

**Faculty of Health Sciences
Centre for International Health**

**Development, Implementation and Evaluation of a Multi-ethnic Peer
Education Programme for the Prevention of Sexually Transmissible
Infections and HIV among University Students in Northwest China**

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**This thesis is presented for the Degree of
Doctor of Philosophy
of
Curtin University**

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DECLARATION

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgement has been made.

This thesis contains no material that has been accepted for the award of any other degree or diploma in any university.

The research presented and reported in this thesis was conducted in accordance with the National Health and Medical Research Council National Statement on Ethical Conduct in Human Research (2007) – updated March 2014. The proposed research study received human research ethics approval from the Curtin University Human Research Ethics Committee (EC00262), Approval Number # HR 158/2011.

John Walkingshaw

Signature:

Date: 28th August, 2019.

DEDICATION

To the Lord Jesus Christ, whose love compels me

and

To my late mother, you will always be my inspiration

ABSTRACT

Despite great advances in early detection, pre-exposure prophylaxis and treatment of HIV, the risk of acquiring infection with the virus in vulnerable populations remains high. A lack of awareness of the routes of transmission of HIV, and prevention measures remain major factors in at-risk individuals. Globally, peer education programmes have been employed in many target groups with differing degrees of effectiveness. Most peer education relies on the use of near peers as opposed to true peers.

Although mandated by law, sex education in high schools in China has often been lacking due to the acute embarrassment of teaching staff. Traditionally, discussions between parents and children concerning sex have been a taboo subject in China due to social mores. This has resulted in vast numbers of students arriving at University inadequately prepared to face the risks should they engage in sexual relations with others.

This intervention study utilized a mixed methods approach and drew on the diffusion of innovations theory (DOI), the health belief model (HBM) and the theory of reasoned action (TRA). A multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV was designed, implemented and evaluated among undergraduate students of Qinghai Nationalities University (QNU) in the People's Republic of China. The participants were Han, Hui, Mongolian and Tibetan. The importance of true peers to each of these ethnic groups was assessed.

The teaching and assessment materials were found to be linguistically and culturally acceptable to participants of each ethnic group. There was a statistically significant ($p < 0.001$) increase between the pre and post-intervention mean correct scores of 7.71 with a 95% confidence interval (6.56, 8.86) of the participants to the 39 quantitative questions designed to assess knowledge of the modes of transmission and prevention of common STIs and HIV. Female participants scored significantly ($p < 0.001$) lower than males in the pre-intervention questionnaire but post-intervention there was no significant difference ($p = 0.524$) between genders. Female pre-intervention mean correct scores were 10.24 and males 12.91, post-intervention

female scores were 18.78 and males 19.46. Apart from the Mongolian cohort, all other ethnic groups showed significant increases in mean correct scores between pre- and post-intervention. There was a significant difference ($p < 0.001$) between Tibetans and Mongolians in both pre- and post-intervention scores. The pre-intervention Tibetan mean correct score was 11.80 and Mongolian 6.20, and the post-intervention Tibetan score was 19.90 and Mongolians 9.31. A significant difference ($p < 0.001$) between the Tibetan and Han participants was also found pre-intervention with the Tibetan participants' mean score being 11.80 and Han participants 15.16. However, there were no significant differences pre-intervention ($p = 0.574$) or post-intervention ($p = 0.211$) between the Tibetan and Hui. This was also the case pre-intervention ($p = 0.024$) and post-intervention ($p = 0.283$) between the Han and Hui.

Participants' dwelling emerged as an important predictor of knowledge relating to STIs and HIV. City dwellers had the highest mean correct score pre-intervention (14.57) followed by those from townships (12.88) then farmers (11.55), and nomads (8.83) had the lowest score. Multiple regression analysis revealed a statistically significant difference ($p = 0.03$) between the city dwellers and nomads pre-intervention. Post-intervention, both city dwellers (21.57) and those from townships (20.16) showed a significantly ($p = 0.01$) higher mean correct score than participants from nomadic areas (15.24).

The qualitative arm of this study used open-ended questions to stimulate feedback concerning assessment of the peer education programme and ideas on how to improve the programme. The use of a programme like this in high schools was overwhelmingly endorsed by participants. Additionally, the role of "true peers" was found to be important to Tibetans and Mongolians but not to Han or Hui participants.

This study found that this multi-ethnic peer education programme using true peers was an effective means of raising awareness of the modes of transmission and prevention of common STIs and HIV among undergraduate students in northwest China and fills a gap in the education system in this region relating to sexual health education.

It is proposed that this education programme be introduced into the orientation programme for first year students at QNU as well as the other major universities, medical colleges and vocational colleges in Xining city. A submission will be made to the Qinghai Provincial Education Department for the adoption of this programme into high schools and possibly middle schools in the province. The Qinghai Provincial Centres for Disease Control and the Qinghai branch of the China Red Cross will also be made aware of this resource. The new 39 item data collection instrument (HIV/STI-KQ-39) will be registered on the Measurement Instrument Database for the Social Sciences (MIDSS) website so that it is available to other international researchers.

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LIST OF ABBREVIATIONS

AIDS	Acquired immunodeficiency syndrome
ART	Anti-retroviral therapy
CDC	Centers for Disease Control and Prevention
China CARES	China Comprehensive AIDS Response
CRISPR	Clustered regularly interspaced short palindromic repeats
CSW	Commercial sex worker
DOI	Diffusion of Innovations Theory
EM	Ethnic minority
FIFO	Fly-in, fly-out
FPD	Former plasma donor
GDP	Gross domestic product
HBM	Health Belief Model
HIV	Human immunodeficiency virus
HIV-KQ-18	HIV knowledge questionnaire (18 questions)
HPV	Human papilloma virus
IC	Informed consent
IDU	Injecting drug user
IEC	Information-education-communication
KAP	Key affected populations
KZN	KwaZulu-Natal
LCW	Language of wider communication
MITT	Modified intention-to-treat
MSM	Men who have sex with men
MTCT	Mother –to- child transmission
PLWHIV	People living with HIV
PMTCT	Prevention- of-mother-to-child transmission
POL	Popular Opinion Leader
PPT	Power Point
PrEP	Pre-exposure prophylaxis
QNU	Qinghai Nationalities University
RNA	Ribonucleic acid
SAQ	Self-administered questionnaire
STAND	Students Against Negative Decisions
STD-KQ	Sexually transmitted diseases knowledge questionnaire
STI	Sexually transmissible infection
TRA	Theory of Reasoned Action
UNAIDS	Joint United Nations Programme on HIV and AIDS
WPS	Writer, Presentation and Spreadsheets
Y-PEER	Youth Peer Education Network

DEFINITIONS

Autonomous region:	A region of a country which has a degree of autonomy. An ethnic minority is the predominant people group in these areas.
Commercial sex worker:	A person, male or female, who exchanges money for sex.
Epidemic:	A widespread occurrence of an infectious disease in a community at a particular time.
Floating population:	This describes a group of people who reside in a given population for a certain amount of time and for various reasons, but are not generally considered part of the official census count. In China these are rural to urban migrants who seek employment in urban areas.
Hyperendemic:	A disease that is equally endemic, at a high level, in all groups of a population.
Money boys:	A slang term for a male who earns money by offering sexual services.
Putonghua:	This is also known as Mandarin. It is the official national language of the People's Republic of China.
Qinghai hua:	This is a dialect which is spoken by residents of Qinghai province in the People's Republic of China.

CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter provides the background to the study, the aims and an overview of the thesis as well as the professional background of the researcher and the impetus for the study.

1.2 Background to the study

Resistance to antibiotics is continuing to increase among commonly acquired STIs. Gonorrhoea, which was once easily treated using oral agents, has continued to develop resistance to antimicrobials, beginning with resistance to sulphonamides in the late 1940s culminating with resistance to the last oral agent cefixime in 1995 (Unemo, del Rio, & Shafer, 2016). The 2015 Centers for Disease Control and Prevention recommend intramuscular ceftriaxone and oral azithromycin for treatment of uncomplicated gonorrhoea. However, there have been sporadic reports from Australia, Europe, Canada, South Africa and Japan of ceftriaxone treatment failures of pharyngeal infection. The Centers for Disease Control and Prevention (CDC) have now classified gonorrhoea as a superbug (Unemo et al., 2016; Workowski & Bolan, 2015). Likewise *Chlamydia trachomatis* isolates resistant to the oral antibiotics azithromycin, doxycycline and ofloxacin were reported in 2000. Although true resistance is a rare event, there have been a number of reports of treatment failures (Kong & Hocking, 2015; Somani, Bhullar, Workowski, Farshy, & Black, 2000). Even though syphilis still remains amenable to first line treatment with intramuscular penicillin G, the second line oral agent azithromycin is no longer recommended, due to treatment failures caused by resistance (Stamm, 2014).

Apart from the “Berlin Patient”, there is no record of any person being cured of HIV. However the “feasibility and efficiency of excising the HIV-1 provirus in three different animal models” was recently demonstrated by using clustered regularly

interspaced short palindromic repeats (CRISPR). The technique will come under increasing scrutiny as the possibility of human trials is investigated (Yin et al., 2017).

There have been over 30 vaccines developed to prevent HIV-1 infection, but few have gone on to phase IIB/III trials. None have proven effective apart from the RV144 trial in Thailand, which only showed modest results. Although the efficacy was 60.5% at one year post vaccination, the modified intention-to-treat (MITT) was 31.2% efficacy seen at three and half years after the final vaccination. Many novel candidate vaccines are currently being developed (Gray, Laher, Lazarus, Ensoli, & Corey, 2016; Lelievre & Levy, 2016; Sheets, Zhou, & Knezevic, 2016).

While Pre-exposure Prophylaxis (PrEP) represents a significant component in the arsenal for preventing HIV, there are a number of issues that must also be considered including: cost effectiveness, adverse effects, compliance and drug resistance. Although there have only been a few reports of HIV infection acquired while an individual was on PrEP and adhering to the correct dosing schedule, multi-dug resistant HIV acquisition is still a possibility (Knox, Anderson, Harrigan, & Tan, 2017). Another disturbing phenomenon associated with the use of PrEP has been a subsequent decrease in the use of condoms among some individuals, which then places them and their sexual partners at increased risk of other STIs (Lal et al., 2017; Scott & Klausner, 2016).

Since the beginning of the AIDS epidemic 39 million people have died. Although the global annual incidence of new infections has been declining, 70% of women and 65% of men do not have a basic awareness about HIV thus rendering them vulnerable to infection. Condom use alone is estimated to have averted 50 million infections since the epidemic began (UNAIDS, 2016b, 2017). In their systematic review and meta-analysis of peer education prevention programmes in developing countries Medley et al. (Medley, Kennedy, O'Reilly, & Sweat, 2009) showed that these programmes only had moderate outcomes with respect to improving behaviour. Many successful peer education programmes for the prevention of STIs and HIV have been employed in China, which target high school and university students, although the majority of these have been in the east and south of the country (Cai et al., 2008; Y. Cheng et al., 2008; H. Huang et al., 2008; Shen, Hong, Cai, Jin, & Shi, 2008a). There was also an

HIV/AIDS Knowledge study in Xinjiang province among a predominantly Uyghur population (Maimaiti, Shamsuddin, Abdurahim, Tohti, & Memet, 2010) but the majority of studies that have focused on university students have targeted predominantly Han populations (X. Li et al., 2004). China has 55 ethnic minorities of which 44 live in the west of the country, a region that is largely impoverished (Z. Zhu, 2010).

The first language of many minorities is not Mandarin, the official language of China. Students from the minority areas often receive their schooling prior to university predominantly in their first language and therefore are not fluent in Mandarin. Peer education programmes for the prevention of STIs including HIV, which are conducted solely in Mandarin, may be problematic for these students. Therefore there is a need for linguistically as well as culturally appropriate programmes. This thesis examines the use of such a programme among four different ethnic groups (Han, Hui, Mongolian and Tibetan) in a nationalities university in northwest China. It also seeks to ascertain whether the issue of near peers versus true peers is considered an important factor in the implementation of the programme.

1.3 Aims and objectives

The overall aim of the study was to determine if a multi-ethnic peer education programme was effective in raising students' awareness regarding the modes of transmission and prevention of STIs (including HIV) among undergraduate students in Qinghai Nationalities University in Xining City, Qinghai Province in China.

The objectives of the study were:

- (a) To develop teaching and assessment materials that were both linguistically and culturally acceptable to participants of four different ethnic groups (Han, Hui, Mongolian and Tibetan).
- (b) To assess differences in knowledge levels relating to STIs including HIV between the demographic variables: gender, ethnic groups, types of dwellings (rural versus urban) and social backgrounds (farmers versus nomads).

The quantitative arm of the study sought feedback on the intervention but also attempted to determine if a similar programme would have benefited participants had it been available when they were high school students. Additionally, the issue of near peers versus true peers was investigated; participants were asked if they preferred peer educators to come from their ethnic group or from other ethnic groups if they were suitable.

Although follow up to assess whether participants' behaviour changed in light of the information they acquired during the current study was beyond the focus of the study, it is hoped that this knowledge and consequent establishment of new social norms would positively influence behaviour intentions. During discussions held by peer educators and participants, entrenched social norms and customs relating to pre-marital sexual behaviour were addressed.

1.4 Professional context of the researcher

The researcher is a medical scientist with 23 years' experience in the public and private health sectors in Australia and New Zealand. His specialisation is microbiology and for most of his career he was in charge of microbiology departments in primarily diagnostic laboratories that had some research component. These laboratories also performed infectious diseases serological testing. A significant component of the work in these laboratories related to testing for STIs and HIV, including the processing of specimens from alleged sexual abuse victims.

The researcher held a number of committee appointments, including the New Zealand Medical Laboratory Scientists Syllabus Review Committee. In addition he was an Otago University examiner for oral examinations for candidates for the degree of Bachelor of Medical Laboratory Science. He therefore has an in-depth knowledge of the symptoms, diagnosis and treatment of STIs and HIV. Moreover, the researcher holds an undergraduate degree in physiology as well as a master's degree in international health. The latter involved a research project conducted in Qinghai.

1.5 Impetus for the study

The researcher has lived in Qinghai province for 17 years and has a long-standing involvement with QNU. He is literate in Tibetan, fluent in two dialects of Amdo Tibetan and has limited fluency in conversational Mandarin but a higher degree of fluency in medical Mandarin. Moreover, he is conversant with the social, cultural, religious and ethnic dimensions operating between and within the various ethnic groups in Qinghai province and among the student body of QNU.

He has observed first-hand the lack of awareness of knowledge of STIs and HIV modes of transmission and prevention among ethnic minorities, predominantly Tibetan and Mongolian, as well as the majority Han students of QNU. In 2005 and 2006 the researcher taught all of the undergraduate students in the Tibetan and Mongolian departments and a small number of Han students of QNU. At that time the resources the researcher used were in Chinese and teaching was done on a lecture basis, class by class, with separate lectures for males and females. The researcher taught in English using interpreters who translated what he said into Chinese.

An anonymous questionnaire administered to students at that time asked about their sexual history for the previous year, and their use of condoms if they were sexually active. The vast majority of male students had multiple partners (many more than five) and had not used condoms. A much smaller number of female students self-reported sexual activity. The female students who were sexually active also failed to use condoms. Although the researcher initially felt that the males may have been over reporting their sexual exploits as a form of machismo, this was not the case. When many of these students contracted STIs, they sought advice from the researcher who was able to direct them to the appropriate medical services for definitive diagnosis and treatment. These students therefore represent a vulnerable population; this is the reason why this research setting was chosen.

1.6 Overview of thesis

Chapter 1

This chapter provides a brief background to the study, along with the aims of the study. An overview of the thesis is also presented.

Chapter 2

This chapter gives an overview of the global picture of the AIDS epidemic together with HIV prevalence in different areas of the world. A history of the AIDS epidemic in China and the current situation follows together with an overview of the ongoing syphilis epidemic the country faces. The conceptual framework underlying the study is discussed. This is followed by an outline of peer education and the effectiveness of peer education programmes, in particular as it applies to STI, HIV and AIDS education in China. The difference between “near peers” and “true peers” is highlighted. Sources of knowledge that adolescents and youth consult relating to these are also commented upon as well as sexual risk behaviours.

Chapter 3

An outline of the study design, logic model employed, and the objectives of the study are presented in chapter 3. The professional background of the researcher, impetus for the study and the study setting are delineated. A discussion of the data collection instrument, translation and back translation of this and other materials used in the study follows. Pilot testing of the data collection instrument and teaching materials, test and retest of the data collection instrument as well as the development of the materials used in the study are also described. Next a description of the intervention, which includes recruitment of participants and peer educators, training of the peer educators and training of participants by peer educators. Ethical issues relating to the study are discussed and finally the data analysis relating to standardisation of the data collection instrument is described.

Chapter 4

This chapter describes the demographic variables of participants’ gender, age, ethnicity, dwelling, and year of study. The quantitative analysis of responses to 39

closed questions relating to knowledge of the modes of transmission, prevention and symptoms of common STIs and HIV is presented. A breakdown of results by the variables listed above is detailed. Possible explanations of these results are offered.

Chapter 5

Participants' responses to six open-ended questions designed to stimulate feedback concerning the intervention and how this could be improved are presented. The main themes identified in a thematic analysis are discussed, and representative comments of participants are provided for each theme and possible explanations given for these are proposed. Challenges and successes during the study are outlined.

Chapter 6

An overview of the research design is presented. Responses to each of the aims of the thesis are described. The significance of the study together with implications, applications and recommendations for policy makers, institutions, programme developers and other researchers working in this area are discussed. A discussion of the study's findings and the current literature with respect to true peers versus near peers is presented, and further research arising from the study and the limitations of the study are outlined before final concluding remarks and key findings are stated.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter begins with an overview of the global AIDS epidemic and the prevalence of HIV in different regions of the world. The phases of the AIDS epidemic in China are outlined together with the current status of the syphilis epidemic that the country faces. The conceptual framework for the study is also discussed. A brief history of peer education and the current use of this in China in HIV prevention are also presented. The difference between “near peers” and “true peers” is also stated. Sources of sex-related knowledge and sexual risk behaviours are discussed.

2.2 The Global Face of HIV

2.2.1 Definitions

Before considering the worldwide picture of HIV, it is first necessary to understand how the epidemic is quantified and which sources are used to provide these estimates.

The Joint United Nations Programme on HIV and AIDS (UNAIDS) lists three categories of epidemic in their terminology guidelines(UNAIDS, 2011):

1. Low-level epidemic: “HIV prevalence has not consistently exceeded 1% in the general population nationally, nor 5% in any subpopulation” (p. 14).
2. Generalized epidemic: “an epidemic that is self-sustaining through heterosexual transmission. In a generalized epidemic, HIV prevalence usually exceeds 1% among pregnant women attending antenatal clinics” (p. 9).
3. Concentrated epidemic:

HIV has spread rapidly in one or more populations but is not well established in the general population. Typically, the prevalence is over 5% in subpopulations while remaining under 1% in the general population, although these thresholds must be interpreted with caution.

In a concentrated HIV epidemic there is still the opportunity to focus HIV prevention, treatment, care, and support efforts on the most affected subpopulations, while recognizing that no subpopulation is fully self-contained. (UNAIDS, 2011, p.5)

Different sources of data are used to estimate HIV prevalence depending on which of these types of epidemic is present in a country. In the case of low-level epidemics and concentrated epidemics, key subpopulations at higher risk of HIV (Injecting drug user (IDU), Commercial sex worker (CSW), or Men who have sex with men (MSM)) are surveyed. In generalized epidemics data are collected mainly from pregnant women attending sentinel antenatal clinics. This data may be further refined by other periodic surveys, which include HIV testing, such as population-based household surveys, which help to calibrate HIV prevalence trends (UNAIDS, 2013b).

Unfortunately, placing the epidemics in some countries into a single category may be misleading as there may be elements of more than one category present (Brookmeyer, 2010). This problem is particularly relevant to low-level and concentrated epidemics where the size of key affected populations (KAPs) have not been accurately assessed. These KAPs include IDUs, CSWs, MSM and other marginalized populations. Although each model has its limitations, the CD4 and Bayesian hierarchical models have proved useful in providing estimates of HIV in such populations (Bao, Raftery, & Reddy, 2015; Hall et al., 2017).

2.2.2 Global HIV

A 38% decrease was seen in the global annual incidence of new HIV infections in the 12 year period from 2001 to 2013, dropping to a rate of 2.1 million (Piot et al., 2015). In 2012, it was estimated that 35.3 million (32.2 million to 38.8 million) people were living with HIV (PLWHIV) (UNAIDS, 2013a). This figure rose to 36.7 million (34.0 million to 39.8 million) in 2015 (UNAIDS, 2016a). Despite the decrease in new HIV infections, the actual incidence of HIV worldwide has increased because people who are infected are now living longer if they are diagnosed early and have access to anti-retroviral therapy (ART) (Maartens, Celum, & Lewin, 2014). In fact, the life span for PLWHIV who receive early diagnosis and

appropriate ART in many developed countries is now approaching the normal life span of the general population. However, there is a great disparity between countries, and within countries, and many differences between gender, age and groups within society (Katz & Maughan-Brown, 2017; UNAIDS, 2016a).

Surprisingly, there have been rapid falls in transmission rates in some countries in sub-Saharan Africa, which previously had the highest incidences. The rate in Zimbabwe, which in 1998 was 30%, fell to 15% in 2011 (Bateman, 2011; Nagelkerke et al., 2014). On the other hand, South Africa has over six million people who are infected with HIV, making it the country with the highest prevalence in the world. This rose from an estimated prevalence of 10.6% in 2008 to 12.2% in 2012. There is great variation across that country's provinces with the Western Cape having the lowest prevalence in 2012 of 5.0% and KwaZulu-Natal (KZN) the highest at 16.9% (Shisana et al., 2014). Women tend to acquire HIV up to seven years earlier than males in South Africa; the disparity between genders is highlighted by the fact that the majority of districts in KZN have antenatal HIV prevalence rates greater than 38% with one district having an even greater rate of 40.7% (Kharsany et al., 2015).

In contrast to this, the situation in many developed countries is very different with a number of these countries being classified as low prevalence. Australia is one of these low prevalence countries (0.1%) where the incidence of new infections has remained stable for the last five years - between 1,000 and 1,100 (Holt, 2017). In fact, just prior to the AIDS 2016 Conference in Durban a joint statement was released stating "Australian researchers and community groups have declared an end to AIDS as a public health issue. There are now almost no annual deaths from the syndrome because of the success of prevention and treatment over the previous three decades" (Coopes, 2016, para. 1). In Australia the HIV epidemic has been primarily driven by infection among MSM with relatively rare incidences of heterosexual transmission (Crooks & Kidd, 2014).

However, now a perturbing trend of HIV infections being acquired overseas has led to the identification of priority populations such as those who are from high prevalence countries as well as their partners coming to live in Australia, together with travellers to high prevalence countries, along with mobile workers such as the

fly-in, fly-out (FIFO) workers in the mining industry in Western Australia (Crawford, Lobo, Brown, & Maycock, 2016; Persson, Brown, McDonald, & Korner, 2014). In Western Australia, “Of 731 new infections which were diagnosed in the period 2010–2015, 52% (n = 382) of cases reported overseas acquisition” (Crawford, Lobo, Brown, Macri, et al., 2016, p. 3).

Like Australia, the principal transmission mode of HIV in the United States of America has been among MSM. Initially in the 1980s this was typically among young, white, middle class urban males. MSM still account for the majority of new HIV infections, but in 2015 black MSM was the foremost group (Hall et al. (2017); (Moore, 2011). The greatest prevalence of HIV is now among people who are at or below the poverty level (Pellowski, Kalichman, Matthews, & Adler, 2013). According to the UNAIDS classification scheme, America would be categorised as having a concentrated epidemic among MSM. However, the epidemic is by no means evenly spread throughout the United States and in some metropolitan statistical areas the picture appears more like a generalised epidemic. In a study conducted in 2012 and 2013 this was highlighted as follows.

The levels of prevalence among MSM correspond to international benchmarks for epidemicity or hyperendemicity, with all 50 states at least tripling the prevalence criterion for generalized epidemics among MSM (>1% prevalence) and 6 states (all in the South) meeting the UNAIDS criterion for hyperendemicity (>15% prevalence). (Rosenberg et al., 2016, p. 12)

The most populous countries in the world, such as China and India, have also seen changes in the way the HIV epidemic has progressed. In India, the epidemic up until 2013 had been primarily due to heterosexual transmission, with a national prevalence of 0.21%, but having variation across states, with some states over 1%. It appears that commercial sex workers, general heterosexual sex, injected drug use and unprotected anal sex between MSM are the leading causes of HIV in India (Paranjape & Challacombe, 2016). The rate of infection in adults has fallen from a high of 0.41% in 2002. However, there has been an increase in the number of children with HIV from 6.3% in 2007 to 7% in 2011 (Raj et al., 2015).

2.3 AIDS in China

2.3.1 Phases of the AIDS epidemic in China

Historically there have been three phases of the AIDS epidemic in China and the country is now experiencing a fourth phase. The first recorded case of AIDS was a foreign tourist who died in a Beijing hospital in 1985. In the same year four haemophiliacs, in Zhejiang province, were infected as a result of using contaminated imported factor VIII. This first phase from 1985 to 1988 was characterised by a small number of AIDS cases in coastal cities (Sheng & Cao, 2008). The second phase began in 1989 when an outbreak occurred among 146 IDUs in Ruili, China's border town with Myanmar in Yunnan province (Shao, 2006). From here it spread to neighbouring areas and along major drug trafficking routes: eastward to Baise, Nanning and Hong Kong, to the northwest through Sichuan and Gansu provinces to Xinjiang province. A third route was from Vietnam through Pinxiang in Guansi province to Nanning and Hong Kong. In 1994, three Yunnanese border counties, that represented only a very small percentage of the country's total population, constituted 60% of all infections and 80% of AIDS cases nationwide. Most of these infections were in the ethnic minority peoples and almost all were IDUs or the spouses of IDUs (Beyrer et al., 2000).

While the numbers of HIV infected individuals continued to grow among the IDU and their sexual partners, the third phase of the epidemic which began in 1994 received worldwide attention. In the early 1990s unhygienic commercial plasma collection in central China resulted in approximately a quarter of a million people in Henan, Anhui, Shanxi, Hubei and Shandong provinces, who were mainly rural peasants, becoming infected with HIV (Mastro & Yip, 2006). It is believed that at least eight and possibly up to 15 provinces face a similar situation to Henan, Anhui and Shanxi, which have attracted the most media attention. In some of the villages in these areas 60–80% of the adult population was infected (Erwin, 2006). Prior to 1998 no cases of HIV infection had been reported in Qinghai province, but in June of that year there were some notifications. From 1998, HIV is now reported in all 31 provinces, autonomous regions and municipalities in China (H. Zhu, 1998).

According to Sheng and Cao (2008) the fourth phase of the epidemic began in 2001 and continues today. It was at this time that denial or silence regarding the extent of HIV in China began to change. Sexual contact now represents the main route of transmission of HIV in China. In 2007 the Minister of Health, Chen Zhu, said "Of the new infections this year, 44.7% were passed on through heterosexual sex, 42% from intravenous drug use, 12.2% from men who have sex with men (MSM), and 1.1 % from mother-to-infant transmission" (Jonathan Watts, 2008, p. 103). Only two years later heterosexual transmission accounted for 42.2% of new cases but homosexual transmission dramatically increased to 32.5% (Y. Guo, Li, & Stanton, 2010; MOH, 2010; J.-J. Xu et al., 2011).

Sexual transmission connects high risk behaviour groups such as IDUs, CSWs and MSM to the general population. HIV is also being introduced by sexual transmission into the general population by former plasma donors (FPDs). Ji, Detels, Wu and Yin (2006) found in their study that in Anhui the prevalence of HIV among FPDs was 15.2% and that the current HIV/AIDS epidemic among adults in that area was due to plasma donation and sexual transmission. In three different studies it was found that between 52% and 98% of female IDUs had exchanged sex for drugs or money (H Yang et al., 2005). In 2001 the national estimate of CSWs was four million of whom 10% were infected with HIV (Sheng and Cao, 2008), whereas only two years later, in 2003, the number of women involved in commercial sex was estimated to be more than 10 million (H Yang et al., 2005).

The number of MSM in China has not been accurately assessed. However, it is estimated that between 2% and 5% of the adult male population are homosexual/bisexual (H. Liu et al., 2005), which translates to between two and eight million adult males (L. Gao, Zhang, & Jin, 2009). Although these men are found in both rural and urban areas, most of the known MSM live in the major metropolitan areas (H. Liu et al., 2005). Although homosexuality is not illegal in China, it is not thought of as socially acceptable, and therefore gay men tend to hide their sexual orientation and are married (Qian, Vermund, & Wang, 2005). Most do not reveal their sexual orientation to their female sexual partner. Many have multiple sexual partners, practice unprotected oral and anal sex and also engage in group sex, casual sex and commercial sex (H. Liu et al., 2005).

The rural-to-urban migrants or so-called "floating population" was estimated at 121 million in 2001 of which 60% were males and of these 40% were aged between 20 and 24 years (Wong et al., 2008). By 2015, it was estimated that the floating population had risen to 247 million representing 18% of the total population of China of which 51.1% were under the age of 33 years (T. Liu, Feng, & Brandon, 2018). This population of young males has been identified as the "tipping point" for the AIDS epidemic in China. A number of these young men turn to prostitution for economic survival and are called "money boys". Money boys are divided into those who self-identify as either gay or non-gay. In the survey conducted by Wong et al. (2008) in Shanghai among 239 money boys, 192 (80.3%) self-identified as gay and 47 (19.7%) as non-gay. Further, 12% of gay money boys and 4% of non-gay money boys said that they were married.

2.3.2 Current situation in China

According to the 2014 national sentinel surveillance (NHFPC, 2015) the percentage of PLWHIV in the general population remains low, and for the five years prior to 2014 among pregnant women the rate had remained at 0.1% or below. However, this is not the case among some of the high risk groups where rates have been 6.0% for IDU and 7.7% for MSM. The same report also goes on to assert that the number of PLWHIV has increased from 307,000 in 2010 to 501,000 in 2014. This increase has been primarily attributed to an increase in testing and a growing number of patients accessing ART. As previously mentioned, sexual transmission is the main mode of infection with HIV in China. There has been an almost three-fold increase from 33.1% in 2006 to 92.2% in 2014, with a concurrent increase in the rate of MSM transmission from 2.5% in 2006 to 25.8% in 2014 (NHFPC, 2015).

Twelve provinces in China accounted for 83.5% of all PLWHIV in 2014. Each of these provinces has more than 10,000 cases. In decreasing order of incidence of PLWHIV they are: Yunnan, Sichuan, Guangxi, Henan, Guangdong, Xinjiang, Chongqing, Guizhou, Hunan, Zhejiang, Jiangsu and Beijing. As can be seen in Figure 2.1, the first three are the most severely affected, whereas the least severely affected provinces are Shanxi, Jilin, Tianjin, Gansu, Inner Mongolia, Hainan, Qinghai, Ningxia and Tibet, which together account for only 3.4% of the national

total. Sichuan province, one of the highest HIV prevalence areas in China, borders both Qinghai province and Gansu provinces. Many Tibetan students who come to study at QNU are drawn from both Sichuan and Gansu provinces. Furthermore, smaller numbers come from Yunnan province another high prevalence area. As Figure 2.1 shows:

The distribution of HIV in China is not even, and is concentrated in areas with high drug use (eg, Yunnan, Guangxi, Xinjiang, and Sichuan) and in areas where people were infected through unsafe blood or plasma donation (eg, Henan, Anhui, Hebei, Shanxi, and Hubei). (Wu et al., 2017, p.687)

Approximately 80% of China's 55 ethnic minorities (EMs) live in the west of China, yet on a national basis EMs only account for about 9% of the population (Pan, Li, Carpiano, Spittal, & Ruan, 2016). However, EMs are disproportionately represented when it comes to HIV/AIDS, as they comprise more than 30% of total cases reported nationally (S. Liu et al., 2013).

Distribution of People Living with HIV/AIDS in China in 2014



Figure 2.1: Country-wide Geographic Distribution of People Living with HIV/AIDS in 2014: From NHFPC. 2015 China AIDS Response Progress Report. *National Health and Family Planning Commission of the People's Republic of China*, May 2015; 8.

2.3.3 Policy Initiatives

After a change of leadership in the Chinese government in 2003 there was an increasing commitment to addressing the HIV epidemic in the nation. Several new initiatives were launched including the “China Comprehensive AIDS Response (China CARES), the “Four Free and One Care” policy and the formation of a State Council AIDS Working Committee responsible for the development of a comprehensive policy framework” (Z. Wu, Sullivan, Wang, Rotheram-Borus, & Detels, 2007). China CARES was a 5 year programme designed to curb the spread of HIV and mitigate the effect on the country. It did this by targeting areas of highest HIV incidence and covered 83.3 million people in 127 programme sites in 28 provinces. This was achieved by collecting surveillance data, initiating prevention programmes for high risk groups and mother-to-child transmission (MTCT), using

ART to treat PLWHIV and providing support for the families of PLWHIV (Han et al., 2010). The “Four Frees and One Care” policy was designed to provide: free ART to AIDS patients who were rural residents or people without insurance living in urban areas, free voluntary counselling and testing; free treatment to HIV positive pregnant women and testing of their new-born babies; free schooling for AIDS orphans; and support and care for the families of PLWHIV (Z. Wu et al., 2007).

Then in March, 2006, “The AIDS Prevention and Control Regulations” were introduced by the State Council of the People’s Republic of China together with a Five Year Action Plan to control HIV/AIDS (Z. Wu et al., 2007). In an effort to reduce the incidence of HIV by 25% and associated mortality by 30% by 2015, at the end of 2010 the Chinese Government introduced their “Five expands, Six strengthens” policy. This focused on “involving information-education-communication (IEC) activities, surveillance and testing, prevention-of-mother-to-child transmission (PMTCT), comprehensive interventions and coverage of ART” (M. Li et al., 2016, p. 2). On 13 January 2012, the China Action Plan to Prevent and Control HIV/AIDS during the 12th Five-Year Plan Period (2011–2015) was approved. This has now been superseded by the 13th Five-Year Plan to cover the period 2016–2020, which aims at promoting prevention and treatment services, addressing the issue of preventing needle sharing, illegal blood transfusions, PMTCT, reducing mortality and improving the quality of life of PLWHIV.

2.4 The Syphilis Epidemic

Infection with both ulcerative and non-ulcerative STIs is known to predispose individuals to infection with HIV. Likewise, HIV infected individuals are at an increased risk of acquiring other STIs because of their compromised immune response (Kalichman, Pellowski, & Turner, 2011). The relationship between HIV and syphilis is both intricate and poorly understood. Although it was previously thought that syphilis may have presented in a more aggressive manner in HIV infected individuals, the evidence for this was primarily anecdotal. More rigorous studies have shown that the presentation is similar in both HIV infected and non-infected individuals (Drummond, Guy, Kaldor, & Donovan, 2010). However, there is evidence that in HIV positive individuals co-infected with syphilis there may be an

increase in HIV viral load, which could lead to an increase in HIV transmission (Drummond et al., 2010; Zetola & Klausner, 2007).

As a result of Mao Zedong's campaign against prostitution and STIs, the Chinese government claimed that STIs were virtually eradicated in China by 1964 (Abrams, 2001; Cohen, Henderson, Aiello, & Zheng, 1996; K. L. Zhang, Ma, & Xia, 2004). Yet within the last two decades there has been an alarming increase in the incidence of STIs (Zunyou Wu et al., 2007). In particular, China is experiencing a substantial syphilis epidemic (Hesketh, Ye, & Zhu, 2008; Joseph D. Tucker & Cohen, 2011) and it was the most frequently reported communicable disease in Shanghai. "In 2008, an average of more than 1 baby per hour was born with congenital syphilis in China" (J.D Tucker, Chen, & Peeling, 2010, p.1659). Syphilis has been acknowledged as a marker for unprotected sex, and the incidence rates in high risk groups reported in 2006 in the only systematic review of seroprevalence studies were: 12.5% in incarcerated female CSWs, 6.81% in IDUs and 14.56% in MSM (Lin, Gao, Chen, Chen, & Cohen, 2006).

2.5 Conceptual Framework

The conceptual framework that was chosen for the current study drew on three theories, which underpin the methods in the next chapter. The theories were: Diffusion of Innovations Theory (DOI), Health Belief Model (HBM), and the Theory of Reasoned Action (TRA).

2.5.1 Diffusion of Innovations Theory

DOI has manifold applications ranging from agriculture, telecommunications, marketing, and mathematics to public health (Murray, 2009; W. Wang, Fergola, Lombardo, & Mulone, 2006). The theory can "help researchers and program developers understand the process through which new ideas and technologies become translated into widespread practice" (Murray, 2009, p. 108). It has been used either as the sole theoretical basis, or in conjunction with other theories, in HIV/AIDS prevention in varying populations such as high school students, MSM, women living in impoverished inner-city neighbourhoods, (Jones et al., 2008; Kelly

et al., 1997; Merakou & Kourea-Kremastinou, 2006; Sikkema et al., 2000) and in the Students Against Negative Decisions (STAND) curriculum for a teen peer education programme in a rural county in a southern state of the USA (Smith & DiClemente, 2000).

Diffusion of Innovations Theory Adopter Categorization Bell Curve

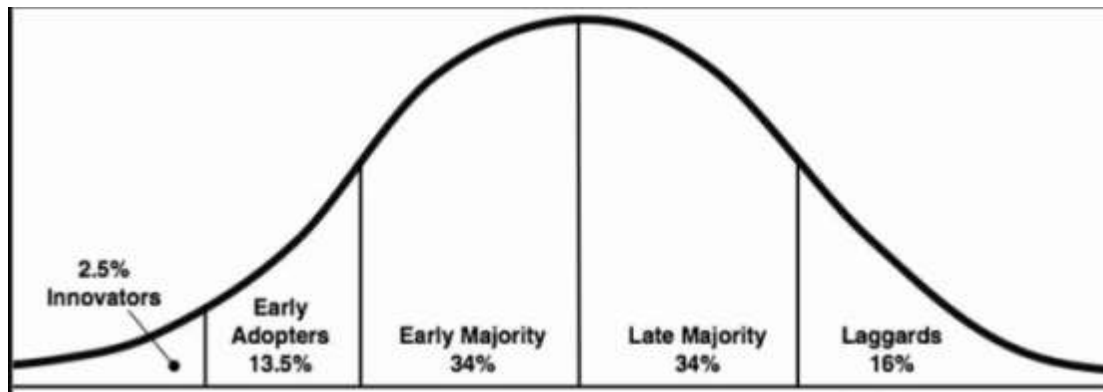


Figure 2.2: Adopter categorization on the basis of innovativeness: from Rogers E.M., eds. 2003. *Diffusion of Innovations (5th ed)*. New York: NY: Free Press.

Diffusion is a process whereby an innovation is communicated through channels over time among the members of a social system (Everett M. Rogers, 2003). These channels are known as Popular Opinion Leaders (POLs). DOI theory considers that during the process of diffusion there are those who adopt the innovation (figure 2.2) very quickly, classified as “innovators” representing 2.5% of the population. They are followed by the “early adopters” (13.5%) and then the “early majority” (34%). At this time a “critical mass” is achieved in the adoption of the innovation by the members of the social system. Rogers defines two further categories as the “late majority” (34%), followed by a final group known as the “laggards” (16%) (Everett M. Rogers, 2003).

Rogers (E. M. Rogers, 2002) suggests that preventive innovations tend to diffuse slowly, in part due to delayed rewards from adoption, and he postulates five strategies based on DOI that can hasten diffusion. The first of these is the “relative advantage” of the innovation. He points out that it does not really matter if the innovation has a great objective advantage, but rather that it is perceived by the individual as being advantageous and better than the previous idea it displaces. The second strategy is “compatibility” which he defines as “the degree to which an

innovation is perceived as being consistent with the existing values, past experiences, and needs of potential adopters”(E.M. Rogers, 2002, p.15). Third is the “complexity” of the innovation, which is “the degree to which an innovation is perceived as difficult to understand and use” (E.M. Rogers, 2002, p.15). The fourth strategy is “trialability”, which is “the degree to which an innovation may be experimented with on a limited basis” (E.M. Rogers, 2002, p.15). The final strategy is “observability”, which “is the degree to which the results of an innovation are visible to others” (E.M. Rogers, 2002, p.16).

Although sex education is mandated by law in Chinese schools, the reality is that even in the most developed cities like Shanghai, only 15% of high school students had received sex education from their teachers or parents (J. Watts, 2004). Peer education programmes are increasing, especially in the more developed east and south of China, however, in less developed areas, such as the northwest, there is a scarcity of such programmes. Therefore, the concept of peer education is seen as a novel idea and is one of the reasons that the DOI theory was useful in the current study. Peer educators, referred to as POLs, in DOI, represent the channel by which the innovation is communicated to classmates. In the present study, the innovation is the teaching materials used to inform the participants about the modes of transmission and prevention of STIs (including HIV).

2.5.2 Health Belief Model

The Health Belief Model depicted in Figure 2.3 “grew out of a set of independent, applied research problems with which a group of investigators in the Public Health Service were confronted between 1950 and 1960” (Rosenstock, 1974, p. 328). In the United States at that time there was reluctance by the public to participate in programmes designed to prevent and detect diseases such as tuberculosis. Concurrently, the public health focus was on prevention rather than treatment of diseases (Glanz, Rimer, & Viswanath, 2008; Rosenstock, 1974). “The HBM contains several primary concepts that predict why people will take actions to prevent, to screen for, or to control conditions; these include susceptibility, seriousness, benefits and barriers to a behaviour, cues to action, and most recently, self-efficacy” (Glanz et al., 2008, pp. 46–47).

Health Belief Model Flow Chart

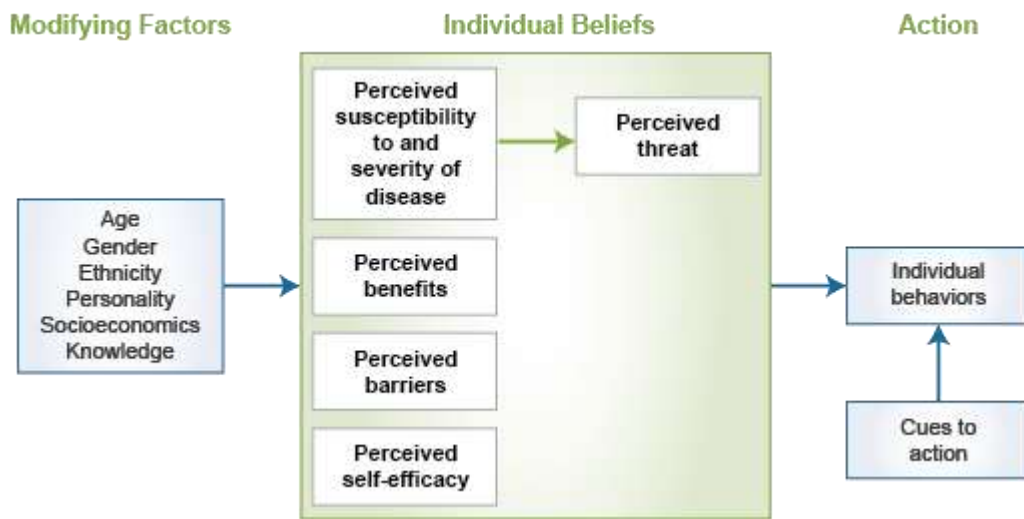


Figure 2.3: Health Belief Model: from Glanz K, Rimer BK, Viswanath K, eds. 2008. *Health Behavior and Health Education: Theory, Research, and Practice (4th ed)*. San Francisco: Jossey-Bass.

For behaviour change to succeed, people must (as the original HBM theorizes) feel threatened by their current behavioural patterns (perceived susceptibility and severity) and believe that change of a specific kind will result in a valued outcome at an acceptable cost (perceived benefit). They also must feel themselves competent (self-efficacious) to overcome perceived barriers to take action. (Glanz et al., 2008, p. 50)

The role of self-efficacy is expounded upon in Bandura's Social Learning Theory with specific relevancy to health education. He proposes a model for a person to engage in a specific behaviour that has a consequent outcome. Behaviour change is deemed to be a function of expectations that will result from engaging in such behaviour and expectations about the individual's ability to carry out the behaviour (Strecher, DeVellis, Becker, & Rosenstock, 1986). In this scenario, the efficacy expectations "consist of beliefs about how capable one is of performing the behaviours that leads to those outcomes" (Strecher, DeVellis, Becker, & Rosenstock, 1986, p. 74). Self-efficacy is not a character trait but relates to "beliefs about capabilities of performing specific behaviours in particular situations" (Strecher, DeVellis, Becker, & Rosenstock, 1986, p. 74). The "cues to action" may be due to

either an internal or external stimulus that activates the individual's health behaviours. "An internal cue may include symptoms of illness, whereas external cues include media campaigns about health promotion or interpersonal interactions, such as learning that a friend has been affected by a health problem" (Poss, 2001, p. 2).

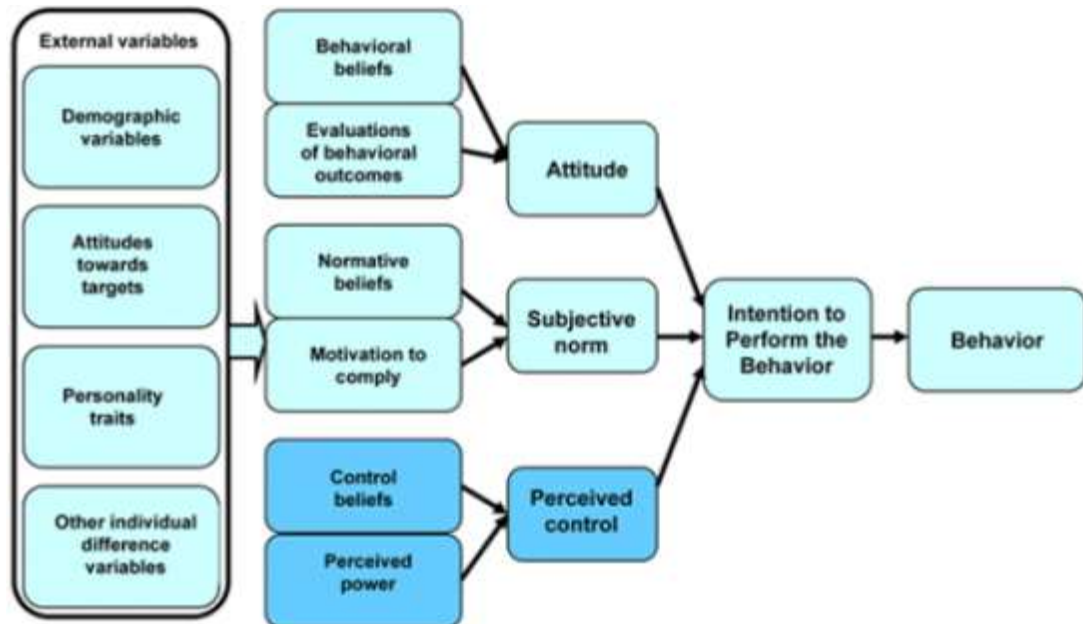
Unlike DOI theory, which has applications outside of health related behaviours, the HBM was specifically developed for this purpose. The HBM theory has been used extensively in the area of HIV/STI prevention peer education. It has been used in a number of diverse settings relating to HIV/AIDS and STIs, either as the sole basis or in combination with other theories. Some of these settings include: unsafe sexual practices of men with commercial sex workers in areas of high HIV incidence, a curriculum for prevention of risk-behaviours related to STIs, pregnancy, and HIV/AIDS among incarcerated youth, factors influencing the use of HIV/AIDS prevention methods among university students, eHealth interventions for HIV prevention in high-risk MSM, and peer-led HIV interventions on a sample of African American college students (Calloway, Long-White, & Corbin, 2014; Clark et al., 2000; Ndabarora & McHunu, 2014; Schnall, Travers, Rojas, & Carballo-Diéguez, 2014; VanLandingham, Suprasert, Grandjean, & Sittitjai, 1995). The HBM has also been applied to other areas such as: predicting mammography screening behaviour, development and psychometric testing of the HBM scale for cervical cancer and the pap smear test, and the role of exercise in African American women with type 2 diabetes (Guvenc, Akyuz, & Açikel, 2011; Koch, 2002; Medina-Shepherd & Kleier, 2012).

2.5.3 Theory of Reasoned Action

The origins of the Theory of Reasoned Action can be found in the work of Fishbein and Azjen (Martin Fishbein, 1967). "At the simplest level, a reasoned action approach to the explanation and prediction of social behaviour assumes that people's behaviour follows reasonably from their beliefs about performing that behaviour" (M. Fishbein, 2008, p. 2). This theory holds that there are a number of variables that are responsible for an individual's behaviour: demographics, attitudes towards targets, personality traits and other individual difference variables. These variables are termed "indirect influences" on behaviour. In conjunction with an individual's

attitude towards a specific behaviour and the social norms that surround the behaviour, together they can act as predictors of intention to engage in that voluntary behaviour (Doswell, Braxter, Cha, & Kim, 2011; Head & Noar, 2014).

Theory of Reasoned Action and Theory of Planned Behavior Flow Chart



Each behavior is defined within: Action, Target, Context, Time

Note: Upper light area shows the Theory of Reasoned Action; entire figure shows the Theory of Planned Behavior

Figure 2.4: Theory of Reasoned Action and Theory of Planned Behaviour: from Glanz K, Rimer BK, Viswanath K, eds. 2008. *Health Behavior and Health Education: Theory, Research, and Practice (4th ed)*. San Francisco: Jossey-Bass.

The more positively a person regards a certain behavior or action and the more they perceive the behavior as being important to their friends, family, or society, the more likely they are to form intentions to engage in the behavior. (La Caille, 2013, p.1964)

Behavioural beliefs arise when people first form beliefs about the likely outcomes of a certain behaviour which then modifies their attitude to those outcomes. Normative beliefs refer to the individual's perception of social pressure and influences their motivation to conform; the greater the perceived pressure the stronger the intention (LaCaille, 2013).

The TRA has numerous applications related to health including: intention to seek information about cancer, influences on pre-hospital cannulation intentions by paramedics, predicting Chinese adolescent smoking behaviour, dietary interventions in adolescents and young adults, determining physicians' intention to measure body mass index in children and adolescents, and predicting undergraduate students' intention to gamble (Banerjee, Siriwardena, & Iqbal, 2011; Q. Guo et al., 2007; Hackman & Knowlden, 2014; Khanna et al., 2009; Lee, 2013). Furthermore, it has been used extensively in relation to HIV/AIDS and STI education and behavioural interventions. Examples include: understanding HIV risk behaviours among Hispanic adolescents, gender differences in condom use, HIV risk reduction strategies for adolescents, and development of an online HIV/STI prevention intervention for young black MSM (Hightow-Weidman et al., 2011; Jemmott III, 2012; Munoz-Silva, Sanchez-Garcia, Nunes, & Martins, 2007; Ortega, Huang, & Prado, 2012). In many instances TRA is used in combination with other theories such as the theory of planned behaviour (Figure 2.4).

Like HBM, TRA has also been used extensively in the area of HIV/STI prevention. An aspect of TRA that was especially useful in the current study, which involved four distinct ethnic groups, was “the reasoned action approach is flexible in that it allows for different attitudinal, normative, and self-efficacy/control determinants of intentions and behavior in different populations. It therefore can be adapted to explain different behaviors and can be applied to different people” (Jemmott III, 2012, p. 152).

2.6 Peer Education

Peer education is not a contemporary concept, but dates back to the time of Aristotle. Throughout history there have been notable examples such as Joseph Lancaster's “monitorial system” used in London in the early 1800s (Green, 2001; Shepherd & Turner, 1999). In the 1950s, peer education was used in many countries to target young people with health and social messages (Goren & Wright, 2006). The basis of peer education is found in social learning theory, social inoculation theory, differential association theory and role theory (Goren & Wright, 2006; Green, 2001; Milburn, 1995; Shepherd & Turner, 1999). Furthermore, the theory of participatory

education has also contributed to the development of peer education (UNAIDS, 1999).

The concept of peer education was first applied to sexual health education in the 1980s to help prevent the spread of HIV/AIDS (Shen, Hong, Cai, Jin, & Shi, 2008b). Peer education programmes for the prevention of HIV and other STIs have been widely used in developing countries and have been moderately effective in improving behavioural outcomes. The increase in HIV knowledge resulted in a statistically significant increase in condom use among study populations, and in studies targeting IDUs there was a statistically significant decrease in equipment sharing. Although statistically significant, the effect sizes were moderate (Medley et al., 2009). Mavedzenge, Luecke, and Ross (2014) in their systematic review found high quality evidence of consistent effectiveness for in-school HIV prevention programmes on knowledge and reported attitude outcomes (Mavedzenge, Luecke, & Ross, 2014). Krishnaratne, Hensen, Cordes, Enstone and Hargreaves (2016) found similar results pertaining to in-school HIV prevention programmes in their systematic review (Krishnaratne, Hensen, Cordes, Enstone, & Hargreaves, 2016).

There are a number of peer education programmes being delivered in China by international organisations in cooperation with Chinese agencies, but most of these are in the east (Beijing or Shanghai) or south (Yunnan) of the country with one in Xingjiang province in the northwest (Y. Gao, Lu, Shi, Sun, & Cai, 2001). A number of studies have been published regarding the successful use of peer education programmes among high school students in Shanghai city (Cai et al., 2008; Shen et al., 2008a), Henan (Y. Cheng et al., 2008), and Fujian provinces (H. Huang et al., 2008). Apart from an HIV/AIDS Knowledge, Attitudes and Practices (KAP) study in Xinjiang province among a predominantly Uyghur population (Maimaiti et al., 2010), the majority of studies involving university students have focused on predominantly Han populations (X. Li et al., 2004). It is not known if previous studies in China involved “near peers” or “true peers”.

The question then arises, what exactly is a peer? According to Simoni et al., (Simoni, Franks, Lehavot, & Yard, 2011) “peers share with the target group key personal characteristics, circumstances, or experiences (i.e., “peeriness”)”. They postulate that

an individual's identity is derived "from a variety of sources, including belonging to a group category (e.g., based on gender, race/ethnicity, sexual orientation); occupying a role; or having a specific experience". They believe that "the 'master' categories of gender and race are often important but are seldom necessary or sufficient" (Simoni, Franks, Lehavot, & Yard, 2011, p. 353). However, in multi-ethnic settings where there is a national language — which is often the second language for ethnic minorities (EMs) — the issue of race and language may take on greater significance. "Existing research and theory suggest that ethnic language proficiency, cultural maintenance by parents, and in-group peer interaction have a role in ethnic identity" (Phinney, Romero, Nava, & Huang, 2001, p, 139). In their Standards for Peer Education Programmes, the United Nations Population Fund and Youth Peer Education Network (Y-PEER) emphasize the need to be both sensitive and maintain respect for culture, communicating with clients in their preferred language, which may not be the national language or an official dialect of the country (UNPF, 2005).

Gore (as cited in McDonald, Education, & Addiction, , p. 15) gives an excellent definition of a true peer: "A true peer is someone who is considered to be a member of a particular group by both themselves and members of the group". There is therefore an urgent need for the development of a multi-ethnic approach to STI and HIV peer education in China that utilises "true peers". This is of paramount importance in rural areas in the west of China where the majority of EMs reside and where such education is lacking. If the transmission of HIV is to be halted among student populations, then accurate information on prevention must be urgently incorporated into educational institutions (X. Zhang et al., 2017).

As with any other health promotion intervention, HIV education must be presented in culturally specific and sensitive ways and should be relevant and responsive to the needs of not only individuals, but groups and communities that are targeted by this education (Fennell, 1992). Cultural sensitivity is integral to public health and should be at the core of any effective health intervention. This does not merely take into account ethnic differences between members of the target population but should also consider the beliefs, world view and any other pertinent factors relating to how those

in the target population see themselves as distinct from other groups (Castro, Barrera, & Martinez, 2004; Resnicow, 2000).

Although language does not embody the totality of culture, at times the two can not be disconnected (Zarcadoolas, Pleasant, & Greer, 2009). While engaging in peer education, especially in multi-ethnic situations, a “one size fits all” approach is not always suitable as it does not take into account differences in culture and preferred language of communication between ethnic groups, which may range from very subtle distinctions to entirely different worldviews.

Common sense alone tells us that efforts grounded in the appropriate cultural context inherently have a better chance of success. Reducing cultural barriers makes it easier for individuals to receive, process, and understand information. Put simply, less cultural and linguistic translation is required. (Zarcadoolas et al., 2009, p.260)

2.7 Sources of Sex-Related Knowledge

Adolescents are one of the most vulnerable groups for acquiring STIs and HIV (Pedlow & Carey, 2003) and sexually active adolescents have the highest rates of STIs out of all age groups globally (Snell, 2002). This vulnerability is multifactorial, including psychosocial development, socio-cultural changes and biological susceptibility to STIs. The latter is especially pertinent to adolescent females whose cervix is covered with columnar epithelium which is more susceptible to damage and infection by STIs than squamous epithelium (S. Y. Cheng & Lo, 2002; Cothran & White, 2002). It is therefore essential that adolescents obtain accurate knowledge that will equip them to make informed choices regarding their sexual interactions with others, and that they are aware of the consequences of these interactions.

Many sources of such knowledge are available, including: parents, health professionals, school teachers, peers, television and movies, etc. Parent-adolescent communication about sexual matters has been shown to reduce sexual risk behaviour in some western countries such as the United States and Sweden. However, communication about sexual matters is not common between parents and adolescents

in Chinese society and most would regard the subject as taboo (L. Zhang, Li, Shah, Baldwin, & Stanton, 2007). In 2002 the Population and Family Planning Law was enacted, which compels schools to provide sex education. Yet a survey conducted in Shanghai, which is one of the most advanced areas in China, revealed that only 15% of high school students had received sex education from their teachers or parents (J. Watts, 2004).

Guidelines released in 2008 by the Ministry of Education in China relating to HIV prevention education state that schools are required to ensure that in each semester “no less than 6 hours in the 3-year middle school education and 4 hours in the 3-year high school are allocated to HIV prevention as well as sexual health education” (C. Li et al., 2017, p. 2). This has also proved to be inadequate due to the embarrassment of teachers who routinely do not adhere to these guidelines. A study conducted in Changchun City found that the source of knowledge depended upon the perceived degree of taboo related to the subject. Among sexually active adolescents, mass media and their peers were the primary source. Accuracy of information from these sources may unfortunately be unreliable (Liyang Zhang, Li, & Shah, 2007). Despite adolescents often feeling that adults are a more trustworthy source of information on sexual matters, they are more comfortable discussing these with their peers (Selikow, Ahmed, Flisher, Mathews, & Mukoma, 2009).

2.8 Sexual Risk Behaviour

Traditionally, Chinese society has been strongly opposed to pre-marital sex (Cui, Li, & Gao, 2001). Nonetheless the attitudes of adolescents have changed dramatically and become more liberal towards not only pre-marital sex, but also commercial sex (Ma et al., 2006). In a survey held in a suburb of Shanghai among out-of-school youths, 60% had a favourable attitude towards pre-marital sex (B. Wang et al., 2007). Burki found that there had been a 55% increase in the numbers of Chinese people who had premarital sex, from 15% in 1989 to 70% in a survey conducted in 2012 (Burki, 2016). Likewise attitudes of Chinese university students towards pre-marital sex have become more liberal. In a study conducted in Wuhan, the majority of female undergraduates thought that pre-marital sex was acceptable, with a small percentage of those who were sexually active having had unprotected sex with

multiple partners (Yan et al., 2009). Additionally, pre-marital sex with casual partners is culturally acceptable among some EMs such as Tibetans (S. Wang & Keats, 2005).

Early initiation of sexual activity is strongly associated with consequent sexual risk behaviour, STIs (including HIV), unplanned pregnancy, abortion and substance abuse (Ma et al., 2009; H. Yang, Li, & Barth-Jones, 2006). Likewise alcohol use shows consistent association with sexual risk behaviour, STIs, sexual coercion and sexual violence (Q. Li, Li, & Stanton, 2009). Over the last three decades there has been a great increase in alcohol consumption in China. A study conducted in 2004 in 18 provincial capitals revealed that almost 30% (males 36.2%, females 23.9%) of the 50,040 students surveyed in grades 7 to 12 began drinking before age 13 (Xing, Ji, & Zhang, 2006).

Within the Chinese student population there is a significant subpopulation of MSM (3.7% to 10.3%). In a study conducted in Liaoning, the HIV prevalence of this group was 3% which is 50 times higher than that of the general population (0.057%) (J.-J. Xu et al., 2011). Low rates of condom use or inconsistent condom use have been noted in a number of studies involving MSM (Y. Guo et al., 2010; Lau, Lin, Hao, Wu, & Gu, 2011; H. Liu et al., 2005; Muessig, Tucker, Wang, & Chen, 2010). What is of particular concern in the Liaoning study population is that a small number of participants did not use condoms even when they knew their regular sexual partners were infected with HIV (J.-J. Xu et al., 2011).

2.9 Summary

This literature review has outlined the conceptual framework employed in the study. The global HIV epidemic has been mentioned with a particular focus on the epidemic in China. China's current syphilis epidemic has also been discussed. The sources of sex-related knowledge and sexual risk behaviour have been outlined. A discussion of peer education as it relates to HIV and STI prevention in China has also been presented.

CHAPTER 3

METHODOLOGY

3.1 Introduction

This chapter describes the study design, objectives, research setting, and data collection instruments, development of the intervention and subsequent implementation, ethical issues and data analysis. The chapter begins with the conceptual framework used in the study and the reasons why these theories were chosen. A logic model shows the program theory employed in the study.

A description of the data collection instrument and other project documents and teaching materials appropriate for peer education are discussed together with the translation into target languages and back translation of these and other project documents and teaching materials. Pilot testing, test and retest of the data collection instrument for each of these translations is described. Focus groups for each of the languages involved reviewed the teaching materials and their findings are presented.

A description of the sampling of study participants, administration of the pre-intervention questionnaire, and the subsequent selection and training of volunteer peer educators is presented. The implementation of the intervention and administration of the post-intervention questionnaire are detailed. Ethical issues associated with the study and a discussion of informed consent in study populations whose first language is not English is presented. Data analysis methodology is also described.

This study sought to develop and utilize materials that would be culturally and linguistically appropriate for assessing Qinghai Nationalities University's (QNU) Han, Hui, Mongolian and Tibetan undergraduate students' knowledge of modes of transmission, prevention, common symptoms and availability of treatment for the most prevalent sexually transmissible infections (STI) and HIV. The Mongolian students were all from within the People's Republic of China, not from Outer Mongolia. Most of these students were from Haixi Mongol and Tibetan Autonomous

Prefecture in Qinghai province, a small number came from other places including other locations within Qinghai and Inner Mongolia.

3.2 Study design

This intervention study utilized a mixed methods approach. A number of theories have been used extensively in relation to peer based HIV/AIDS and STI health education. The current study sought to assess the knowledge of undergraduate students regarding the modes of transmission and prevention of STIs (including HIV) by using questionnaires pre- and post-intervention. This study drew on three theories: Diffusion of Innovations Theory (DOI), Health Belief Model (HBF), and the Theory of Reasoned Action (TRA).

3.3 Logic Model

Logic models are merely diagrams which conveniently illustrate a programme theory (Funnell & Rogers, 2011). They are one of the characteristics that have been identified in effective curriculum development for sex and HIV/STI education (Kirby, Laris, & Roller, 2007). Duncan, Hieftje, Culyba, and Fiellin (2014) state that “there is widespread agreement that the creation of logic models and intervention manuals is a necessary step in the process of conducting health interventions research” (Duncan, Hieftje, Culyba, & Fiellin, 2014, p. 108). Therefore, these are widely used in the area of peer education for the prevention of STIs and HIV. A similar model to the one used in the current study was employed among college freshmen in a university in the United States (McClain, 2013). Figure 3.1 illustrates the logic model employed in the current study.

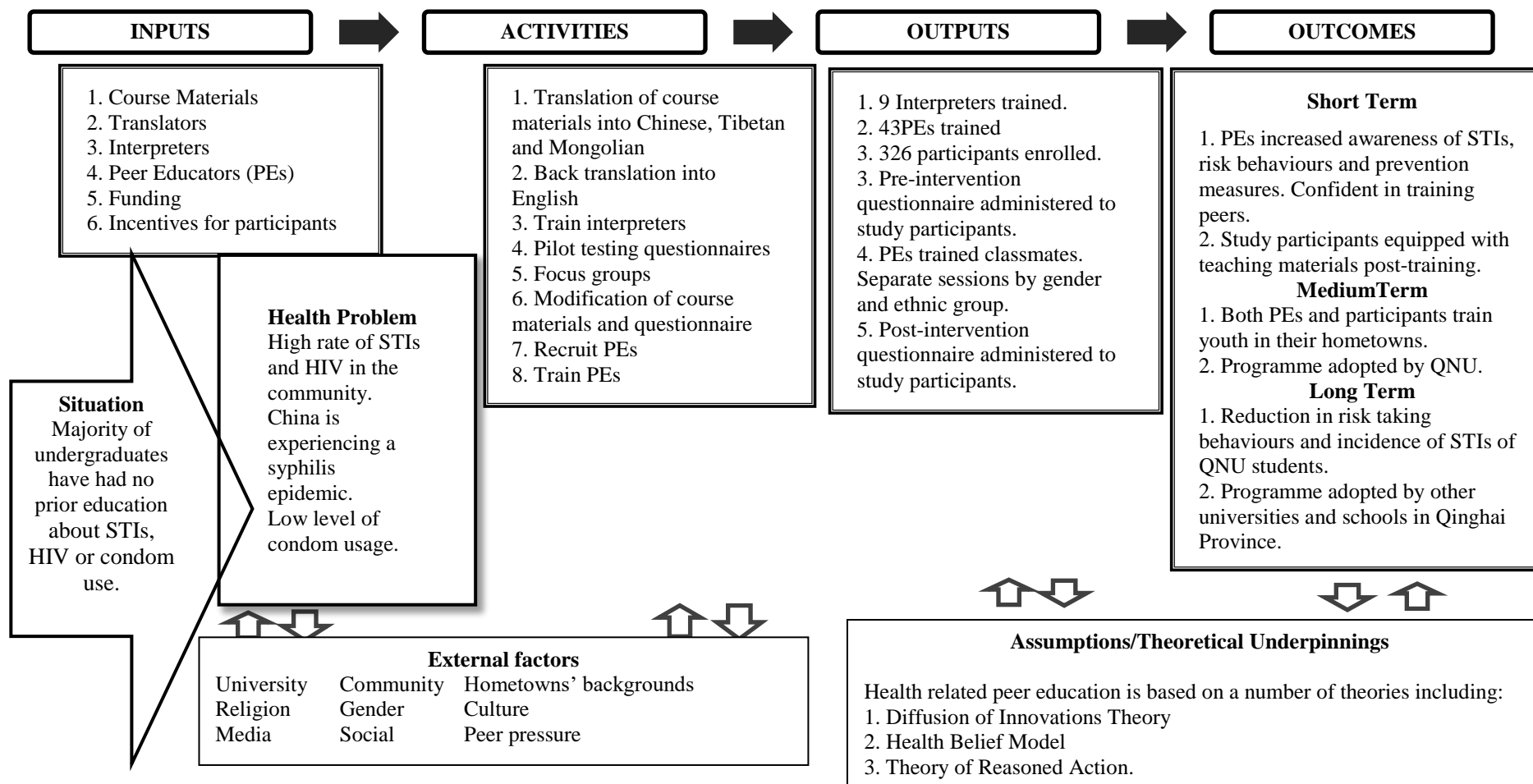


Figure 3.1: Logic model adapted with permission from the Youth Advisory Council of Western Australia (YACWA), from a Youth Educating Peers (YEP) Program Logic Model.

3.4 Objectives

3.4.1 Main Aim

The overall aim of the study is to ascertain if a multi-ethnic peer education programme is effective in raising students' awareness regarding the modes of transmission and prevention of STIs (including HIV) among undergraduate students in Qinghai Nationalities University.

3.4.2 Objectives

The objectives of the study are:

- (a) To develop teaching and assessment materials which were both linguistically and culturally acceptable to participants of four different ethnic groups.
- (b) To assess differences in knowledge levels relating to STIs including HIV between the demographic variables: gender, ethnic groups, types of dwellings (rural versus urban) and social backgrounds (farmers versus nomads).

The qualitative arm of the study will seek feedback on the intervention, but also attempt to determine if a similar programme would have benefitted participants had it been available when they were high school students. Additionally, the issue of near peers versus true peers will be investigated; participants will be asked if they prefer peer educators to come from their ethnic group or if those from other ethnic groups would be suitable.

An outcome of this study is the presentation of recommendations and policy guidelines for the implementation of multi-ethnic peer education programmes for the prevention of STIs and HIV especially among ethnic minorities (EMs). These recommendations and guidelines are presented in chapter 6.

3.5 Research setting

Qinghai province in the northwest of China borders on the Tibetan plateau (Figure 3.2) and covers an area of 722,300 km² situated between 31°32' N and 39°20' N and longitude 89°24' E and 103°04' E (W. J. Li et al., 2010; Tang, Zhong, Kristen, & Cheng, 2012). The capital city, Xining, is located in the eastern part of the province at the edge of the Qinghai-Tibet Plateau lying in the Huangshui River valley (Q. Chen, Cai, Liu, Zhou, & Zhang, 2013).

Although Qinghai province had a population of 5.23 million people in 2001, which grew to 5.5 million in 2010, it remains one of the most sparsely populated provinces of China. The population mix according to the 2000 Census figures was: 54.5% Han, 21.9% Tibetan, 15.9% Hui, 3.9% Tu, 1.9% Salar and 1.7% Mongolian (Goodman, 2004). Apart from a 2.5% increase in the population of Tibetans, a 1.4% decrease in Han and a 1.1% decrease in Hui, other ethnicities remained at approximately the same level in 2010 ("Yearbook", 2013), whereas, according to the 2013 Qinghai Statistical Year Book, the population in 2010 was 5.63 million and 5.73 million in 2012 ("Yearbook", 2013).

In the period from 1978 to 1997, Qinghai had the slowest average annual growth rate of per capita gross domestic product (GDP) of any province at 5.88% (Pedroni & Yao, 2006). GDP rose from 135.043 billion Yuan in 2010 to 188.454 billion Yuan in 2012 ("Yearbook", 2013). The exchange rate on June 19, 2015, was 1 yuan = \$0.21 (Australian dollars) and \$0.16 (United States dollars). A survey of minimum monthly wages across various jurisdictions in China showed there was an increase in Qinghai from 200 Yuan in the year 2000 to 460 Yuan in 2007. The corresponding increase for Guangdong was from 450 Yuan to 850 Yuan (J. Wang & Gunderson, 2011). This disparity persisted in 2013 when the per capita GDP in Guangdong was \$10,000 USD and only \$6,000 USD in Qinghai (S. Wu, Lei, & Li, 2015). Annual per capita income in farming and nomadic populations in Qinghai was 3,862.68 Yuan in 2010 and in 2012 rose to 5304.38 Yuan, whereas the urban population's annual disposable income in 2010 was 13,864.99 Yuan and increased to 17,566.28 Yuan in 2012 ("Yearbook", 2013).

Despite an increase of 9.6 % (0.5 million) in the population between 2001 and 2012, Qinghai is still one of the most sparsely populated provinces in China. Although salaries have increased over the years, there is still a sizeable disparity between rural and urban residents of Qinghai. Likewise, Qinghai's GDP is much lower than the more developed provinces in China.



Figure 3.2: Map of China, Managing in 中国: Cultural Issues for Enterprise in the People's Republic of China, Provinces and Administrative Regions of China, 2009. http://4.bp.blogspot.com/_d6Wqa_Yrsxk/SYFISb53a6I/AAAAAAAAAAEg/ykpfX5py1ZQ/s400/china-province_map_med.jpg

Qinghai province is rich in natural resources and has four pillar industries: (a) oil and natural gas; (b) electric power; (c) non-ferrous metals; and (d) salt chemicals. In addition there are four advantageous industrial enterprises: (a) metallurgy; (b) manufacture of medical and pharmaceutical products; (c) animal products; and (d) building (S. R. Xu, Chen, Wang, & Wang, 2010). In 2012, the numbers of people employed in primary, secondary and tertiary industry were 1.37 million, 746,100, and 1.19 million, respectively. The total annual agricultural production in the same year was 20.132 billion Yuan ("Yearbook", 2013).

The grasslands of the Qinghai-Tibetan plateau have traditionally been extensively used by Tibetan pastoralists for grazing their livestock. However, due to degradation of the grasslands this traditional way of life is changing. A number of theories have been proposed to explain the degradation including overgrazing and sedenterisation (including fencing). The Ecological Migration policy has led to the establishment of numerous resettlement villages and large-scale urbanization of pastoralists. In addition to helping the degraded grasslands recover, the aim is to lift the standard of living of the pastoralists. Unfortunately this policy has not fully addressed the social consequences of displacing the herdsmen and their families

and the resultant poverty, unemployment and cultural issues (Foggin, 2008; Harris, 2010; Ptackova, 2011).

Tibetans and Mongolians are Tibetan Buddhists who come from farming or nomadic backgrounds and have their own written and spoken languages. In Qinghai province the Amdo dialect is the prominent Tibetan dialect apart from Yushu prefecture where Kham Tibetan is spoken. The Tu are also Tibetan Buddhists and primarily farmers although some breed livestock. Both the Tu and Salar have their own spoken languages but no written language (Chow, 2002). The Hui do not have their own language, they primarily speak Qinghai Hua (Qinghai dialect) which evolved from the contact of standard Chinese (Putonghua) with the non-Sinitic languages spoken in this area: primarily Amdo Tibetan, Mongolian and Monguor. The latter is the dialect spoken by the Tu people (Dede, 2006). The majority of Han in Qinghai speak Putonghua, although long term residents, especially those from rural areas, may also speak Qinghai Hua. The religious practices of the Han may include: Confucianism, Daoism, Buddhism and ancestor worship as well as Christianity, but many do not profess any religious affiliation (Nadeau, 2012).

In 2011, Qinghai had 131 hospitals, which included 79 general hospitals and 12 specialised hospitals; the remainder were hospitals that focused on Chinese traditional medicine or Mongolian and Tibetan ethnic groups. The 131 hospitals had a total of 18,606 beds. In addition to the hospitals there were 169 Community Health Service Centres as well as 405 Health Care Centres. A number of other clinics operated and there were 21 Women and Children Care Agencies (Stations). The number of fully licensed doctors at that time was 7,369 together with 1,282 assistant doctors, 8,681 registered nurses as well as other licensed paramedical staff ("Yearbook", 2013).

During the study period there were 9,712 students attending QNU, which included 3,489 Han (35.9 %), 2,702 Tibetan (27.8 %), 997 Hui (10.3 %), and 343 Mongolian (3.5 %) (L. Wang, personal communication, March 30, 2014). Anecdotal evidence suggests that the vast majority of students from Qinghai province attending QNU have never received any formal education regarding STIs (including HIV) and therefore represent an extremely vulnerable population.

3.6 Instruments

3.6.1 Translation

Translation

Errors in translation can severely compromise the efficacy of assessment tools and teaching materials which result in significant miscommunication. Initially, materials were developed in English and then translated into Mandarin, Tibetan and Mongolian. Translations were checked for accuracy and certified by professors in the appropriate languages at the QNU - and in the case of Mongolian - this was also performed in Inner Mongolia. The exception to this was the TeachAIDS animated video developed by Stanford University which was already available in Mandarin. The SAQs (self-administered questionnaires) for pre-intervention¹, post-intervention² and other project documents were translated from English into Chinese, Mongolian and Tibetan using the double-back-translation method (Eremenco, Cella, & Arnold, 2005; Sousa & Rojjanasrirat, 2011). The SAQs were then piloted with a small group of students, not in the study group, to check for accuracy. Any necessary revisions to the SAQs were made before they were used in the study. The same method was employed for all of the project documents that participants were given: the information form for all participants³, information form for peer educators⁴, consent form for all participants⁵, consent form for peer educators⁶ and the questionnaire evaluation form⁷.

The researcher is literate in Tibetan and has a working knowledge of Mandarin, especially related to medical vocabulary. Together with translators the researcher worked on several drafts of project documents in the respective languages before a suitable draft was submitted for back translation.

¹ Appendices A1 English, A2 Chinese, A3 Mongolian and A4 Tibetan

² Appendices B1 English, B2 Chinese, B3 Mongolian and B4 Tibetan

³ Appendices C1 English, C2 Chinese, C3 Mongolian and C4 Tibetan

⁴ Appendices D1 English, D2 Chinese, D3 Mongolian and D4 Tibetan

⁵ Appendices E1 English, E2 Chinese, E3 Mongolian and E4 Tibetan

⁶ Appendices F1 English, F2 Chinese, F3 Mongolian and F4 Tibetan

⁷ Appendices G1 English version for Chinese participants, G2 English version for Mongolian participants, G3 English version for Tibetan participants, G4 Chinese, G5 Mongolian, G6 Tibetan

Back Translation

For each written language, two independent translators not associated with the project were used. Once these translators had sent their back translations to the researcher any discrepancies in translation were discussed. For translators living in other cities or provinces the follow up discussion was by telephone with subsequent face to face meetings if they came to Xining. Face to face meetings were held with those translators living in Xining. In order to eliminate any potential bias, the original statements were either read in the appropriate language or shown to the translators who were then asked to verbally translate them into English. This helped to overcome any of the deficiencies seen in the translators' written English. In the event that translators disagreed on any changes, advice was sought from other independent translators and only if a consensus was reached were changes made; otherwise the original was used (Sousa & Rojjanasrirat, 2011). A third translator, who was a doctor and therefore familiar with medical vocabulary, was used for the Mongolian documents to improve accuracy. Analyses of back translations are presented in the Appendices (H1, H2: Chinese; H3, H4, H5: Mongolian; and H6, H7: Tibetan).

Interpreters

The researcher recruited male and female interpreters fluent in English and the respective ethnic group dialects: Mandarin, Mongolian, Qinghai Hua (local dialect of Qinghai residents used by Hui), and Tibetan. All interpreters were offered remuneration for their work but they refused to accept it as they felt that the project was important for their respective ethnic groups and were privileged to help in any way they could. They were familiarized with the project documents (information forms, consent forms, pre and post-intervention questionnaires, peer educator training records) and teaching materials prior to any meeting with study participants. Where possible, interpreters were closely age-matched to the participants to help put participants at ease. They assisted the researcher when he met with the various groups which included the cohorts involved in the pilot testing of the data collection instrument, as well as the test and retest for the Chinese, Mongolian and Tibetan versions. Interpreters also assisted when study participants and peer educators were recruited, during the training of peer educators, and at the administration of both pre and post-intervention questionnaires to study participants. They also assisted when liaising with some of the staff of QNU. Male interpreters were only used when interacting with male participants

in the study; likewise female interpreters were only used when interacting with female participants.

3.6.2 Questionnaires

Anonymous self-administered questionnaires were used as the data collection instruments. The pre-intervention SAQ was filled in prior to training and the post-intervention after participants received training by volunteer peer educators. The HIV knowledge questionnaire, which has 18 questions (HIV-KQ-18) (Carey & Schroder, 2002) was used in combination with an adaptation of the Sexually Transmitted Diseases Knowledge Questionnaire (STD-KQ) (Jaworski & Carey, 2006). The HIV-KQ-18 questionnaire has previously been validated and found to be reliable. It assesses the respondent's knowledge of transmission and prevention of HIV and responses to the questions are (a) True, (b) False, or (c) Don't Know. This questionnaire and adaptations of it have been widely used in many different settings among diverse study populations including university students, drug users, and MSM (A. Adefuye et al., 2011; A. S. Adefuye, Abiona, Balogun, & Lukobo-Durrell, 2009; Johnston et al., 2011; Sabato, Burnett, Kerr, & Wagner, 2013; Wagenaar, Sullivan, & Stephenson, 2012).

The questionnaire has been extensively used in a number of countries including Africa, the United States of America, Fiji, Indonesia and China (Chang, Hsieh, Peng, Li, & Hser, 2014; Paraniala, Jeganathan, Kim, Katherine, & Kamal, 2014; Wagenaar et al., 2012; Waluyo, Culbert, Levy, & Norr, 2015). The STD-KQ has also been previously validated and assesses knowledge of cause/cure and general knowledge of six STIs: herpes, gonorrhoea, chlamydia, HIV, hepatitis B, and human papilloma virus (HPV). The questionnaire and adaptations of it have been used extensively among distinct populations including university students, STI clinic patients, lesbian, bisexual and other women who have sex with women (Ehrhardt, Krumboltz, & Koopman, 2007; Logie et al., 2014; Scott-Sheldon et al., 2010). This questionnaire has also been widely used in a number of countries including the United States of America and Africa (Mimiaga et al., 2009; Nelson et al., 2015). China is currently experiencing a syphilis epidemic therefore the main adaptation in the current study was to add questions relating to syphilis (Hesketh et al., 2006; Joseph D. Tucker & Cohen, 2011).

The new 39 item data collection instrument to assess HIV and STI knowledge in the present study is entitled the HIV/STI-KQ-39 questionnaire. The first section of the pre-intervention

questionnaire included instructions for filling in the questionnaire as well as questions (Q1–Q3) related to participant demographics. The second section consists of questions (Q4–Q21) related to HIV with the following questions (Q22–Q42) predominantly relating to other bacterial and viral STIs. The final section in the pre-intervention SAQ has three questions asking participants to rank the 3 most important influences on their knowledge relating to puberty, sexuality and knowledge of STIs, HIV and AIDS.

Questions in the pre-intervention SAQ were close-ended. It is well recognised that even when questionnaires are self-administered many subjects still misreport when they are answering sensitive questions (Tourangeau & Yan, 2007). However, issues considered as sensitive by adolescents are more likely to be revealed by the use of close-ended questions rather than open questions (Lavikainen & Lintonen, 2009). Additionally, closed ended designs enable researchers to produce aggregated data quickly, such as by the use of score sheets, but the range of possible answers is set by the researcher which can lead to frustration for subjects if all of the possible responses have not been listed (Boynton & Greenhalgh, 2004). Sections one and two (as described above) of the HIV/STI-KQ-39 are identical in the post-intervention SAQ. However, it also had a third section containing six open-ended questions that were designed to elicit feedback from the students regarding their assessment of the peer education programme and their ideas on how to improve the programme. It appears that the order of data collection, i.e., closed questions followed by open questions or vice versa, is unlikely to bias participants' responses when these responses are collected concurrently (Covell, Sidani, & Ritchie, 2012).

3.6.3 Teaching Materials

3.6.3.1 Power Point Presentations (PPTs)

These were developed by the researcher and addressed the following questions related to STIs and HIV:

- a) How do you get them?
- b) How do you avoid getting them?
- c) How do you know if you have an STI?
- d) Can all STIs be treated successfully?
- e) What should you do if you think you have an STI?

The modes of transmission, prevention (including how to use a condom correctly and abstinence), symptoms, complications and treatment of common STIs (gonorrhoea, chlamydia, syphilis, herpes, human papilloma virus and pubic lice) and HIV are discussed. Where to seek appropriate treatment is also reviewed. Although the PPTs used for male⁸ and female⁹ participants have many common elements, they differ in gender specific symptoms and complications. The male PPT primarily has images of the effects of some of the STIs on male genitalia. In order to preserve cultural sensitivity, the female PPT primarily has images of the effects on neonates born to infected mothers. The one exception to this is an image of vaginal genital warts as it was felt that any potential embarrassment was far outweighed by awareness of cervical cancer as a sequela of infection with human papilloma virus.

3.6.3.2 Tibetan HIV prevention video (Love Wisely Live Healthy)

This story-based educational DVD (Appendix K, English transcript) was previously developed by the researcher and found to be culturally and linguistically acceptable to Tibetans irrespective of their literacy level. It portrays how a young woman from a farming area contracts HIV from her husband who had slept with a prostitute on a trip to a large city. The woman has a baby that is HIV positive and her husband subsequently dies. The other protagonist is a young man from a nomadic (pastoralist) area who has a number of female sexual partners and also contracts HIV. Modes of transmission, prevention and treatment issues are also addressed. In Tibetan society, people, consider themselves as either farmers or nomads irrespective of their occupation. It was important to use characters from both of these backgrounds; if only one group was identified then the other would say that only that group could contract HIV.

There are both Amdo Tibetan and Kham Tibetan translations of this DVD. It has been used extensively throughout Tibetan areas in Qinghai, Gansu and Sichuan provinces of China where these dialects are spoken. In addition to the spoken dialogue, written Tibetan subtitles have enabled it to be used among literate Tibetans in Lhasa where Amdo and Kham spoken dialects are not understood. Qinghai Tibetan Television has aired the Amdo version of the video; these broadcasts can also be seen in other provinces such as Gansu. A version of the video with Mongolian subtitles is useful when teaching Mongolians as they also have farmers and nomads in their society.

⁸ Appendices I1: English, I2: Chinese, I3: Mongolian, I4: Tibetan

⁹ Appendices J1: English, J2: Chinese, J3: Mongolian, J4: Tibetan

3.6.3.3 TeachAIDS animated video

This free video was developed by Stanford University and released in 2009; it is available in a number of languages and has been used extensively in over 70 countries. The Mandarin version was used in this research project as it was not available in Tibetan, Mongolian or Qinghai Hua. Since this project was completed, a Tibetan version has been released but it is in Lhasa dialect, not the Amdo dialect spoken in Qinghai, Gansu and Sichuan provinces.

TeachAIDS couples a biology-based approach with culturally-appropriate euphemisms to promote a coherent conception for knowledge retention, extended reasoning, and assessment of HIV risk behaviours. Our pedagogy simplifies complex ideas without sacrificing completeness or accuracy of critical information. Using an iterative design process, TeachAIDS develops medically-accurate, culturally-tailored animations to maximize learning and retention. (“TeachAIDS”, 2009 Evidence-Based Design Process, para 1)

3.6.3.4 Focus Group Discussions

The main purpose of the focus groups was to assess the efficacy of the materials that the researcher had developed as well as the TeachAIDS animated video to give students an understanding of the knowledge of modes of transmission, prevention, common symptoms and availability of treatment for the most prevalent STIs and HIV. Each translation of the materials (Chinese, Mongolian and Tibetan) were examined using this method. Separate sessions were held for males and females were conducted after participants had completed the retesting and subsequent evaluation of the SAQ.

The PPTs used differ slightly in content with the male one having images of the effects of some of the STIs on male genitalia. Images in the female presentation focused more on the effects on neonates born to infected mothers. The TeachAIDS animated video was identical for male and female focus groups.

3.6.3.4.1 Chinese participants

PPTs

There were 15 males and 19 females in the respective focus groups. Fourteen of the males thought that students their age would understand the PPT designed for males and one thought that they would partially understand. Fifteen of the females believed that the PPT designed for females would be easily understood and 4 thought they might partially understand before the explanation was given, and fully understand after the explanation. All of the males thought that the main message of the PPT was how to use a condom correctly and avoid having sex before marriage so that you won't acquire an STI. All of the females thought that the PPT gave an introduction to STIs, symptoms and how to protect themselves from acquiring STIs, and the consequences of infection with STIs. Female participants did not find any words in the PPT difficult apart from some of the names of infections. Males found that epididymitis, genital warts and chlamydia were a little difficult.

Males did not find anything in the PPT that might offend or embarrass students their age. The females said that the photo of vaginal genital warts might be a little embarrassing but they thought that it was important that this be kept in the PPT for educational purposes because of the risk of women developing cervical cancer caused by Human Papilloma Virus (HPV). While the males did not find anything confusing in the PPT, the females were initially confused about how people could develop oral infection with HPV as they had no concept of oral sex.

All female participants did not identify any features of the PPT that they really liked or did not like. On the other hand the males did not like "all kinds of viruses". This comment was made because of the severity of infections caused by the viruses. All male participants really liked the explanation of how to use a condom correctly. When asked what could be done to make the PPT better, one male thought that mother to child transmission of HIV should be included in the male PPT. However, this issue is addressed in the TeachAIDS animated video.

All participants found that the presenter clearly explained the contents of the PPT and found it very helpful. The males commented that they now had a general idea about STIs and they know how to avoid acquiring these infections.

TeachAIDS animated video

All participants thought that students their age would be able to understand this video. The males thought the main message was how to prevent HIV infection and all of the females thought it was how HIV is acquired, with 11 of them adding that it also highlighted how to deal with HIV. All participants said that there were no words in the video that were difficult to understand, it would not offend or embarrass students their age, and there was nothing confusing. They all liked the video and found no elements that they did not like. Although all of the females thought nothing was needed to improve the video, one male thought that the cartoon figures were not good enough and the repetitive sentence style in some parts should either be improved or cut out. All participants found this video very helpful and the education session to be very beneficial. At the conclusion of the focus groups participants were thanked for their participation and given a free 2 GB thumb drive.

3.6.3.4.2 Tibetan participants

PPTs

There were 13 male and 13 female participants in the respective focus groups. All of the males thought that students their age would be able to understand the PPT designed for males. Of the females, 54 % held the same view for the PPT designed for females with 38.5 % saying that students would be able to partially understand this and one participant thought that they would not be able to understand it. Their reason was that some of the medical words were new to them.

Twelve out of the 13 males thought that the main message of the PPT was not to have sex before marriage but if you did to practice safer sex. One male thought that the main message was not to have sex with commercial sex workers. The females thought that the main message was awareness of symptoms, how to prevent infection and to make people aware of the infections.

The words that presented most difficulty for females were chlamydia (13 participants), gonorrhoea and syphilis (8 participants). Male participants thought that syphilis, gonorrhoea,

baby oil, chlamydia, herpes and lymph nodes were a little difficult. Neither male nor female participants believed that anything in the PPTs would offend or embarrass other students their age. Likewise they did not find that there was anything confusing in the presentations or any elements that they did not like. All participants really liked the photos in the PPTs. They all agreed that the presenter had clearly explained the contents of the PPTs and found them very beneficial. Once the explanations had been given for the terms that some had found difficulty with, they were confident they fully understood these. Male participants thought that it was good to show the Tibetan AIDS movie in conjunction with the PPTs.

Love Wisely Live Healthy Video

All participants thought that this movie would be easily understood by students their age. Males thought that the main message was to love life and love others wisely (i.e. practice safer sex) whereas the females thought that it was primarily about prevention of infection and one participant used the Tibetan word for sorrowful. None of the participants thought that there were any words that were difficult to understand or that the movie would offend or embarrass other students their age. Additionally, there was nothing that was confusing or that they did not like. They thought that the actors in the movie were very good and the characters were easy to identify with. The Tibetan language used was very clear and easy to understand and the movie was culturally relevant. All participants found the movie very beneficial and the only thing that might have improved the movie was a list of symptoms. However, these were covered in the PPT and the TeachAIDS animated video.

TeachAIDS animated video

All participants thought that students their age would be able to understand this video. All male participants thought that the main message was how to prevent HIV infection, whereas female participants said that it was how to prevent infection and awareness of symptoms. All participants did not think that there were any words in the video that were difficult to understand, that the video would not offend or embarrass other students their age, there was nothing confusing nor was there anything that they really did not like. Male participants thought that the dialogue and explanations were clear and the female participants used a Tibetan word to describe it as 'wonderful'. There were no suggestions on how the video might be improved.

All participants found the education session to be very beneficial. At the conclusion of the focus groups participants were thanked for their participation and given a free copy of the Tibetan AIDS movie and a poster in Tibetan on hydatids disease.

3.6.3.4.3 Mongolian participants

PPTs

There were 7 male and 16 female participants in the respective focus groups. All of the male participants and 11 of the females thought that students their age would be able to understand the PPT designed for their gender. One female thought that they would be able to partially understand the PPT. All of the females thought that the main message was how to protect oneself, and it is good to use condoms to stay healthy. All the males thought that the main message was that if you are going to have sex, use a condom, although one of the males also thought the message included don't have sex before marriage, and another male thought that it was to know how to treat infections. Male participants did not find any words in the PPT difficult to understand and all of the female participants understood most of the words. Any words that were not clearly understood were then explained by the facilitator. In the study proper, this was the task of the peer educators so that all participants were fully conversant with terminology used.

None of the male participants found anything in the PPT that they thought might embarrass or offend other students their age. The female participants felt that the picture of a male penis used in the slides that demonstrate how to use a condom could cause some embarrassment to other students their age. However, they felt that these slides should be retained in the PPT. Male participants did not find anything confusing in the PPTs, female participants felt the same way once the unfamiliar words were explained to them. Likewise they did not find anything that they did not really like. The male participants all really liked the parts of the PPT that discussed effective treatments for infections, while female participants really liked the sections on gonorrhea, viruses and AIDS.

Female participants thought that making a video presentation especially about gonorrhea could improve the PPT. Male participants thought that it would be good to have the PPT in Mongolian and Chinese. All of the female participants thought that the presenter clearly explained the contents of the PPT and the males thought that it was explained very clearly. All of the male and female participants thought that the PPT was beneficial. Male participants also remarked that “now they want to protect themselves”.

Love Wisely Live Healthy Video

All male and female participants thought that this movie would be easily understood by students their age. Likewise all participants thought that the main message of the movie was how to protect oneself from acquiring HIV. None of the participants found any of the words used in the movie difficult to understand. Neither did they think that there was anything in the movie that might offend or embarrass students their age. There was nothing confusing in the movie for any of the participants and nothing that they really did not like. Female participants did not give feedback about anything that they really liked in the movie. Whereas, all of the male participants really liked everything about the movie and commented that it reflected real life.

When asked what might be done to make the movie better, all participants said that the use of Mongolian vocals would be good. However, even without the Mongolian vocals they thought that with the existing Mongolian subtitles it is still good to show the video to Mongolians. All participants thought that the presenter clearly explained the content of the movie. One male participant thought that it might be good to show photos of the STIs as they were mentioned in the movie. All participants agreed that the movie was beneficial.

TeachAIDS animated video

All participants thought that students their age would be able to understand this video. All female participants thought that the main message of the video was how HIV was transmitted. The male participants thought that it was how to protect oneself, HIV transmission and prevention and how to check if one was sick. There were no words in the video that participants found difficult to understand. Neither was there anything that they felt would

offend or embarrass students their own age. Additionally, there was nothing in the video that any of the participants found confusing.

None of the participants found anything that they really did not like about the video. There was a difference between male and female participants when asked what they really liked about the video. All of the male participants thought that the questions and answers in the video were really good, whereas the female participants really liked that the video taught them how to protect themselves. All participants did not think that there was anything that could be done to improve the video. Female participants thought that the video was beneficial and male participants felt it was very helpful and easy to understand. At the conclusion of the focus groups participants were thanked for their participation and given a free 2 GB thumb drive.

3.6.4 Pilot testing

Pilot testing of the SAQ was performed in order to assess the efficacy and suitability of the terms used in the translations.

3.6.4.1 Sample for pilot testing

The pre-intervention SAQ underwent pretesting with 25, 4th year Tibetan students from the Tibetan department just prior to their graduation from QNU. This group of students fulfilled the inclusion criteria for the study: they were over the age of 18 and from one of the ethnic groups (Tibetan) included in the study. Additionally they had a good level of ability in spoken and written Chinese language, and were therefore suitable to pilot both Tibetan and Chinese versions of the questionnaire. There were 16 female participants in one session and 9 male participants in a separate session.

3.6.4.2 Method for pilot testing

After the participants were told about the proposed project and their part in piloting the data collection instrument, they were given time to ask any questions they had regarding the project and data collection instrument. Once they agreed to take part they were asked to fill in a consent form. When informed consent was obtained, they were asked to fill in the Tibetan version of the pre-intervention SAQ. Once they had completed this they were given a copy of

the Chinese pre-intervention SAQ and asked to complete this. They were not permitted to refer back to the Tibetan questionnaire while doing this. Once the Chinese version had been filled in, participants were asked to complete a questionnaire evaluation form. At that time they were permitted to refer back to both the Tibetan and Chinese questionnaires they had previously completed. When this was accomplished, all of the questionnaires and evaluation forms were collected. The data from the evaluation form was subsequently analysed.

Participants were then shown PPTs, an AIDS movie in Amdo Tibetan and the Stanford TeachAIDS animated video in Chinese. They were encouraged to ask questions at any time. A discussion time took place at the conclusion of these presentations. Participants were given a free copy of the AIDS movie to take away as well as a poster, in Tibetan, about hydatids disease, which is endemic in Tibetan pastoralist areas (Boufana et al., 2013).

3.6.4.3 Results of pilot testing

Twelve of the participants found the questionnaire easy to understand, 14 said that many of the medical words used were unfamiliar to them and 22 found that some of the medical words were unfamiliar. As to the translations used, 22 said that including the Chinese translation of medical words on the Tibetan version was helpful and 23 of 24 participants preferred to use the Tibetan version of the questionnaire rather than the Chinese version. The one participant who preferred the Chinese version was not literate in written Tibetan although fluent in spoken Tibetan. This participant's primary and secondary education had been in Mandarin and not in Tibetan. The length of the questionnaire was not too long according to 23 participants, although 50% stated that additional questions could be added.

All participants agreed that difficulty in understanding the questionnaire was not due to the wording of questions but rather medical terms that participants were unfamiliar with such as chlamydia, syphilis, genital herpes and genital warts. In Tibetan areas sexually transmissible infections are usually referred to as male (མོ་ནད།) or female diseases (ཚོ་ནད།) without specific terms being used to distinguish different infections. Participants all agreed that after seeing the PPTs, AIDS movie and the TeachAIDS animated video and subsequent discussion, they felt familiar with and understood previously unfamiliar medical terms.

Participants suggested that alternative words should be used in Tibetan for orgasm, sneeze (this relates to question 4 of the SAQ), human papilloma virus, and condom. The suggested alternatives, for two of these words were very specific to limited geographical areas, and not in common use in all Tibetan areas, therefore these words were not changed. The other two suggestions did not have the same meaning in Tibetan and were likewise unchanged. Additional questions that participants suggested would be useful in the questionnaire were all covered in the education session. The above analysis is presented in Appendix L.

3.6.5 Test and Retest

Test and retest of the SAQ was implemented to assess the stability of the questionnaire without any learning effect that would have come from the intervention. The cohorts involved in the test and retesting of the questionnaire were distinct from those involved in pilot testing of the questionnaire. Test and retesting of the questionnaire, seven days apart, was performed with separate male and female cohorts for each of the written languages: Chinese, Mongolian and Tibetan. The exception to this was the Mongolian male cohort which was not available for retesting until one month had elapsed. All participants were informed about the purpose of the project. They were given adequate time to ask any questions and if they agreed to take part then they were asked to fill in consent forms. Once informed consent was obtained, the data collection instrument was administered as described below.

Once the retesting was completed, participants were also asked to take part in focus groups to review the teaching materials that would be used in the study proper.

3.6.5.1 Sample for test and retest

a) Chinese version

At the initial testing of the SAQ there were 16 male participants and 16 female participants. Thirteen of the male participants returned for retesting and another two who were not at the initial testing also presented at that time. The questionnaires from these two students were not included in the statistical analysis of the SAQ. Unfortunately the female cohort was unavailable for retesting, therefore another cohort was recruited, which consisted of 19 participants who all underwent initial testing and then returned for retesting.

b) Tibetan version

At the initial testing of the SAQ there were 13 male and 13 female participants. At retesting there were 12 male participants and 6 females. It should be noted that during the intervening week there had been self-immolations in the home town of many of the participants. In fact one of those who died was a relative of one of the girls in the original cohort. The questionnaires from those participants who had not been present for the initial testing of the SAQ were not included in the statistical analysis of the SAQ.

c) Mongolian version

The male participants were from the 3rd and 4th year classes, and female participants were from the 3rd year classes. At the initial testing of the SAQ there were 15 male and 18 female participants. At retesting there were 7 male and 16 female participants. Between the test and retest eight of the 4th year male participants left the university as they had either found employment or had returned to their hometowns and were therefore unavailable for retesting.

3.6.5.2 Method for test and retest

a) Chinese version

After the participants had given informed consent, they were asked to fill in the Chinese version of the pre-intervention SAQ. Once the Chinese version had been filled in, participants were asked to complete a questionnaire evaluation form. At retest the participants again filled in the Chinese version of the pre-intervention SAQ.

b) Tibetan version

After the participants had given informed consent, they were asked to fill in the Tibetan version of the pre-intervention SAQ. Once they had completed this they were given a copy of the Chinese pre-intervention SAQ and asked to complete it. They were not permitted to refer back to the Tibetan questionnaire while doing this. Once the Chinese version had been filled in, participants were asked to complete a questionnaire evaluation form. At that time they were permitted to refer back to both the Tibetan and Chinese questionnaires they had previously completed. When this was accomplished, all of the questionnaires and evaluation forms were collected. The data from the evaluation form was subsequently analysed. At retest participants only filled in the Tibetan version of the questionnaire. Participants were given a

free copy of the AIDS movie to take away as well as a poster, in Tibetan, about hydatids disease which is endemic in Tibetan pastoralist areas.

c) Mongolian version

After the participants had given informed consent, they were asked to fill in the Mongolian version of the pre-intervention SAQ. Once they had completed this they were given a copy of the Chinese pre-intervention SAQ and asked to complete this. They were not permitted to refer back to the Mongolian questionnaire while doing this. Once the Chinese version had been filled in, participants were asked to complete a questionnaire evaluation form. At that time they were permitted to refer back to both the Mongolian and Chinese questionnaires they had previously completed. When this was accomplished, all of the questionnaires and evaluation forms were collected. The data from the evaluation form was subsequently analysed. At retest participants only filled in the Mongolian version of the questionnaire.

3.6.5.3 Results of test and retest

a) Chinese version

Of the males, 86.7% found the SAQ easy to understand, whereas 100% of the females said it was hard to understand. Many of the medical words were unfamiliar to 40% of the males and 94.7% of the females, whereas 60% of the males and 17% of the females stated that only some of the medical words were unfamiliar to them. None of the males and only 5% of the females thought that the SAQ was too long. Additional questions could be added to the SAQ according to 80 % of the males and 21 % of the females.

Participants suggested alternative words for some of the medical terms that they found difficult such as: warts, syphilis, chlamydia, gonorrhoea and human papilloma virus. However, the meanings of the alternative words they gave were either very broad terms for STIs or did not accurately reflect the pathogen in question. Two participants suggested that more colloquial language be used for some of the medical terms. After discussion with translators it was felt that there were no appropriate colloquial terms that would be widely understood. Suggested additional questions to be included in the SAQ as well as additional comments by participants were all covered in the education component of the training program. The above analysis is presented in Appendix M.

The Cronbach's alpha value (based on standardized items) for the Han males at initial test was $\alpha = 0.784$, females $\alpha = 0.854$ and combined male and female $\alpha = 0.844$. At retest the respective values were $\alpha = 0.820$, $\alpha = 0.889$ and $\alpha = 0.892$ (Table 3.2).

b) Tibetan version

Of the males 61.5% found the SAQ easy to understand, whereas the same number of females said it was hard to understand. Many of the medical words were unfamiliar to 53.8% of males and 92.3 % of females, whereas 76.9% of both male and females found that only some of medical words were unfamiliar. It was considered helpful to include the Chinese words for medical terms in the Tibetan version of the SAQ by 84.6% of the males and 100% of the females. There was a preference to use the Tibetan SAQ rather than the Chinese version by 84.6% of the males and 75% of the females. According to 69.2% of males and 76.9% of females the SAQ was not too long. There was no need to add additional questions to the SAQ according to 54% of the males and 62% of the females, although two males failed to answer this question.

No alternative words were suggested for those that participants found difficult to understand. Suggestions for additional questions included tuberculosis which is not an STI and therefore was not added. One participant suggested the origin and history of AIDS, however, the researcher felt that this could be raised in training sessions if participants wished to know more, but would not be a useful addition to the SAQ. Although some participants suggested that definitions of medical terms, including names of infections be given, the purpose of the SAQ is to assess baseline knowledge and these terms are then fully discussed in training sessions. All participants agreed that difficulty in understanding the questionnaire was not due to the wording of questions but rather medical terms that participants were unfamiliar with. Participants were in total agreement that after seeing the PPTs, AIDS movie and the TeachAIDS animated video and subsequent discussion in the focus group, they felt familiar with and understood the medical terms that they had previously been unfamiliar with. Analysis of the aforementioned is shown in Appendix N.

The Cronbach's alpha value (based on standardized items) for the Tibetan males at initial test was $\alpha = 0.889$, females $\alpha = 0.850$ and combined male and female $\alpha = 0.878$. At retest the respective values were $\alpha = 0.951$, $\alpha = 0.816$ and $\alpha = 0.927$ (Table 3.2).

c) Mongolian version

The SAQ was easy to understand by 57.1%, and 11.1% of females. Many of the medical words were unfamiliar to 85.7% of males and 88.9% of females, whereas 64.3% of males and 72.2% of females found that only some of the medical words were unfamiliar. All of the male participants and 66.7% of the female participants thought that it was helpful to include the Chinese terms for medical words in the Mongolian version of the SAQ. All of the males and 38.9% of the females preferred to fill in the questionnaire in Mongolian. While none of the males preferred to fill in the questionnaire in Chinese, 55.6% of the females did. Only 28.6% of the males and 16.7% of the females thought that the questionnaire was too long. According to 78.6% of the males and 35.3% of the females additional questions could be added to the questionnaire.

Chlamydia (25% participants), gonorrhoea (25% participants) and syphilis (21.9% participants) were the words that appeared most difficult to understand, although no alternative Mongolian words for these were suggested by the participants. Suggestions by male participants for additional questions to be included in the SAQ predominantly related to how to have a better sex life, and about male genitalia. Advice about marriage was also proposed as an additional topic. One participant suggested that an additional questionnaire that covered other general diseases be included.

All participants agreed that difficulty in understanding the questionnaire was not due to the wording of questions but rather medical terms that participants were unfamiliar with. Participants were in total agreement that after seeing the PPTs, AIDS movie and the TeachAIDS animated video and subsequent discussion, in the focus group, they felt familiar with and understood the medical terms that they had previously been unfamiliar with. This analysis is depicted in Appendix O.

Unfortunately due to logistical issues, the identity of individual participants could not be matched between test and retest for these Mongolian cohorts, which represents a limitation of this study. Therefore, statistical analysis was only possible at the group level. Nevertheless, the Cronbach's alpha values (based on standardized items) were excellent, close to 90%. The test value was $\alpha = 0.8982$ and at retest the value was $\alpha = 0.8928$ with an overall value of $\alpha = 0.8959$ (Table 3.7).

3.6.6 Analysis of the test and retest data and standardisation of the data collection instrument

Data analysis of quantitative data was initially performed using SPSS Version 23 (IBM) software. Data was then examined by a multilevel mixed-effects linear regression model.

3.6.6.1 Comparison of Han and Tibetan Cohorts from the test and retest

Statistical analysis of the data was initially performed using SPSS version 23 (IBM) software. The internal consistency of the question items was estimated by Cronbach's alpha. A higher value of Cronbach's alpha indicates good internal consistency of the set of items in the scale. A commonly used rule is as follows: $\alpha \geq 0.9$ excellent; $0.7 \leq \alpha < 0.9$ good; $0.6 \leq \alpha < 0.7$ acceptable, $0.5 \leq \alpha < 0.6$ poor, and $\alpha < 0.5$ unacceptable (Nunnally, 1978). The test-retest reliability of each item, or the consistency or stability of each item was examined by Pearson correlation coefficients between test and retest for each item. The Pearson correlation between the number of correct answers participants gave between test and retest was also used to assess the test-retest reliability.

The association between the number of correct answers given and participants' gender, age, ethnicity and test occasion was examined by a multilevel mixed-effects linear regression model. In such a model, participant ID is included in the model as a random effect to account for the repeated measures on the same questions made by the same participants at test and retest.

3.6.6.2 Results of the comparison between the Tibetan and Han cohorts

The Tibetan cohort is about 2.1 years older than the Han cohort (95% *CI* [1.4, 2.7]), and the gender distribution is similar in Han and Tibetan cohort ($p = 0.74$, Table 3.1 for details).

The Cronbach's alpha for both Han and Tibetan cohorts (as previously mentioned in section 3.4.5) were excellent, all over 80% (Table 3.2 for details). The correlations between each of the individual items and the overall scale, such as item scale direction and item-rest correlation, were examined and details are shown in Appendices P1–P4. In general, most of the items in both test and retest in both Han and Tibetan groups are positively scaled. Only a few of them had poor correlation; however, if these items are removed from the scale this will not improve the scale significantly.

The number of correct answers the Han and Tibetan cohorts gave at test and retest are highly correlated, with both correlation coefficients greater than 70% (Table 3.3 for details). Paired sample *t*-tests also confirmed that there was no difference in the number of correct answers between test and retest in Han or Tibetan cohorts (both $p > 0.05$, Table 3.3 for details).

For each individual item, about half of the items in the Han (item number = 21) and Tibetan (item number = 22) had correlations of 30% or over (Table 3.4 for details). Four items had significant test-retest correlation in both Han and Tibetan cohorts:

- 1) Can a person get HIV if they have anal sex (penis inside the anus) with a man?
- 2) Is there a female condom that can help decrease a woman's chance of getting HIV?
- 3) Can syphilis infect a baby before it is born?
- 4) Is there a cure for chlamydia?

The regression model shows that gender was the only factor that was significantly associated with the number of items that were answered correctly, with male participants on average having 4 correct answers more than females (coefficient = 3.96, 95% *CI* = 1.15, 6.78). There was no difference in the number of correct answers between Han and Tibetan participants, by age, or test occasion (Table 3.5 for details).

Table 3.1. Participants' demographics (Han and Tibetan cohorts).

	Overall (n = 61)	Han (n = 35)	Tibetan (n = 26)	<i>p</i> value*
Age, mean (<i>SD</i>)	20.2 (1.7)	19.3 (1.2)	21.3 (1.5)	<0.001
Gender, number (%)				0.74
Male	29 (47.5%)	16 (45.7)	13 (50.0)	
Female	32 (52.5%)	19 (54.3)	13 (50.0)	

**p* values were derived from two-sample *t*-test for age and Chi-square test for gender comparison between Han and Tibetan study samples.

Table 3.2. Cronbach's alpha of test and retest (Han and Tibetan cohorts).

	Cronbach's alpha	
	Han	Tibetan
Test	0.8517	0.8789
Retest	0.8928	0.9349

Table 3.3. Average number of correct answers at test and retest (Han and Tibetan cohorts).

	Mean number of correct answers	
	Han	Tibetan
Test	11.7 (4.9)	12.2 (5.3)
Retest	11.5 (5.7)	12.3 (7.1)
<i>p</i> value of paired sample <i>t</i> -test	0.84	0.44
Correlation coefficient	0.67, <i>p</i> < .001	0.83, <i>p</i> < .001

Table 3.4. Pearson correlation coefficient for test and retest (Han and Tibetan cohorts).

	Pearson correlation coefficient	
	Han	Tibetan
1. Can a person get HIV if someone who has HIV coughs or sneezes on them?	0.32	0.25
2. Can a person get HIV if they share a glass of water with someone who has HIV?	0.50**	0.44
3. Does pulling out the penis from a woman's vagina, before a man climaxes, prevent a woman from getting HIV during sex?	0.50**	0.24
4. Can a person get HIV if they have anal sex (penis inside the anus) with a man?	0.40*	0.50*
5. Can showering or washing one's genitals after sex prevent one from getting HIV?	0.23	0.32
6. Will all pregnant women infected with HIV have babies born with AIDS?	0.06	-0.02
7. Do all people who have been infected with HIV quickly show serious signs of being infected?	-0.03	0.30
8. Is there a vaccine that can prevent people from getting HIV?	0.25	0.69***
9. Are people likely to get HIV by deep kissing, putting their tongue into their partner's mouth, if their partner has HIV?	0.24	0.22
10. Can a woman get HIV if she has sex during her period?	0.37*	0.24
11. Is there a female condom that can help decrease a woman's	0.56***	0.71***

chance of getting HIV?		
12. Can a person get HIV if he or she is taking antibiotics?	0.16	0.02
13. Does having sex with more than one partner increase a person's chance of being infected with HIV?	0.72***	0.14
14. Will taking a test for HIV one week after having sex tell a person if he or she has HIV?	0.30	0.53*
15. Can a person get HIV by sitting in a hot tub or swimming pool with a person who has HIV?	0.33	0.55*
16. Can a person get HIV by having oral sex (putting a man's penis in their mouth)?	0.23	0.22
17. Does using Vaseline or baby oil with a condom lower the chances of getting HIV?	0.32	0.49*
18. Is it easier to get HIV if a person has another sexually transmissible disease?	0.43*	0.49*
19. Is there a cure for gonorrhoea?	-0.17	0.76***
20. Can a person get gonorrhoea from anal sex (inserting a man's penis inside their anus)?	0.08	0.20
21. If a man has gonorrhoea, may he have a discharge (pus) from his penis?	0.43*	0.42
22. Can a woman look at her body and tell if she has gonorrhoea?	0.25	0.28
23. Can syphilis infect a baby before it is born?	0.62***	0.62***
24. Is there a cure for syphilis?	0.22	0.54*
25. Can a person develop sores on their genitals (penis or vagina) soon after they become infected with syphilis?	0.18	0.35
26. Can Human Papilloma Virus (HPV) cause cancer in women?	0.17	0.29
27. Is there a vaccine that can prevent infection with Human Papilloma Virus (HPV)?	0.22	0.46*
28. Can a man get genital warts only by having vaginal sex?	0.36*	0.16
29. Do Genital Herpes sores on a man's penis come and go?	-0.12	0.30
30. Are there medications available to cure Genital Herpes?	0.11	0.25
31. Can a woman who has Genital Herpes pass the infection on to her baby during childbirth?	0.44*	0.03

32. Must a person who has Genital Herpes have open sores to give the infection to his or her sexual partner?	0.37*	0.05
33. Does chlamydia cause obvious symptoms in most women?	0.12	-0.21
34. Can chlamydia cause pain when a person urinates?	0.22	0.34
35. Is there a cure for chlamydia?	0.52**	0.70***
36. Is there a vaccine that can prevent Hepatitis B?	0.42*	0.52*
37. Can a person get Hepatitis B if they have vaginal sex?	0.45**	0.12
38. Can Hepatitis B be passed on from a mother to her baby when it is born?	0.48**	0.42
39. If a person is an injecting drug user, can they get HIV if they use a needle that someone who has HIV has already used?	0.43*	0.36

Overall

Results are Pearson correlation coefficient. It has a range from 0 to 1, with higher values indicating better reliability.* $p < .05$, ** $p < 0.01$, *** $p < 0.001$

Table 3.5 Factors association with correct answers (Han and Tibetan cohorts).

	Coefficient [95% CI]	p value
Gender		0.006
Female	0.00	
Male	3.96 [1.15, 6.78]	
Age	-0.01 [-1.10, 1.09]	0.99
Ethnicity		0.98
Han	0.00	
Tibetan	0.04 [-3.21, 3.28]	
Test occasion		0.76
Test	0.00	
Retest	-0.18 [-1.31, 0.96]	

3.6.6.3 Mongolian Cohort

Limitation: Test-retest analysis was only possible on the test-retest group level, because individual identity cannot be matched for test and retest in this study population. The association between test and retest in the number of correct answers participants gave was examined by two-sample t test and Pearson correlation. However, the test-retest reliability for each item, or the consistency or stability of each item was not examined in this study because we could not identify the individual participants in the test and retest.

The association between the number of correct answers given and participants' gender, age, ethnicity and test occasion was examined by a multiple linear regression model.

Results for the Mongolian cohort between test and retest

There was no difference in demographics between test and retest study population (all $p > 0.05$, Table 3.6 for details). The Cronbach's alpha for test and retest were excellent (as previously mentioned in section 3.4.5), all close to 90% (Table 3.7 for details). The correlations between each of the individual items and the overall scale, such as item scale direction and item-retest correlation were examined and details are shown in Appendices P5 and P6. In general, most of the items in both test and retest are positively scaled. Only one of them had poor correlation, which is "Water0"; however, if this item is removed from the scale it will not improve the scale significantly. Two- sample t -tests showed that there was no difference in the number of correct answers between test and retest (mean difference = 0.5, 95% $CI = -2.4, 3.4$, $p = 0.73$, Table 3.8 for details). However, the number of correct answers given at test and retest are not correlated, with a correlation coefficient only 9% (Table 3.8 for details).

The regression model shows that age was the only factor that was significantly associated with the number of items that were answered correctly. Every one year increase in age is associated with a 24% increase in the number of correct answers (coefficient=1.24, 95% $CI = 0.10, 2.37$, $p = 0.03$). There was no difference in the number of correct answers between male and female participants, by dwelling, or test occasion (Table 3.9 for details).

Table 3.6. Demographics at test and retest (Mongolian cohort).

	Test (n = 32)	Retest (n = 23)	<i>p</i> value*
Age, mean (SD)	22.4 (0.3)	22.4 (0.3)	0.97
Gender, number (%)			0.32
Male	14 (43.8)	7 (30.4)	
Female	18 (56.2)	16 (69.6)	
Dwelling			.34
Nomadic area	28 (87.5)	19 (82.6)	
Township	1 (3.1)	1 (4.3)	
City	3 (9.4)	1 (4.3)	
9	0	2 (8.7)	

**p* values were derived from two sample *t*-test for age and Chi-square test for gender and dwelling comparison between test and retest study population.

Table 3.7. Cronbach's alpha of test and retest (Mongolian cohort).

	Cronbach's alpha
Test	0.8982
Retest	0.8928
Overall	0.8959

Table 3.8. Average number of correct answers at test and retest (Mongolian cohort).

	Mean number of correct answers (<i>SD</i>)
Test	7.2 (0.9)
Retest	6.7 (1.2)
Mean difference, 95% CI	0.5 (-2.4, 3.4)
<i>p</i> value of two-sample <i>t</i> -test	0.73

The low correlation in this table is because the study individuals could not be paired in the test and retest.

Table 3.9. Factor association with correct answers (Mongolian cohort).

	Coefficient [95% CI]	<i>p</i> value
Gender		
Female	0.00	
Male	-0.49 [-3.91, 2.94]	0.78
Age	1.24 [0.10, 2.37]	0.03
Dwelling		0.60
Nomadic area	0.00	
Township	-1.60 [-9.84, 6.68]	.70
City	0.66 [-4.93, 6.24]	0.81
9	-5.05 [-12.83, 2.72]	0.20
Test occasion		0.76
Test	0.00	
Retest	-20.34 [-45.29, 4.60]	0.11

3.6.7 Key Findings

1. Teaching materials

PPT

All participants felt that this would be easily understood by undergraduate students of similar ages to themselves. Although there were some unfamiliar terms, these did not present any difficulty once the peer educator had explained them. Male participants from all of the ethnic groups found nothing that would be offensive or cause embarrassment. On the other hand, some female participants did mention that although the picture of vaginal genital warts might cause some embarrassment, they felt it important to retain this in the PPT to alert students of the link between HPV and cancer. Additionally, the diagram of a male penis in the section on how to use a condom, although it might be a little embarrassing, should remain in the PPT.

TeachAIDS animated video

All participants found this video helpful and thought that students their age would find it easy to understand. There were no confusing elements in the video and the question and answer format was well-liked.

HIV prevention video (Love Wisely Live Healthy)

This video was only shown to Tibetan and Mongolian students as these ethnic groups are the only ones that consist of farming and nomadic populations. The version shown to Tibetan students was in Amdo Tibetan spoken dialect and had written Tibetan subtitles. The version shown to Mongolian students had Mongolian subtitles but the spoken language was Tibetan.

Tibetan participants found this video easy to understand and there was nothing in the video which would be offensive or embarrassing. They found it easy to identify with the characters in the video. The video showed a high degree of cultural relevance.

Mongolian students also found that there was nothing embarrassing or offensive in the video and felt that their peers would easily understand the contents. Although it might be good to add Mongolian vocals, they all felt that in the present format with only Mongolian subtitles it would still be good to show this to other Mongolian students.

2. Pilot testing of the questionnaire to assess the suitability of the terms used in the various translations of the SAQs

Any difficulty in understanding the questionnaire was not due to wording but some of the medical terms (chlamydia, syphilis, genital herpes and genital warts) which participants were unfamiliar with. The inclusion of these terms in Chinese in the Tibetan version was considered helpful. Participants all agreed that after viewing the educational materials and participating in subsequent discussions they became familiar with and understood the medical terms that they had previously been unfamiliar with.

3. Test and Retest to assess the stability of the questionnaire

The questionnaire was found to very stable between test and retest with all Chronbach alpha values $> 80\%$. The Cronbach's alpha value (based on standardized items) for the Han males at initial test was $\alpha = 0.784$, females $\alpha = 0.854$ and combined male and female $\alpha = 0.844$. At retest the respective values were $\alpha = 0.820$, $\alpha = 0.889$ and $\alpha = 0.892$. For the Tibetan males at initial test the value was $\alpha = 0.889$, females $\alpha = 0.850$ and combined male and female $\alpha = 0.878$. At retest the respective values were $\alpha = 0.951$, $\alpha = 0.816$ and $\alpha = 0.927$. Due to logistical issues individual identities could not be matched between the test and retest for the Mongolian participants. Therefore, statistical analysis was only possible at the group level. Nevertheless, the Cronbach's alpha values (based on standardized items) were excellent, close to 90%. The test value was $\alpha = 0.8982$ and at retest the value was $\alpha = 0.8928$ with an overall value of $\alpha = 0.8959$

3.7 Intervention

3.7.1 Selection Criteria

Only undergraduate students who were Han, Hui, Mongolian, or Tibetan and 18 years or older were eligible for participation. These four groups represented the majority (77.5%) of students attending QNU during the study period. All other ethnic groups were excluded from participation in the study.

3.7.2 Phase 1 (Pre-intervention) Recruitment of study participants

A total of 326 participants were recruited by cluster sampling and were enrolled from 1st year, 2nd year, 3rd year and 4th year undergraduate classes. Nine participants were subsequently excluded from the study as it was discovered that they did not meet the inclusion criteria. A further 2 participants did not present for the administration of the pre-intervention questionnaire or subsequent training. Therefore, the number of participants who took part in the study was 315. One class was selected from each year for each of the four ethnic groups. For Tibetan and Mongolian students, most of these in the QNU student body were studying in the Tibetan and Mongolian departments respectively.

Although, Hui students might be found in a number of departments, the highest concentration was in the Arabic Studies department, so participants were selected from this department. Unfortunately, 3rd and 4th year students in this department were either engaged in work experience or on overseas electives and therefore only 1st and 2nd year students were available for participation in the study. Han students were also dispersed throughout a number of different departments, although a higher concentration was found in certain classes in the Chinese Literature and Law departments.

Following selection of a class, separate meetings were held for male and female students to minimise any embarrassment that might have arisen because of the nature of the study. In this initial meeting the researcher, together with an interpreter of the same gender as the students, outlined the nature of the project and gave each student an information form and also explained the contents of this form. Students were also told that if they took part in the project they would have to sign a consent form. As most students were unaccustomed to consent forms (see section 3.6), the reason for the form was also explained to them. The students were invited to ask any questions they had concerning the project. Students were

told that participation was entirely voluntary and that they were under no obligation to participate. If they did choose to participate they were free to withdraw from the project at any time without this resulting in any negative impact on their studies.

Once students had been acquainted with the information form and had the opportunity to ask questions, those who did not wish to participate in the project then left the meeting room. Students who chose to take part in the study were given two consent forms to sign; one was retained by the student and the other was returned to the researcher. They were then given the opportunity to ask any further questions before they signed this. Once informed consent was obtained, the adverse events management protocol (Appendix T) was explained to the participants. They were given the contact information for the researcher, student counselling services and a doctor. The male students were given the contact information for a male doctor and the female students a female doctor.

3.7.3 Implementation of the Pre-intervention Questionnaire

Only students who had signed consent forms were permitted to take part. Separate sessions were held for male and female participants of each class enrolled in the study. The interpreter read the instructions for the pre-intervention SAQ, reminding participants that they should not write their names on the questionnaire as it was anonymous. They were asked if they had any questions before the questionnaire was distributed. Once the questionnaire was distributed they were asked not to talk to each other until all completed questionnaires were collected.

3.7.4 Phase 2 (Development of the intervention) Peer Education

3.7.4.1 Recruitment of peer educators

Once the completed pre-intervention SAQs had been collected, participants were given an information sheet explaining the commitments required for volunteer peer educators. The students were then invited to ask any questions they had concerning the roles of peer educators. Two males and two females were requested for each class, the males to train their male classmates and the females to train the females. Study participants who did not want to become peer educators then left the meeting room. In the event that more than two

volunteered, each person was assigned a number on a piece of paper. The papers were put into a bag and two pieces were drawn by the interpreter to select two volunteers.

The volunteers were then given an information consent form for peer educators. They were given the opportunity to ask any further questions before signing the form. Contact details of volunteers were collected by the researcher. Times that were mutually agreeable to volunteers, the researcher and interpreter were settled on for training sessions.

3.7.4.2 Training of Volunteer Peer Educators

Peer educators were required to attend 3, two-hour training sessions. The researcher was the facilitator for these sessions, helped by an interpreter who was fluent in the respective dialects of the peer educators, and of the same gender as the peer educators. Separate training sessions were held for male and female peer educators. Each training session was originally designed to have a total of 8 participants, two from each class of 1st year, 2nd year, 3rd year and 4th year of respective ethnic groups. Due to dissimilar class timetables for volunteers from different years within the same ethnic group it was not always practical for them to meet at the same time. In this case, additional times were set for their training sessions. In some cases this meant that in some cases if there were only 2 volunteers at a particular session the required material was covered in a shorter time. This was also the case with Hui volunteers as only 1st and 2nd year classes were enrolled in the study and therefore only 4 male and 4 female volunteers from that ethnic group were trained.

At the first training session each participant was given a Volunteer Peer Educator Training Form (Appendix Q), which was a record of their attendance at each session and their competency for each task required before they were permitted to commence training their classmates. During the training sessions participants were shown PPTs which showed the signs and symptoms of some of the most common sexually transmitted infections, transmission modes of the diseases, how to avoid catching those diseases and the availability of treatment or vaccines for these infections. They were also shown an animated video about HIV/AIDS. Tibetan and Mongolian volunteers were also shown the short HIV prevention movie “Love wisely, live healthy”. Participants were encouraged to ask questions at any time during the training sessions and there were discussions held at the end of each session.

At the end of the third or final training session the researcher assessed each peer educator to ensure that they fully understood the material presented in the training sessions. If the researcher was satisfied that they had completed the requirements of the training programme and the participants felt confident, they were then permitted to begin training their classmates. Each peer educator was given a free 4 GB thumb drive containing the appropriate PPT, a TeachAIDS animated video and — in the case of the Tibetan and Mongolian peer educators — a copy of “Love wisely, live healthy”. Tibetan peer educators were also given a poster about Hydatids (see 3.4.4).

3.7.5 Phase 3 (Implementation of the intervention) Training of Classmates by peer educators

Participants in the project were asked to attend 4, two-hour training sessions taught by the two same-gender peer educators from their class. However, because of the size of their groups, some groups were able to complete the requisite material and discussions in fewer sessions. The materials that they were shown were the same as those used in the peer educators’ training sessions. Peer educators were instructed to encourage participants to ask questions at any time during the presentations and to facilitate discussions at the end of each session. The location of the sessions varied from classrooms to student dormitories, depending on the preferences of peer educators and their classmates.

Participants in the current study were given information about the modes of transmission and prevention of STIs, including HIV. According to the constructs of the HBM, they were given the information that equipped them to gauge their likelihood of acquiring an STI and “perceived susceptibility” if they engaged in unprotected sexual behaviours. Likewise, they could assess the “perceived severity” of contracting an STI and the subsequent consequences (“perceived threat”) which might range from easily treatable infections to the sequelae of untreated infections including sterility, congenital infections in neonates from infected mothers, and death.

3.7.6 Implementation of the Post-intervention questionnaire

When participants completed their final training session, a meeting with the researcher and interpreter for their respective dialect was convened. The interpreter read the instructions for

the post-intervention SAQ reminding participants that they should not write their names on the questionnaire as it was anonymous. They were asked if they had any questions before the questionnaire was distributed. Once the questionnaire was distributed they were asked not to talk to each other until all completed questionnaires were collected. Once all of the completed SAQs were collected all participants, peer educators and interpreters were thanked by the researcher for their participation in the project. They were reminded that once the study was completed a summary of the results would be made available to them. They were also encouraged to use the knowledge that they had acquired during the intervention to teach their own peers and the people in their home towns.

All participants were given a copy of the TeachAIDS animated video. Mongolian and Tibetan participants were also given a copy of the “Love wisely, live healthy video”. Participants were told that if they wished to submit a thumb drive to the peer educators from their class, they could also receive a copy of the PPT used in their training sessions.

3.7.7 Analysis of pre and post-intervention data

Quantitative data obtained from the pre-intervention and post-intervention questionnaires was analysed using SPSS version 23 software (IBM) and multiple regression analysis was also performed using Stata version 14.2. (StataCorp LP, TX, USA).

Multiple regression modelling of the association between demographic variables and correct responses to questions 4–42 of the questionnaire are presented in tables 4.9 and 4.10.

The following are the variables that were examined in the multiple regression analysis:

Dependent variable: count correct score (continuous and normally distributed)

Independent variables:

Age (continuous variable)

Year of study (categorical variable: 1, 2, 3, 4)

Gender (Binary variable: male and female)

Ethnicity (categorical variable: 2 (Tibetan), 4 (Mongolian), 5 (Han), 6 (Hui))

Dwelling (categorical variable: 0 (farming area), 1 (Nomadic area), 2 (Township), 3 (city))

Intervention (Binary variable: pre and post)

The following models were used:

1. Multiple regression without interaction terms (determines demographic variables associated with overall correct count controlling for the intervention effect)

$$\text{correctcount} = \text{intercept} + \beta_1 \text{intervention} + \beta_2 \text{age} + \beta_3 \text{gender} + \beta_4 \text{studyyear} + \beta_5 \text{ethnicity} + \beta_6 \text{dwelling}$$

Statistical method: multiple linear regression based on OLS (Ordinary Least Square) estimation.

2. Multiple regression with interaction terms (examines the intervention effect within different subgroups, such as within gender subgroups or ethnicity subgroups).

$$\text{correctcount} = \text{intercept} + \beta_1 \text{intervention} + \beta_2 \text{age} + \beta_3 \text{gender} + \beta_4 \text{studyyear} + \beta_5 \text{ethnicity} + \beta_6 \text{dwelling} + \beta_7 \text{intervention} * \text{gender} + \beta_8 \text{intervention} * \text{studyyear} + \beta_9 \text{intervention} * \text{ethnicity} + \beta_{10} \text{intervention} * \text{dwelling}$$

This demonstrated whether or not the main objective of the study was achieved: that a multi-ethnic peer education programme was effective in raising students' awareness regarding the modes of transmission and prevention of STIs (including HIV). Furthermore, to find whether there were differences in knowledge levels relating to STIs, including HIV between the demographic variables of gender, ethnic groups, types of dwelling (rural versus urban) and social backgrounds (farmers versus nomads), which was one of the objectives of the study. The qualitative data from the post-intervention questionnaire open-ended questions was analysed using NVivo 11 software, and a set of themes were developed using deductive analysis.

3.8 Ethics

3.8.1 Project Approval

This project was given ethics approval by Curtin University Human Research Ethics Committee (Protocol Approval HR158/2011) - Appendix R, and by Qinghai Nationalities University (Appendix S).

3.8.2 Informed Consent

“Misunderstandings and miscommunication are more likely to occur when investigators and participants speak different languages, when informed consent (IC) documents must be translated, or when scientific research and the notion of IC are unfamiliar to study participants” (Marshall, 2006, p.26). Tibetan, Mongolian and Chinese are languages that can differ greatly in their written and spoken forms and therefore present unique challenges to researchers designing both written and oral IC protocols. “While researchers want to ensure their subjects are “informed” about the nature, responsibilities, rights and effects of research, so too should researchers make sure they are “informed” about the cultural contexts of the places where they work and make efforts to adapt to these contexts where appropriate” (Adams et al., 2007, p. 464).

Although one would expect the students that represent the pool from which participants were selected should have a reasonable working knowledge and literacy level in Chinese, abilities may vary greatly. At undergraduate level, apart from Tibetan and Mongolian classes, most subjects are taught in Chinese. However, some students may have received the majority of their previous education in either Tibetan or Mongolian, and therefore unfamiliar issues of informed consent and questionnaires about STIs (including HIV) transmission modes should be presented in Tibetan, Mongolian and Chinese.

This is also valid when talking to participants about the adverse events management protocol. It is unlikely that the majority, if not all of the participants, have ever taken part in any type of scientific research project. Therefore, ensuring that they are fully informed by presenting the information in their own dialect and allowing them adequate time to ask any questions they have concerning these issues is foundational to obtaining unequivocal informed consent. Interpreters ensured that any sensitive issues or unfamiliar words in the information forms, consent forms and adverse events were fully explained to participants in colloquial language before informed consent was given.

3.8.3 Right to withdraw

The right to withdraw from the study at any time without resulting in any negative impact on the participants or their studies was clearly explained to potential participants in their own dialects. This right is also listed on the consent form.

3.8.4 Respectful Intervention and Anonymity

“HIV education, like other interventions in health promotion, must be culturally specific, sensitive, and responsive to the needs of each individual, group, and community to whom it is directed” (Fennell, 1992, p. 52). Cultural sensitivity is integral to public health and should be at the core of any effective health intervention. This does not merely take into account ethnic differences between members of the target population but should also consider the beliefs, world view and any other pertinent factors relating to how those in the target population see themselves as distinct from other groups (Castro et al., 2004; Resnicow, 2000). The researcher is conversant with the social, cultural, religious and ethnic dimensions operating between and within the various ethnic groups in Qinghai province and among the student body of QNU. Therefore, all interactions with participants, interpreters and others associated with the research project were conducted with respect and cultural sensitivity.

Participants were assured that, apart from consent forms that required the participants' signature, all other aspects of the research provided complete anonymity for participants. Participants were instructed both verbally and in writing that they were not to write their names on questionnaires. Therefore, it was impossible to identify any individual participants.

3.9 Summary

This chapter has described the study design, objectives, and the research setting. Additionally, the data collection instruments, translation and back translation of these and other project documents, development of the intervention and subsequent implementation, ethical issues and data analysis are explained.

CHAPTER 4

QUANTITATIVE RESULTS AND DEMOGRAPHICS

4.1 Introduction

This chapter describes the quantitative results from the study. Demographic data of participants is given for the pre- and post-intervention questionnaires. Following this the analysis of the pre- and post-intervention results for the questions designed to ascertain participants' knowledge of modes of transmission, prevention and symptoms of common STIs and HIV is presented.

4.2 Demographics

As previously mentioned in chapter 3, there were 326 participants enrolled in the study but 9 were subsequently found not to meet the inclusion criteria and 2 did not present for the administration of the pre-intervention questionnaire. Of the 315 remaining participants, 295 participants presented for the administration of the post-intervention questionnaire. This indicated a 93.6% retention rate of participants in the study.

Table 4.1 shows a summary of the demographic data of the 315 participants (pre-intervention) and the post-intervention demographics for the 295 participants is shown in Table 4.2. Each of the demographics is then presented and discussed in more detail in the following sections.

Table 4.1. Demographics of participants (Pre-intervention).

		<u>Ethnicity</u>				Missing	Total
		Han	Hui	Mongolian	Tibetan	n (%)	n (%)
		n (%)	n (%)	n (%)	n (%)		
Participants		67 (21.3)	38 (12.1)	51 (16.2)	154 (48.9)	5 (1.6)	315 (100)
Male		22 (32.8)	17 (44.7)	25 (49.0)	97 (63.0)		161 (51.1)
Female		45 (67.2)	21 (55.3)	26 (51.0)	57 (37.0)	5 (3.2)	154 (48.9)
Age	18	4 (6.2)	2 (5.4)	4 (7.8)	2 (1.6)		12 (4.3)
	19	18 (27.7)	4 (10.8)	17 (33.3)	11 (8.7)		50 (17.9)
	20	21 (32.3)	13 (35.1)	22 (43.1)	16 (12.7)	1 (0.4)	73 (26.1)
	21	14 (21.5)	12 (32.4)	5 (9.8)	24 (19.0)		55 (19.6)
	22	4 (6.2)	3 (8.1)	3 (5.9)	29 (23.0)		39 (13.9)
	23	1 (1.5)	3 (8.1)	0 (0.0)	22 (17.5)		26 (9.3)
	24	3 (4.6)	0 (0.0)	0 (0.0)	14 (11.1)		17 (6.1)
	25	0 (0.0)	0 (0.0)	0 (0.0)	6 (4.8)		6 (2.1)
	27	0 (0.0)	0 (0.0)	0 (0.0)	2 (1.6)		2 (0.7)
Mean age		20.2	20.5	19.7	21.8	35 (11.1)	20.9
Study year:							
	1st	44 (67.7)	13 (35.1)	17 (44.7)	57 (37.3)	1 (0.3)	132 (44.7)
	2nd	16 (24.6)	19 (51.4)	21 (55.3)	41 (26.8)	1 (0.3)	98 (33.2)
	3rd	0 (0.0)	0 (0.0)	0 (0.0)	26 (17.0)		26 (8.8)
	4th	5 (7.7)	5 (3.5)	0 (0.0)	29 (19.0)		39 (13.2)
Dwelling:							
	Farming	11 (16.4)	8 (21.1)	4 (2.8)	70 (47.0)		93 (30.4)
	Nomadic	2 (3.0)	0 (0.0)	42 (82.4)	42 (28.2)	1 (0.3)	87 (28.4)
	Township	26 (38.8)	11 (28.9)	2 (3.9)	20 (13.4)		59 (19.3)
	City	28 (41.8)	19 (50.0)	3 (5.9)	17 (11.4)		67 (21.9)

Table 4.2. Demographics of participants (Post-intervention).

	Ethnicity					Total n (%)
	Han n (%)	Hui n (%)	Mongolian n (%)	Tibetan n (%)	Missing n (%)	
Participants	74 (25.1)	35 (11.9)	55 (18.6)	131 (44.4)		295 (100)
Male	23 (31.1)	15 (42.9)	24 (43.6)	83 (63.4)		145 (49.2)
Female	51 (68.9)	20 (57.1)	31 (56.4)	48 (36.6)		150 (50.8)
Age						
18	4 (5.5)	1 (2.9)	3 (5.8)	3 (2.3)		11 (3.8)
19	19 (26.0)	4 (11.4)	19 (36.5)	5 (3.9)		47 (16.3)
20	27 (37.0)	13 (37.1)	21 (40.4)	13 (10.2)		74 (25.7)
21	15 (20.5)	13 (37.1)	6 (11.5)	28 (21.9)		62 (21.5)
22	5 (6.8)	4 (11.4)	3 (5.8)	36 (28.1)		48 (16.7)
23	2 (2.7)	0 (0.0)	0 (0.0)	26 (20.3)		28 (9.7)
24	1 (1.4)	0 (0.0)	0 (0.0)	11 (8.6)		12 (4.2)
25	0 (0.0)	0 (0.0)	0 (0.0)	6 (4.7)		6 (2.1)
Mean age	20.1	20.4	19.8	21.9		20.9
Study year:						
1st	49 (66.2)	12 (34.3)	22 (40.0)	48 (36.6)		131 (44.4)
2nd	19 (25.7)	22 (62.9)	33 (60.0)	43 (32.8)		117 (39.7)
3rd	0 (0.0)	0 (0.0)	0 (0.0)	28 (21.4)		28 (9.5)
4th	6 (8.1)	1 (2.9)	0 (0.0)	12 (9.2)		19 (6.4)
Dwelling:						
Farming	7 (9.6)	8 (22.9)	4 (7.8)	58 (46.4)		77 (27.1)
Nomadic	1 (1.4)	1 (2.9)	41 (80.4)	35 (28.0)		78 (27.5)
Township	38 (52.1)	8 (22.9)	3 (5.9)	19 (15.2)		68 (23.9)
City	27 (37.0)	18 (51.4)	3 (5.9)	13 (10.4)		61 (21.5)

4.2.1 Age

Of the 315 participants (pre-intervention), ages were provided for 280 (Table 4.1). The ages ranged from 18 to 27 years old with a mean age of 20.9.

There were 295 participants who presented for the administration of the post-intervention questionnaire. Of the 295 participants, 7 failed to record their age. The ages of the remaining 288 ranged from 18 to 25 with a mean age of 20.9, which was the same as the pre-intervention (Table 4.2).

4.2.2 Ethnicity

Of the 315 participants, 5 failed to indicate their ethnicity on the pre-intervention questionnaire (Table 4.1). All of the 295 participants who presented for the post-intervention questionnaire recorded their ethnicity (Table 4.2).

4.2.2.1 Tibetans

Tibetans who attended university classes that were predominantly other non-Tibetan ethnic groups were only identified as Tibetan. However, among the classes sampled within the Tibetan department the ethnicity of Tibetans is further subdivided into the 3 main groups: Amdo, Khamba and Lhasa. The Amdo are predominantly from Qinghai, Gansu and Sichuan provinces. Khambas are primarily from Yushu prefecture of Qinghai province although some come from Sichuan and Yunnan provinces. Lhasa Tibetans or Central Tibetans refers to those participants who come from the Tibetan Autonomous Region (TAR). The 154 Tibetan participants pre-intervention and the 131 post-intervention are shown in Table 4.3.

Table 4.3. Frequency of Tibetan subgroups (Pre and post-intervention).

Ethnicity	Frequency (%) Pre-intervention	Frequency (%) Post-intervention
Amdo Tibetan	111 (72.1)	94 (71.7)
Khamba Tibetan	15 (9.7)	22 (16.8)
Tibetan	20 (13.0)	9 (6.9)
Lhasa Tibetan	8 (5.2)	6 (4.6)
Total	154 (100.0)	131 (100.0)

4.2.2.2 Age versus ethnicity

The mean ages of the participants by ethnicity are shown in tables 4.1 (pre-intervention) and 4.2 (post-intervention). The mean age for Tibetan participants was 21.8 years pre-intervention and 21.9 years post-intervention, which are slightly older than the other groups. This was due to a number of factors. First, the Tibetan group was the only ethnic group for which it was possible to sample all four years of students studying at QNU, that is, 1st year through 4th year. Second, Tibetan first year students tend to be a little older than the other ethnic groups as they

often start their primary, middle and high school educations later than the other groups, especially if they are from nomadic areas.

4.2.3 Year of undergraduate study

When the pre-intervention questionnaire was administered some classes were combined to facilitate the completion of the questionnaire during class meeting times. These meetings are held for all classes at QNU on Sunday evenings. Therefore, within a single ethnic group 1st and 2nd year classes were combined as were 3rd and 4th, although classes were still only one gender to avoid any potential embarrassment. Participants were asked to indicate their year of study on the questionnaire. However, 20 participants failed to record this for the pre-intervention questionnaire (Table 4.1). All participants recorded this for the post-intervention questionnaire (Table 4.2). The ethnicity of participants for each year of undergraduate study is also shown in tables 4.1 and 4.2. As previously mentioned, Tibetans were the only group for which 1st through 4th year students were available to participate.

The greatest concentration of Hui students was found in the Arabic Studies department. However, during the study period, 3rd and 4th year students in this department were either engaged in work experience or on overseas electives and therefore only 1st and 2nd year students were available for participation in the study. Likewise 3rd and 4th year students in the Mongolian department were unavailable during the study period. Han students were dispersed throughout a number of different departments, although a higher concentration was found in certain classes in the Chinese Literature and Law departments. Third year students in these departments were also on work experience and therefore unavailable to participate in the study.

4.2.4 Dwelling

Participants were asked to indicate if they came from cities, townships, farming or nomadic areas (tables 4.1 and 4.2). Nine participants failed to record their dwelling in the pre-intervention questionnaire and 11 in the post-intervention questionnaire.

Although the majority of Tibetan (75.2% pre-intervention, 74.4% post-intervention) and Mongolian (85.2% pre-intervention, 88.2% post-intervention) participants came mainly from farming and nomadic areas, the opposite was true for the Han (80.6% pre-intervention, 89.1% post-intervention) and Hui (78.9% pre-intervention, 74.3% post-intervention) participants

who were primarily from townships and cities. This is consistent with the population demographics of each of these ethnic groups within Qinghai province.

4.3 STI and HIV knowledge questions

The 39 questions were designed to evaluate participants' knowledge of the modes of transmission, prevention and symptoms of common STIs and HIV. Questions 4–21 and question 42 related to HIV, and questions 22–41 related to the most common STIs. The following sections describe the mean correct responses for all questions together with the significance of these results by gender, ethnic group and dwelling as determined by *t*-tests. Reasons for the results are then suggested.

4.3.1 Gender

Table 4.4. Mean correct responses by gender.

	Male (mean score)	Female (mean score)	<i>p</i> value
Pre-intervention mean	12.91	10.24	<0.001
Post-intervention mean	19.46	18.78	0.524

The maximum score possible for the STI and HIV knowledge questions was 39.

When the pre- and post-intervention data was analysed for the mean number of correct responses, there was a significant difference ($p < 0.001$) between male and female participants in the pre-intervention questionnaire (Table 4.4). Male participants' mean correct response rate was 12.91 and females' mean correct response rate was 10.24. There was a substantial improvement in the correct responses for both genders post-intervention, with the males' correct response rate being 19.46, and females improving to 18.78. However, there was no significant difference between genders in their post-intervention scores ($p = 0.524$). Therefore, although the knowledge level of female participants was initially lower than that of the males, the female participants were able to close this gap after the training they received in the intervention.

In the following section an explanation of the differences between genders will be discussed as they relate to ethnicity.

4.3.2 Gender differences within ethnic groups

The composite figures listed in Table 4.4 did not hold true for each ethnic group as can be seen in Table 4.5. Although this pattern was similar in the Tibetans and Mongolians, it differed in the Han and Hui populations. Among the Tibetan participants there was a significant difference ($p = 0.001$) between males and females pre-intervention with males' mean correct response rate of 12.99 and females being 9.77. Post-intervention there was no significant difference ($p = 0.600$) with males' mean correct response rate of 20.16 and females' being 19.46. Mongolian participants pre-intervention scores likewise showed a significant difference ($p < 0.001$) between gender, with males' mean correct response rate of 8.76 and females' being 3.73. Post-intervention there was no significant difference ($p = 0.222$) between correct mean response rates in males (10.63) and females (8.29).

Table 4.5. Mean correct responses within ethnic groups by gender.

	Han		p value
	Male (mean score)	Female (mean score)	
Pre-intervention	16.05	14.73	0.354
Post-intervention	23.61	23.75	0.948
	Hui		
Pre-intervention	14.47	10.76	0.060
Post-intervention	23.33	20.75	0.371
	Mongolian		
Pre-intervention	8.76	3.73	<0.001
Post-intervention	10.63	8.29	0.222
	Tibetan		
Pre-intervention	12.99	9.77	0.001
Post-intervention	20.16	19.46	0.600

There was no significant difference between Han male and female participants pre-intervention ($p = 0.354$) or post-intervention ($p = 0.948$). The mean correct response pre-intervention for Han males was 16.05 and for females it was 14.73, while post-intervention they were males 23.61, and females 23.75. The same was true of the Hui participants; there

was no significant difference between the genders pre-intervention ($p = 0.060$) or post-intervention ($p = 0.371$). Hui males mean correct response pre-intervention was 14.47 and 23.33 post-intervention, while the respective values for females were 10.76 and 20.75.

There were no significant differences between genders for either Han or Hui participants pre or post-intervention. Participants from these groups were predominantly from cities or townships, while both Tibetan and Mongolian cohorts show a significant difference between male and female pre-intervention with male participants scoring higher on correct answers than females. Post-intervention, there were no differences between males and females. Tibetans were primarily from farming and nomadic areas whereas Mongolians were predominantly from nomadic areas with a smaller number coming from farming areas.

4.3.3 Differences between ethnic groups

There were significant differences between some of the ethnic groups' mean correct responses (Table 4.6). The Han participants had the highest pre-intervention mean of 15.16 followed by the Hui at 12.42; the Tibetans were next with 11.80; the lowest was the Mongolians with 6.20. This trend was the same in the post-intervention scores with Han having the highest mean 23.70, followed by Hui (21.86), Tibetans (19.90) and Mongolians (9.31). When comparisons for significance were made between the ethnic groups it was found that there was a significant difference between Tibetans and Mongolians both pre-intervention ($p < 0.001$) and post-intervention ($p < 0.001$). A significant difference between the Tibetans and Han participants was also found pre-intervention ($p < 0.001$) and post-intervention ($p = 0.001$). However, there was no significant difference between the Tibetan and Hui participants pre-intervention ($p = 0.574$) and post-intervention ($p = 0.211$).

Table 4.6. Mean correct responses between ethnic groups pre- and post-intervention

	Tibetan (mean score)	Mongolian (mean score)	<i>p</i> value
Pre-intervention	11.80	6.20	<0.001
Post-intervention	19.90	9.31	<0.001
	Tibetan	Han	
Pre-intervention	11.80	15.16	<0.001
Post-intervention	19.90	23.70	0.001
	Tibetan	Hui	
Pre-intervention	11.80	12.42	0.574

Post-intervention	19.90	21.86	0.211
	Han	Hui	
Pre-intervention	15.16	12.42	0.024
Post-intervention	23.70	21.86	0.283
	Han	Mongolian	
Pre-intervention	15.16	6.20	<0.001
Post-intervention	23.70	9.31	<0.001
	Hui	Mongolian	
Pre-intervention	12.42	6.20	<0.001
Post-intervention	21.86	9.31	<0.001

No significant difference was found between the Han and Hui participants pre-intervention ($p = 0.024$) and post-intervention ($p = 0.283$), however there was a significant difference between the Han and Mongolians pre-intervention ($p = 0.000$) and post-intervention ($p < 0.001$). Similarly there was a significant difference between the Hui and Mongolians pre-intervention ($p < 0.001$) and post-intervention ($p < 0.001$).

4.3.4 Differences between pre- and post-intervention of each ethnic group

Table 4.7 shows that all of the ethnic groups, excluding the Mongolians ($p = 0.012$) had a significant difference between their pre- and post-intervention correct mean responses. The significance levels for Han, Tibetan and Hui participants were the same with $p < 0.001$.

Table 4.7. Mean correct responses of ethnic groups.

Ethnic group	Pre-intervention (mean score)	Post-intervention (mean score)	<i>p</i> value
Han	15.16	23.70	<0.001
Hui	12.42	21.86	<0.001
Mongolian	6.20	9.31	0.012
Tibetan	11.80	19.90	<0.001

4.3.5 Dwelling differences

Differences between participants from different dwellings were found in the mean correct responses in pre- and post-intervention (Table 4.8). Those from cities had the highest score pre-intervention 14.57, followed by townships (12.88), farming areas (11.55) and those from nomadic areas having the lowest score (8.83). The pattern was similar for post-intervention except that farming areas were slightly higher than townships, although this was not a significant difference. City dwellers' mean score was 21.57, farming areas (21.00), township areas (20.16) and nomadic areas (15.24).

Table 4.8. Mean correct responses by dwelling.

	Farming (mean score)	Nomad (mean score)	<i>p</i> value
Pre-intervention	11.55	8.83	<0.001
Post-intervention	21.00	15.24	<0.001
	Farming	Township	
Pre-intervention	11.55	12.88	0.186
Post-intervention	21.00	20.16	0.539
	Farming	City	
Pre-intervention	11.55	14.57	0.003
Post-intervention	21.00	21.57	0.688
	Nomad	Township	
Pre-intervention	8.83	12.88	<0.001
Post-intervention	15.24	20.16	0.002
	Nomad	City	
Pre-intervention	8.83	14.57	<0.001
Post-intervention	15.24	21.57	0.002
	Township	City	
Pre-intervention	12.88	14.57	0.129
Post-intervention	20.16	21.57	0.380

There were no significant differences between city and township dwellers either pre-intervention ($p = 0.129$) or post-intervention ($p = 0.380$). While there was a significant difference between city dwellers and those from farming areas pre-intervention ($p = 0.003$), there was no significant difference post-intervention ($p = 0.688$). The significant difference between city dwellers and nomads seen pre-intervention ($p < 0.001$), persisted into the post-intervention ($p = 0.002$). No significant differences were seen pre-intervention ($p = 0.186$) or post-intervention ($p = 0.539$) between those participants from townships and farming areas, although there were significant differences pre-intervention ($p < 0.001$) and post-intervention ($p = 0.002$) between those living in townships and nomadic areas. Significant differences were also found between farmers and nomads' pre-intervention ($p < 0.001$) and post-intervention ($p < 0.001$).

4.3.6 Multiple regression analysis

Multiple regression analysis of the mean number of correct responses to the 39 quantitative questions was performed and the results are seen in Tables 4.9 and 4.10. In Table 4.9 the intervention refers to the difference in scores between pre- and post-intervention

Table 4.9. Multiple regression analysis.

Variables	Coefficient	SE	t	p value	95% CI
Intervention (reference=pre)	7.71	0.59	13.17	<0.001	(6.56, 8.86)
Age	0.12	0.09	1.32	0.19	(-0.06,0.30)
Gender (reference=female)	-1.97	0.61	-3.23	<0.001	(-3.16, -0.77)
Study year (reference=1)					
2	-0.86	0.67	-1.28	0.20	(-2.19, 0.46)
3	-2.42	1.11	-2.18	0.03	(-4.60, -0.23)
4	-0.38	1.04	-0.36	0.72	(-2.43, 1.67)
Ethnicity (reference=Tibetan)					
Mongolian	-8.42	0.99	-8.51	<0.001	(-10.36, -6.47)
Han	3.86	0.88	4.39	<0.001	(2.14, 5.59)
Hui	1.22	1.02	1.19	0.23	(-0.79, 3.23)
Dwelling (reference= farming area)					
Nomadic area	0.06	0.88	0.07	0.95	(-1.66, 1.78)
Township	-1.05	0.90	-1.17	0.24	(-2.81, 0.71)
City	0.45	0.90	0.50	0.62	(-1.31, 2.21)
Intercept	11.23	1.95	5.76	<0.001	(7.40, 15.06)

When the intervention is set as the reference, the difference between the pre- and post-intervention groups is statistically significant ($p < 0.001$). Compared with that in the pre-intervention group, in the post-intervention group the mean correct count increased by 7.71 with a 95% confidence interval (6.56, 8.86).

When ethnicity is set as the reference, there is a statistically significant difference between the Tibetan group and Mongolian group as well between the Tibetan group and the Han group. In comparison to the Tibetan group, the mean correct count decreased by 8.42 with 95% confidence interval (6.47, 10.36) in the Mongolian group controlling for other covariates such as intervention, study year, gender and dwelling. This difference between the mean correct counts for these ethnic groups was previously shown in Table 4.6.

Table 4.10 examines the intervention effect within different subgroups such as within gender subgroups or ethnicity subgroups.

Table 4.10. Multiple regression analysis within different subgroups.

Variables	Coefficient	SE	t	p value	95%CI
Intervention (reference=pre)	9.28	1.63	5.70	<0.001	(6.08, 12.48)
Age	0.07	0.09	0.80	0.42	(-0.11, 0.26)
Gender (reference=female)	-3.36	0.84	-3.99	<0.001	(-5.01, -1.70)
year(reference=1)					
2	0.56	0.94	0.60	0.55	(-1.29, 2.42)
3	-3.13	1.54	-2.03	0.04	(-6.16, -0.10)
4	-1.91	1.28	-1.50	0.14	(-4.42, 0.60)
Ethnicity (reference=Tibetan)					
Mongolian	-5.28	1.40	-3.76	<0.001	(-8.04, -2.52)
Han	2.31	1.20	1.93	0.05	(-0.04, 4.67)
Hui	-0.93	1.39	-0.66	0.51	(-3.66, 1.81)
Dwelling (reference=Nomadic area)					
Farming area	0.75	1.18	0.64	0.52	(-1.57, 3.08,)
Township	2.03	1.48	1.37	0.17	(-0.88, 4.93)
City	3.06	1.42	2.16	0.03	(0.28, 5.84)
Intervention* Gender					
Post*Male	2.67	1.19	2.24	0.03	(0.33, 5.02)
Intervention*studyyear					
Post* 2	-2.45	1.31	-1.88	0.06	(-5.02, 0.11)
Post* 3	1.09	2.19	0.50	0.62	(-3.21, 5.39)
Post* 4	4.60	2.11	2.18	0.03	(0.45, 8.75)
Intervention*Ethnicity					
Post* Mongolian	-5.67	1.94	-2.93	<0.001	(-9.48, -1.87)

Post* Han	2.81	1.73	1.63	0.11	(-0.59, 6.20)
Post* Hui	4.16	2.00	2.08	0.04	(0.23, 8.10)
Intervention*dwelling					
Post* Farming area	-1.40	1.71	-0.82	0.41	(-4.76, 1.96)
Post* Township	-5.74	2.05	-2.80	0.01	(-9.77, -1.71)
Post* City	-5.21	2.02	-2.58	0.01	(-9.18, -1.24)
Intercept	11.42	2.17	5.27	<0.001	(7.16, 15.67)

From the dwelling variable coefficient, the mean scores of correct count in the farming area, township and city are all higher than that of the nomadic area, but only the difference between the nomadic area and the city is statistically significant ($p = 0.03$).

From the interaction term of the intervention and dwelling, the intervention effect in the nomadic area is the best as the coefficients for other areas are all negative compared with the nomadic area. Among those, the difference of intervention effect between nomadic area and township as well as between nomadic area and city is statistically significant ($p = 0.01$ for both comparison).

The adjusted R -squared value is 0.41, which means these demographic variables take account of 41% of variations of the response variable, i.e. correct count score.

4.3.7 Partitioning Chi Square test

This test was performed on Table 5.2. Although question 46 was originally intended as an open-ended question, 263 participants answered it in a binary fashion (yes/no) before adding additional comments.

Partitioning Chi-square test:

$\alpha = 0.05$ needed to be adjusted to $0.05/6 = 0.008$

(1) Compare Tibetan with Mongolian:

The Chi-square statistic is 0.3704. The p value is 0.54. The difference is not significant at $\alpha = 0.008$ level.

(2) Compare Tibetan with Han:

The Chi-square statistic is 29.5111. The p value is <0.00001 . The difference is significant at α

= 0.008 level.

(3) Compare Tibetan with Hui:

The Chi-square statistic is 26.6828. The p value is <0.00001 . The difference is significant at $\alpha = 0.008$ level.

(4) Compare Mongolian with Han:

The Chi-square statistic is 14.8352. The p value is 0.000117. The difference is significant at $\alpha = 0.008$ level.

(5) Compare Mongolian with Hui:

The Chi-square statistic is 17.0191. The p value is 0.000037. The difference is significant at $\alpha = 0.008$ level.

(6) Compare Han with Hui:

The Chi-square statistic is 1.9636. The p value is 0.161125. The difference is not significant at $\alpha = 0.008$ level.

4.3.8 Key findings

Participants' ages ranged from 18 to 27 years old pre-intervention and 18 to 25 post-intervention. However, the mean age remained unchanged at 20.9 years old. Tibetan students were the largest group in the study followed by Han, Mongolian and Hui.

The majority of the Tibetan and Mongolian participants in the study came from farming and nomadic areas, whereas most of the Han and Hui participants came from townships and cities. This is a reflection of the population demographics of these ethnic groups within Qinghai province.

Pre-intervention mean correct scores for the 39 questions varied greatly, Mongolian females had an extremely low score of 3.76 while the males score was also low at 8.76 out of a maximum of 39. Tibetans fared a little better with females scoring 9.77 and males 12.99. Hui female participants score was 10.76 whereas males scored 14.47. Han females scored slightly higher than the Hui males at 14.73 but the Han males had the highest score of 16.05. These results clearly demonstrate that this population is very vulnerable because of their low levels of knowledge concerning the modes of transmission, prevention and symptoms of common STIs and HIV.

The difference between the pre- and post-intervention groups was statistically significant ($p < 0.001$). Compared with that in the pre-intervention group, in the post-intervention group the mean correct count increased by 7.71 with a 95% confidence interval (6.56, 8.86).

When participants responses were analysed without reference to ethnicity, the male participants' mean correct scores (12.91) for the 39 quantitative questions was significantly higher ($p < 0.001$) than female participants' scores (10.24) pre-intervention. There was no significant difference ($p = 0.524$) between genders post-intervention. However, when ethnicity was considered this effect remained the same for Tibetan and Mongolian participants but for the Han and Hui participants there were no significant differences pre- or post-intervention between genders.

There was a significant difference pre- and post-intervention between the Tibetan and Han groups, with Han scoring significantly higher. Likewise the Tibetan group scored higher than the Mongolian group pre- and post-intervention. There were no significant differences between Tibetan and Hui or between Han and Hui pre- or post-intervention.

When dwelling of participants was analysed the greatest difference was found between city dwellers and nomads, with the former scoring significantly higher ($p = 0.03$). Nomads also scored significantly less ($p = 0.01$) than those from townships.

4.4 Summary

This chapter has described the quantitative arm of the study including participant demographics and their responses to the questions that were designed to ascertain their knowledge of modes of transmission, prevention and symptoms of common STIs and HIV. The mean correct responses for these questions are shown for both pre- and post-intervention questionnaires by gender, ethnic group and dwelling. The ethnic groups represented in the study made up 77.5% of the student body at QNU during the time that this study was undertaken.

CHAPTER 5

QUALITATIVE RESULTS

5.1 Introduction

This chapter describes the results of the open-ended questions from the post-intervention questionnaire of the study. The six open-ended questions were designed to elicit feedback from participants on the intervention and how it might be improved. Additionally, it was hoped the open-ended questions would yield answers to ascertain if a programme like this would have been beneficial in high schools and if the ethnicity of the peer educators was considered an important factor. A thematic analysis of the open-ended questions is presented. The challenges and successes of the programme are also presented.

5.2 Open-ended questions

The qualitative data for the study was derived from the six open-ended questions in the post-intervention questionnaire. All responses were first back translated into English from the three written languages that participants used to complete the questionnaires (i.e. Chinese, Mongolian and Tibetan). This data was subsequently analysed using NVivo 11 software and the set of themes using deductive analysis are shown in Table 5.1.

The intervention consisted of selection and training of male and female volunteer peer educators from each class that participated in the study. Once these peer educators had reached an acceptable level of competency they then trained their classmates of the same gender and ethnicity. Participants were shown PPT presentations which showed the signs and symptoms of some of the most common sexually transmissible infections, transmission modes of the infections, how to avoid catching those infections and the availability of treatment or vaccines for these infections. They were also shown an animated video about HIV/AIDS. Tibetan and Mongolian volunteers were also shown the short HIV prevention movie, “Love wisely, live healthy”. Participants were encouraged to ask questions at any time during the training sessions and discussions were held at the end of each session.

The open-ended questions in the post-intervention questionnaire were designed to elicit feedback on the value of the intervention and how it might be improved. Participants were

asked if a programme like this would have been beneficial in high schools and if they thought that the ethnicity of the peer educators who trained them was an important factor.

These questions are listed below and will be dealt with one by one. The total number of participants was 295. The response rate was greater than 90% for questions 43–47 and 89.5% for question 48. It should be noted that for the vast majority of participants this was the first time that they had been involved in a scientific survey and peer education, and probably a survey of any kind. The Chinese education system relies primarily on rote learning, teachers do most of the talking usually without seeking the opinions of students (Dello-Iacovo, 2009).

Therefore, participants in this study were unfamiliar with the concept of unreservedly expressing their opinions. While their comments regarding the questions may seem rather cursory to those who have been trained in a western education system, this is a phenomenon which is typical in China and other Asian cultures. There is a fear of saying the wrong thing, that their opinions may differ from others or cause others to “lose face”, especially if they were to give any form of negative feedback (Richmond, 2007). The fact that the questionnaires used in this study were anonymous may have helped to overcome some of the participants’ reticence. All participants’ comments are available on request.

It should be noted that questions 43–48 had several lines on which participants could write their responses. This was not the same format as questions 4–42 which used tick boxes for the response options of yes, no and don’t know. However, for questions 46 and 47 the majority of participants responded in a binary fashion (yes or no) and then most gave reasons to support their answer.

Table 5.1. Thematic analysis of open-ended questions (post-intervention questionnaire).

Sample size ($n = 295$)			
Questions	Themes	Sources ^a	References ^b
Thoughts about the peer education programme	Good / very good programme, helpful /useful	118	141
	Knowledge about, including prevention of, AIDS and STIs	76	130
	Protection	14	15
Best part of the peer education programme	Knowledge about, including prevention of, AIDS and STIs	71	88
	Teaching method including use of PPT, Pictures and Questionnaire	62	72
	Sex education	12	14
Improvements that might benefit future peer education programmes	Include more people	23	53
	Disseminate information (advertise, publicise)	29	45
	Expand the programme into rural areas	22	23
Importance of selecting peer educators from the same ethnic group as participants	Important to have peer educators from the same ethnic group as participants	109	131
	Not important to have the peer educators from the same ethnic group as participants	154	166
Benefits of a similar programme in high schools	Beneficial	197	197
	Not beneficial	28	28
	Earlier/sooner the better	24	24
Additional Feedback	Continue the programme	25	26
	Expand the programme	13	13
	Go to rural areas	12	12

^aSources are the documents containing the data to be analysed (i.e. all comments of participants to the open-ended questions). ^bReferences are the sections of qualitative data that have been coded in a specified way.

5.2.1 Question 43

What did you think about this peer education programme?

This question was designed to elude participants' overall impression of the peer education programme without asking them to specifically focus on individual elements. Although, they were free to comment on specifics of the programme if they wished to.

5.2.1.1 Good / very good programme which was helpful /useful

This was the most dominant theme. In addition to commenting that the programme was good or very good, many of the participants commented that the peer education programme was useful or helpful. The following are quotes from several of the participants, which emphasize this aspect of the programme:

It is a very beneficial programme to inform teenagers about sex. It is very useful for teenagers at this time of their lives. You have taught them sexual knowledge which forms correct sexual and psychological concepts. [Male Han student, 18 years]

I think this programme is very helpful for us. This is the only way to improve people's knowledge about sex in nomad areas. [Male Tibetan, 23 years]

For me, I think this is a very helpful programme because it not only protected our lives but also provided us with knowledge that we need. [Female Tibetan, 21 years]

5.2.1.2 Knowledge about, including prevention of, AIDS and STIs

This was a major theme because very few participants had previously received any formal instruction regarding AIDS and STIs. Some of their comments concerning this are:

This is a very good programme to know about AIDS and prevention of AIDS. This programme does not just teach theory but is very practical. It contributes to human beings' health. [Male Han, 21 years]

For me as a girl, I think this programme is very important. Because it is important that girls learn this knowledge and know how to take care of themselves and prevent AIDS. [Female, Tibetan 24 years]

It is very necessary because this lets us know more about sex and the prevention of STIs. [Male, Hui 20 years]

From this peer education programme I learnt a lot of knowledge about AIDS and to take it seriously. So I think this is very relevant to everyone's health so I support this programme. [Male, Tibetan 22 years]

You taught the important STI knowledge to us. Many people are embarrassed to teach this subject. It helps us to avoid certain infections. [Male, Hui 20 years]

The final comment exemplifies one of the major obstacles to sex education in China: "most people are embarrassed to teach this subject". Although it is mandated by law that this should be taught in high schools, most teachers are too embarrassed to do so and subsequently do not fulfil their obligations regarding this responsibility.

5.2.1.3 Protection

Although not as prevalent as other themes for this question, protection is nonetheless a very important part of the programme. Many participants were previously unaware of how to protect themselves from infection, the correct method of using condoms and indeed how some of these infections are transmitted. The following are some representative comments:

It teaches us more about sexual infections that we didn't know about before and how to protect ourselves and prevent the infections. [Female, Tibetan 19 years]

I think it is very necessary to do this type of education at this age. It is useful to let us have more knowledge and protect ourselves better. [Female, Han 19 years]

Know the risks associated with sex and protection measures that can reduce the rate of acquiring infection. Protect more people's lives and health. [Male, Han 20 years]

The part that teaches us about the way that STIs are transmitted was very good and it is very good to teach us the ways to protect ourselves and to know more about it. [Female, Han 20 years]

The main objective of the study was to assess if a multi-ethnic peer education programme was effective in raising students' awareness regarding the modes of transmission and

prevention of STIs (including HIV) among undergraduate students in Qinghai Nationalities University. The quantitative results in chapter 4 have shown that this objective was reached for 3 of the 4 ethnic groups involved in the study (Han, Hui and Tibetan) with all showing significant differences between their mean pre- and post-intervention correct responses to the STI and HIV knowledge questions. The Mongolian cohort showed no significant difference and the reasons relating to this are discussed in section 5.3.

Participants who answered question 43 strongly felt that the programme was very good or useful, and had increased their knowledge relating to STIs and HIV and how to protect themselves from acquiring infection. This supports the view that they perceived the programme achieved its main objective.

5.2.2 Question 44

What did you think was the best part of this education programme?

This question asked participants to focus on the part of the programme that appealed to them most. As previously mentioned, few had ever participated in any form of peer education or AIDS and STI education before, therefore it was useful to ascertain which aspect of the programme was most interesting so that it could be preserved in future programmes.

5.2.2.1 Knowledge about, including prevention of, AIDS and STIs

This was the leading theme as one of the best parts of the intervention. The following comments clearly illustrate this:

The best thing in this educational programme is it taught us how to prevent AIDS.
[Female, Tibetan 21years]

The best part is that it taught us the forms of the STIs and prevention measures. [Male, Hui 20 years]

The best part is you taught us lots of knowledge about health that is usually hard to get.
[Female, Hui 21 years]

The best part is AIDS, hepatitis B, syphilis and knowledge about other infections that

relate to these. [Female, Tibetan 23 years]

5.2.2.2 Teaching methods

The method of teaching employed in this programme differed greatly from the traditional teacher-centred teaching methods that students were used to. This programme used peer educators, anonymous questionnaires, multimedia (PPTs, videos etc.) and discussion. Many participants commented on the benefits of these.

a) Teaching method

There were many ways to teach such as PPT, cartoon and DVD. [Female, Han 22 years]

The method for teaching is good. [Male, Mongolian 20 years]

The best part is the questionnaire and the way of teaching. [Male, Hui 21 years]

b) Questionnaires

I think the best thing is that this kind of programme has started and that the questionnaires are anonymous. [Male, Tibetan 21 years]

The best part is using a questionnaire to let people know about AIDS. [Male, Han 21 years]

c) Multimedia

Usually we can only have written information but the use of multimedia presentations (CD, PPT, movie) when these teaching methods are used together to expand the project. So this will help people to pay closer attention so they will absorb more information. [Female, Tibetan 21 years]

The PPT impressed us. We learnt about HIV more thoroughly. The combination of words and pictures made us know more about its transmission and prevention. [Female, Han 19 years]

The PPT was very detailed and impressive. [Male, Hui 21 years]

The part showing the pictures of the symptoms of the STIs and this makes us know

about the STDs thoroughly. [Female, Han 23 years]

The pictures of the people in the PPTs with symptoms of the disease can warn us to treat sexual behaviour more seriously. [Female, Han 20 years]

The part where you show the pictures of the real infections and viruses. [Female, Han 20 years]

5.2.2.3 Sex education

A number of participants commented on this as one of the best parts of the programme:

Broadcasting the correct sex education information. The study population is very appropriate for this programme. [Female, Tibetan 21 years]

Sex education and transmission of viruses. [Male, Tibetan 20 years]

5.2.3 Question 45

What things do you think might be improved on that will benefit future education programmes?

The feedback sought by this question would be used to tailor future programmes, and where feasible, ideas would be incorporated. Although not specifically looking for any aspects that might be ethnic specific, this question did raise a theme that one ethnic group regarded as very important for future programmes.

5.2.3.1 Include more people

Many participants thought that the programme should include more people as demonstrated by the following comments:

Have more participants. Teach more people about this. [Female, Han 19 years]

Continue to tell people about this programme and assemble more people. [Male, Tibetan 22 years]

It would be important to let more people know. [Female, Mongolian 19 years]

5.2.3.2 Expand the programme into rural areas

Apart from one Mongolian participant, this theme was mentioned only by Tibetan participants in the programme and appears to be very important to them. The following comments underline their concern:

To improve this education programme it would be good if you went with students in the summer and winter holidays to rural areas and teach the people there by showing movies and teaching the knowledge. [Female, Tibetan 21 years]

I think the way to improve this programme is to spread this programme widely especially tell this information to people in rural areas. [Male, Tibetan 21 years]

If you can go to rural areas and tell farmers and nomads about how to prevent these infections I would be very grateful. [Male, Tibetan 22 years]

The request to expand this programme and reach more people came from participants of different ethnic groups. A more detailed discussion of this is given in relation to question 47. The desire for this programme to be expanded into rural areas was extremely important to Tibetan participants. However, there was one Mongolian participant who commented:

I think it is important to teach people who have a low level of education: nomads, ordinary people. [Female, Mongolian 22 years]

5.2.4 Question 46

Do you think that it is important that the peer educators involved in the programme are from your ethnic group?

This question was an important foundation of the study. Rather than teach students of different ethnic groups together solely, in Mandarin Chinese (the official language in China) as the communication language, all teaching materials and communication was carried out in the languages of the various ethnic groups. Therefore, for the Han Chinese students, written material was in Chinese and oral communication used Mandarin. In the case of Hui students,

the written material was in Chinese and spoken communication used Qinghai dialect. For Mongolian students both written and oral communication was in Mongolian. The written materials for Tibetan students were in written Tibetan (which differs from oral forms in both grammar and word usage) and oral communication was conducted in the Tibetan Amdo dialect (the predominant dialect in Qinghai province and the one in which Tibetan students at QNU receive teaching from faculty in the Tibetan department).

It should be noted that for the Hui, Mongolian and Tibetan students, Mandarin is a second language, although because of the proximity of the Hui to Han populations they are much more conversant with Mandarin and receive all of their primary and secondary schooling in Mandarin. This is not the case for many Mongolian and Tibetan students who may receive a large part of their schooling in their own languages and consequently may have more difficulty with Mandarin. This can present problems when discussing unfamiliar or sensitive issues using Mandarin rather than their own languages. Although differences in language may be important, there may be other underlying differences in customs and ethnic identity which for some groups are more important than others. Thus the preference for true peers as opposed to near peers may well be an issue for some participants.

5.2.4.1 Important to have peer educators from the same ethnic group as participants

Some of the participants who held this view made the following comments, which touch on language, customs and ethnic identity:

It is important because if the peer educator is from the same ethnic group we can ask questions freely as it is easy to relate to them and they speak the same language. [Male, Tibetan 24 years]

Important. If they are from the same ethnic group they will certainly be concerned about Tibetans safety and lives. [Female, Tibetan 21 years]

Important because if they come from another ethnic group they don't know the life customs of this ethnic group so can't teach well. [Female, Tibetan 22 years]

5.2.4.2 Not important to have peer educators from the same ethnic group as participants

These comments were made by some of the participants who adhered to this view:

I don't think that it is important because this is just education, it has nothing to do with ethnicity. [Female, Hui 19 years]

Don't think so. Nationalities are equal. Different ethnic groups are united as a whole. There is no big difference among ethnic groups so it is not important whether they come from the same ethnic group or not. [Female, Han 20 years]

Not important. There is no relationship between ethnic groups acquiring these infections. [Female, Han 19 years]

Although question 46 was an open-ended question and participants were given a number of lines on which to write their response, 263 participants first answered this in a binary fashion, with yes or no answers. They then elaborated on their response with appropriate comments. There were 154 (58.6%) participants who thought that it was not important that the peer educator was from the same ethnic group as participants and 109 (41.4%) who thought that it was important to have peer educators from the same ethnic group as participants. Table 5.2 shows an analysis of the binary responses given to this question for each ethnic group in addition to the total for all participants.

Table 5.2. Importance of ethnicity of peer educators.

Ethnicity of participants	Important that peer educators are from the same ethnic group as participants n (%)	Not important that peer educators are from the same ethnic group as participants n (%)	Total n (%)
Tibetan	68 (60.2)	45 (39.8)	113 (100)
Mongolian	23 (54.8)	19 (45.2)	42 (100)
Han	15 (20.0)	60 (80.0)	75 (100)
Hui	3 (9.1)	30 (90.9)	33 (100)
Total	109 (41.4)	154 (58.6)	263 (100)

Hui (90.9%) and Han (80.0%) participants overwhelmingly believe that the ethnicity of the peer educator is not important. Mongolian participants slightly favour (54.8%) having peer educators from the same ethnic group as participants, whereas, 60.2% of Tibetan participants support the use of peer educators from the same ethnic group, that is, true peers as opposed to near peers.

A Partitioning Chi-square test was performed (see section 4.3.7) on the contingency table (Table 5.2) to assess any significant differences between the ethnic groups.

There is no significant difference between Han and Hui or between Mongolian and Tibetan but there is a significant difference between Han and Tibetan, Han and Mongolian as well as between Hui and Tibetan and Hui and Mongolian.

5.2.5 Question 47

Do you think that a programme like this would have been beneficial to you if it was available when you were a high school student?

As previously mentioned, sex education is mandated by law in high schools (C. Li et al., 2017). However, this is routinely ignored by teachers who are too embarrassed to teach students about this subject matter. Therefore, very few students arrive at university with any formal education regarding this topic. There may be some from larger cities in the east and south of China who may have received some instruction, but even in Shanghai, the most socioeconomically advanced city in China, a high proportion of teachers fail to teach sex education (J. Watts, 2004). The situation in the west of China and Qinghai in the northwest of China, especially in rural areas, is even more abysmal with few, if any, teachers willing to tackle these sensitive issues (Personal observation; see section 1.5).

Therefore, this question sought to find out whether students, after going through the current peer education programme, felt that this type of programme would have been beneficial when they were at high school.

5.2.5.1 Beneficial

Although this was an open-ended question, 225 participants responded with binary answers (yes or no), and then most went on to state their reasons for their response. Most participants

(195; 87.6%) believed that it would be beneficial if a programme like this one had been available when they were at high school. Some of the comments that expressed this are:

It is very important because many young people in high school don't care if their partner has a disease or not, it is okay or not, as long as they can have sex. [Male, Tibetan 25 years]

True. If I had this information in high school I would have had a better knowledge of how to protect myself and prevent infection and encouraged more people. [Male, Tibetan 23 years]

If we can have this programme in high school it can avoid lots of bad phenomena but because of the limitation of the Chinese education system very few schools in China will have this course in high school. [Female, Han 19 years]

5.2.5.2 Not beneficial

Only 28 participants (12.4%) of those who responded in a binary fashion to this question held this view. The following participants articulated this in their comments:

Don't think so. The environment at high school is very good and safe so don't need this type of education. [Female, Han 19 years]

High school students are very sensitive; their mind is not mature enough. Personally, I think it is better to accept this kind of knowledge at university. [Female, Hui 21 years]

I don't think you can have courses like this in high school because regulations are very strict and we are self-disciplined, have self-esteem and love ourselves. [Female, Hui 19 years]

5.2.5.3 Earlier/sooner the better

Some participants believed that the earlier they had this sort of programme in their school life the better it would be for their health and wellbeing. They conveyed these beliefs in comments such as:

It is helpful because the earlier you receive the information the better you can protect yourself. [Female, Tibetan 21 years]

It is very important. The sooner you know about this the sooner you will think about prevention and act on this. [Male, Tibetan 23 years]

Important. If we had this programme earlier we would take seriously the dangers of AIDS earlier. [Male, Tibetan 23 years]

Only four participants mentioned that they had previously had any form of sex education: 2 females and 2 males. These participants were Han with two from cities and two from townships. It is likely that these students came from provinces in the east or south of China. While 3 of the participants only mentioned that they had similar education in either middle school or high school, 1 male participant commented:

Although when I was in high school I did have a biology class and heard about some health materials. However, it was not as pertinent. [Male, Han: age not given]

5.2.6 Question 48

Do you have any other comments that you would like to make?

This question was designed to stimulate feedback on any issues not covered by the preceding questions.

5.2.6.1 Continue the programme

This was the most common theme identified in relation to this question. Some of the participants' comments are listed below:

No suggestions but I hope that you can continue to do this every year. Thank you for teaching us. [Male, Tibetan 23 years]

First of all thank you for doing this programme. I hope you can continue to do it. [Male, Tibetan 21 years]

If you continue this education programme I will be very grateful. [Male, Tibetan 25]

years]

5.2.6.2 Expand the programme

This was predominantly mentioned by Tibetan participants although two Han participants also suggested this. The following comments illustrate this opinion:

Continue to expand this programme and keep on doing it. If you televise it everyone will benefit from it. [Male, Tibetan 23 years]

Expand the scope; don't limit it to university students. [Male, Han 18 years]

My only hope for this educational project is to continue to expand it so more people's lives can be saved. Especially for people in nomad and farming areas who don't know anything about this. Everyone hopes those people will be helped. [Female, Tibetan 21 years]

5.2.6.3 Go to rural areas

Only Tibetan participants identified this as a need. This notion is exemplified by the following comments:

In the future activities like this should spread to the people in rural areas and let them know every aspect of how to prevent these infections. [Female, Tibetan 21 years]

I think it is good to continue this programme and make those in rural areas familiar with it. [Male, Tibetan 21 years]

Continue to provide more information about this and it is important to let people in rural areas know about this. [Female, Tibetan 23 years]

Expansion of the programme, especially into rural areas has been discussed previously in 5.2.3. Continuation of the programme is contingent upon approval by QNU. The researcher is no longer an enrolled language student at QNU but would be willing to continue this programme if permission was granted. Expansion to other universities, high schools and

possibly middle schools will be discussed in the recommendations coming out of this study in Chapter 6.

5.3 Challenges

This research project presented many challenges for the researcher but they were outweighed by the successes. The fact that the researcher had previously carried out a small research project with the Tibetan students of QNU, and that he had also been a long term language student at QNU were facilitating factors in gaining ethics approval from QNU for the present study. Additionally, the previous research project had been seen as helpful to Tibetan students by the faculty of QNU and lent further credence to the researcher's current study.

Some obstacles occurred while carrying out the test and retest of the different versions (target languages) of the questionnaires that were developed with the respective ethnic groups. The 16 participants of the first female cohort for the Chinese version of the questionnaire were unavailable at retest. This meant that a new cohort had to be enrolled and the process restarted which resulted in a delay; however this obstacle was offset by the fact that the second cohort had 19 members and all were able to return for retesting. Only 7 of the original 13 Tibetan female cohort returned for retesting.

Unfortunately, in the week that elapsed between the test and retest self-immolations had occurred in a town many of the participants were from, including a relative of one of the girls who subsequently died. There were also challenges with the Mongolian male cohort with only 7 out of 15 of the original participants available at retest as the other 8 had left university and found employment. Unlike all the other groups where there was one week between test and retest, the Mongolian male cohort were not available for retesting until one month had elapsed. Fortunately, 16 out of 18 of the Mongolian female cohort were available at retest.

Materials for the research project were initially developed by the researcher in English with the exception of the TeachAIDS animated video by Stanford University, which was in Mandarin. Translation into Chinese, Mongolian and Tibetan followed by back translation into English was necessary before the materials could be tested with a pilot group. A number of drafts were necessary before the final one for each of the languages was submitted for back translation which was a time consuming process. The Chinese and Tibetan translations were

relatively straightforward but the Mongolian translations posed some challenges. The researcher is not literate in Mongolian and therefore had to rely totally on translators. Initial Mongolian fonts used in early drafts by the first translators in Qinghai province were not compatible with those used by translators in Inner Mongolia who worked on subsequent drafts. This led to significant delays while these problems were resolved. These translations in the target languages were found to be very suitable for training purposes by the focus groups of the respective ethnic groups. Additionally, the questionnaires that were developed were found to show excellent correlation between testing and retesting and represent useful tools for assessing the level of HIV/AIDS and STI knowledge of Chinese, Mongolian and Tibetan populations.

Initially it had been hoped that one class from each of the four years of undergraduate students from 5 ethnic groups would be recruited for the project. Unfortunately, there were insufficient Salar students and they were dispersed too widely in different classes for this group to be included. In addition, apart from the Tibetan students where this sampling was possible, many third and fourth year students from other ethnic groups were attending work experience electives and were therefore unavailable.

Training peer educators was a great privilege and an extremely rewarding part of the project. It was wonderful to see the increase in their level of knowledge and change in their understanding of the subject material. Although open discussion of this type of material is routinely seen as taboo in this society, the fact that the student groups were small and only one gender made this a comfortable and secure forum for participants to freely ask questions and share opinions. The enthusiasm of the majority of the peer educators was heartening.

There were logistical problems. Mongolians are predominantly nomads, and their sense of time is not the same as westerners, who live in a very time conscious society. On a number of occasions sessions had to be rescheduled when participants did not attend at previously agreed upon times. Notwithstanding their lack of punctuality, when they did attend the sessions they were very enthusiastic. Unfortunately, it appears that the Mongolian peer educators were rather lax in training their classmates with some participants not receiving the required level of training. This was alluded to by one participant who commented “improve more on the educator”. When the researcher discussed this with the Mongolian peer educators they admitted that for varying reasons, such as time pressures, they had not completed their

tasks to the agreed level and some had completely failed to carry out this task. These attitudes and traits are mentioned by Bruun and Odgaard (2013, p.93) who stated that “Mongols have been criticized for a poor work attitude and lack of punctuality in the office and factory. Such engrained attitudes originate from the nomadic lifestyle. Mongols in general react negatively to systematized work with regular hours”, and would explain the situations encountered by the researcher.

Unlike western universities, it is compulsory for undergraduate students in China to live in dormitories on campus. This presents a unique situation, which the peer educators utilized in various ways to train their classmates. Some held meetings in classrooms for the training sessions while others held these sessions in their dormitories which allowed an even more informal environment.

Apart from increasing participants’ knowledge, which was one of the main aims of the project, the greatest success was the enthusiasm of many participants to share this knowledge. This was especially evident in those from a rural background. Many of these students may be the only person in their village ever to attend university and have the chance to access this sort of knowledge. They had an overwhelming desire to share this information with the people in their hometowns during their summer and winter vacations. The longing to spread this information in rural areas was echoed by many students in the comments they expressed when answering question 45. Each student was given a copy of the TeachAIDS animated video and the PPT in their language. Mongolian and Tibetan students were also given a copy of the “Love wisely, live healthy” DVD. These resources could be used to train others.

5.4 Key findings

Participants found the peer education programme to be good or very good as well as useful. They found that the knowledge they acquired about AIDS and STIs, including prevention was beneficial and would help protect them from acquiring these infections in the future. The programme did not only focus on theory but was found to be practical. Issues were managed in a sensitive manner to avoid potential embarrassment. Participants commented that the teaching methods were very good and appreciated the use of questionnaires, PPTs and videos, which contrasted with traditional teaching methods that use a lot of written material.

Suggestions on improving the programme focused on reaching more people and expanding the programme into rural areas. The latter was of concern to Tibetan participants, although one Mongolian student also commented on this.

Han and Hui participants did not think that it was important that the peer educator was from the same ethnic group as participants. On the other hand this was important to Tibetans and less so for Mongolians.

The majority of participants (87.6%) who answered question 47, thought that a programme like this would have been very beneficial if it had been available when they were high school students. Some commented that the earlier this type of education is given in their school lives the better. When asked for any additional feedback, it was suggested that the programme continue and earlier comments regarding expansion of the programme especially into rural areas were restated.

5.5 Summary

This chapter has described the qualitative arm of the study and participants' responses to the open-ended questions designed to stimulate their feedback on the intervention. A thematic analysis was performed and for each theme identified, representative comments of participants were listed. The importance of peer educators coming from the same ethnic group as participants revealed differences between the ethnic groups. A discussion on the challenges and successes of the research project was also presented.

CHAPTER 6

DISCUSSION, SIGNIFICANCE, RECOMMENDATIONS, CONCLUSIONS AND KEY FINDINGS

6.1 Introduction

This chapter begins with an overview of the aims of the study. This is followed by a response to each of the main aims and objectives of the study. The significance of the study, implications and applications of the study, together with its limitations are presented. Further areas of research related to the study are outlined. The chapter ends with the key findings of the study and some concluding remarks.

6.2 Overview of study

Qinghai province, located in the northwest of China, is inhabited by a number of ethnic groups in addition to the Han majority. Owing to the low level of knowledge of the modes of transmission and prevention of STIs including HIV among undergraduate students at QNU, these students represented a vulnerable population. The student body comprises primarily Han, Hui, Tibetan and Mongolians together with smaller numbers of other ethnic minority groups. An intervention study using a mixed methods approach was developed to raise the awareness of students of the four main ethnic groups regarding the modes of transmission and prevention of these pathogens. The quantitative arm of the study assessed the knowledge of participants both pre- and post-intervention using 39 questions relating to HIV and STIs. The qualitative component of the study was restricted to the post-intervention questionnaire and sought feedback on the study, the suitability of a similar education programme in high schools and the importance of the ethnicity of peer educators.

A large component of the study involved the development of suitable teaching and assessment materials which were both linguistically and culturally acceptable to participants. Rather than only using Mandarin as the teaching language, the written resources were also translated into Mongolian and Tibetan. Spoken presentations used the first languages of each group as the Mandarin fluency of some ethnic groups is suboptimal, especially when dealing

with sensitive issues such as sexual health. An added dimension of the study was to determine whether or not the participants showed a preference for “true peers” as opposed to “near peers” for the ethnicity of the peer educators.

The study highlighted the low level of existing knowledge of participants in the pre-intervention phase and demonstrated significant increases in knowledge in 3 out of the 4 ethnic groups at post-intervention. Differences between gender, ethnicity and dwelling as well as within ethnic groups were found and possible explanations for these were proposed. The preference for “true peers” was found to be especially important among Tibetan participants and to a lesser degree among Mongolians, but not considered important by either Han or Hui participants.

6.3 Response to thesis aims

6.3.1 Main aim of the study

The main aim of the study was to determine if a multi-ethnic peer education programme was effective in raising students’ awareness regarding the modes of transmission and prevention of STIs (including HIV) among undergraduate students in Qinghai Nationalities University.

Only 4 Han participants mentioned that they had previously had any form of sex education while in high school or middle school, which in one case was only a biology class. As previously mentioned the researcher discovered in 2005 and 2006 while teaching all Tibetan and Mongolian department undergraduates and some Han undergraduates at QNU, that students had previously not had any education regarding STIs and HIV while in high school. The lack of instruction in high school regarding this subject has obviously persisted among the vast majority of participants. The lack of knowledge of the modes of transmission and prevention of STIs and HIV among participants was very apparent in the quantitative analysis of the pre-intervention questionnaire results and this will be discussed further in a section below where a breakdown of these results are considered with respect to gender, ethnicity and dwelling.

The multi-ethnic peer education programme was successful in raising students’ awareness of the modes of transmission and prevention of STIs (including HIV).

This aim was achieved as there was a statistically significant ($p < 0.001$) increase between the pre- and post-intervention mean correct scores of 7.71 with a 95% confidence interval (6.56, 8.86).

6.3.2 Development of teaching and assessment materials

An objective of the study was to develop teaching and assessment materials that were both linguistically and culturally acceptable to participants of four different ethnic groups.

Apart from the TeachAIDS animated video in Mandarin that was developed by Stanford University, the researcher developed all of the remaining teaching materials. Separate PPT presentations for males and females which outlined the most common STIs, including HIV, together with modes of transmission, symptoms of infection, prevention measures and treatment options. A story-based educational HIV prevention video in spoken Amdo and Kham dialects of Tibetan, as well as written Tibetan subtitles, was also developed by the researcher. This was used for Tibetan students and another version of the same video with Mongolian subtitles was used for Mongolian students.

The data collection instrument was a combined STI and HIV knowledge questionnaire, which was based on two existing questionnaires, but modified with additional questions that made the final questionnaire more suitable for use in China.

A qualitative component consisting of six open-ended questions was included in the post-intervention questionnaire. The questionnaire, teaching materials and all of the other documents, such as information sheets, consent forms and questionnaire evaluations were initially developed in English then translated into the various target languages (Chinese, Mongolian and Tibetan). Back translation of the above material, and then pilot testing was performed, as well as focus groups to assess the linguistic and cultural suitability of the materials.

Test and retesting of the questionnaire was performed with separate male and female cohorts for each of the written languages: Chinese, Mongolian and Tibetan. These were conducted seven days apart, with the exception of the Mongolian male cohort whose members were not available for retesting until one month had elapsed. Between test and retest all Chronbach

alpha values were > 80% which demonstrated the stability of the questionnaire. Statistical analysis for Mongolian cohorts was only possible at the group level as they could not be matched between the test and retest. Nonetheless, the Cronbach's alpha values (based on standardized items) were excellent, close to 90%. The questionnaire was therefore found to be an effective tool for assessing knowledge relating to the modes of transmission and prevention of common STIs and HIV.

All of the teaching materials were found to be linguistically and culturally acceptable to each of the 4 ethnic groups participating in the study. The Tibetan HIV prevention video has been widely used throughout Qinghai province and has been shown on Qinghai Tibetan Television. It has also been used extensively in Gansu and Sichuan provinces where it has been extremely well received. There has even been some limited use of it in the Tibetan Autonomous Region despite the fact that the vocals used are not in Lhasa dialect.

It was interesting that in answering question 44, while echoing the responses in question 43 regarding an increase in knowledge relating to STIs and HIV, the second most popular theme was the teaching method which involved PPT presentations, questionnaires and DVDs. This shows the contrast between the normal teaching methods used in many Chinese universities and schools — which are traditionally teacher-centred with minimal interaction between teacher and students, or between students — and a western student-centred interactive approach. Undergraduate and graduate student enrolments in China have continued to increase at a rate of about 30 percent each year since 1999. There has not been a corresponding increase in the number of universities or a proportional increase in academic staff, which means that the academics are under increased pressure to cope with increasing class sizes (S. Li & Shaw, 2015).

The teaching process is teacher-centred and text-based. Both the teacher and the textbook are regarded as authoritative sources of knowledge. Teachers select points of knowledge from authoritative sources such as textbooks and teacher handbooks. Teachers interpret, analyze and elaborate on these points for students, deliver a carefully sequenced dose of knowledge for the students to memorise, repeat and understand, and help them connect the new points of knowledge with old knowledge. Watkins D., and Biggs, J.B., *Teaching the Chinese learner : psychological and pedagogical perspectives* (as cited in Chen, 2015).

This is not just found in universities but begins in primary school and follows the same pattern in middle and high schools. Starting in the first grades of school, teachers present their lessons in an uninterrupted dialogue, while maintaining strict discipline (Pine, 2012). Curriculum reform was approved in 2001 by the Ministry of Education to move towards a more student-oriented quality education (J. Chen, 2015). However, China is such a large and diverse country that fully implementing such changes nationwide will take time. It is still often the practice that a teacher will read from the textbook and if they do use PPT presentations these will often be extracts from the same textbook. Therefore, participants greatly appreciated the student-centred and interactive model of the peer education programme.

6.3.3 Difference in knowledge levels between demographic variables

Another objective was to assess differences in knowledge levels between the demographic variables: gender, ethnic group, type of dwelling (rural versus urban) and social background (farmers versus nomads).

Significant differences existed between genders in the pre-intervention questionnaire; the mean correct score was significantly higher for males than females. However, there was no significant difference post-intervention. The Han participants had the highest pre-intervention mean, then Hui, followed by Tibetans with the Mongolians having the lowest. There was a significant difference between Tibetans and Mongolians both pre-intervention and post-intervention. A significant difference between the Tibetans and Han participants was also found pre-intervention. There were no significant differences pre-intervention or post-intervention between the Tibetans and Hui or between the Han and Hui. City dwellers had the highest mean correct score pre-intervention, followed by those from townships, and then farmers and nomads had the lowest score. A statistically significant difference was found between the city dwellers and nomads pre-intervention. Post-intervention both city dwellers and those from townships showed a significantly higher mean correct score than participants from nomadic areas.

6.3.4 Difference in knowledge levels within demographic variables

Another objective was to assess if there are differences in knowledge relating to STIs including HIV and between the demographic variables: gender, ethnic groups, types of

dwellings (rural versus urban) and social backgrounds (farmers versus nomads).

In addition to the differences noted in section 6.3.3, differences were found within these demographic variables. When gender was examined within ethnic groups a different perspective was visible. Although there was a significant difference between Mongolian males and females and Tibetan males and females pre-intervention with males scoring higher than females, this was not the case post-intervention where no significant differences were found. However, there were no significant differences between Han males and females or Hui males and females either pre- or post-intervention.

Apart from the Mongolians who showed no significant increase in mean score between pre- and post-intervention, the other ethnic groups all showed a significant increase in mean scores.

The differences between those from nomadic areas, townships and cities have been mentioned in the previous section. Additionally, there were no significant differences between participants from farming areas and those from townships pre- or post-intervention, although pre-intervention there was a significant difference between farmers and city dwellers, but this did not persist post-intervention.

Gender Differences

When all participants were considered, there was a significant difference between genders, pre-intervention but not post-intervention. However, this is not equally applicable to all ethnic groups. In the case of Han and Hui no significant differences between genders was observed either pre- or post-intervention. However, both Mongolian and Tibetan males had a significantly higher pre-intervention score than their respective female counterparts. This may well reflect the position of women in both Mongolian and Tibetan societies, their lack of mobility and less access to information sources as their male equivalents. In nomad society, tasks are gender based. For example, women milk yaks and make butter during the summer while the men herd the livestock (Shang, White, Degen, & Long, 2016).

Tibetan nomads have increasingly replaced their horses with motorbikes, which have made them much more mobile; they not only ride them to herd animals but the motorbikes make

traveling to nearby towns and cities much easier. These motorbikes are usually the sole domain of the men in Tibetan households, especially young men, who think they “look cool” riding them. Nomads riding horses from the grasslands into towns have now become a rare sight. If women want to go to town, it first has to be discussed with males in the family. Should women go into town, then their behaviour is governed by gender stereotypes with some places considered inappropriate for Tibetan women to visit; this includes internet cafes/bars (Iselin, 2011, 2014).

It is considered fashionable for Mongolian men also to ride motorbikes. The majority of the Mongolian participants in the study were from Haixi Mongol and Tibetan Autonomous Prefecture in Qinghai province where there is close proximity between the two ethnic groups. The remainder were from other areas, including Inner Mongolia. There is a considerable population of Mongolians in Henan County in Qinghai and although they self-identify as Mongolian, very few can speak Mongolian and nearly all communication is in Amdo Tibetan. Traditional Mongolian musical instruments are not found in Henan and with a few exceptions such as at certain rituals, songs are also sung in Tibetan. At these rituals, like hair-cutting ceremonies, speeches and songs in Oirat have actually been back translated from Tibetan (Roche, 2016).

Ethnic Differences

There were no significant differences between Han and Hui participants’ mean correct responses pre- and post-intervention. Significant differences were seen between the Han, Tibetan and Mongolian cohorts’ pre- and post-intervention. Likewise there was a significant difference between the Hui and Mongolians, but not the Tibetans (see Tables 15 and 18). A significant difference was also seen between the Tibetan and Mongolians pre- and post-intervention. These differences may be due to a number of factors including the education standards in rural areas, the lower level of fluency in Mandarin of Tibetan and Mongolians from rural areas, but the most important is probably where the participants live and their access or lack of access to appropriate information regarding STIs and HIV in a language they can understand.

Despite the fact that “57% of China’s population lived in rural areas in 2015” (Jian Li, 2016, p. 2380), there has long existed an urban-rural divide in the educational system that persists

today. “In practice, investments are skewed toward better-performing schools in urban areas” (Tam & Jiang, 2015, p. 162). Although there is a law which decrees nine years of free education for primary and middle school students, in reality school fees may be required before students are admitted (Brown & Park, 2002).

In addition to these fees, there are escalating sundry costs that students’ families must meet, including school uniforms and books. These costs are greater for middle school students than primary school students (Lu, 2012). In spite of the fact that funding for rural compulsory education is nominally guaranteed by the Compulsory Education Law, in practice it is the responsibility of the county and township governments to raise the majority of the money to fund this (Fu & Ren, 2010). This places these local authorities in an inferior negotiating position against the larger prefectural, provincial and central governments in their efforts to secure funding (Fu & Ren, 2010). Therefore, in order to cover deficits in local revenues, many rural schools levy students directly (Lu, 2012).

The funding inadequacy not only impacts students directly through these charges but also influences the quality of the teaching staff in rural areas, which has been identified as the main factor leading to the urban-rural divide in educational standards (Jian Li, 2016).

Teachers’ salaries in rural areas are not only considerably less than their urban counterparts, but their workload is often greater, and they frequently have to teach subjects that were not their majors in college or university (Peng et al., 2014). Experienced teachers will often relocate to urban areas because of these discrepancies (Q. Li, 2012).

In addition to the urban-rural divide there also exists a Han-Minority achievement gap. Compared to Han students, substantially fewer numbers of ethnic minorities (EMs) fail to complete the compulsory nine years of education (Hannum, 2003; Y. Yang et al., 2015). Tam and Jiang (Tam & Jiang, 2015, p. 175) state that there is “a striking contrast between the changing likelihood of college attendance for urban and rural students from 1989 to 2002. For students of similar socioeconomic back-grounds, college attendance had risen sharply among urban students but remained stagnant among rural students”. This is further compounded in the case of minority students with even fewer going on to secondary education let alone tertiary education.

Although affirmative action has been a policy since the mid-1980s, which allows preferential entry for EMs even if their scores in the national university entrance exam are lower than required for non-EM students, of these about 25% of students are only enrolled in Nationalities Universities or their preparatory courses where language and liberal arts studies are the predominant courses (Sautman, 1998; Z. Zhu, 2010). There are currently no Nationalities Universities in the top 100 ranking of Chinese universities. Nationalities Universities have generally had a poor reputation within China for their low standard of academic quality and facilities (M. Wu, 2008). Huang's comment (Huang, J. 2000, p. 203) is rather scathing: "The University for Nationalities impresses people with its backwardness, its conservativeness, its low efficiency and its inability to attract talent".

Conversely, Huang does acknowledge the great contribution that these universities have made in the education of minorities. Of the 55 EMs in China, 80% live in the west of the country which constitutes the provinces of Gansu, Guizhou, Qinghai, Shaanxi, Sichuan, and Yunnan as well as the five minority autonomous regions of Guangxi, Inner Mongolia, Ningxia, Tibet, and Xinjiang, together with Chongqing, which is a municipality. EMs are greatly under-represented in other Chinese universities with very few gaining admission to key or upper tier universities (Clothey, 2005; Z. Zhu, 2010).

Language barriers are another factor which must be taken into account among the EMs. Mandarin is the official national language in China or the language of wider communication. Generally speaking, when it comes to educational achievement, the rural non-Chinese speaking minority students are at the greatest disadvantage (Yanbi Hong, 2010). In EM regions, there is often a lack of suitably qualified bilingual teachers (Y. Li, Liu, & Zuckermann, 2014). Mandarin speaking EMs perform much better than non-Mandarin speaking EMs in school. In a study conducted by Yang et al, in Shaanxi, Gansu, and Qinghai provinces which involved about 21,000 fourth and fifth grade students, they found that there was a Han-minority achievement gap of nearly 0.3 standard deviations (*SD*) in mathematics and greater than 0.2 *SD* in Chinese. This achievement gap was even more marked among the minorities whose first language was not Mandarin, with these students' scores being 0.62 *SD* lower in mathematics and 0.65 *SD* lower in Chinese than the Han students (Y. Yang et al., 2015). Non-Mandarin speaking EMs may only speak Mandarin at school as other family members will often only speak their first language.

Although mandated by law, sex education is often not taught in schools because teachers are too embarrassed. This results in students accessing different sources of information relating to sexuality, STIs, HIV and AIDS, such as mass media, friends and sometimes family (Tung, Hu, Efirid, Yu, & Su, 2011). In their meta-analysis of mass media interventions for HIV prevention for the period 1986–2013, La Croix, Snyder, Huedo-Medina, & Johnson (2014) concluded these interventions had a powerful effect on people they targeted who were living in nations that were most at need for HIV prevention and other health promotion interventions (LaCroix, Snyder, Huedo-Medina, & Johnson, 2014). In a study in an urban centre (Changchun) in 2001 of unmarried 15–19 year olds, preferences for sources of knowledge relating to puberty, sexuality, STIs, HIV and AIDS, found that in the case of subjects with a lower degree of cultural taboo, such as knowledge about puberty, teachers and parents were consulted. However, adolescents tended to obtain their knowledge on subjects with a higher degree of cultural taboo, such as sexuality, STIs, HIV and AIDS, from mass media or their peers (Liyang Zhang et al., 2007). In Chen et al's study of female college students at six universities in Beijing, Shanghai and Guangzhou, which included both urban (77.6%) and rural (22.4%) participants:

The majority of both students from urban areas (67.5%, 1367/2071) and rural areas (63%, 377/598) reported traditional media such as newspapers or television were the most common sources of useful information for HIV/AIDS in China, followed by the Internet (53.0% compared to 47.3%), school sex education (41.5% compared to 37.6%), and friends (21.9% compared to 18.9%). (Chen et al, 2016, p. 4)

Another study, conducted at Wuhan University in China's central Hubei Province found that undergraduate students used the following sources to find information about HIV/AIDS: "mass media (newspapers and magazines, 64%; television and radio, 48.8%), followed by college (32.9%), public health campaigns (22.9%), friends (20.9%) and other sources, such as the Internet (19.8%)" (Tan, 2008, p. 227).

Although Chen et al's study did include some rural participants; it is unlikely that any of these were EMs as those universities were not located in the west of China where the majority of EMs are found. There is paucity in the literature relating to sources of STI, HIV/AIDS knowledge that are used by rural EMs. In Qinghai Province, even when Tibetan television programmes cover these topics, students may be reluctant to watch them if other

family members are present as these subjects are taboo and it would be considered culturally inappropriate to watch them. Other mass media sources are predominantly in Chinese and therefore present difficulties to those who have low levels of fluency in Mandarin. As previously mentioned, male nomads are more mobile than females and will visit townships or cities where they may frequent internet cafes/bars and perhaps access relevant information.

Tibetan participants in the current study had a desire to see the programme expanded into rural areas. This was only mentioned by one Mongolian participant but not stated by any Han or Hui participants. Many of the Tibetan participants in this study may be the only person from their village or community with the chance to attend university and have exposure to this sort of information. They feel a great burden to raise the general education standards in their communities and to share this information in particular, which they realise, can prevent others from unnecessary suffering. This may relate to their Tibetan Buddhist beliefs about suffering and in particular a concept called “karuna” which is one of the tenets of Buddhist teachings. Karuna is perhaps best translated as compassion and is a desire to prevent the suffering of others and self (Hofmann, Grossman, & Hinton, 2011).

6.3.5 Use of the peer education programme in high schools

Participants were asked the following question:

Do you think that a programme like this would have been beneficial to you if it was available when you were a high school student?

Of the 225 participants who responded, 87.6% believed that it would be beneficial if a programme like this one had been available when they were at high school. This is an overwhelming endorsement for the use of this multi-ethnic peer education programme in high schools.

In reporting on data from the 2009 National Youth Reproductive Health Survey in China, Guo, Wu, Qiu, Chen and Zheng (2012) found that the mean age of sexual debut for men was 22.5 years and for women 23.1, with 21–24 years of age being the normative range. There was also a difference in gender; the debut for males was earlier than females. Additionally, both males and females in rural areas, and those living in western China also had an earlier age of sexual debut (W. Guo, Wu, Qiu, Chen, & Zheng, 2012). Then only two years later a

survey of 11,582 women across 21 urban and rural sites found that in urban areas more than 10% of the 15–19 year old cohort were already sexually active and this rose to almost 44% in the 20–24 year old cohort. Regardless of their dwelling, female students were less likely to be sexually active than Chinese women of the same age who had an occupation (Zhao et al., 2012).

Youth and adolescents who have dropped out of the school system are even more likely to engage in sexual and other risk taking behaviour at an early age. Li et al., (Jianghong Li et al., 2012) found in their study of 289 out-of-school adolescents and youth in Yunnan that about 33% of the 12–20 year olds had sex with 15.7% having their sexual debut before age 15, while in the 20–24 age group the figures were 62.4% and 15.5% respectively. Li's study of adolescent sex in Guangzhou city and Liu et al.'s study among school students in the delta region of the Pearl River (Yu, 2010), found that in Guangzhou and Guangdong 17% and 18% of high school students respectively were sexually active with males (24% and 26%) being twice as likely to lose their virginity as females (12% and 10%).

Since the age of sexual debut is becoming lower in China it is evident that an increasing number of students is becoming sexually active not only while in high school but some even in middle school. It would therefore be prudent to have a programme like this running in high schools. This could even be expanded to middle schools where some students are also sexually active; for those who are not sexually active, it would give them the knowledge that they require to protect themselves when they do become active.

6.3.6 Value of true peers

Participants were asked the following question:

Do you think that it is important that the peer educators involved in the programme are from your ethnic group?

Initial results showed that 58.6% of the 263 participants who answered this question thought that it was not important that the peer educator was from the same ethnic group as participants. However, when responses were broken down by ethnic groups it became apparent that there were indeed significant differences of opinion. Although an overwhelming majority of Han (80.0%) and Hui (90.9%) did not feel that it was important to have peer educators from the same ethnic group as participants, Mongolians (54.8%) and Tibetans

(60.2%) did consider it important to have peer educators from their own ethnic groups. There were no significant differences between Han and Hui or between Mongolian and Tibetans but there were significant differences between Tibetan and Han, Tibetan and Hui, Mongolian and Han as well as Mongolian and Hui.

It is interesting to note that the first language of the Han group is Mandarin. Although Mandarin is not the first language of the Hui, they receive all of their primary and secondary schooling in Mandarin and are therefore very proficient in the language. This is unlike the majority of Mongolian and Tibetans from rural areas who receive most of their primary and secondary schooling in their own languages and therefore may not be as proficient in Mandarin.

The importance that Tibetans attach to having a peer educator from the same ethnic group as they, may be due to a number of factors including language, culture and identity. “The need to teach, speak and maintain Tibetan language as a key dimension of social-cultural identity” is a strong belief of the majority of Tibetans (Holtgraves, 2014, p. 33). Cross-cultural communication can be fraught with many pitfalls, even more so when this is between members of a majority ethnic group and those of a minority ethnic group. In an attempt to communicate individuals use their own repertoire, which is grounded in their own culture, to exchange ideas. Their use of language may seem straight forward to them but is inherently full of expressions and words that have particular meanings in their culture, religion or worldview, but may have entirely different meanings to those of other cultures. This is not only limited to language but also includes non-verbal gestures and differing degrees of acceptable “personal space”. As Nancy Adler states: “Cross-cultural perspectives tend to render everything relative and slightly uncertain. Entering a foreign culture is tantamount to knowing the words without knowing the music, or knowing the music without knowing the beat” (Adler, 1991, p. 15).

Additional barriers to cross cultural communication may include anxiety, assuming similarity instead of difference, prejudice and ethnocentrism. Individuals are often oblivious to these traits but these traits can cause serious miscommunication between ethnic groups.

“Ethnocentrism is negatively judging aspects of another’s culture by the standard of one’s own culture. To be ethnocentric is to believe in the superiority of one’s own culture” (Keles, 2013, p. 1515). This final barrier to cross cultural communication can be devastating between

majority ethnic groups and minority ethnic groups. In light of the above and the comments of Tibetan participants in the study, the advocacy for same-ethnic group peer educators is valid and eliminates language, culture, ethnic and worldview barriers to communication.

True peers are important to Tibetans and Mongolians whereas near peers are seen as acceptable by Han and Hui. One of the comments by a Han participant in relation to this question may shed some light on this view which is likely held by others:

Don't think so. Nationalities are equal. Different ethnic groups are united as a whole. There is no big difference among ethnic groups so it is not important whether they come from the same ethnic group or not. [Female, Han 20 years]

Article 4 of the Chinese Constitution states that — “All ethnic groups in the People’s Republic of China are equal” (Wang, S. , 2004, p. 165). There is also a great emphasis in Chinese society on the promotion of harmony and equality among all people.

There is a scarcity of references to “true peers” in the current literature, although many studies do employ “near peers”, where peers and participants may be matched by gender, age, and special circumstances (e.g., IDUs, CSWs). Yet there are recommendations from a number of studies, such as Hong et al. (2006) when discussing rural to urban migrants, that HIV/STI preventative education should be culturally appropriate to these groups (Yan Hong et al., 2006). Liu et al. (2014) in their study of ethnic minority women who were CSWs, propose that HIV education programmes should be in ethnic minority languages and utilize culturally meaningful ways to distribute this information (Q. Liu et al., 2014). Another study of rural to urban migrants suggests that HIV education should be tailored to migrant populations and this education should be commenced at an early stage in rural schools (L. Zhang, Chow, Jahn, Kraemer, & Wilson, 2013).

The current study has incorporated these elements and found that “true peers” were able to deliver HIV/STI preventative education in a linguistically and culturally appropriate manner to their peers, which was considered an important component of this education programme to the Tibetan and Mongolian participants.

6.4 Significance of the study

This study is significant in that it was the first of its kind conducted among university students in Qinghai Province. It is also the first multi-ethnic study, to the researcher's knowledge, conducted in China among university students that utilised written teaching and assessment material in the first language of each of the ethnic groups involved rather than solely in Mandarin. The use of "true peer" educators, who spoke the dialects of each group in this multi-ethnic setting, was also unique to this study. Other studies in China have been predominantly conducted in the east and south of the country, but have used Mandarin for teaching students. One recent study focusing only on HIV knowledge conducted by the Qinghai Medical College did have a similar student population to the present study. However, they did not use a peer education approach. Additionally, their literature was exclusively in Chinese and the single teaching session was a lecture in Mandarin given to a combined group of male and female students (Y.Liu, personal communication, October 19, 2016).

The present study is also significant for the following reasons:

- (i) It fills a gap in the current education system in northwest China relating to STI, HIV and sexual health education among multi-ethnic populations of university students and high school students.
- (ii) The use of peer educators relieves the burden that has been traditionally placed on teaching staff to fulfil this obligation, which they have consistently failed to meet, primarily because of embarrassment.
- (iii) The study has further established that "true peers" are preferred to "near peers" by Tibetan and Mongolian students. True peers have the advantage of overcoming any language, cultural or worldview barriers that might exist between ethnic groups. In multi-ethnic settings where ethnic minorities are not sufficiently fluent in the national language, the use of first language in sexual health education is imperative.
- (iv) The teaching material that has been developed has been found to be culturally and linguistically acceptable to Han, Hui, Mongolians and Tibetans. It can therefore be used in other parts of China where these ethnic groups live. It has proven effective in raising students' awareness of the modes of transmission and prevention of common STIs and HIV.

- (v) A new 39 item combination HIV and STI knowledge questionnaire (HIV/STI-KQ-39) has been developed and validated. It has proven to be a useful tool in assessing knowledge of the modes of transmission and prevention of infection by the most common STIs and HIV. As with the teaching materials, this questionnaire is suitable for use among any Han, Hui, and Tibetan or Mongolian populations.

The significance of this study will be further augmented if it brings about a change in the policy of the Education Department with respect to teaching students about STI and HIV. The current biology class, which is meant to be taught by teachers in high schools, is rarely undertaken due to their embarrassment. The content is also lacking as it does not adequately address the issue of STIs and HIV. The model proposed in this study, is an effective means of raising student's awareness of the modes of transmission and prevention of infection by the most common STIs and HIV. Additionally, the recognition that the role of "true peers" is an integral part of this model, and is very important to some ethnic groups, is essential.

6.5 Implications and applications of the study

The information derived from this study makes it apparent that it is an effective means of raising awareness of the modes of transmission and prevention of common STIs and HIV. The multi-ethnic approach utilising "true peers" and linguistically and culturally acceptable teaching and assessment materials, although established among a population of university students, is easily adaptable to any student population. As the age of sexual debut is becoming lower in China, it is now common for high school students to be sexually active as well as some middle school students. Therefore, this programme should not only be used in universities and colleges but could also prove useful in high schools and middle schools.

The findings from this present study will be applied in the following five ways.

1. The results of the study will be shared with the leadership of Qinghai Nationalities University. A proposal to incorporate the multi-ethnic peer education programme into the orientation programme for new students on an ongoing basis will be submitted. The possibility of incorporating the use of a mobile platform such as WeChat, which has become very popular in China, would also be discussed. The programme would also be opened up to

other undergraduate and postgraduate students if required. The researcher would also hold workshops on how to run this programme and train volunteer peer educators.

2. The other major universities and colleges in Xining including Qinghai University, the Teachers' University, Qinghai Medical College, the Tibetan Medical College and Vocational Colleges will be approached to assess their interest in the use of the multi-ethnic peer education programme with their students. The researcher would hold workshops as described above in each institution that wishes to adopt this programme.

3. A submission will be put to the Qinghai Provincial Education Department to assess their interest in conducting a pilot study using this programme to assess its suitability for use in high schools and perhaps middle schools as well.

4. The Qinghai Provincial Centres for Disease Control and the Qinghai branch of the China Red Cross will also be made aware of this resource, which they can use at their discretion.

5. The new 39 item data collection instrument (HIV/STI-KQ-39) will be registered on the Measurement Instrument Database for the Social Sciences (MIDSS) website so that it is available to other international researchers.

6.6 Limitations of the study

The Mongolian translation presented unique challenges as the original project documents and PPT presentations done in Xining had been produced using the Microsoft Baiti font. However, when all of these materials were sent to Inner Mongolia for subsequent translations the software was incompatible as the translators were using Menksoft with WPS Office. A local Mongolian doctor felt that the Mongolian professors at QNU were not fully conversant with medical terms in Mongolian, and advised the researcher to send all of the project documents to Inner Mongolia where this expertise was available in order to improve the accuracy of the translations. Additionally the researcher is not literate in Mongolian and therefore had to rely completely on translators to produce the Mongolian version of project documents and PPT presentations.

Although the Chinese and Tibetan versions of the data collection instrument showed excellent correlation between test and retest, due to logistical problems the Mongolian version while still showing excellent correlation between test and retest, could only be validated at the group level. The individual identity of Mongolian participants could not be matched between test and retest for these cohorts, which is a limitation of this study.

While the study resulted in a significant increase in mean correct responses to STI and HIV knowledge in the Han, Hui and Tibetan groups, this was not seen in the Mongolian group. However, the lack of significant change in knowledge in the latter relates to the negligence of peer educators in this ethnic group in adequately training their classmates.

The success of the study in raising awareness of the modes of transmission and prevention of STIs (including HIV) among the Han, Hui and Tibetans can not necessarily be generalised to other ethnic groups.

Sampling procedures also represented a limitation of the study. The initial proposal was that one class from each of the four years of undergraduate students in each of the ethnic groups would be selected for participation in the study. These classes were to be predominantly or wholly composed of the target ethnic groups. Unfortunately, this was only possible with the Tibetan participants. For various reasons, such as work experience or overseas electives, the full range of students in the other ethnic groups were not available to participate during the time that the study was undertaken.

The final limitation of the study was time. The study had to be completed within one academic term which meant that all phases of the study had to be completed before students began to revise for their end of term examinations.

6.7 Further research

There are a number of further avenues of research related to this current study that would be practical, such as:

- (i) Assessing the suitability of this multi-ethnic peer education programme in both urban and rural high schools in Qinghai Province.

- (ii) The translation of the teaching and assessment materials into other languages suitable for other ethnic minorities in China, whose fluency in Mandarin is suboptimal, could also be investigated.
- (iii) The use of mobile social media platforms, such as WeChat, is becoming increasingly popular in China. The use of such platforms for health teaching is in their infancy in China, but could be easily adapted to disseminate sexual health education, especially to rural populations.
- (iv) Investigating the use of “true peers” in other multi-ethnic countries where there is a national language that is not the first language of ethnic minorities whose lack of proficiency in the national language may impede their full understanding of sexual health education programmes.

6.8 Conclusions

This study evolved after I relocated to Xining in 2001 to undertake language studies at Qinghai Nationalities University. My professional background as a medical scientist led me to befriend medical staff at the teaching hospital affiliated to Qinghai Medical College. I soon discovered that the level of STIs in the general population was high. In discussions with local students at QNU, I quickly realised that these students were unaware of the modes of transmission and prevention of STIs and HIV.

I subsequently asked permission from the leadership of QNU to conduct a series of lectures in 2005 and 2006 for students in the Tibetan and Mongolian departments as well as some Han students. A survey conducted at that time revealed that these students had previously had no education during high school relating to this subject; therefore they were a very vulnerable population. My teaching materials at that time were in Chinese and a translator translated what I said in English into Mandarin. However, a number of those who attended the lectures had some difficulty in understanding the content due to their lack of fluency in Mandarin. This experience inspired the present study.

This study sought to develop linguistically and culturally acceptable teaching materials and an assessment tool to measure participants’ knowledge of the modes of transmission and prevention of common STIs and HIV with the goal of raising participants’ awareness. The volunteer peer educators were trained by the researcher with the assistance of interpreters

who spoke the first language of the peer educators. These “true peers” in turn taught their classmates. This method of teaching was successful in overcoming any potential embarrassment, which some participants may have had regarding the subject. Although implementation of this programme on an ongoing basis in a university setting will prove useful in compensating for the lack of similar education in high schools, it would be more prudent to initiate this form of education in high schools and even middle schools where some students are already becoming sexually active.

In a world where the global incidence of new HIV infections is falling, there are new vaccines on the horizon, and there has been a recent report of the elimination of HIV-1 in infected mice, perhaps the eradication of HIV/AIDS is within our grasp (Dash et al., 2019). Yet, there are still great disparities in the incidence of new infections between countries. These differences are sometimes seen within countries and different groups in society. Equal access to early diagnosis and therapy are not available to all, especially those in the developing world and to marginalized groups. This is the case in China, where those who live in urban areas have better access to diagnosis and treatment than those in rural areas. The exception is the ‘floating population’ who — despite living and working in large cities — have limited access to health services. Therefore, the prevention of STIs and HIV is of paramount importance. Education regarding the modes of transmission of STIs, and ways to avoid acquiring infection remains a primary line of defence.

6.9 Key Findings

The key findings of this study were:

- (i) Teaching and assessment materials developed by the researcher were found to be linguistically and culturally acceptable to participants in the programme.
- (ii) The new 39 question data collection instrument (HIV/STI-KQ-39) was stable between test and retest and was a useful tool in gauging participants’ knowledge relating to STIs and HIV.
- (iii) Due to the lack of knowledge of the modes of transmission and prevention of STIs and HIV, as demonstrated by low pre-intervention mean correct scores for the 39 questions, the Han, Hui, Mongolian and Tibetan students at QNU represent a vulnerable population.

- (iv) The peer education programme was successful in raising awareness of the modes of transmission and prevention of STIs and HIV which was confirmed by a statistically significant increase between pre- and post-intervention mean correct scores.
- (v) Overall, male participants scored significantly higher than females on the pre-intervention questionnaire but there was no significant difference post-intervention. This difference was found in the Tibetan and Mongolian participants. However, there were no significant differences pre- or post-intervention between genders in the Han and Hui cohorts.
- (vi) Differences between ethnic groups were found. There was a significant difference pre- and post-intervention between the Tibetan and Han groups, with Han scoring significantly higher. Likewise the Tibetan group scored higher than the Mongolian group pre- and post-intervention. There were no significant differences between Tibetan and Hui or between Han and Hui pre- or post-intervention.
- (vii) Differences in dwelling impacted upon participants' mean correct scores. The greatest difference was found between city dwellers and nomads, with the former scoring significantly higher. Nomads also scored significantly less than those from townships.
- (viii) The peer education programme was viewed by participants as good or very good and a useful method of increasing their awareness regarding the modes of transmission and prevention of STIs and HIV. Teaching methods using multi-media were greatly appreciated and contrasted with traditional written materials. Participants were keen that the programme be continued and to reach more people. Tibetan participants wanted the programme to expand into rural areas.
- (ix) Tibetan participants, and to a lesser extent Mongolians, think that it is important that the peer educator is from their own ethnic group. Han and Hui participants did not think that the ethnicity of the peer educator was relevant to the programme.
- (xi) The majority of participants thought that a programme like this would have been very beneficial if it had been available when they were in high school.

This has been a long journey since 2001, but it has been extremely fulfilling and if only one person has avoided contracting an STI or HIV in the process then it has been well worthwhile.

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APPENDICES

Appendix A1 – Pre-intervention questionnaire (English version)

a) This questionnaire is completely anonymous. Please DO NOT write your name on the paper.

(b) Please tick the box corresponding to the appropriate response.

(c) Thank you for your cooperation.

1. Age :

2. Nationality : Han Hui Mongolian Salar Tibetan Other.....

3. Dwelling : Farming area Nomad area Township City

4.	Can a person get HIV if someone who has HIV coughs or sneezes on them?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
5.	Can a person get HIV if they share a glass of water with someone who has HIV?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
6.	Does pulling out the penis from a woman's vagina, before a climaxes, prevent a woman from getting HIV during sex?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
7.	Can a person get HIV if they have anal sex (penis inside the anus) with a man?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
8.	Can showering or washing one's genitals after sex prevent one from getting HIV?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
9.	Will all pregnant women infected with HIV have babies born with AIDS?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
10.	Do all people who have been infected with HIV quickly show serious signs of being infected?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
11.	Is there a vaccine that can prevent people from getting HIV?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
12.	Are people likely to get HIV by deep kissing, putting their tongue into their partner's mouth, if their partner has HIV?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
13.	Can a woman get HIV if she has sex during her period?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
14.	Is there a female condom that can help decrease a woman's chance of getting HIV?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>

15.	Can a person get HIV if he or she is taking antibiotics?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
16.	Does having sex with more than one partner increase a person's chance of being infected with HIV?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
17.	Will taking a test for HIV one week after having sex tell a person if he or she has HIV?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
18.	Can a person get HIV by sitting in a hot tub or swimming pool with a person who has HIV?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
19.	Can a person get HIV by having oral sex (putting a man's penis in their mouth)?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
20.	Does using Vaseline or baby oil with a condom lower the chances of getting HIV?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
21.	Is it easier to get HIV if a person has another sexually transmissible disease?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
22.	Is there a cure for gonorrhoea?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
23.	Can a person get gonorrhoea from anal sex (inserting a man's penis inside their anus)?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
24.	If a man has gonorrhoea, may he have a discharge (pus) from his penis?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
25.	Can a woman look at her body and tell if she has gonorrhoea?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
26.	Can syphilis infect a baby before it is born?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
27.	Is there a cure for syphilis?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
28.	Can a person develop sores on their genitals (penis or vagina) soon after they become infected with syphilis?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
29.	Can Human Papilloma Virus (HPV) cause cancer in women?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
30.	Is there a vaccine that can prevent infection with Human Papilloma Virus (HPV)?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
31.	Can a man get genital warts only by having vaginal sex?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>

32.	Do Genital Herpes sores on a man's penis come and go?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
33.	Are there medications available to cure Genital Herpes?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
34.	Can a woman who has Genital Herpes pass the infection on to her baby during childbirth?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
35.	Must a person who has Genital Herpes have open sores to give the infection to his or her sexual partner?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
36.	Does chlamydia cause obvious symptoms in most women?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
37.	Can chlamydia cause pain when a person urinates?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
38.	Is there a cure for chlamydia?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
39.	Is there a vaccine that can prevent Hepatitis B?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
40.	Can a person get Hepatitis B if they have vaginal sex?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
41.	Can Hepatitis B be passed on from a mother to her baby when it is born?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
42.	If a person is an injecting drug user, can they get HIV if they use a needle that someone who has HIV has already used?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>

The following questions ask you about where you obtained information from regarding: puberty, sexuality, sexually transmissible infections and HIV/AIDS. If you obtained information from more than one source please rank the importance of these sources numerically. Where 1 means the most important, 2 means the next in importance and 3 was less important than the other two. It is only necessary to list up to 3 sources for each of these questions.

Example: Where did you obtain knowledge about puberty from?
Schoolteachers 2

Parents ...
Friends 1
Television 3
Internet ...

This answer would indicate that Friends were the most important source followed by school teachers and then television.

43. Which of the following did you find as the most important source of your knowledge about puberty?

- Parents ...
- Siblings ...
- Friends ...
- Schoolteachers ...
- Doctors ...
- Television/movies ...
- Newspaper/magazines ...
- Internet ...

44. Which of the following did you find as the most important source of your knowledge about sexuality?

- Parents ...
- Siblings ...
- Friends ...
- Schoolteachers ...
- Doctors ...
- Television/movies ...
- Newspaper/magazines ...
- Internet ...

45. Which of the following did you find as the most important source of your knowledge about sexually transmissible infections, HIV and AIDS?

- Parents ...
- Siblings ...
- Friends ...
- Schoolteachers ...
- Doctors ...
- Television/movies ...
- Newspaper/magazines ...
- Internet ...

Appendix A2 – Pre-intervention questionnaire (Chinese version)

(a) 本问卷为完全匿名，请勿在问卷内填写您的姓名。

(b) 请在您选择的对应选项框内打钩或做标记。

(c) 感谢您的参与及合作。

1. 年龄:

2. 民族: 汉 回 蒙古 撒拉 藏 其他.....

3. 家庭居住地: 农业区 牧业区 乡镇 城市

4.	艾滋病病毒携带者对人咳嗽或打喷嚏，是否会使他人感染艾滋病病毒?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
5.	与艾滋病病毒携带者饮用同一杯水会感染艾滋病病毒吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
6.	在男性高潮之前，通过体外射精能避免女方感染艾滋病病毒吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
7.	肛交的性交方式会使人感染艾滋病病毒吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
8.	性交后冲洗生殖器能避免感染艾滋病病毒吗?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
9.	是不是所有感染了艾滋病病毒的孕妇生育的孩子都有艾滋病?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
10.	是不是所有感染了艾滋病病毒的人很快就会有严重症状?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
11.	是否有疫苗可以预防感染艾滋病病毒?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
12.	如果一方是艾滋病病毒携带者，那么伴侣会因为舌吻而感染艾滋病病毒吗?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
13.	女性在经期性交会感染艾滋病病毒吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
14.	为了帮助女性降低感染艾滋病的机率，有女式避孕套吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
15.	如果某人正在服用抗生素，这个人会感染艾滋病病毒吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
16.	拥有一人以上的性伴侣会增加感染艾滋病病毒的机率吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
17.	性交后一周进行艾滋病病毒检测，是否能确定某人已经感染艾滋病病毒?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>

18.	与艾滋病病毒携带者共处一个浴池或游泳池会感染艾滋病病毒吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
19.	通过口交(将阴茎置于性伴侣口腔中)会感染艾滋病病毒吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
20.	使用避孕套时同时使用凡士林或婴儿油, 会降低感染艾滋病病毒的机率吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
21.	如果某人已患有其他性传播疾病, 那么他是否更容易感染艾滋病病毒?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
22.	淋病能彻底根治吗?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
23.	通过肛交会感染淋病吗(将阴茎置于肛门内)?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
24.	如果男性患有淋病, 阴茎口会出现分泌物(脓液)吗?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
25.	女性通过观察自己的身体能否判断她是否患有淋病?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
26.	胎儿出生前会被梅毒感染吗?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
27.	梅毒能彻底根治吗?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
28.	感染梅毒后, 短期内会在生殖器(阴茎或阴道)出现溃疡吗?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
29.	人乳头瘤病毒是否导致女性罹患癌症?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
30.	有疫苗能预防感染人乳头瘤病毒吗?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
31.	只有阴道性交导致男性阴茎出现疣体吗?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
32.	生殖器疱疹会在阴茎反复出现吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
33.	有药物能彻底根治生殖器疱疹吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
34.	患有生殖器疱疹的孕妇在生产时会将病毒传染给胎儿吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
35.	只有明显溃疡的生殖器疱疹患者会把病毒传染给性伴侣吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
36.	在大多数女性中, 衣原体会导致明显的不适症状吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
37.	衣原体感染会导致小便时出现疼痛吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
38.	衣原体感染能彻底根治吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
39.	有疫苗能预防乙型肝炎吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>

40.	乙型肝炎是否通过阴道性交传播?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
41.	乙型肝炎在孕妇生产过程中是否会传染给她的胎儿?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
42.	如果某人是静脉注射吸毒者, 通过使用艾滋病病毒携带者使用过的同一注射器会使他/她感染艾滋病病毒吗?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>

以下问题将涉及到您获得有关发育期间的改变、性行为、性传播疾病和艾滋病病毒/艾滋病相关知识的途径。如果您是从多个途径获得这些知识。那么, 请您按照途径的重要性依次罗列。比如, 1 指最重要途径, 2 指较重要途径, 3 指一般重要途径。您只需对每个问题罗列 3 个途径。

举例: 您是从哪里获得有关发育期间的改变的知识的? 学校老师 2

父母 ...

朋友 1

互联网 ...

电视 3

以上回答表明朋友是获得这一知识的最重要途径, 其次是学校老师和电视。

43. 以下哪些途径您认为是获得有关发育期间的改变知识最重要的途径?

父母 ...

兄弟姐妹 ...

朋友 ...

学校老师 ...

医师 ...

电视/电影 ...

报纸/杂志 ...

互联网 ...

44. 以下哪些途径您认为是获得有关性行为知识最重要的途径?

父母 ...

兄弟姐妹 ...

朋友 ...

学校老师 ...

医师 ...

电视/电影 ...

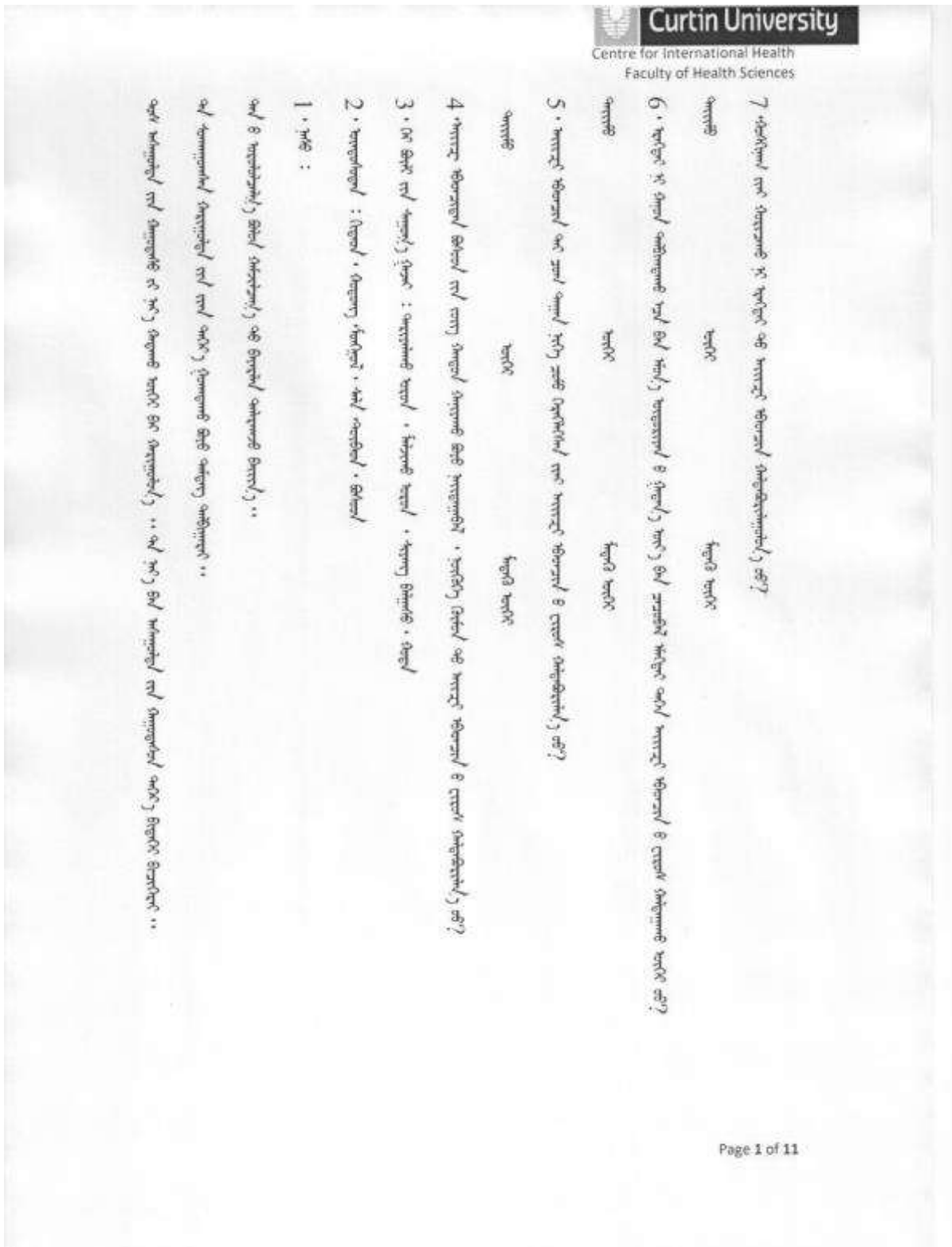
报纸/杂志 ...

互联网 ...

45. 以下哪些途径您认为是获得有关性传播疾病、艾滋病病毒及艾滋病知识最重要的途径?

- 父母 ...
- 兄弟姐妹 ...
- 朋友 ...
- 学校老师 ...
- 医师 ...
- 电视/电影 ...
- 报纸/杂志 ...
- 互联网 ...

Appendix A3 – Pre-intervention questionnaire (Mongolian version)



13. **13.1** **13.2** **13.3**
12. **12.1** **12.2** **12.3**
11. **11.1** **11.2** **11.3**
10. **10.1** **10.2** **10.3**
9. **9.1** **9.2** **9.3**
8. **8.1** **8.2** **8.3**



14. څه ډول ټولنيزو او ټولنيزو پوښښو په اسانجا کې د ښوونيزو او زده کونکو په لارښوونو کې اغېزې لري؟ (30%)
15. څه ډول ټولنيزو او ټولنيزو پوښښو په اسانجا کې د ښوونيزو او زده کونکو په لارښوونو کې اغېزې لري؟ (30%)
16. څه ډول ټولنيزو او ټولنيزو پوښښو په اسانجا کې د ښوونيزو او زده کونکو په لارښوونو کې اغېزې لري؟ (30%)
17. څه ډول ټولنيزو او ټولنيزو پوښښو په اسانجا کې د ښوونيزو او زده کونکو په لارښوونو کې اغېزې لري؟ (30%)
18. څه ډول ټولنيزو او ټولنيزو پوښښو په اسانجا کې د ښوونيزو او زده کونکو په لارښوونو کې اغېزې لري؟ (30%)
19. څه ډول ټولنيزو او ټولنيزو پوښښو په اسانجا کې د ښوونيزو او زده کونکو په لارښوونو کې اغېزې لري؟ (30%)
20. څه ډول ټولنيزو او ټولنيزو پوښښو په اسانجا کې د ښوونيزو او زده کونکو په لارښوونو کې اغېزې لري؟ (30%)

31. 生殖器疣 (生殖器疣) 是由什么引起的?
A. 细菌 B. 真菌 C. 病毒 D. 寄生虫
30. 人类乳头瘤病毒 (人类乳头瘤病毒) 会导致什么?
A. 宫颈癌 B. 肺癌 C. 肝癌 D. 胰腺癌
29. 人类乳头瘤病毒 (人类乳头瘤病毒) 会导致什么?
A. 宫颈癌 B. 肺癌 C. 肝癌 D. 胰腺癌
28. 梅毒 (梅毒) 是由什么引起的?
A. 细菌 B. 真菌 C. 病毒 D. 寄生虫
27. 梅毒 (梅毒) 会导致什么?
A. 皮肤问题 B. 心脏问题 C. 肾脏问题 D. 神经系统问题
26. 梅毒 (梅毒) 会导致什么?
A. 皮肤问题 B. 心脏问题 C. 肾脏问题 D. 神经系统问题

سوالنامو ډکړئ

36. ډکړئ چې څه ډول واکمني د ډیټا (衣原体) په واسطه ترسره کېږي؟

ځواب: ډکړئ

ډکړئ چې څه ډول واکمني د ډیټا (衣原体) په واسطه ترسره کېږي؟

35. ډکړئ چې څه ډول واکمني د ډیټا (衣原体) په واسطه ترسره کېږي؟

ځواب: ډکړئ

34. ډکړئ چې څه ډول واکمني د ډیټا (衣原体) په واسطه ترسره کېږي؟

ځواب: ډکړئ

33. ډکړئ چې څه ډول واکمني د ډیټا (衣原体) په واسطه ترسره کېږي؟

ځواب: ډکړئ

32. ډکړئ چې څه ډول واکمني د ډیټا (衣原体) په واسطه ترسره کېږي؟

ځواب: ډکړئ

42. 静脈注射吸毒者 (静脉注射吸毒者) 感染 HIV 的几率比静脉注射毒品者高多少倍?

a. 1 倍
 b. 2 倍
 c. 3 倍
 d. 4 倍

41. 乙型肝炎 (乙肝病) 的传播途径是什么?

a. 血液
 b. 唾液
 c. 汗液
 d. 尿液

40. 乙型肝炎 (乙肝病) 的传播途径是什么?

a. 血液
 b. 唾液
 c. 汗液
 d. 尿液

39. 乙型肝炎 (乙肝病) 的传播途径是什么?

a. 血液
 b. 唾液
 c. 汗液
 d. 尿液

38. 衣原体 (衣原体) 的传播途径是什么?

a. 血液
 b. 唾液
 c. 汗液
 d. 尿液

37. 衣原体 (衣原体) 的传播途径是什么?

كرد

بازارهای سلامت جهانی

بازارهای سلامت

بازارهای سلامت و رفاه

بازارها

بازارهای سلامت و رفاه و بازارهای سلامت جهانی

بازارهای سلامت و رفاه و بازارهای سلامت جهانی

بازارهای سلامت

بازارهای سلامت

بازارهای سلامت

بازارها

بازارهای سلامت و رفاه

بازارهای سلامت

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
الحمد لله رب العالمين
والصلاة والسلام على سيدنا محمد وآله

Appendix A4 – Pre-intervention questionnaire (Tibetan version)

དོན་ལྡན་བུ་རྒྱུ་:

- རྟོག་དཔྱད་ཀྱི་གཞི་འདི་ནི་མིང་མི་འགོད་པའི་རྣམ་པ་སྦྱད་དགོས་པ་སྟེ། བྱིས་ཤོག་ལྟེ་འདིའི་སྟེང་དུ་མིང་མི་འགོད་པར་ལྷན།
- བྱིས་ཤོག་ཁ་སྐོང་ནང་དུ་ལན་འདེབས་པ་དང་ཡང་ན་གྲུག་ས་རྟོག་ས་རྒྱག་དགོས།
- བྱིས་ཤོག་རྒྱབ་སྐྱོར་བྱེད་པ་ལ་ཕྱག་ས་རྗེ་ཆེ།

1. ལོ་གྲངས། :
2. མི་རིགས། : བོད་རིགས། - ཨ་མདོ། ལམས། དབུས་གཙང་།
: སོག་རིགས། རྒྱ་རིགས། ཅོ་རིགས། ཟ་ལུ་རིགས། གཞན་པ།
3. རྫོང་གནས། : རོང་ཁུལ། འབྲོག་ཁུལ། བྱོང་བརྒྱལ། བྱོང་བྱིར།

4.	ཨེ་ཅི་ནད་དུག་ཡོད་པའི་མི་ཞིག་གིས་མི་གཞན་པའི་སྐྱོག་ས་ལ་ལུད་པའམ་སྒྲིད་པ་ (打噴嚏) གཏོང་ན་ནད་དེ་འགོས་སྲིད་དམ།	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ཤེས། <input type="checkbox"/>
5.	མི་ཞིག་གིས་ཨེ་ཅི་ནད་དུག་ཡོད་པའི་མི་དང་མཉམ་དུ་རྩ་ཐོར་གཅིག་བཀོལ་སྒྲིད་བྱས་ནས་ཆུ་འཕུང་ན་ནད་དེ་འགོས་སྲིད་དམ།	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ཤེས། <input type="checkbox"/>
6.	ཆགས་པ་སྐྱོད་སྐབས་མིའི་རེག་པ་ཕྱིར་སོན་ (男性高潮) རྩོན་ལ་ཐོ་མཚན་མོ་མཚན་ལས་སྤྱིར་སྐྱབས་ན་དེས་བྱུང་མེད་དེར་ཨེ་ཅི་ནད་དུག་འགོས་སྲིད་དམ།	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ཤེས། <input type="checkbox"/>
7.	མི་ཚོས་བཤང་ལམ་དུ་ཆགས་པ་སྦྱད་ན་ (ཐོ་མཚན་བཤང་ལམ་ནང་དུ་གཏོང་བ།) རོ་མཚན་མོ་ལ་ཨེ་ཅི་ནད་དུག་འགོས་སྲིད་དམ།	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ཤེས། <input type="checkbox"/>

8.	ཆགས་པ་སྐྱད་རྗེས་རང་གི་མཚན་མ་བཤམ་ནས་ཨེ་ཙི་ནད་དུག་ འགོག་བྱས་སམ།	མི་ཤེས། <input type="checkbox"/> མི་བྱས། <input type="checkbox"/> བྱས། <input type="checkbox"/>
9.	ཨེ་ཙི་ནད་དུག་འགོས་ཡོད་པའི་བྱད་མེད་སྐྱམ་མ་ཐམས་ཅད་ལ་བྱིས་ པ་སྐྱེས་ན་དེ་ལ་ཨེ་ཙི་ནད་ཡོད་མྱོང་དམ།	མི་ཤེས། <input type="checkbox"/> མི་མྱོང། <input type="checkbox"/> མྱོང། <input type="checkbox"/>
10.	ཨེ་ཙི་ནད་དུག་འགོས་ཡོད་པའི་མི་ཐམས་ཅད་ལ་སྐྱུར་དུ་ནད་རྟགས་ ཚབས་ཚེན་མཐོང་རྒྱུ་ཡོད་མྱོང་དམ།	མི་ཤེས། <input type="checkbox"/> མི་མྱོང། <input type="checkbox"/> མྱོང། <input type="checkbox"/>
11.	ཨེ་ཙི་ནད་དུག་འགོག་གྲུབ་པའི་འགོག་སྒྲུབ་ཡོད་དམ།	མི་ཤེས། <input type="checkbox"/> མེད། <input type="checkbox"/> ཡོད། <input type="checkbox"/>
12.	གལ་ཏེ་ཁྱོད་གྱི་ཉལ་རོགས་ལ་ཨེ་ཙི་ནད་དུག་འགོས་ཡོད་ཚེ། བཅ་ ཚུན་ལ་འོ་བྱས་ན (བཅ་ཚུན་གྱི་ཁ་ནང་ལ་ཕྱེ་གཏོང་རེ་བྱེད་པ།) ཨེ་ ཙི་ནད་དུག་འགོས་མྱོང་དམ།	མི་ཤེས། <input type="checkbox"/> མི་མྱོང། <input type="checkbox"/> མྱོང། <input type="checkbox"/>
13.	ཟླ་མཚན་ཡོང་བའི་སྐབས་ཆགས་པ་སྐྱད་ན་བྱད་མེད་དེ་ལ་ཨེ་ཙི་ནད་ དུག་འགོས་མྱོང་དམ།	མྱོང། <input type="checkbox"/> མི་མྱོང། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>
14.	བྱད་མེད་ལ་ཨེ་ཙི་ནད་དུག་འགོས་པའི་ཆ་རྗེ་ཉུང་དུ་གཏོང་ཆེད་མོ་ མཚན་སྐྱམ་འགོག་གྲུབས་ (女用避孕套) ཡོད་དམ།	མྱོང། <input type="checkbox"/> མི་མྱོང། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>
15.	མི་ཞིག་གིས་སྲིན་འགོག་སྒྲུབ་ (抗生素) འཕུང་ན་ཨེ་ཙི་ནད་དུག་ འགོས་མྱོང་དམ།	མྱོང། <input type="checkbox"/> མི་མྱོང། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>
16.	ཆགས་པ་སྐྱོད་ཡུལ་མི་གཅིག་ལས་མང་ན་ཨེ་ཙི་ནད་དུག་འགོས་ བའི་ཆ་རྗེ་མང་དུ་འགྱུར་མྱོང་དམ།	མྱོང། <input type="checkbox"/> མི་མྱོང། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>
17.	ཆགས་པ་སྐྱད་ནས་གཟུང་འཁོར་གཅིག་གི་རྗེས་སུ་བརྟག་དབྱེད་ བྱས་ཚེ་ཁོ་འམ་མོ་ལ་ཨེ་ཙི་ནད་དུག་འགོས་ཡོད་པ་ཤེས་མྱོང་དམ།	མྱོང། <input type="checkbox"/> མི་མྱོང། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>

18.	ཨེ་ཙི་ནད་དུག་ཡོད་པའི་མི་ཞིག་དང་མཉམ་དུ་ཚུ་གཞོང་ངམ་རྒྱལ་ རྒྱུ་ནད་དུ་བསྐྱེད་ན་ཨེ་ཙི་ནད་དུག་འགོས་སྲིད་དམ།	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>
19.	ཁ་རུ་ཆགས་པ་སྲུང་ན་མི་དེ་ལ་ཨེ་ཙི་ནད་དུག་འགོས་སྲིད་དམ། (རོ་ མཚན་ཁ་ནད་དུ་གཏོང་བ།)	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>
20.	རྩོ་ཚིལ་ (凡士林) ལམ་ཡང་ན་བྱིས་པའི་སྐྱུམ་ (婴儿油) མཛེ་ ཕྱབས་སྐྱེད་དུ་བཀོལ་སྲོུད་བྱས་ན་ཨེ་ཙི་ནད་དུག་འགོས་པའི་ཆ་རྩེ་ ཉུང་དུ་གཏོང་བྱེད་བམ།	ཐུབ། <input type="checkbox"/> མི་ཐུབ། <input type="checkbox"/> མི་ཤེས། <input type="checkbox"/>
21.	གལ་ཏེ་མི་ཞིག་ལ་མཚན་མའི་འགོས་ནད་ (性传播病疾病) གཞན་པ་ཡོད་ན་ཨེ་ཙི་ནད་དུག་འགོས་སྲུང་མ།	སྲི། <input type="checkbox"/> མི་སྲི། <input type="checkbox"/> མི་ཤེས། <input type="checkbox"/>
22.	གྲང་གཞི་ནད་ (淋病) ལ་བཅོས་ཐབས་ཡོད་དམ།	མི་ཤེས། <input type="checkbox"/> མེད། <input type="checkbox"/> ཡོད། <input type="checkbox"/>
23.	མི་ཚོས་བཤང་ལམ་དུ་ཆགས་པ་སྲུང་ན་ (རོ་མཚན་བཤང་ལམ་ནད་ དུ་གཏོང་བ།) རོ་མཚན་མོ་ལ་གྲང་གཞི་ནད་ (淋病) འགོས་སྲིད་དམ།	མི་ཤེས། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> སྲིད། <input type="checkbox"/>
24.	གལ་ཏེ་མི་ཞིག་ལ་གྲང་གཞི་ནད་ (淋病) ཡོད་ན། རོ་མཚན་ ལས་རྣམས་ཡོད་སྲིད་དམ།	མི་ཤེས། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> སྲིད། <input type="checkbox"/>
25.	ཐུད་མེད་བྱིས་རང་གི་ལུས་པོར་བལྟས་པ་ལས་རང་ལ་གྲང་གཞི་ནད་ (淋病) ཡོད་མེད་ཤེས་ཐུབ་བམ།	མི་ཤེས། <input type="checkbox"/> མི་ཐུབ། <input type="checkbox"/> ཐུབ། <input type="checkbox"/>
26.	བྱིས་པ་མ་སྐྱེས་སྲོན་ལ་བསྐྱེ་མོག་ (རེག་དུག / 梅毒) འགོས་སྲིད་ དམ།	མི་ཤེས། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> སྲིད། <input type="checkbox"/>
27.	བསྐྱེ་མོག་ (རེག་དུག / 梅毒) ལ་བཅོས་ཐབས་ཡོད་དམ།	མི་ཤེས། <input type="checkbox"/> མེད། <input type="checkbox"/> ཡོད། <input type="checkbox"/>
28.	མི་ཚོར་བསྐྱེ་མོག་ (རེག་དུག / 梅毒) འགོས་རྗེས་ལྷུང་དུ་འོ་ཚིེ་	མི་ཤེས། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> སྲིད། <input type="checkbox"/>

	མཚན་མའི་ (རོ་མཚན་དང་ཡང་ན་མོ་མཚན།) སློང་དུ་མེ་ལ་འབྱུང་ སྲིད་དམ།	
29.	མིའི་བུ་ཏོག་སྐྱབ་ནད་དུག་ (人乳头瘤病毒) གིས་བྱུང་མེད་ཚོར་ འབྲས་ནད་ (癌症) བསྐྱེད་སྲིད་དམ།	མི་ཤེས། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> སྲིད། <input type="checkbox"/>
30.	མིའི་བུ་ཏོག་སྐྱབ་ནད་དུག་ (人乳头瘤病毒) འགོག་གྲུབ་པའི་ འགོག་སྐྱབ་ཡོད་དམ།	མི་ཤེས། <input type="checkbox"/> མེད། <input type="checkbox"/> ཡོད། <input type="checkbox"/>
31.	སྐྱེས་པ་ལ་མཛེ་ཐོག་དུ་སྐྱེ་དབང་ག་མཛེར་ (生殖器疣) ཐོགས་པ་ དེ་རྒྱུན་ལྡན་གྱི་ཚགས་སྐྱོད་ (མོ་མཚན་ནད་དུ།) གཅིག་པོ་ལས་བྱུང་ བ་ཤེད་དམ།	མི་ཤེས། <input type="checkbox"/> མ་ཤེད། <input type="checkbox"/> ཤེད། <input type="checkbox"/>
32.	སྐྱེས་པའི་མཛེ་སློང་གི་སྐྱེ་དབང་རྒྱུ་འབྱུང་ (生殖器疱疹) མེ་ལ་ མཚམས་རེར་མཐོང་རྒྱ་ཡོད་པ་དང་མཚམས་རེར་མེད་པར་འབྱུང་ སྲིད་དམ།	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>
33.	སྐྱེ་དབང་རྒྱུ་འབྱུང་ (生殖器疱疹) བཅོས་གྲུབ་པའི་སྐྱབ་ཡོད་ དམ།	ཡོད། <input type="checkbox"/> མེད། <input type="checkbox"/> མི་ཤེས། <input type="checkbox"/>
34.	སྐྱེ་དབང་རྒྱུ་འབྱུང་ (生殖器疱疹) ཡོད་པའི་བྱུང་མེད་ལ་བྱིས་ པ་སྐྱེས་དུས་ནད་དེ་བྱིས་པར་འགོས་སྲིད་དམ།	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>
35.	སྐྱེ་དབང་རྒྱུ་འབྱུང་ (生殖器疱疹) གྱི་མེ་ལ་ཡོད་པའི་མིའི་ནད་ དེ་ཉལ་རོགས་ལ་འགོས་པར་ངེས་པར་དུ་ཁ་སྐྱེ་ཡོད་པའི་མེ་ལ་ཡིན་ དགོས་སམ།	དགོས། <input type="checkbox"/> མི་དགོས། <input type="checkbox"/> མི་ཤེས། <input type="checkbox"/>
36.	མུང་རྟེན་ཚགས་ཐར་མའི་ནད་ (衣原体) གྱིས་བྱུང་མེད་མང་གས་ ལ་ནད་རྟགས་གསལ་པོ་བསྐྱེད་སྲིད་དམ།	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>

37.	གཅིན་གཏོང་དུས་ལྷུང་རྟེན་ཚགས་ཐར་མས་ (衣原体) བ་ལུག་ བསྐྱེད་སྲིད་དམ།	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>
38.	ལྷུང་རྟེན་ཚགས་ཐར་མ་ (衣原体) བཅོས་ཐབས་ཡོད་དམ།	ཡོད། <input type="checkbox"/> མེད། <input type="checkbox"/> མི་ཤེས། <input type="checkbox"/>
39.	མཚན་ཚད་ཁ་བའི་ནད་ (乙肝病) འགོག་ཕྱབ་པའི་འགོག་སྐྱོན་ ཡོད་དམ།	ཡོད། <input type="checkbox"/> མེད། <input type="checkbox"/> མི་ཤེས། <input type="checkbox"/>
40.	མིས་རྒྱན་ལྡན་གྱི་ཚགས་སྲོད་(མོ་མཚན་ནད་དུ།) བྱས་ན་མཚན་ ཚད་ཁ་བའི་ནད་ (乙肝病) འགོས་སྲིད་དམ།	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>
41.	མཚན་ཚད་ཁ་བའི་ནད་ (乙肝病) ཡོད་པའི་བྱུང་མེད་ལ་བྱིས་པ་ སྐྱེས་དུས་ནད་དེ་བྱིས་པར་འགོས་སྲིད་དམ།	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>
42.	གལ་ཏེ་མི་ཞིག་སྣོད་རྩའི་སྐྱོན་བདེ་མཁའ་ (静脉注射吸毒 者) ཡིན་ན། ཁོ་འམ་མོ་ཡིས་ཨེ་ཅི་ནད་དུག་འགོས་པའི་ནད་པས་ བཀོལ་ཟེན་པའི་སྐྱོན་ཁབ་བཀོལ་དེ་དུག་རྒྱབ་ན་ནད་དེ་འགོས་སྲིད་ དམ།	མི་ཤེས། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> སྲིད། <input type="checkbox"/>

གཤམ་གྱི་དྲི་བ་དག་གིས་ཁྱེད་ལ་ལང་ཚོ་རྒྱས་དུས་ (青春期) དང་། འདོད་ཚལ་སྤྱོད་ (性行为) མཚན་མའི་འགོས་
ལྷུང་ནད། (性传播病疾病) ཨེ་ཅི་ནད་དུག་ / ཨེ་ཅི་ནད་བཅས་སྐྱོར་གྱི་ཤེས་བྱ་དག་གང་ནས་ཐོབ་པ་འདྲི་རྒྱ་ཡིན་
བས། གལ་ཏེ་ཁྱེད་ལ་ཤེས་བྱ་དེ་དག་འཐོབ་པའི་ལུངས་གཅིག་ལས་མང་བ་ཡོད་ན་གཤམ་གྱི་གྲངས་ཀའི་མཐོ་དམའ་
ལྟར་གལ་ཚེན་རང་བཞིན་གྱི་སྐྱོན་ནས་འདེམས་རོགས། འདིར་ 1 བྱི་ཚེས་གལ་ཚེན་བ་མཚོན་བ་དང་། 2 བྱི་གལ་ཚེན་བ།
3 བྱི་རྩུང་གལ་ཚེན་བ་མཚོན་ཡོད་ལ། དྲི་བ་དག་ལ་ལན་གསུམ་རེ་མ་གཏོགས་གདམ་མི་དགོས།

དཔེར་ན། : ཁྱེད་ལ་ལང་ཚོ་རྒྱས་དུས་ (青春期) སྐྱོར་གྱི་ཤེས་བྱ་གང་ནས་ཐོབ་བམ།
དགོ་ཆེན། .2..
མ་མ།

གྲོགས་པོ། .1..

བརྒྱ།

བརྟན་འཕྲིན། .3..

དྲི་ལན་འདིས་1 གྲོགས་པོས་ནི་ཆེས་གལ་ཆེ་བ་མཚོན་བ་དང་། 2 དགེ་ལྡན་གྱིས་གལ་ཆེ་བ་མཚོན། 3 བརྟན་འཕྲིན་གྱིས་རྩུང་གལ་ཆེ་བ་མཚོན་ཡོད།

43. གཤམ་ལས་གང་ནི་ཁྱེད་ལ་ལང་ཚོ་རྒྱས་དུས་ (青春期) རྫོང་གི་ཤེས་བྱ་ཐོབ་པའི་ཁྱེད་ཀྱི་འཕྲིན་གྲུ་ལོ་ཡིན་ནམ།

- ཕ་མ། ...
- སྲུབ་མཆོད། ...
- གྲོགས་པོ། ...
- དགེ་ལྡན། ...
- སྲུབ་པ། ...
- བརྟན་འཕྲིན། / གྲོག་བརྟན། ...
- ཚགས་པར། / འཕྲོད་བསྟེན་རྫོང་གི་དུས་དེབ། ...
- བརྒྱ། ...

44. གཤམ་ལས་གང་ནི་ཁྱེད་ལ་འདོད་ཆགས་ (性行为) རྫོང་གི་ཤེས་བྱ་ཐོབ་པའི་ཁྱེད་ཀྱི་འཕྲིན་གྲུ་ལོ་ཡིན་ནམ།

- ཕ་མ། ...
- སྲུབ་མཆོད། ...
- གྲོགས་པོ། ...
- དགེ་ལྡན། ...
- སྲུབ་པ། ...

བརྟན་འཕྲིན། / ལྷོག་བརྟན། ...
 ཚགས་པར། / འཕྲོད་བསྟེན་སྐོར་གྱི་དུས་དེབ། ...
 འགྲུ། ...

45. གཤམ་ལས་གང་ནི་ཁྱེད་ལ་མཚན་མའི་འགོས་ནད། ཨེ་ཅི་ནད་དུག། ཨེ་ཅི་ནད་བཅས་སྐོར་གྱི་ཤེས་བྱ་ཐོབ་པའི་ཁྱེད་ཀྱི་འཕྲིན་ལུས་ལ།

པ་མ། ...
 ལྷན་མཚེད། ...
 ལྷོགས་པོ། ...
 དག་ཀྱན། ...
 ལྷན་པ། ...
 བརྟན་འཕྲིན། / ལྷོག་བརྟན། ...
 ཚགས་པར། / འཕྲོད་བསྟེན་སྐོར་གྱི་དུས་དེབ། ...
 འགྲུ། ...

Appendix B1 – Post-intervention questionnaire (English version)

(a) This questionnaire is completely anonymous. Please DO NOT write your name on the paper.

(b) Please tick the box corresponding to the appropriate response.

(c) Thank you for your cooperation.

1. Age :

2. Nationality : Han Hui Mongolian Salar Tibetan Other.....

3. Dwelling : Farming area Nomad area Township City

4.	Can a person get HIV if someone who has HIV coughs or sneezes on them?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
5.	Can a person get HIV if they share a glass of water with someone who has HIV?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
6.	Does pulling out the penis from a woman's vagina, before a climaxes, prevent a woman from getting HIV during sex?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
7.	Can a person get HIV if they have anal sex (penis inside the anus) with a man?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
8.	Can showering or washing one's genitals after sex prevent one from getting HIV?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
9.	Will all pregnant women infected with HIV have babies born with AIDS?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
10.	Do all people who have been infected with HIV quickly show serious signs of being infected?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
11.	Is there a vaccine that can prevent people from getting HIV?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
12.	Are people likely to get HIV by deep kissing, putting their tongue into their partner's mouth, if their partner has HIV?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
13.	Can a woman get HIV if she has sex during her period?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
14.	Is there a female condom that can help decrease a woman's chance of getting HIV?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
15.	Can a person get HIV if he or she is taking antibiotics?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>

16.	Does having sex with more than one partner increase a person's chance of being infected with HIV?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
17.	Will taking a test for HIV one week after having sex tell a person if he or she has HIV?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
18.	Can a person get HIV by sitting in a hot tub or swimming pool with a person who has HIV?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
19.	Can a person get HIV by having oral sex (putting a man's penis in their mouth)?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
20.	Does using Vaseline or baby oil with a condom lower the chances of getting HIV?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
21.	Is it easier to get HIV if a person has another sexually transmissible disease?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
22.	Is there a cure for gonorrhoea?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
23.	Can a person get gonorrhoea from anal sex (inserting a man's penis inside their anus)?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
24.	If a man has gonorrhoea, may he have a discharge (pus) from his penis?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
25.	Can a woman look at her body and tell if she has gonorrhoea?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
26.	Can syphilis infect a baby before it is born?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
27.	Is there a cure for syphilis?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
28.	Can a person develop sores on their genitals (penis or vagina) soon after they become infected with syphilis?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
29.	Can Human Papilloma Virus (HPV) cause cancer in women?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
30.	Is there a vaccine that can prevent infection with Human Papilloma Virus (HPV)?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
31.	Can a man get genital warts only by having vaginal sex?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>
32.	Do Genital Herpes sores on a man's penis come and go?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
33.	Are there medications available to cure Genital Herpes?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>

		<input type="checkbox"/>
34.	Can a woman who has Genital Herpes pass the infection on to her baby during childbirth?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
35.	Must a person who has Genital Herpes have open sores to give the infection to his or her sexual partner?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
36.	Does chlamydia cause obvious symptoms in most women?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
37.	Can chlamydia cause pain when a person urinates?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
38.	Is there a cure for chlamydia?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
39.	Is there a vaccine that can prevent Hepatitis B?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
40.	Can a person get Hepatitis B if they have vaginal sex?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
41.	Can Hepatitis B be passed on from a mother to her baby when it is born?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
42.	If a person is an injecting drug user, can they get HIV if they use a needle that someone who has HIV has already used?	Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>

43. What did you think about this peer education programme?

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44. What did you think was the best part of this education programme?

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45. What things do you think might be improved on that will benefit future education programmes?

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46. Do you think that it is important that the peer educators involved in the programme are from your ethnic group?

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47. Do you think that a programme like this would have been beneficial to you if it was available when you were a high school student?

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48. Do you have any other comments that you would like to make?

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Appendix B2 – Post-intervention questionnaire (Chinese version)

(a) 本问卷为完全匿名，请勿在问卷内填写您的姓名。

(b) 请在您选择的对应选项框内打钩或做标记。

(c) 感谢您的参与及合作。

1. 年龄:

2. 民族: 汉 回 蒙古 撒拉 藏 其他.....

3. 家庭居住地: 农业区 牧业区 乡镇 城市

4.	艾滋病患者对人咳嗽或打喷嚏，是否会使他人感染艾滋病病毒？	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
5.	与艾滋病患者共用饮水杯会感染艾滋病病毒吗？	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
6.	在男性高潮之前，通过体外射精能避免女方感染艾滋病病毒吗？	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
7.	肛交的性交方式会使男性感染艾滋病病毒吗？	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
8.	性交后冲洗生殖器能避免感染艾滋病病毒吗？	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
9.	是不是所有感染了艾滋病病毒的孕妇生育的孩子都有艾滋病？	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
10.	是不是所有感染了艾滋病病毒的人很快就会有严重症状？	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
11.	是否有疫苗可以预防感染艾滋病病毒？	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
12.	如果一方有艾滋病，那么伴侣会因为舌吻而感染艾滋病病毒吗？	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
13.	女性在经期性交会感染艾滋病病毒吗？	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
14.	为了帮助女性降低感染艾滋病的机率，有女式避孕套吗？	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
15.	如果某人正在服用抗生素，这个人会感染艾滋病病毒吗？	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
16.	拥有一人以上的性伴侣会增加感染艾滋病病毒的机率吗？	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
17.	性交后一周进行艾滋病病毒检测，是否能确定某人已经感染艾滋病病毒？	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>

18.	与艾滋病患者共处一个浴池或游泳池会感染艾滋病病毒吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
19.	通过口交(将阴茎置于女性口腔中)会感染艾滋病病毒吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
20.	使用避孕套时同时使用凡士林或婴儿油, 会降低感染艾滋病病毒的机率吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
21.	如果某人已患有其他性传播疾病, 那么他是否更容易感染艾滋病病毒?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
22.	淋病能彻底根治吗?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
23.	通过肛交会感染淋病吗 (将阴茎置于肛门内)?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
24.	如果男性患有淋病, 阴茎口会出现分泌物(脓液)吗?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
25.	女性通过观察自己的身体能否判断她是否患有淋病?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
26.	胎儿出生前会被梅毒感染吗?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
27.	梅毒能彻底根治吗?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
28.	感染梅毒后, 短期内会在生殖器(阴茎或阴道)出现溃疡吗?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
29.	人乳头瘤病毒是否导致女性罹患癌症?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
30.	有疫苗能预防感染人乳头瘤病毒吗?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
31.	只有阴道性交导致男性阴茎出现疣体吗?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>
32.	生殖器疱疹会在阴茎反复出现吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
33.	有药物能彻底根治生殖器疱疹吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
34.	患有生殖器疱疹的孕妇在生产时会将病毒传染给胎儿吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
35.	只有明显溃疡的生殖器疱疹患者会把病毒传染给性伴侣吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
36.	在大多数女性中, 衣原体会导致明显的不适症状吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
37.	衣原体感染会导致小便时出现疼痛吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
38.	衣原体感染能彻底根治吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
39.	有疫苗能预防乙型肝炎吗?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>

40.	乙型肝炎是否通过阴道性交传播?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
41.	乙型肝炎在孕妇生产过程中是否会传染给她的胎儿?	是 <input type="checkbox"/> 否 <input type="checkbox"/> 不知道 <input type="checkbox"/>
42.	如果某人是静脉注射吸毒者，通过使用艾滋病患者使用过的同一注射器会使他感染艾滋病病毒吗?	不知道 <input type="checkbox"/> 否 <input type="checkbox"/> 是 <input type="checkbox"/>

43. 您如何看待本同伴性教育项目?

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44. 您认为本教育项目最精彩的部分是?

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45. 您认为在哪些方面需要我们去改进，从而使今后的项目及参与者获益?

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46. 您是否认为参与该教育项目的同伴教育者与您来自同一民族很重要?

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47. 您是否认为如果在您高中时就能获得类似的教育，可能会给您带来益处?

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48. 您还有其他补充意见或建议吗?

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- | Question | Answer | Mark |
|--|--|------|
| 13 .
The epidemiological transition theory suggests that the burden of infectious diseases will decrease as countries develop. This is because: | As countries develop, they invest more in public health and sanitation, which reduces the spread of infectious diseases. | 3 |
| 12 .
The epidemiological transition theory suggests that the burden of infectious diseases will decrease as countries develop. This is because: | As countries develop, they invest more in public health and sanitation, which reduces the spread of infectious diseases. | 3 |
| 11 .
The epidemiological transition theory suggests that the burden of infectious diseases will decrease as countries develop. This is because: | As countries develop, they invest more in public health and sanitation, which reduces the spread of infectious diseases. | 3 |
| 10 .
The epidemiological transition theory suggests that the burden of infectious diseases will decrease as countries develop. This is because: | As countries develop, they invest more in public health and sanitation, which reduces the spread of infectious diseases. | 3 |
| 9 .
The epidemiological transition theory suggests that the burden of infectious diseases will decrease as countries develop. This is because: | As countries develop, they invest more in public health and sanitation, which reduces the spread of infectious diseases. | 3 |
| 8 .
The epidemiological transition theory suggests that the burden of infectious diseases will decrease as countries develop. This is because: | As countries develop, they invest more in public health and sanitation, which reduces the spread of infectious diseases. | 3 |

20

25. 淋病 (淋病) 的潜伏期通常为 2-6 周，但有时可长达 12 周。下列哪项不是淋病的特征？

淋病

尿道炎

宫颈炎

24. 淋病 (淋病) 的潜伏期通常为 2-6 周，但有时可长达 12 周。下列哪项不是淋病的特征？

淋病

尿道炎

宫颈炎

23. 淋病 (淋病) 的潜伏期通常为 2-6 周，但有时可长达 12 周。下列哪项不是淋病的特征？

淋病

尿道炎

宫颈炎

22. 淋病 (淋病) 的潜伏期通常为 2-6 周，但有时可长达 12 周。下列哪项不是淋病的特征？

淋病

尿道炎

宫颈炎

21. 淋病 (淋病) 的潜伏期通常为 2-6 周，但有时可长达 12 周。下列哪项不是淋病的特征？

淋病

尿道炎

宫颈炎

20. 淋病 (淋病) 的潜伏期通常为 2-6 周，但有时可长达 12 周。下列哪项不是淋病的特征？

淋病 (淋病) 的潜伏期通常为 2-6 周，但有时可长达 12 周。下列哪项不是淋病的特征？



31. **תלמוד** **המחלות** **הגורמות** **על** **ידי** **ה** **א** **(生殖器疣)** **הן** **?**
תשובה **א** **א** **א** **א** **א**
30. **תלמוד** **המחלות** **הגורמות** **על** **ידי** **ה** **א** **(人类乳头瘤病毒)** **הן** **?**
תשובה **א** **א** **א** **א** **א**
29. **תלמוד** **המחלות** **הגורמות** **על** **ידי** **ה** **א** **(人类乳头瘤病毒)** **הן** **?**
תשובה **א** **א** **א** **א** **א**
28. **תלמוד** **המחלות** **הגורמות** **על** **ידי** **ה** **א** **(梅毒)** **הן** **?**
תשובה **א** **א** **א** **א** **א**
27. **תלמוד** **המחלות** **הגורמות** **על** **ידי** **ה** **א** **(梅毒)** **הן** **?**
תשובה **א** **א** **א** **א** **א**
26. **תלמוד** **המחלות** **הגורמות** **על** **ידי** **ה** **א** **(梅毒)** **הן** **?**
תשובה **א** **א** **א** **א** **א**



سوالنامہ

36. 衣原体 (衣原体) کے لیے مناسب تشخیصی ٹیسٹ کیا ہے؟

سوالنامہ

کون سا ٹیسٹ ہے؟

35. 生殖器 (生殖器) کے لیے مناسب تشخیصی ٹیسٹ کیا ہے؟

سوالنامہ

34. 生殖器 (生殖器) کے لیے مناسب تشخیصی ٹیسٹ کیا ہے؟

سوالنامہ

33. 生殖器 (生殖器) کے لیے مناسب تشخیصی ٹیسٹ کیا ہے؟

سوالنامہ

32. 生殖器 (生殖器) کے لیے مناسب تشخیصی ٹیسٹ کیا ہے؟

سوالنامہ

42. 靜脈注射吸毒者 (静脉注射吸毒者) 的傳染病預防策略包括哪些？

答：(1) 使用乾淨的針筒 (2) 使用乾淨的針頭 (3) 使用乾淨的濾網 (4) 使用乾淨的藥水

41. 乙型肝炎 (乙肝病) 的傳染途徑包括哪些？

答：(1) 血液 (2) 體液 (3) 性接觸 (4) 垂直傳染

40. 乙型肝炎 (乙肝病) 的預防策略包括哪些？

答：(1) 接種疫苗 (2) 使用安全套 (3) 避免共用針筒 (4) 避免共用牙刷

39. 乙型肝炎 (乙肝病) 的臨床表現包括哪些？

答：(1) 黃疸 (2) 肝臟腫大 (3) 肝酶升高 (4) 肝硬化

38. 衣原體 (衣原体) 的預防策略包括哪些？

答：(1) 使用安全套 (2) 避免共用針筒 (3) 避免共用牙刷 (4) 避免共用毛巾

37. 衣原體 (衣原体) 的臨床表現包括哪些？

48. ארץ ישראל, ארצות הברית ובריטניה הם מדינות המערב. האם יש להם תפקיד מיוחד במאבק נגד מחלות זoonotic? האם יש להם תפקיד מיוחד במאבק נגד מחלות זoonotic?
47. האם יש להם תפקיד מיוחד במאבק נגד מחלות זoonotic? האם יש להם תפקיד מיוחד במאבק נגד מחלות זoonotic?
46. האם יש להם תפקיד מיוחד במאבק נגד מחלות זoonotic? האם יש להם תפקיד מיוחד במאבק נגד מחלות זoonotic?
45. האם יש להם תפקיד מיוחד במאבק נגד מחלות זoonotic? האם יש להם תפקיד מיוחד במאבק נגד מחלות זoonotic?
44. האם יש להם תפקיד מיוחד במאבק נגד מחלות זoonotic? האם יש להם תפקיד מיוחד במאבק נגד מחלות זoonotic?
43. האם יש להם תפקיד מיוחד במאבק נגד מחלות זoonotic? האם יש להם תפקיד מיוחד במאבק נגד מחלות זoonotic?

Appendix B4 – Post-intervention questionnaire (Tibetan version)

དོ་སྣང་བྱ་རྒྱུ་:

- རྟོག་དཔྱོད་ཀྱི་གཞི་འདི་ནི་མིང་མི་འགོད་པའི་རྣམ་པ་སྤྱད་དགོས་པ་སམ། བྱིད་ཀྱིས་ཤོག་ལྗེ་འདིའི་སྤྱིང་དུ་མིང་མི་འགོད་པར་ལྷ།
- བྱིད་ཀྱིས་ཁ་སྐྱོང་ནང་དུ་ལན་འདེབས་པ་དང་ཡང་ན་གྲུགས་རྟགས་རྒྱག་དགོས།
- བྱིད་ཀྱིས་རྒྱབ་སྐྱོར་བྱེད་པ་ལ་ཐུགས་རྗེ་ཆེ།

1. ལོ་གྲངས། :
2. མི་རིགས། : བོད་རིགས། - ཨ་མདོ། ཁམས། དབུས་གཙང་།
: སོག་རིགས། རྒྱ་རིགས། ཅི་རིགས། ཟ་ལུ་རིགས། གཞན་པ།
3. རྫོད་གནས། : རོང་ཁུལ། འབྲོག་ཁུལ། གྲོང་བརྒྱུད། གྲོང་ཁྱེར།

4.	ཨེ་ཅི་ནད་དུག་ཡོད་པའི་མི་ཞིག་གིས་མི་གཞན་པའི་སྤྱོགས་ལ་ལུད་པའམ་སྤྱིད་པ་ (打噴嚏) གཏོང་ན་ནད་དེ་འགོས་སྤྱིད་དམ།	སྤྱིད། <input type="checkbox"/>	མི་སྤྱིད། <input type="checkbox"/>	མི་ཤེས། <input type="checkbox"/>
5.	མི་ཞིག་གིས་ཨེ་ཅི་ནད་དུག་ཡོད་པའི་མི་དང་མཉམ་དུ་ཇ་ཐོར་གཅིག་བཀོལ་སྤྱོད་བྱས་ནས་རྒྱ་འབྲུང་ན་ནད་དེ་འགོས་སྤྱིད་དམ།	སྤྱིད། <input type="checkbox"/>	མི་སྤྱིད། <input type="checkbox"/>	མི་ཤེས། <input type="checkbox"/>
6.	ཆགས་པ་སྤྱོད་སྐབས་མིའི་རེག་པ་ཕྱེར་སོན་ (男性高潮) རྫོན་ལ་ཕོ་མཚན་མོ་མཚན་ལས་སྤྱིར་སྤངས་ན་དེས་བྱད་མེད་དེར་ཨེ་ཅི་ནད་དུག་འགོས་སྤྱིད་དམ།	སྤྱིད། <input type="checkbox"/>	མི་སྤྱིད། <input type="checkbox"/>	མི་ཤེས། <input type="checkbox"/>
7.	མི་ཚོས་བཤང་ལམ་དུ་ཆགས་པ་སྤྱད་ན་ (ཕོ་མཚན་བཤང་ལམ་ནང་དུ་གཏོང་བ།) ཁོ་འམ་མོ་ལ་ཨེ་ཅི་ནད་དུག་འགོས་སྤྱིད་དམ།	སྤྱིད། <input type="checkbox"/>	མི་སྤྱིད། <input type="checkbox"/>	མི་ཤེས། <input type="checkbox"/>

8.	ཆགས་པ་སྐྱད་རྗེས་རང་གི་མཚན་མ་བཀྲས་ན་ཨེ་ཙི་ནད་དུག་འགོག་ བྱས་སམ།	མི་ཤེས། <input type="checkbox"/> མི་བྱས། <input type="checkbox"/> བྱས། <input type="checkbox"/>
9.	ཨེ་ཙི་ནད་དུག་འགོས་ཡོད་པའི་བྱད་མེད་སྐྱམ་མ་ཐམས་ཅད་ལ་བྱིས་ པ་སྐྱེས་ན་དེ་ལ་ཨེ་ཙི་ནད་ཡོད་སྲིད་དམ།	མི་ཤེས། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> སྲིད། <input type="checkbox"/>
10.	ཨེ་ཙི་ནད་དུག་འགོས་ཡོད་པའི་མི་ཐམས་ཅད་ལ་ལྗུར་དུ་ནད་རྟགས་ ཚབས་ཆེན་མཐོང་རྒྱ་ཡོད་སྲིད་དམ།	མི་ཤེས། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> སྲིད། <input type="checkbox"/>
11.	ཨེ་ཙི་ནད་དུག་འགོག་གྲུབ་པའི་འགོག་སྐྱོན་ཡོད་དམ།	མི་ཤེས། <input type="checkbox"/> མེད། <input type="checkbox"/> ཡོད། <input type="checkbox"/>
12.	གལ་ཏེ་ཁྱོད་གྱི་ཉལ་རོགས་ལ་ཨེ་ཙི་ནད་དུག་འགོས་ཡོད་ཚེ། བན་ ཚུན་ལ་འོ་བྱས་ན (བན་ཚུན་གྱི་ཁ་བར་ལ་ལྷེ་གཏོང་རེ་བྱེད་པ།) ཨེ་ ཙི་ནད་དུག་འགོས་སྲིད་དམ།	མི་ཤེས། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> སྲིད། <input type="checkbox"/>
13.	ལྷ་མཚན་ཡོད་པའི་སྐབས་ཆགས་པ་སྐྱད་ན་བྱད་མེད་དེ་ལ་ཨེ་ཙི་ནད་ དུག་འགོས་སྲིད་དམ།	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>
14.	བྱད་མེད་ལ་ཨེ་ཙི་ནད་དུག་འགོས་པའི་ཆ་རེ་ཉུང་དུ་གཏོང་ཆེད་མོ་ མཚན་སྐྱམ་འགོག་གྲུབས་ (女用避孕套) ཡོད་དམ།	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>
15.	མི་ཞིག་གིས་སྲིན་འགོག་སྐྱོན་ (抗生素) འབྲུང་ན་ཨེ་ཙི་ནད་དུག་ འགོས་སྲིད་དམ།	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>
16.	ཆགས་པ་སྐྱོད་ལུ་ལ་མི་གཅིག་ལས་མང་ན་ཨེ་ཙི་ནད་དུག་འགོས་ པའི་ཆ་རེ་མང་དུ་འགྱུར་སྲིད་དམ།	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>
17.	ཆགས་པ་སྐྱད་ནས་གཟའ་འཁོར་གཅིག་གི་རྗེས་སུ་བརྟག་དབྱེད་ བྱས་ཚེ་ཁོ་འམ་མོ་ལ་ཨེ་ཙི་ནད་དུག་འགོས་ཡོད་པ་ཤེས་སྲིད་དམ།	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>

18.	ཨེ་ཙི་ནད་དུག་ཡོད་པའི་མི་ཞིག་དང་མཉམ་དུ་ཚུ་གཞོང་ངམ་རྒྱལ་ རྒྱུ་ནད་དུ་བསྐྱེད་ན་ཨེ་ཙི་ནད་དུག་འགོས་སྲིད་དམ།	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>
19.	ཁ་རུ་ཆགས་པ་སྲུང་ན་མི་དེ་ལ་ཨེ་ཙི་ནད་དུག་འགོས་སྲིད་དམ། (རོ་ མཚན་ཁ་ནད་དུ་གཏོང་བ།)	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>
20.	རྩོ་ཚིལ་ (凡士林) ལམ་ཡང་ན་བྱིས་པའི་སྐྱུམ་ (婴儿油) མཛེ་ ཕྱབས་སྐྱེད་དུ་བཀོལ་སྲོུད་བྱས་ན་ཨེ་ཙི་ནད་དུག་འགོས་པའི་ཆ་རྩི་ ཉུང་དུ་གཏོང་བྱེད་བམ།	ཐུབ། <input type="checkbox"/> མི་ཐུབ། <input type="checkbox"/> མི་ཤེས། <input type="checkbox"/>
21.	གལ་ཉེ་མི་ཞིག་ལ་མཚན་མའི་འགོས་ནད་ (性传播病疾病) གཞན་པ་ཡོད་ན་ཨེ་ཙི་ནད་དུག་འགོས་སྲིད་དམ།	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ཤེས། <input type="checkbox"/>
22.	གྲང་གཞི་ནད་ (淋病) ལ་བཅོས་ཐབས་ཡོད་དམ།	མི་ཤེས། <input type="checkbox"/> མེད། <input type="checkbox"/> ཡོད། <input type="checkbox"/>
23.	མི་ཚོས་བཤང་ལམ་དུ་ཆགས་པ་སྲུང་ན་ (རོ་མཚན་བཤང་ལམ་ནད་ དུ་གཏོང་བ།) རོ་མཚན་མོ་ལ་གྲང་གཞི་ནད་ (淋病) འགོས་སྲིད་དམ།	མི་ཤེས། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> སྲིད། <input type="checkbox"/>
24.	གལ་ཉེ་མི་ཞིག་ལ་གྲང་གཞི་ནད་ (淋病) ཡོད་ན། རོ་མཚན་ ལས་རྒྱག་ཡོད་སྲིད་དམ།	མི་ཤེས། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> སྲིད། <input type="checkbox"/>
25.	ཐུད་མེད་བྱིས་རང་གི་ལུས་པོར་བལྟས་པ་ལས་རང་ལ་གྲང་གཞི་ནད་ (淋病) ཡོད་མེད་ཤེས་ཐུབ་བམ།	མི་ཤེས། <input type="checkbox"/> མི་ཐུབ། <input type="checkbox"/> ཐུབ། <input type="checkbox"/>
26.	བྱིས་པ་མ་སྐྱེས་སྔོན་ལ་བསྐྱེ་མོག་ (རེག་དུག / 梅毒) འགོས་སྲིད་ དམ།	མི་ཤེས། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> སྲིད། <input type="checkbox"/>
27.	བསྐྱེ་མོག་ (རེག་དུག / 梅毒) ལ་བཅོས་ཐབས་ཡོད་དམ།	མི་ཤེས། <input type="checkbox"/> མེད། <input type="checkbox"/> ཡོད། <input type="checkbox"/>
28.	མི་ཚོར་བསྐྱེ་མོག་ (རེག་དུག / 梅毒) འགོས་རྗེས་ལྷུང་དུ་འཛོལ་ འགོས་སྲིད་དམ།	མི་ཤེས། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> སྲིད། <input type="checkbox"/>

	མཚན་མའི་ (རོ་མཚན་དང་ཡང་ན་མོ་མཚན།) སློང་དུ་མཉམ་འབྲུང་ སྲིད་དམ།	
29.	མིའི་བུ་ཏོག་སྐྱབ་ནད་དུག་ (人乳头瘤病毒) གིས་བྱུང་མེད་ཚོར་ འབྲས་ནད་ (癌症) བསྐྱེད་སྲིད་དམ།	མི་ཤེས། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> སྲིད། <input type="checkbox"/>
30.	མིའི་བུ་ཏོག་སྐྱབ་ནད་དུག་ (人乳头瘤病毒) འགོག་གྲུབ་པའི་ འགོག་སྐྱབ་ཡོད་དམ།	མི་ཤེས། <input type="checkbox"/> མེད། <input type="checkbox"/> ཡོད། <input type="checkbox"/>
31.	སྐྱེས་པ་ལ་མཛེ་ཐོག་དུ་སྐྱེ་དབང་ག་མཛེར་ (生殖器疣) ཐོགས་པ་ དེ་རྒྱུན་ལྡན་གྱི་ཚགས་སྐྱོད་(མོ་མཚན་ནད་དུ།) གཅིག་པོ་ལས་བྱུང་ བ་རེད་དམ།	མི་ཤེས། <input type="checkbox"/> མ་རེད། <input type="checkbox"/> རེད། <input type="checkbox"/>
32.	སྐྱེས་པའི་མཛེ་སྟེང་གི་སྐྱེ་དབང་རྒྱུ་འབྲུམ་ (生殖器疱疹) མཉམ་ མཚམས་རེར་མཐོང་རྒྱ་ཡོད་པ་དང་མཚམས་རེར་མེད་པར་འགྱུར་ སྲིད་དམ།	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>
33.	སྐྱེ་དབང་རྒྱུ་འབྲུམ་ (生殖器疱疹) བཅོས་གྲུབ་པའི་སྐྱབ་ཡོད་ དམ།	ཡོད། <input type="checkbox"/> མེད། <input type="checkbox"/> མི་ཤེས། <input type="checkbox"/>
34.	སྐྱེ་དབང་རྒྱུ་འབྲུམ་ (生殖器疱疹) ཡོད་པའི་བྱུང་མེད་ལ་བྱིས་ པ་སྐྱེས་དུས་ནད་དེ་བྱིས་པར་འགོས་སྲིད་དམ།	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>
35.	སྐྱེ་དབང་རྒྱུ་འབྲུམ་ (生殖器疱疹) གྱི་མཉམ་ཡོད་པའི་མིའི་ནད་ དེ་ཉལ་རོགས་ལ་འགོས་པར་ངེས་པར་དུ་ཁ་སྐྱེ་ཡོད་པའི་མཉམ་ཡིན་ དགོས་སམ།	དགོས། <input type="checkbox"/> མི་དགོས། <input type="checkbox"/> མི་ཤེས། <input type="checkbox"/>
36.	ལུང་རྟེན་ཚགས་ཐར་མའི་ནད་ (衣原体) གྱིས་བྱུང་མེད་མང་གས་ ལ་ནད་རྟགས་གསལ་པོ་བསྐྱེད་སྲིད་དམ།	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>

37.	གཙུག་གཏོང་དུས་སྤུང་རྟོན་ཚགས་ཐར་མས་ (衣原体) བ་ལུག་ བསྐྱེད་སྲིད་དམ།	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>
38.	སྤུང་རྟོན་ཚགས་ཐར་མ་ (衣原体) བཅོས་ཐབས་ཡོད་དམ།	ཡོད། <input type="checkbox"/> མེད། <input type="checkbox"/> མི་ཤེས། <input type="checkbox"/>
39.	མཚན་ཚད་ཁ་བའི་ནད་ (乙肝病) འགོག་ཐབས་པའི་འགོག་སྐྱོན་ ཡོད་དམ།	ཡོད། <input type="checkbox"/> མེད། <input type="checkbox"/> མི་ཤེས། <input type="checkbox"/>
40.	མིས་རྒྱན་ལྡན་གྱི་ཚགས་སྲོད་(མོ་མཚན་ནད་དུ།) བྱས་ན་མཚན་ ཚད་ཁ་བའི་ནད་ (乙肝病) འགོས་སྲིད་དམ།	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>
41.	མཚན་ཚད་ཁ་བའི་ནད་ (乙肝病) ཡོད་པའི་སྤུང་མེད་ལ་བྱིས་པ་ སྐྱེས་དུས་ནད་དེ་བྱིས་པར་འགོས་སྲིད་དམ།	སྲིད། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> མི་ ཤེས། <input type="checkbox"/>
42.	གལ་ཏེ་མི་ཞིག་སྣོད་རྩའི་སྐྱོན་བདེ་མཁའ་ (静脉注射吸毒 者) ཡིན་ན། ཁོ་འམ་མོ་ཡིས་ཨེ་ཅི་ནད་དུག་འགོས་པའི་ནད་པས་ བཀོལ་ཟེན་པའི་སྐྱོན་ཁབ་བཀོལ་དེ་དུག་རྒྱབ་ན་ནད་དེ་འགོས་སྲིད་ དམ།	མི་ཤེས། <input type="checkbox"/> མི་སྲིད། <input type="checkbox"/> སྲིད། <input type="checkbox"/>

43. རྩོད་གྱིས་རིགས་མཐུན་སློབ་གསོའི་ལས་གཞི་འདིར་ལྷ་རྩུལ་ཅི་འདྲ་བཟུང་ཡོད།

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རྩོད་གྱིས་ཐེངས་འདིའི་སློབ་གསོའི་ལས་གཞི་འདིའི་ཆེས་ལེགས་པ་གང་ཞིག་ཡིན་པར་འདོད་ཡོད།

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རྩོད་གྱིས་བལྟས་ན་ང་ཚོས་ད་དུང་ལས་གཞི་འདི་ཡར་རྒྱས་སུ་གཏོང་བར་ལས་ཅི་ཞིག་བྱ་དགོས་སམ།

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44. རྩོད་གྱིས་བལྟས་ན་སློབ་གསོའི་ལས་གཞི་འདིའི་རིགས་མཐུན་སློབ་གསོ་བ་ནི་རང་དང་མི་རིགས་གཅིག་ཡིན་
དགོས་པ་གལ་ཆེའམ།

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45. རྩོད་གྱིས་བལྟས་ན་སློབ་གསོའི་ལས་གཞི་འདི་ལྟ་བུ་ལྟེད་རང་མཐོ་འབྲིང་གི་སློབ་མ་ཡིན་དུས་ལྷན་སྐྱེས་ཡོད་ན་དེ་
ལས་ཀྱང་ཕན་པ་གལ་ཆེན་ཡོད་པར་འདོད་དམ།

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ལྟེད་ལ་ད་དུང་ལྟ་བུ་ལྟེད་རང་བསམ་འཆར་གཞན་ཁ་གསལ་བྱེད་རྒྱ་ཅི་ཞིག་ཡོད།

Appendix C1 – Information Sheet (For all participants) – English version

Information Sheet (For all participants)

Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.

Hello. My English name is John Walkingshaw. I am a medical scientist and PhD candidate at the Centre for International Health at Curtin University in Western Australia. I have lived in Xining for 10 years. I am currently conducting a research project for my PhD degree in International Health.

The aim of this project is to see how useful an educational programme is in helping students understand how people catch sexually transmitted diseases and HIV. Also what they can do to avoid getting these infections.

If you agree to participate in this project:

- You will be required to complete a questionnaire about your knowledge of sexually transmitted diseases and HIV. You only have to reply: Yes, No or Don't Know to most of the questions.
- You will be required to attend four, two hour educational programmes. These will be taught by two of your classmates who have been trained by me.
- Male students will be taught by their male classmates and female students will be taught by their female classmates. There will be separate educational programmes for male and female students.
- You will be seeing some Power Point presentations which show the signs and symptoms of some of the commonest sexually transmitted diseases. You will find out how to avoid catching these diseases. You will also watch a short movie about HIV/AIDS and have a chance to participate in discussions about these things.
- After the last session, you will be required to complete another questionnaire.

I hope that you decide to help me with this project. I believe that your participation in this project and the knowledge you learn will be very beneficial for you. You can then share this knowledge with people in your hometowns.

Your name or identity will not be shown on the questionnaires, and will not be revealed in the analysis or results of the study. When the project is finished a summary of the results will be available for you.

Your participation in this project is entirely voluntary. You can withdraw from this project at any time without causing you any problems. Just telephone me and let me know that you no longer want to take part in the project.

All data relating to the study will be kept for 7 years. I will be the only person who has access to the data. After 7 years the data will be destroyed.

If you have any questions regarding this project my phone number is 138 9747 5147. My project supervisor is Dr B-K Tan who can be contacted at BK.Tan@curtin.edu.au

If you have any complaints during this study you can contact the Human Research Ethics Committee Secretary of Curtin University at hrec@curtin.edu.au.

The way this project is done will be in accordance with the Australian National Health and Medical Research Council's National Statement on Ethical Conduct in Human Research.

This study has been approved by the Curtin University Human Research Ethics Committee (Approval Number HR **158/2011**). The Committee is comprised of members of the public, academics, lawyers, doctors, and pastoral carers. Its main role is to protect participants. If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee, c/- Office of Research and Development, Curtin University, GPO Box U1987, Perth, 6845 or by telephoning 61 8 9266 2784 or by e-mailing hrec@curtin.edu.au.

This study has also been approved by Qinghai Nationalities University (Reference no: xxxx)
Thank you for taking the time to read this information sheet.

John Walkingshaw.

Appendix C2 – Information sheet (For all participants) - Chinese version

项目说明（供参与者）

中国西北部高校在校多民族大学生性传播疾病和艾滋病预防同伴课程的设计，实施及评估。

您好！我的英文名字叫 John Walkingshaw. 是一名现就读于西澳大利亚州科廷大学国际公共卫生中心的博士研究生，同时我也是一名医学研究员。我来西宁已经有十年了。目前我正在开展我的国际卫生博士研究课题。

该课题的目的是，评估一项教育项目在帮助大学生认识性病和艾滋病的传播、预防中的作用。同时，如何避免感染这些疾病。

如果您同意参加本项目，那么：

- 您需要完成一份评估您对性病和艾滋病知晓情况的调查问卷。对于大部分问卷内容您只需以**是**，**否**或**不知道**作答。
- 您需要参加 4 次，每次 2 小时的教育课程。这些课程将由经过本人培训的，您的两个同班同学来教授。
- 教育课程将根据性别不同分为男、女班。男性学员由男性同学教授，女性学员由女性同学教授。
- 您将在教育课程中，看到一些展示常见性传播疾病的症状、体征的幻灯片。您将会了解到如何避免传染这些疾病。同时，您将会观看一部有关艾滋病的短片，并有机会参加相关话题的小组讨论。
- 在项目最后节段，您需要完成另一份调查问卷。

我衷心地希望您能做出参加本教育项目的决定。我相信，通过参加这一项目您将从中获取知识并受益。同时，将您获取的知识分享给您家乡的人。

您的姓名或身份信息将不出现在调查问卷中，也不会透露于本项目的统计结果中。当项目完成后，该项目总结报告可供您参阅。

您将在完全自愿的情况下参加本项目。您可以在任何时候退出本项目，并不受任何不良影响。您只需通过电话的方式通知我，您不愿意继续参与本项目。

有关本项目的的所有数据将保存 7 年。本人是唯一可获取这些数据的研究人员。7 年后所有数据将被销毁。

如果您有意获取更多有关本项目的相关信息，您可以电话联系我，本人手机号码为：138 9747 5147。另外，我的导师是 BK Tan 博士，您也可以通过电子邮件的方式和她取得联系，邮箱地址为 BK.Tan@curtin.edu.au。

如果您在参与本项目的过程中有任何不满，您可以通过电子邮件联系科廷科技大学人类研究伦理委员会秘书，邮箱地址为 hrec@curtin.edu.au。

本项目的开展将严格按照澳大利亚国家医学与卫生研究委员会制定的《涉及人的生物研究伦理条例》进行。

本研究项目已通过科廷科技大学伦理委员会审批（审批号 HR 158/2011），主要目的是保护受试者。该伦理委员会成员包括普通民众、学者，律师，医生及心灵关怀工作者。如需验证该项目真实性, 您可通过以下方式与科廷科技大学伦理委员会进行核实。

地址：

c/- Office of Research and Development, Curtin University, GPO Box U1987, Perth, 6845 or by

电话：61 8 9266 2784

电子邮件：hrec@curtin.edu.au.

本研究项目同时也通过了青海民族大学的审批（联系号码 XXXX）。

感谢您阅读本说明。

John Walkingshaw.

Appendix C4 – Information Sheet (For all participants) – Tibetan version

ལས་གཞི་གསལ་བཤད། (ཞུགས་མི་ཚང་མར་མཁོ་སྤྲོད་བྱ་བ།)

ཀྲུང་གོའི་རྒྱལ་བྱང་ལུལ་གྱི་སློབ་ཆེན་སློབ་མའི་མཚན་མའི་འགོ་སྐྱོད་དང་ཨེ་ཙི་ནད་དུག་སློབ་འགོ་གདང་འབྲེལ་བའི་
རིགས་མཐུན་བསྐྱབ་གཞིའི་རྒྱལ་འགོ་དང་ལག་བསྟར། དབྱུང་འཛོག་ལས་གཞི།

ཚང་མ་བདེ་མོ། ངའི་མིང་ལ་ John Walkingshaw (རྫོ་རྗེ།) ཟེམ། ང་ནི་གསོ་བ་རིག་པའི་ཚན་རིག་པ་ཞིག་ཡིན་
པ་མ་ཟད་ཨོ་སི་བྲོ་རི་ལེ་ཡ་རྒྱལ་མའི་ལུང་ཐེན་སློབ་ཆེན་གྱི་རྒྱལ་སྤྱིའི་འཕྲོད་བརྟེན་ལྟེ་གནས་གྱི་འབྲུམ་རམས་པ་ཞིག་
ཀྱང་ཡིན། ང་ཟླ་ལིང་དུ་འོང་ནས་ལོ་བཅུ་ལྷག་འགོར་སོང་། ད་ལྟ་ངས་རྒྱལ་སྤྱིའི་འཕྲོད་བརྟེན་གྱི་འབྲུམ་རམས་པའི་
ཞིབ་འཇུག་ལས་གཞི་ཞིག་སྤེལ་བཞིན་ཡོད།

ལས་གཞི་འདིའི་དམིགས་ལུལ་ནི་སློབ་གསོའི་ལས་གཞི་འདིས་སློབ་མ་ཚོར་མཚན་མའི་འགོ་སྐྱོད་དང་ཨེ་ཙི་ནད་དུག་
མི་རྣམས་ལ་རི་ལྟར་འགོ་སྐྱོད་པ་དོས་འཛིན་དང་། ཁོ་ཚོས་ནད་དེ་དག་སློབ་འགོ་གཞི་ལྟར་བྱ་དགོས་པ་ཤེས་སུ་འཇུག་རྒྱ་
དེ་ཡིན།

གལ་ཏེ་ཁྱེད་ལས་གཞི་འདིར་ཞུགས་པར་འབྲང་བ་ཡིན་ན།

- ཁྱེད་གྱིས་མཚན་མའི་འགོ་སྐྱོད་དང་ཨེ་ཙི་ནད་དུག་སློབ་འགོ་སྐྱོར་གྱི་ཤེས་བྱ་དག་འདྲི་གཞིའི་ཤོག་ལྟེ་རུ་
འགོད་རོགས། འདྲི་གཞི་མང་པོ་ཞིག་ལ་ཁྱེད་གྱིས་ཡིན་མིན་དང་ཤེས་མིན་གྱི་ལན་ཐོབས།
- ཁྱེད་ལས་གཞིའི་སློབ་བྱིད་འདིར་ཐེངས་བཞི་ལ་ཞུགས་དགོས་པ་དང་ཐེངས་རེར་དུས་ལྟན་རྒྱ་ཚོད་གཉིས་ཡིན།
ལས་གཞིའི་སློབ་བྱིད་འདི་དག་ངས་གསལ་བྱིད་བྱས་ཡོད་པའི་ཁྱེད་གྱི་སློབ་གྲོགས་ཚོས་འབྲིད་རྒྱ་ཡིན།
- ལས་གཞིའི་སློབ་བྱིད་དག་ཕོ་མོའི་དབྱེ་བ་གཞིར་བཟུང་ནས་འཛིན་གྲུ་གཉིས་སུ་བཀར་ཡོད་ལ། རིགས་
མཐུན་གྱིས་སློབ་བྱིད་བྱེད་རྒྱ་ཡིན།
- ལས་གཞིའི་སློབ་བྱིད་ཀྱི་བརྒྱུད་རིམ་བྲོད་དུ་ཁྱེད་གྱིས་མཚན་མའི་འགོ་སྐྱོད་ཁ་ཤས་ཀྱི་ནད་རྟགས་མཐོང་
བྱུང་ལ། དེ་དག་རི་ལྟར་སློབ་འགོ་གཞི་དགོས་པ་འདྲ་རྟོགས་བྱུང་། ད་དུང་ཁྱེད་ལ་ཨེ་ཙི་ནད་དུག་དང་ཨེ་ཙི་

ནད་དང་འབྲེལ་ཡོད་སྐོར་གྱི་སློབ་འཇུག་གི་སྤྱི་བཏུན་གྱི་སློབ་འཇུག་ལྟར་བསྟུན་ཏེ་སློབ་འཇུག་གི་བཞོན་སྲོལ་
བྱེད་པའི་གོ་སྐབས་ཡོད།

➤ མཚུགས་མཐའ་བྱེད་ཀྱིས་འདྲི་གཞི་གཞུག་པ་ཞིག་ལ་སྐོར་བྱེད་དགོས།

ངའི་མེ་བར་བྱེད་ནམ་པས་ལྷག་བསམ་ནམ་དག་གིས་ངའི་ལས་གཞི་འདིར་རྒྱབ་སྐྱོར་བྱ་རྒྱུ་དང་། ལས་གཞི་འདི་ལས་
བྱེད་ལ་ཐོན་པ་མི་ཉུང་བ་ཞིག་འཕྲོད་པར་ང་ལ་ཡིད་ཆེས་ཡོད། བྱེད་ཀྱིས་ཤེས་བྱ་དེ་དག་རང་གི་ལ་ཡུལ་ན་ཡོད་པའི་
ཡུལ་མི་ཚོར་བཤད་ཆོག།

བྱེད་ཀྱི་མིང་རམ་ཐོབ་ཐང་ཆ་འཕྲིན་འདྲི་གཞིའི་སྟེང་དུ་མི་འགོད་པ་དང་དབྱེད་ཞིབ་བམ་ཞིབ་འཇུག་གི་གྲུབ་འབྲས་ནང་
དུ་མི་འབྲི། ལས་གཞི་འདི་མཚུགས་ཚོགས་རྗེས་དབྱེད་ཞིབ་ཀྱི་གྲུབ་འབྲས་གནས་ཚུལ་མདོར་བསྟུན་ཤིག་བྱེད་ལ་སྐྱོན་
ངེས།

བྱེད་རང་ལས་གཞི་འདིར་ཞུགས་པ་ནི་རང་འཐད་ཡིན་པས། གནད་དོན་ཅི་ཡང་མེད་པར་བྱེད་རང་ལས་གཞི་འདི་
ལས་ནམ་འབྲུད་འདོད་ན་རང་དབང་ཡིན། གནས་ཚུལ་དེ་བྱེད་ཀྱིས་ཁ་པར་བརྒྱུད་ནས་ང་ལ་ཤེས་སུ་བཅུག་གུང་ཆོག།

འབྲེལ་ཡོད་ཀྱི་ལས་གཞིའི་ཡིག་ཆ་དག་ལོ་བདུན་ལ་ཉར་ཚགས་བྱེད་རྒྱུ་ཡིན་ལ། ཡིག་ཆ་དེ་དག་ཉར་མཐུན་ང་གཅིག་
སུ་ཡིན། ལོ་བདུན་གྱི་རྗེས་སུ་ཡིག་ཆ་མཐུན་དག་མེད་པར་གཏོང་རྒྱུ་ཡིན།

གལ་ཏེ་བྱེད་ལ་ལས་གཞི་འདི་དང་འབྲེལ་བའི་དྲི་བ་ཡོད་ན། ངའི་ཁ་པར་ཨང་གཏམ་ནི་
13897475147 ཡིན། དེ་མིན་དུང་ངའི་ལས་གཞིའི་མཚུབ་སྟོན་དག་ཀྱི་ཐོན་འབྲུམ་རམས་པ་ B-K Tan ཉིད་
ཡིན་པས། བྱེད་ཀྱིས་ཁོ་མོའི་ཡིག་བྱང་ BK.Tan@curtin.edu.au བརྒྱུད་ནས་འབྲེལ་གཏུགས་བྱེད་ཆོག།

གལ་ཏེ་བྱེད་རང་ལས་གཞི་འདིར་ཞུགས་པའི་གོ་རིམ་ཁྲོད་དུ་བསམ་འཆར་ཡོད་ན་ཐད་ཀར་ཁུར་ཐོན་སློབ་ཆེན་གྱི་མིའི་
རིགས་པ་ཞིབ་འཇུག་མི་ཚོས་ཨུ་ཡོན་ཁང་གི་དྲུང་ཡིག་པར་ཡིག་བྱང་འདི་ hrec@curtin.edu.au བརྒྱུད་ནས་
འབྲེལ་གཏུགས་བྱེད་ཆོག།

ལས་གཞི་འདི་ནི་ཨོ་སི་ཁོ་རི་ལེ་ཡ་རྒྱལ་ཁབ་ཀྱི་འཕྲོད་བསྟེན་དང་སྐྱབ་རིག་ཞིབ་འཇུག་ལུ་ཡོན་ལྷན་ཁང་གི་ << མི་དང་
སྐྱེ་དངོས་ཞིབ་འཇུག་ཐད་ཀྱི་མི་ཚོས་ཚུ་དོན>> ལྟར་སྐྱེ་ལ་རྒྱུ་ཡིན།

ཞིབ་འཇུག་ལས་གཞི་འདི་ཁུར་ཐེན་སློབ་ཆེན་གྱི་མི་ཚོས་ལུ་ཡོན་ཁང་གིས་ཚོག་མཆན་བཀོད་ཡོད། (ཚོག་མཆན་ཨང་
རྟགས་ནི་ HR 158/2011) ཚོགས་པ་འདིའི་ཚོགས་མི་ནི་མི་སེར་དགུས་མ་དང་། རིག་གནས་པ། བྲིམས་ཚོད་པ།
སྐྱབ་པ། སེམས་ཁམས་གསོ་སྦྱོང་མཁན་བཅས་ཡིན། ཚོགས་པ་དེའི་དམིགས་ལུ་ལེ་ནི་ལས་ཞུགས་མི་སྣར་སྤྱད་སྦྱོབ་
བྱེད་རྒྱ་དེ་ཡིན། གལ་ཏེ་བྱེད་ཀྱིས་ལས་གཞི་འདིའི་ཚོག་མཆན་དབང་ཡིག་ལ་བལྟ་འདོད་ན་གཤམ་གྱི་འབྲེལ་
གཏུགས་ས་གནས་ Curtin University Human Research Ethics Committee, c/ - Office of
Research and Development, Curtin University, GPO Box U1987, Perth, 6845.

ཡང་ན་ཁ་བར་ཨང་གུངས་ 61 8 9266 2784 དང་ཡང་ན་ hrec@curtin.edu.au བཅས་བརྒྱུད་ནས་འབྲེལ་
གཏུགས་བྱེད་ཚོག

ཞིབ་འཇུག་ལས་གཞི་འདི་མཚོ་སྐྱོན་མི་རིགས་སློབ་ཆེན་གྱིས་ཀྱང་ཚོག་མཆན་བཀོད་ཡོད།

ལས་གཞིའི་གསལ་བཤད་ཡི་གེ་འདི་བཟུགས་པར་བྱགས་རྗེ་ཆེ་ལུ་བ་ཡིན།

John Walkingshaw

Appendix D1 – Information Sheet (For volunteer peer educators)

– English version

Information Sheet (For volunteer peer educators)

Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.

Hello. My English name is John Walkingshaw. I am a medical scientist and PhD candidate at the Centre for International Health at Curtin University in Western Australia. I have lived in Xining for 10 years. I am currently conducting a research project for my PhD degree in International Health.

The aim of this project is to see how useful an educational programme is in helping students understand how people catch sexually transmitted diseases and HIV. Also what they can do to avoid getting these infections.

If you agree to participate in this project as a volunteer peer educator:

- You would be required to attend three, two hour training sessions.
- I will personally train you with the help of a translator who is fluent in your dialect.
- If you are a male, you will be in a group of 8 males from your department.
- If you are a female, you will be in a group of 8 females from your department.
- The training sessions for male and female students will be held separately.
- You will be seeing some Power Point presentations which show the signs and symptoms of some of the commonest sexually transmitted diseases.

You will find out how to avoid catching these diseases.

You will also watch a short movie about HIV/AIDS and have a chance to participate in discussions about these things.

At the end of the three training sessions I will check to see that you fully understand the material that you have seen. If I am satisfied that you have completed the requirements of the training programme and you feel confident then you and your classmate, who has also attended the training sessions, can then begin teaching your classmates.

I hope that you decide to help me with this project. I believe that your participation in this project and the knowledge you learn will be very beneficial for you. You can then share this knowledge with people in your hometowns.

Your name or identity will not be shown on the questionnaires, and will not be revealed in the analysis or results of the study. When the project is finished a summary of the results will be available for you.

Your participation in this project is entirely voluntary. You can withdraw from this project at any time without causing you any problems. Just telephone me and let me know that you no longer want to take part in the project.

All data relating to the study will be kept for 7 years. I will be the only person who has access to the data. After 7 years the data will be destroyed.

If you have any questions regarding this project my phone number is 138 9747 5147. My project supervisor is Dr B-K Tan who can be contacted at BK.Tan@curtin.edu.au

If you have any complaints during this study you can contact the Human Research Ethics Committee Secretary of Curtin University at hrec@curtin.edu.au.

The way this project is done will be in accordance with the Australian National Health and Medical Research Council's National Statement on Ethical Conduct in Human Research.

This study has been approved by the Curtin University Human Research Ethics Committee (Approval Number HR **158/2011**). The Committee is comprised of members of the public, academics, lawyers, doctors, and pastoral carers. Its main role is to protect participants. If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee, c/- Office of Research and Development, Curtin University, GPO Box U1987, Perth, 6845 or by telephoning 61 8 9266 2784 or by e-mailing hrec@curtin.edu.au.

This study has also been approved by Qinghai Nationalities University (Reference no: xxxx)
Thank you for taking the time to read this information sheet.

John Walkingshaw.

Appendix D2 – Information Sheet (For volunteer peer educators) – Chinese version

项目说明（供义务同伴教育者）

中国西北部高校在校多民族大学生性传播疾病和艾滋病预防同伴课程的设计，实施及评估。

您好！我的英文名字叫 John Walkingshaw. 是一名现就读于西澳大利亚州科廷大学国际公共卫生中心的博士研究生，同时我也是一名医学研究员。我来西宁已经有十年了。目前我正在开展我的国际卫生博士研究课题。

该课题的目的是，评估一项教育项目在帮助大学生认识性病和艾滋病的传播、预防中的作用。同时，如何避免感染这些疾病。

如果您同意参加本项目，那么：

- 您需要参加 3 次，每次 2 小时的培训课程。
 - 本人将在精通您所用方言的翻译帮助下为您提供培训。
 - 如果您是男性，那么您将参与到由 8 位来自您所在院系的男性同学所组成的培训小组。
 - 如果您是女性，那么您将参与到由 8 位来自您所在院系的女性同学组成的培训小组。
 - 男性和女性培训课程将分开展开。
 - 您将在教育课程中，看到一些展示常见性传播疾病的症状、体征的幻灯片。您将会了解到如何避免传染这些疾病。
- 同时，您将会观看一部有关艾滋病的短片，并有机会参加相关话题的小组讨论。

培训课程结束后，将由我来评估您是否完全掌握了培训内容。如果本人对您完成相关培训内容满意，您也对自己很有信心。那么，您可开始对您的同学进行培训。

我衷心地希望您能做出参加本教育项目的决定。我相信，通过参加这一项目您将从中获取知识并受益。同时，将您获取的知识分享给您家乡的人。

您的姓名或身份信息将不出现在调查问卷中，也不会透露于本项目的统计结果中。当项目完成后，该项目总结报告可供您参阅。

您将在完全自愿的情况下参加本项目。您可以在任何时候退出本项目，并不受任何不良影响。您只需通过电话的方式通知我，您不愿意继续参与本项目。

有关本项目的的数据将保存 7 年。本人是唯一可获取这些数据的研究人员。7 年后所有数据将被销毁。

如果您有意获取更多有关本项目的相关信息，您可以电话联系，本人手机号码为：138 9747 5147。另外，我的导师是 BK Tan 博士，您可以通过电子邮件的方式和她取得联系，邮箱地址为 BK.Tan@curtin.edu.au。

如果您在参与本项目的过程中有任何不满，您可以通过电子邮件联系科廷科技大学人类研究伦理委员会秘书，邮箱地址为 hrec@curtin.edu.au。

本项目的开展将严格按照澳大利亚国家医学与卫生研究委员会制定的《涉及人的生物研究伦理条例》进行。

本研究项目已通过科廷科技大学伦理委员会审批（审批号 HR 158/2011），主要目的是保护受试者。该伦理委员会成员包括普通民众、学者，律师，医生及心灵关怀工作者。如需验证该项目真实性，您可通过以下方式与科廷科技大学伦理委员会进行核实。

地址：

c/- Office of Research and Development, Curtin University, GPO Box U1987, Perth, 6845 or by

电话：61 8 9266 2784

电子邮件：hrec@curtin.edu.au.

本研究项目同时也通过了青海民族大学的审批（联系号码 XXXX）。

感谢您阅读本说明。

John Walkingshaw.

Appendix D4 – Information sheet (For volunteer peer educators)

– Tibetan version

ལས་གཞི་གསལ་བཤད། (དང་སྒྲུབ་སྒྲིག་སྒྲིག་སྒྲིག་གསལ་བཤད།)

ཀྲུང་གོའི་རྒྱལ་ཁབ་ལྷན་དྲུག་གི་སློབ་ཆེན་སློབ་མའི་མཚན་མའི་འགོ་སྐོར་དང་ཨེ་ཙི་ནད་དུག་སློབ་འགོ་སྐོར་དང་འབྲེལ་བའི་
སྒྲིག་སྒྲིག་བསྐྱོར་བཞུགས་པའི་ལས་གཞི་ལྷན་དྲུག་གི་དཔྱད་འཇུག་ལས་གཞི།

ཚང་མ་བདེ་མོ། ངའི་མིང་ལ་ John Walkingshaw (རྫོ་རྫོ།) ཟེང་། ང་ཞི་གསོ་བ་སྒྲིག་པའི་ཚན་རིག་པ་ཞིག་ཡིན་
པ་མ་ཟད་ཨོ་སི་ཁྲོ་ལེ་ཡ་རྒྱལ་མའི་ལྷན་ཐོན་སློབ་ཆེན་གྱི་རྒྱལ་སྤྱིའི་འཕྲོད་བསྟེན་ལྷན་ཁྲིམས་ཀྱི་འབྲུམ་རམས་པ་ཞིག་
ཀྱང་ཡིན། ང་ཚེ་ལོ་དུ་འོང་ནས་ལོ་བཅུ་ལྷག་འགོར་སོང་། ད་ལྟ་ངས་རྒྱལ་སྤྱིའི་འཕྲོད་བསྟེན་གྱི་འབྲུམ་རམས་པའི་
ཞིབ་འཇུག་ལས་གཞི་ཞིག་སྤེལ་བཞུགས་ཡོད།

ལས་གཞི་འདིའི་དམིགས་ལུས་ནི་སློབ་གསོའི་ལས་གཞི་འདིས་སློབ་མ་ཚོར་མཚན་མའི་འགོ་སྐོར་དང་ཨེ་ཙི་ནད་དུག་
མི་རྒྱལ་ལ་ཇི་ལྟར་འགོ་སྐོར་བ་དོན་འཛིན་དང་། ཁོ་ཚོས་ནད་དེ་དག་སློབ་འགོ་སྐོར་གྱི་ལྷན་དྲུག་གི་འགོ་སྐོར་བ་ཤེས་སུ་འཇུག་ཀྱི་
དེ་ཡིན།

གལ་ཏེ་ཁྱེད་ལས་གཞི་འདིར་ཞུགས་པར་འབྲུག་པ་ཡིན་ན།

- ཁྱེད་ལས་གཞིའི་སློབ་བྱིན་འདིར་ཐེངས་གསུམ་ལ་ཞུགས་དགོས་པ་དང་ཐེངས་ཤེས་དུས་ལྷན་ཁྲིམས་ཀྱི་ཚོད་གཉིས་
ཡིན།
- བདག་གིས་ཁྱེད་ཅག་གི་ཁ་སྐོར་ལ་བྱང་བའི་ལོ་ལྷན་བཞུགས་པའི་ལས་གཞི་ལྷན་དྲུག་གི་ལྷན་ཁྲིམས་ཀྱི་ལྷན་ཁྲིམས་
ཡིན།
- གལ་ཏེ་ཁྱེད་རང་སླེམ་པ་ཡིན་ན། ཁྱེད་རང་སླེམ་གཅིག་པའི་སླེམ་པ་བཞུགས་དང་མཉམ་དུ་ཚོགས་པ་ལ་
ཞུགས་དགོས།
- གལ་ཏེ་ཁྱེད་རང་སླེམ་མ་ཡིན་ན། ཁྱེད་རང་སླེམ་གཅིག་པའི་སླེམ་པ་བཞུགས་དང་མཉམ་དུ་ཚོགས་པ་ལ་
ཞུགས་དགོས།

- ལས་གཞིའི་སློབ་བྱིན་དག་པོ་མོའི་དབྱེ་བ་གཞིར་བརྒྱུད་ནས་འཛིན་གྲུ་གཉིས་སུ་བཀའ་ཡོད་ལ། རིགས་མཐུན་གྱིས་སློབ་བྱིན་བྱེད་རྒྱ་ཡིན།
- ལས་གཞིའི་སློབ་བྱིན་གྱི་བརྒྱུད་རིམ་བྱོང་དུ་བྱིན་གྱིས་མཚན་མའི་འགོས་ནད་ཁ་གསུང་གི་ནད་རྟགས་མཐོང་བྱུང་ལ། དེ་དག་རི་ལྟར་སློབ་འགོག་བྱ་དགོས་པའང་རྟོགས་བྱུང། ད་དུང་བྱིན་ལ་ཨེ་ཅི་ནད་དུག་དང་ཨེ་ཅི་ནད་དང་འབྲེལ་ཡོད་སྐོར་གྱི་སློབ་བརྟན་ཐུང་ཐུང་ཞིག་སྟོན་རྒྱ་ཡིན་པས། བྱིན་ཚོར་དེའི་སྐོར་གྱི་བགོ་སྐྱོང་བྱེད་པའི་གོ་སྐྱབས་ཡོད།

སློབ་བྱིན་མཚུགས་རྗེས་རྗེས་པས་བྱིན་ཚོས་འབྲེལ་ཡོད་ཤེས་བྱ་དག་ཡོངས་སུ་ཤེས་ཡོད་མེད་བརྟག་དབྱེད་བྱེད་རྒྱ། གལ་ཏེ་བྱིན་ཚོའི་སློབ་སྦྱང་གི་འབྲས་བུ་འདི་དུང་སློབ་འཚམ་ཞིང་བྱིན་རང་ཉིད་ལ་ཡང་གདེང་ཚིང་ཡོད་ན་ད་གཞོན་བྱིན་དང་བྱིན་གྱི་འཛིན་གྲོགས། ད་དུང་དེའི་སློབ་བྱིན་ལ་ཞུགས་པའི་སློབ་མ་ཚོས་སློབ་གྲོགས་གཞན་པར་གསུང་སྦྱོང་བྱེད་ཚོགས།

འདི་ལྟར་བྱིན་རྣམས་ལས་ལྷག་བསམ་རྣམས་དག་གིས་འདི་ལས་གཞི་འདིར་རྒྱབ་སྐྱོར་བྱ་རྒྱུ་དང་། ལས་གཞི་འདི་ལས་བྱིན་ལ་ཕན་པ་མི་ཉུང་བ་ཞིག་འཐོབ་པར་ང་ལ་ཡིད་ཆེས་ཡོད། བྱིན་གྱིས་ཤེས་བྱ་དེ་དག་རང་གི་ཕ་ཡུལ་ན་ཡོད་པའི་ཡུལ་མི་ཚོར་བཀའ་ཚིགས།

བྱིན་གྱི་མིང་རམ་ཐོབ་ཐང་ཆ་འཕྲིན་འདི་གཞིའི་སྟེང་དུ་མི་འགོད་པ་དང་དབྱེད་ཞིབ་བམ་ཞིབ་འཇུག་གི་གྲུབ་འབྲས་ནད་དུ་མི་འབྱེ། ལས་གཞི་འདི་མཚུགས་རྗེས་དབྱེད་ཞིབ་གྱི་གྲུབ་འབྲས་གནས་ཚུལ་མདོར་བསྟན་ཤིག་བྱིན་ལ་སྦྱོར་ངེས།

བྱིན་རང་ལས་གཞི་འདིར་ཞུགས་པ་ནི་རང་འཐད་ཡིན་པས། གནད་དོན་ཅི་ཡང་མེད་པར་བྱིན་རང་ལས་གཞི་འདི་ལས་ནམ་འདྲུང་འདོད་ན་རང་དབང་ཡིན། གནས་ཚུལ་དེ་བྱིན་གྱིས་ཁ་པར་བརྒྱུད་ནས་ང་ལ་ཤེས་སུ་བཅུག་གུང་ཚོགས།

འབྲེལ་ཡོད་གྱི་ལས་གཞིའི་ཡིག་ཆ་དག་ལོ་བདུན་ལ་ཉར་ཚགས་བྱེད་རྒྱ་ཡིན་ལ། ཡིག་ཆ་དེ་དག་ཉར་མཁུང་དག་གཅིག་སུ་ཡིན། ལོ་བདུན་གྱི་རྗེས་སུ་ཡིག་ཆ་མཐའ་དག་མེད་པར་གཏོང་རྒྱ་ཡིན།

གལ་ཏེ་བྱིད་ལ་ལས་གཞི་འདི་དང་འབྲེལ་བའི་དྲི་བ་ཡོད་ན། ངའི་ཁ་པར་ཨང་གྲངས་ནི་
13897475147 ཡིན། དེ་མིན་ད་དུང་ངའི་ལས་གཞིའི་མཚུབ་སྐྱོན་དགོ་ཆེན་ནི་འབྲུམ་རམས་པ་ B-K Tan ཉིད་
ཡིན་པས། བྱིད་ཀྱིས་ཁོ་མོའི་ཡིག་བྱང་ BK.Tan@curtin.edu.au བརྒྱུད་ནས་འབྲེལ་གཏུགས་བྱེད་ཚོགས།

གལ་ཏེ་བྱིད་རང་ལས་གཞི་འདིར་ཞུགས་པའི་གོ་རིམ་ཚོད་དུ་བསམ་འཆར་ཡོད་ན་ཐད་ཀར་ཁུར་ཐེན་སློབ་ཆེན་གྱི་མིའི་
རིགས་པ་ཞིབ་འཇུག་མི་ཚོས་ཨུ་ཡོན་ཁང་གི་དུང་ཡིག་པར་ཡིག་བྱང་འདི་ hrec@curtin.edu.au བརྒྱུད་ནས་
འབྲེལ་གཏུགས་བྱེད་ཚོགས།

ལས་གཞི་འདི་ནི་ཨོ་སི་ཁོ་རི་ལེ་ཡ་རྒྱལ་ཁབ་གྱི་འཕྲོད་བསྟེན་དང་སྐྱོན་རིག་ཞིབ་འཇུག་ཨུ་ཡོན་ལྷན་ཁང་གི་ << མི་དང་
སྐྱེ་དངོས་ཞིབ་འཇུག་ཐད་གྱི་མི་ཚོས་ཅུ་དོན>> ལྟར་སྐྱེལ་རྒྱུ་ཡིན།

ཞིབ་འཇུག་ལས་གཞི་འདི་ཁུར་ཐེན་སློབ་ཆེན་གྱི་མི་ཚོས་ཨུ་ཡོན་ཁང་གིས་ཚོགས་མཆན་བཀོད་ཡོད། (ཚོགས་མཆན་ཨང་
རྟགས་ནི་ HR 158/2011) ཚོགས་པ་འདིའི་ཚོགས་མི་ནི་མི་སེར་དགུས་མ་དང་། རིག་གནས་པ། འཕྲིན་ཚོད་པ།
སྐྱོན་པ། སེམས་ཁམས་གསོ་སྦྱོང་མཁན་བཅས་ཡིན། ཚོགས་པ་དེའི་དམིགས་ཡུལ་ནི་ལས་ཞུགས་མི་སྣར་སྲུང་སྦྱོབ་
བྱེད་རྒྱ་དེ་ཡིན། གལ་ཏེ་བྱིད་ཀྱིས་ལས་གཞི་འདིའི་ཚོགས་མཆན་དཔང་ཡིག་ལ་བལྟ་འདོད་ན་གཤམ་གྱི་འབྲེལ་
གཏུགས་ས་གནས་ Curtin University Human Research Ethics Committee, c/ - Office of
Research and Development, Curtin University, GPO Box U1987, Perth, 6845.

ཡང་ན་ཁ་པར་ཨང་གྲངས་ 61 8 9266 2784 དང་ཡང་ན་ hrec@curtin.edu.au བཅས་བརྒྱུད་ནས་འབྲེལ་
གཏུགས་བྱེད་ཚོགས།

ཞིབ་འཇུག་ལས་གཞི་འདི་མཚོ་སྐྱོན་མི་རིགས་སློབ་ཆེན་གྱིས་ཀྱང་ཚོགས་མཆན་བཀོད་ཡོད།

ལས་གཞིའི་གསལ་བཤད་ཡི་གེ་འདི་བཟུགས་པར་ཐུགས་རྗེ་ཆེ་ཞུ་བ་ཡིན།

John Walkingshaw

Appendix E1 – Consent Form (For all participants) – English version

Consent Form (For all participants)

Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.

The researcher for this project is John Walkingshaw.

- By signing this form I agree to participate in this project.
- The researcher has explained to me about the purpose of this project.
- I have been given the opportunity to ask questions.
- I understand what I need to do if I take part in this project.
- I understand that I can withdraw from this project at any time.
- If I withdraw from this project I understand it will not cause me any problems.
- I understand that any information that might be used to identify me will not be used in any published material.

I agree to participate in this project as explained to me.

Participant's signature.....

Date.....

Appendix E2 – Consent form (For all participants) – Chinese version

知情同意书（供参与者）

中国西北部高校在校多民族大学生性传播疾病和艾滋病预防同伴课程的设计，实施及评估。

本项目研究者为 John Walkingshaw

- 签署同意后我同意参加此项目。
- 研究者已向我说明了此项目的研究目的。
- 我被给予了提问的机会。
- 如果参加本项目我清楚自己的职责。
- 我知道我在任何时间都可以退出本项目。
- 我知道如果退出本项目不会对我产生不良影响。
- 我知道任何可能用于表明本人身份的信息将不会出现于任何出版性材料中。

根据研究者的解释，我同意参加本研究项目。

受试者签名-----

日期-----

Appendix E3 – Consent form (For all participants) – Mongolian version

МОНГОЛЫН ЯРИХУЙН ГЭРМЭЭНИЙ ХАМРААГЧИДЫН ХАМРААГЧИД

МОНГОЛЫН ЯРИХУЙН ГЭРМЭЭНИЙ ХАМРААГЧИДЫН ХАМРААГЧИДЫН ХАМРААГЧИД
МОНГОЛЫН ЯРИХУЙН ГЭРМЭЭНИЙ ХАМРААГЧИДЫН ХАМРААГЧИДЫН ХАМРААГЧИД
МОНГОЛЫН ЯРИХУЙН ГЭРМЭЭНИЙ ХАМРААГЧИДЫН ХАМРААГЧИДЫН ХАМРААГЧИД

МОНГОЛЫН ЯРИХУЙН ГЭРМЭЭНИЙ ХАМРААГЧИДЫН ХАМРААГЧИДЫН ХАМРААГЧИД
МОНГОЛЫН ЯРИХУЙН ГЭРМЭЭНИЙ ХАМРААГЧИДЫН ХАМРААГЧИДЫН ХАМРААГЧИД
МОНГОЛЫН ЯРИХУЙН ГЭРМЭЭНИЙ ХАМРААГЧИДЫН ХАМРААГЧИДЫН ХАМРААГЧИД

МОНГОЛЫН ЯРИХУЙН ГЭРМЭЭНИЙ ХАМРААГЧИДЫН ХАМРААГЧИДЫН ХАМРААГЧИД
МОНГОЛЫН ЯРИХУЙН ГЭРМЭЭНИЙ ХАМРААГЧИДЫН ХАМРААГЧИДЫН ХАМРААГЧИД
МОНГОЛЫН ЯРИХУЙН ГЭРМЭЭНИЙ ХАМРААГЧИДЫН ХАМРААГЧИДЫН ХАМРААГЧИД



МОНГОЛЫН ЯРИХУЙН ГЭРМЭЭНИЙ ХАМРААГЧИД
МОНГОЛЫН ЯРИХУЙН ГЭРМЭЭНИЙ ХАМРААГЧИД

Appendix E4 – Consent form (For all participants) – Tibetan version

མོས་མཐུན་ཡིག་ཆ། (ལས་གཞིར་ཞུགས་མཁན་ལ་མཐོ་སྤྲོད་བྱ་བ།)

ཀླུང་གོའི་རྒྱབ་བྱུང་ལུལ་གྱི་སློབ་ཆེན་སློབ་མའི་མཚན་མའི་འགོ་སྟོན་དང་ཨེ་ཙི་ནད་དུག་སློབ་འགོ་གཏང་འབྲེལ་བའི་
རིགས་མཐུན་བསྐྱབ་གཞིའི་རྒྱས་འགོད་དང་ལག་བསྟར། དབྱུང་འཛོག་ལས་གཞི།

ལས་གཞི་འདིའི་ཞིབ་འཇུག་བྱེད་མཁན་ནི་ John Walkingshaw (རྫོ་རྗེ།)

- མོས་མཐུན་ཡིག་ཆ་འདིར་མིང་ཉུགས་བཀོད་རྗེས་ང་རང་ལས་གཞི་འདིར་ཞུགས་པར་འཐད་པ་ཡིན།
- ལས་གཞི་ཞིབ་འཇུག་བྱེད་མཁན་གྱིས་ང་ལ་ལས་གཞི་འདིའི་དམིགས་ཡུལ་གསལ་བཤད་བྱས་ཡོད།
- ང་ལ་འདྲི་བ་འདོན་པའི་གོ་སྐབས་སྤྲོད་ཡོད།
- གལ་ཏེ་ང་རང་ལས་གཞི་འདིར་ཞུགས་ན་ངས་རང་གི་འོས་འགན་ཅི་ཡིན་པ་ཤེས་ཡོད།
- ངས་རང་ཉིད་ལས་གཞི་འདི་ལས་ནམ་ཕྱིར་བྱུང་གྱུང་ཚོགས་པ་ཤེས་ཡོད།
- གལ་ཏེ་ང་རང་ལས་གཞི་འདི་ལས་ཕྱིར་འབྲུད་ན་རང་ཉིད་ལ་གནད་དོན་ཅི་ཡང་མི་འབྲུང་བ་ཤེས་ཡོད།
- ལས་གཞི་འདིའི་ནང་དུ་བཀོད་པའི་ངའི་གནས་ཚུལ་དག་དཔེ་སྟོན་ཡིག་ཆ་རུ་མི་བཀོལ་བ་ཤེས་ཡོད།

ལས་གཞི་ཞིབ་འཇུག་མཁན་གྱིས་གསལ་བཤད་བྱས་པ་བརྒྱུད་ང་རང་ཞིབ་འཇུག་ལས་གཞི་འདིར་ཞུགས་པར་འཐད་
པ་ཡིན།

ལས་གཞིར་ཞུགས་མཁན་གྱི་མིང་ཉུགས། _____ རྫོ་རྗེས། _____

Appendix F1 – Consent Form (Volunteer Peer Educators) – English version

Consent Form (Volunteer Peer Educators) Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.

The researcher for this project is John Walkingshaw.

- By signing this form I agree to participate in this project as a volunteer peer educator.
- The researcher has explained to me about the purpose of this project.
- I have been given the opportunity to ask questions.
- I understand what I need to do if I take part in this project.
- I understand that I can withdraw from this project at any time.
- If I withdraw from this project I understand it will not cause me any problems.
- I understand that any information that might be used to identify me will not be used in any published material.

I agree to participate in this project as explained to me.

Participant's signature.....

Date.....

Appendix F2 – Consent form (For volunteer peer educators) – Chinese version

知情同意书（供义务同伴教育者）

中国西北部高校在校多民族大学生性传播疾病和艾滋病预防同伴课程的设计，实施及评估。

本项目研究者为 John Walkingshaw

- 签署同意书后我同意以义务同伴教育者的身份参加此项目。
- 研究者已向我说明的本项目的研究目的。
- 我被给予了提问的机会。
- 如果参加本项目我清楚自己的职责。
- 我知道我在任何时间可以退出本项目。
- 我知道如果退出本项目不会对我产生不良影响。
- 我知道任何可能用于表明本人身份的信息将不会出现于任何出版性材料中。

根据研究者的解释，我同意参加本研究项目。

受试者签名-----

日期-----

**Appendix F3 – Consent Form (For volunteer peer educators) –
Mongolian version**

МОНГОЛЫН ХАМГААГАХ АЖ АХуй (Биеийн гажууд, мэргэжлээр, гажуудын гурвалжны) дэргэдүүр
Хөгжлийн үйлчилгээний тусламж үзүүлэх үйлчилгээний хөтөлбөрийг амьжилгах болон үйлдвэрлэх үйлчилгээний
хөтөлбөрийг амьжилгах болон үйлдвэрлэх үйлчилгээний хөтөлбөрийг амьжилгах болон үйлдвэрлэх үйлчилгээний
хөтөлбөрийг амьжилгах болон үйлдвэрлэх үйлчилгээний хөтөлбөрийг амьжилгах болон үйлдвэрлэх үйлчилгээний
хөтөлбөрийг амьжилгах болон үйлдвэрлэх үйлчилгээний хөтөлбөрийг амьжилгах болон үйлдвэрлэх үйлчилгээний

Энд таныг оролцуулах болон үйлдвэрлэх үйлчилгээний хөтөлбөрийг амьжилгах болон үйлдвэрлэх үйлчилгээний
хөтөлбөрийг амьжилгах болон үйлдвэрлэх үйлчилгээний хөтөлбөрийг амьжилгах болон үйлдвэрлэх үйлчилгээний
хөтөлбөрийг амьжилгах болон үйлдвэрлэх үйлчилгээний хөтөлбөрийг амьжилгах болон үйлдвэрлэх үйлчилгээний

Энд таныг оролцуулах болон үйлдвэрлэх үйлчилгээний хөтөлбөрийг амьжилгах болон үйлдвэрлэх үйлчилгээний
хөтөлбөрийг амьжилгах болон үйлдвэрлэх үйлчилгээний хөтөлбөрийг амьжилгах болон үйлдвэрлэх үйлчилгээний
хөтөлбөрийг амьжилгах болон үйлдвэрлэх үйлчилгээний хөтөлбөрийг амьжилгах болон үйлдвэрлэх үйлчилгээний

Энд таныг оролцуулах болон үйлдвэрлэх үйлчилгээний хөтөлбөрийг амьжилгах болон үйлдвэрлэх үйлчилгээний
хөтөлбөрийг амьжилгах болон үйлдвэрлэх үйлчилгээний хөтөлбөрийг амьжилгах болон үйлдвэрлэх үйлчилгээний
хөтөлбөрийг амьжилгах болон үйлдвэрлэх үйлчилгээний хөтөлбөрийг амьжилгах болон үйлдвэрлэх үйлчилгээний



Мэргэжлээр, гажуудын гурвалжны
Хөгжлийн үйлчилгээний тусламж үзүүлэх үйлчилгээний хөтөлбөрийг амьжилгах болон үйлдвэрлэх үйлчилгээний

**Appendix F4 -Consent form (For volunteer peer educators_ -
Tibetan version**

མོས་མཐུན་ཡིག་ཆ། (དང་སྒྲངས་རིགས་མཐུན་སློབ་གསོ་བ།)

ཀྱུང་གོའི་རྒྱབ་བྱུང་ཁུལ་གྱི་སློབ་ཆེན་སློབ་མའི་མཚན་མའི་འགོ་སྐྱོད་དང་ཨེ་ཅི་ནང་དུ་གྲྭ་སློབ་འགོ་གཏང་འབྲེལ་བའི་
རིགས་མཐུན་བསྐྱབ་གཞིའི་རྒྱས་འགོད་དང་ལག་བསྟར། དབྱུང་འཛོག་ལས་གཞི།

ལས་གཞི་འདིའི་ཞིབ་འཇུག་བྱེད་མཁན་ནི་ John Walkingshaw (རྫོ་རྗེ།)

- མོས་མཐུན་ཡིག་ཆ་འདིར་མིང་རྟགས་བཀོད་རྗེས་ང་རང་འགན་བབས་རིགས་མཐུན་སློབ་གསོ་བ་ཞིག་ཡིན་
པའི་ཆ་ནས་ལས་གཞི་འདིར་ཞུགས་པར་འཐད་བ་ཡིན།
- ལས་གཞི་ཞིབ་འཇུག་བྱེད་མཁན་གྱིས་ང་ལ་ལས་གཞི་འདིའི་དམིགས་ཡུལ་གསལ་བཤད་བྱས་ཡོད།
- ང་ལ་འདྲི་བ་འདོན་པའི་གོ་སྐབས་སྤྲད་ཡོད།
- གལ་ཏེ་ང་རང་ལས་གཞི་འདིར་ཞུགས་ན་ངས་རང་གི་འོས་འགན་ཅི་ཡིན་པ་ཤེས་ཡོད།
- ངས་རང་ཉིད་ལས་གཞི་འདི་ལས་ནམ་ཕྱིར་བྲལ་ན་ཆོག་པ་ཤེས་ཡོད།
- གལ་ཏེ་ང་རང་ལས་གཞི་འདི་ལས་ཕྱིར་བྲལ་ན་རང་ཉིད་ལ་གནད་དོན་ཅི་ཡང་མི་འབྱུང་བ་ཤེས་ཡོད།
- ལས་གཞི་འདིའི་ནང་དུ་བཀོད་པའི་ངའི་གནས་ཚུལ་དག་དཔར་སྐྱུན་ཡིག་ཆ་རུ་མི་བཀོལ་བ་ཤེས་ཡོད།

ལས་གཞི་ཞིབ་འཇུག་མཁན་གྱིས་གསལ་བཤད་བྱས་པ་བརྒྱུད་ང་རང་ཞིབ་འཇུག་ལས་གཞི་འདིར་ཞུགས་པར་འཐད་
བ་ཡིན།

ལས་གཞིར་ཞུགས་མཁན་གྱི་མིང་རྟགས། _____ ལྷ་ཆོས། _____

Appendix G1 – Questionnaire Evaluation Form for Chinese participants – English version

1. Did you find this questionnaire easy to understand?	Yes <input type="checkbox"/> No <input type="checkbox"/>
2. Are many of the medical words used in this questionnaire unfamiliar to you?	Yes <input type="checkbox"/> No <input type="checkbox"/>
3. Are some of the medical words used in this questionnaire unfamiliar to you?	Yes <input type="checkbox"/> No <input type="checkbox"/>
4. Did you find that the questionnaire was too long?	Yes <input type="checkbox"/> No <input type="checkbox"/>
5. Do you think that there are other questions that should have been included in the questionnaire?	Yes <input type="checkbox"/> No <input type="checkbox"/>

6. Which questions did you find difficult to understand?

.....

7. Which words did you find the most difficult to understand?

.....

8. Can you suggest alternative words for the words that you found difficult in the questionnaire?

.....

9. What additional questions would you like to have included in the questionnaire?

.....

10. Do you have any other comments that you would like to make?

.....
.....
.....
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.....

Appendix G2 – Questionnaire Evaluation Form for Mongolian participants – English version

1. Did you find this questionnaire easy to understand?	Yes <input type="checkbox"/> No <input type="checkbox"/>
2. Are many of the medical words used in this questionnaire unfamiliar to you?	Yes <input type="checkbox"/> No <input type="checkbox"/>
3. Are some of the medical words used in this questionnaire unfamiliar to you?	Yes <input type="checkbox"/> No <input type="checkbox"/>
4. Is it helpful to also use the Chinese medical words on the Mongolian questionnaire?	Yes <input type="checkbox"/> No <input type="checkbox"/>
5. Did you prefer to fill out the questionnaire in Mongolian?	Yes <input type="checkbox"/> No <input type="checkbox"/>
6. Did you prefer to fill out the questionnaire in Chinese?	Yes <input type="checkbox"/> No <input type="checkbox"/>
7. Did you find that the questionnaire was too long?	Yes <input type="checkbox"/> No <input type="checkbox"/>
8. Do you think that there are other questions that should have been included in the questionnaire?	Yes <input type="checkbox"/> No <input type="checkbox"/>

9. Which questions did you find difficult to understand?

.....

10. Which words did you find the most difficult to understand?

.....

11. Can you suggest alternative words for the words that you found difficult in the questionnaire?

.....

12. What additional questions would you like to have included in the questionnaire?

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13. Do you have any other comments that you would like to make?

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Appendix G3 – Questionnaire Evaluation Form for Tibetan participants – English version

1. Did you find this questionnaire easy to understand?	Yes <input type="checkbox"/> No <input type="checkbox"/>
2. Are many of the medical words used in this questionnaire unfamiliar to you?	Yes <input type="checkbox"/> No <input type="checkbox"/>
3. Are some of the medical words used in this questionnaire unfamiliar to you?	Yes <input type="checkbox"/> No <input type="checkbox"/>
4. Is it helpful to also use the Chinese medical words on the Tibetan questionnaire?	Yes <input type="checkbox"/> No <input type="checkbox"/>
5. Did you prefer to fill out the questionnaire in Tibetan?	Yes <input type="checkbox"/> No <input type="checkbox"/>
6. Did you prefer to fill out the questionnaire in Chinese?	Yes <input type="checkbox"/> No <input type="checkbox"/>
7. Did you find that the questionnaire was too long?	Yes <input type="checkbox"/> No <input type="checkbox"/>
8. Do you think that there are other questions that should have been included in the questionnaire?	Yes <input type="checkbox"/> No <input type="checkbox"/>

9. Which questions did you find difficult to understand?

.....

10. Which words did you find the most difficult to understand?

.....

11. Can you suggest alternative words for the words that you found difficult in the questionnaire?

.....

12. What additional questions would you like to have included in the questionnaire?

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13. Do you have any other comments that you would like to make?

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Appendix G4 – Questionnaire Evaluation Form (Chinese version)

1. 您认为问卷内容容易理解吗？	是 <input type="checkbox"/> 否 <input type="checkbox"/>
2. 您是否对问卷中的多数医学词汇感觉陌生？	是 <input type="checkbox"/> 否 <input type="checkbox"/>
3. 您是否对问卷中的少数医学词汇感觉陌生？	是 <input type="checkbox"/> 否 <input type="checkbox"/>
4. 您是否认为问卷过长？	是 <input type="checkbox"/> 否 <input type="checkbox"/>
5. 您是否认为问卷还应包含其他问题？	是 <input type="checkbox"/> 否 <input type="checkbox"/>

6. 您认为问卷中哪些问题理解困难？

.....

7. 您认为问卷中最难理解的词汇是？

.....

8. 您认为哪些词汇可以替代问卷中理解困难的词汇？

.....

9. 您认为问卷中还应包括哪些问题？

.....

10. 针对问卷，您还有其他意见和建议吗？

.....

.....
.....

Appendix G6 – Questionnaire Evaluation Form (Tibetan version)

1. བྱིད་ལ་རྟོག་དཔྱད་འདྲི་གཞི་འདིའི་དོན་གོ་སླབ་ཞེས་རེད་དམ།	རེད། <input type="checkbox"/> མ་རེད། <input type="checkbox"/>
2. རྟོག་དཔྱད་འདྲི་གཞི་འདིའི་ནང་གི་གསོ་རིག་ཐ་སྐད་གང་མང་ཞེས་བྱིས་མཐོང་མ་མྱོང་བ་རེད་དམ།	རེད། <input type="checkbox"/> མ་རེད། <input type="checkbox"/>
3. རྟོག་དཔྱད་འདྲི་གཞི་འདིའི་ནང་གི་གསོ་རིག་ཐ་སྐད་ཁ་གསལ་གྱི་བྱིས་མཐོང་མ་མྱོང་བ་རེད་དམ།	རེད། <input type="checkbox"/> མ་རེད། <input type="checkbox"/>
4. བོད་ཡིག་གི་རྟོག་དཔྱད་འདྲི་གཞིའི་ནང་དུ་རྒྱ་ཡིག་གི་གསོ་རིག་ཐ་སྐད་བཞོལ་ན་ཕན་བ་ཡོད་དམ།	ཡོད། <input type="checkbox"/> མེད། <input type="checkbox"/>
5. བྱིད་བྱིས་རྟོག་དཔྱད་འདྲི་གཞི་འདི་བོད་ཡིག་གི་ལམ་ནས་ཁ་སྐོང་ས་པར་མོས་བ་སྐྱེས་སམ།	སྐྱེས། <input type="checkbox"/> མ་སྐྱེས། <input type="checkbox"/>
6. བྱིད་བྱིས་རྟོག་དཔྱད་འདྲི་གཞི་འདི་རྒྱ་ཡིག་གི་ལམ་ནས་ཁ་སྐོང་ས་པར་མོས་བ་སྐྱེས་སམ།	སྐྱེས། <input type="checkbox"/> མ་སྐྱེས། <input type="checkbox"/>
7. བྱིད་ལ་རྟོག་དཔྱད་འདྲི་གཞི་འདི་ཉ་ཅང་རིང་འདུག་སྟམ་པའི་སྣང་ཚུལ་འདུག་གམ།	འདུག <input type="checkbox"/> མི་འདུག <input type="checkbox"/>
8. བྱིད་བྱིས་བལྟས་ན་རྟོག་དཔྱད་འདྲི་གཞི་འདིར་ཆད་ལྷག་གམ་ཡང་ན་ཁ་གསལ་དགོས་པའི་དྲི་བ་རེ་ཡོད་དམ།	ཡོད། <input type="checkbox"/> མེད། <input type="checkbox"/>

9. བྱིད་བྱིས་རྟོག་དཔྱད་འདྲི་གཞི་འདི་ལས་དྲི་བ་གང་དག་གི་དོན་རྟོག་དཀའ་བར་སྟམ།

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10. བྱིད་ལ་མཚོན་ན་རྟོག་དཔྱད་འདྲི་གཞིའི་ཐ་སྐད་གང་དག་གོ་བ་ལེན་དཀའ་བའི་སྣང་ཚུལ་འདུག

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11. བྱིས་རྟོག་དཔྱོད་འདྲི་གཞིའི་ནང་གི་ཐ་སྐད་དོན་རྟོག་དཀའ་བ་དག་ལ་འོས་འཚམས་གྱི་ཐ་སྐད་རེ་བཤད་རྒྱ་
ཡོད་དམ།

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12. བྱོད་ལ་རྟོག་དཔྱོད་འདྲི་གཞི་འདིར་ཁ་གསལ་དགོས་འདུག་སྐྱམ་པའི་དྲི་བ་གང་དག་ཡོད།

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13. དེ་མིན་བྱོད་ལ་བསམ་འཆར་གཞན་བཤད་རྒྱ་ཡོད་དམ།

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Appendix H1 – Analysis of Discrepancies in Chinese Back Translation No. 1

Document	Correct Wording	Back Translation	Alters intended meaning	Changes
Consent form (Volunteer Peer Educators)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	Design, progress and evaluation of Peer training on preventing AIDS and sexually transmitted disease for Minority students from university on the northwest of China	Yes / remainder clarified	The word “implementation” 实施 has been used instead of 开展 which means “develop”.
Consent form (Volunteer Peer Educators)	I understand what I need to do if I take part in this project.	I know my responsibility after participating in this project.	Yes	“If” 如果 is missing. The word for “Clear” 清楚 has been added to bring further clarity to the Chinese.
Consent form (all participants)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	Design, progress and evaluation of Peer training on preventing AIDS and sexually transmitted disease for Minority students from university on the northwest of China	Yes / remainder clarified	The word “implementation” 实施 has been used instead of 开展 which means “develop”.
Consent form (all participants)	I understand what I need to do if I take part in this project.	I know my responsibility after participating in this project.	Yes	“If” 如果 is missing. The word for “Clear” 清楚 has been added to bring further

				clarity to the Chinese.
Information Sheet (For all participants)	Information Sheet (For all participants)	Project description (for subjects)	Yes	Change from “for subjects” 供受试者 to “for participants” 供参与者
Information Sheet (For all participants)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	Design, progress and evaluation of Peer training on preventing AIDS and sexually transmitted disease for Minority students from university on the northwest of China	Yes / remainder clarified	The word “implementation” 实施 has been used instead of 开展 which means “develop”.
Information Sheet (For all participants)	I am a medical scientist	I am also a medical researcher.	No	
Information Sheet (For all participants)	I am currently conducting a research project for my PhD degree in International Health.	I am currently studying PhD in the Centre of International Public Hygiene	Yes	“International health” 国际卫生 added.
Information Sheet (For all participants)	The aim of this project is to see how useful an educational programme is in helping students understand how people catch sexually transmitted diseases and HIV. Also what they can do to avoid getting these infections.	The goal of this project is to evaluate the impact of an educational project on helping college students to know the spread and prevention of sexually transmitted diseases and AIDS, at the same time, how to avoid these diseases.	No/ useful is implied in the Chinese.	
Information Sheet (For all participants)	You will be required to complete a questionnaire about your knowledge of sexually transmitted diseases and HIV. You only have to reply: Yes, No or Don't Know to most of the questions.	You need to complete a questionnaire about STD and AIDS to evaluate how much you know already. For most of the questions, you only need to answer yes or no.	No / don't know is present in the Chinese	
Information Sheet	You will be required to attend four,	You need to participate 4 times of 2 hours	No	

(For all participants)	two hour educational programmes. These will be taught by two of your classmates who have been trained by me.	each of educational training. These trainings will be given by me, your classmates will teach.		
Information Sheet (For all participants)	I hope that you decide to help me with this project.	I truly hope you can participate in this project.	Yes	This sentence has been changed from 我衷心的希望您能参加本教育项目 to 我衷心地希望您能做出参加本教育项目的决定 so that it reads better in the Chinese. The word “decide” 决定 has been added.
Information Sheet (For all participants)	When the project is finished a summary of the results will be available for you.	When the project is done, you can ask for result reports from the researcher.	Yes	The initial sentence “当项目完成后, 您可以向研究者索取项目的结果汇报”。 indicated that all of the results would be available for participants. This has been replaced with “当项目完成后, 该项目总结报告可供您参阅” where the word “summary” 总结 has been added.
Information Sheet	If you have any complaints during	If you have any complaints when	No /	

(For all participants)	this study you can contact the Human Research Ethics Committee Secretary of Curtin University at hrec@curtin.edu.au .	participating in the project, you can contact the Ethnic committee of the University	clarified. In the Chinese “Human Research Ethics Committee” is present, not “Ethnic Committee”	
Information Sheet (For all participants)	The way this project is done will be in accordance with the Australian National Health and Medical Research Council’s National Statement on Ethical Conduct in Human Research.	This project will process rigidly according to the <<Involved in Human Biological research ethics rules>> by the Australian national medical and hygiene committee.	No /clarified	
Information Sheet (For all participants)	This study has been approved by the Curtin University Human Research Ethics Committee (Approval Number HR 158/2011). The Committee is comprised of members of the public, academics, lawyers, doctors, and pastoral carers. Its main role is to protect participants. If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee	This project has been approved by the ethic committee of University. <i>No written back translation was given for the composition of the committee and its role etc.</i>	Yes / In the Chinese “Human Research Ethics Committee” is present, not “Ethic Committee”. Remainder clarified.	The word “verification” 核实 has been added.
Information Sheet (For all participants)	Thank you for taking the time to read this information sheet.	Thank you for reading this description.	No	
Information Sheet (For volunteer	Development, implementation and evaluation of a multi-ethnic peer	Design, progress and evaluation of Peer training on preventing AIDS and sexually	Yes / remainder	The word “implementation”

peer educators)	education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	transmitted disease for Minority students from university on the northwest of China	clarified	实施 has been used instead of 开展 which means “develop”.
Information Sheet (For volunteer peer educators)	I am a medical scientist	I am also a medical researcher.	No	
Information Sheet (For volunteer peer educators)	I am currently conducting a research project for my PhD degree in International Health.	I am currently studying PhD in the Centre of International Public Hygiene	Yes	“International health” 国际卫生 was added.
Information Sheet (For volunteer peer educators)	The aim of this project is to see how useful an educational programme is in helping students understand how people catch sexually transmitted diseases and HIV. Also what they can do to avoid getting these infections.	The goal of this project is to evaluate the impact of an educational project on helping college students to know the spread and prevention of sexually transmitted diseases and AIDS, at the same time, how to avoid these diseases.	No/ useful is implied in the Chinese.	
Information Sheet (For volunteer peer educators)	At the end of the three training sessions I will check to see that you fully understand the material that you have seen. If I am satisfied that you have completed the requirements of the training programme and you feel confident then you and your classmate, who has also attended the training sessions, can then begin teaching your classmates.	After the training, I will be in charge of testing if you have grasped the content of training. If I am satisfied with your preparation, you will also have self-confidence. Then, you can start training your classmates.	No	
Information Sheet (For volunteer peer educators)	I hope that you decide to help me with this project.	I truly hope you can participate in this project.	Yes	This sentence has been changed from 我衷心的希望您能参

				加本教育项目 to 我衷心地希望您能做出参加本教育项目的决定 so that it reads better in the Chinese. The word “decide” 决定 has been added.
Information Sheet (For volunteer peer educators)	When the project is finished a summary of the results will be available for you.	When the project is done, you can ask for result reports from the researcher.	Yes	The initial sentence “当项目完成后, 您可以向研究者索取项目的结果汇报”。indicated that all of the results would be available for participants. This has been replaced with “当项目完成后, 该项目总结报告可供您参阅” where the word “summary” 总结 has been added.
Information Sheet (For volunteer peer educators)	If you have any complaints during this study you can contact the Human Research Ethics Committee Secretary of Curtin University at hrec@curtin.edu.au .	If you have any complaints when participating in the project, you can contact the Ethnic committee of the University	No / clarified. In the Chinese “Human Research Ethics Committee” is present,	

			not “Ethnic Committee”	
Information Sheet (For volunteer peer educators)	The way this project is done will be in accordance with the Australian National Health and Medical Research Council’s National Statement on Ethical Conduct in Human Research.	This project will process rigidly according to the <<Involved in Human Biological research ethics rules>> by the Australian national medical and hygiene committee.	No /clarified	
Information Sheet (For volunteer peer educators)	This study has been approved by the Curtin University Human Research Ethics Committee (Approval Number HR 158/2011). The Committee is comprised of members of the public, academics, lawyers, doctors, and pastoral carers. Its main role is to protect participants. If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee	This project has been approved by the ethic committee of University. <i>No written back translation was given for the composition of the committee and its role etc.</i>	Yes / In the Chinese “Human Research Ethics Committee” is present, not “Ethic Committee”. Remainder clarified.	The word “verification” 核实 has been added.
Information Sheet (For volunteer peer educators)	Thank you for taking the time to read this information sheet.	Thank you for reading this description.	No	
Pre-intervention Questionnaire	Can a person get HIV if someone who has HIV coughs or sneezes on them?	Would AIDS patient’s coughing or sneezing on people cause others to be infected?	Yes	“AIDS patient” 艾滋病患者 has been changed to the commonly used term for “HIV carrier” 艾滋病病毒携带者.
Pre-intervention Questionnaire	Can a person get HIV if they share a glass of water with someone who has HIV?	Will drinking from the same cup with AIDS patients cause infection?	Yes	“AIDS patient” 艾滋病患者 has been changed to the

				commonly used term for “HIV carrier” 艾滋病病毒携带者. Also “glass of water” 杯水 has been added and “drinking cup” 饮水杯 has been deleted.
Pre-intervention Questionnaire	Can a person get HIV if they have anal sex (penis inside the anus) with a man?	Will anal sex among homosexuals cause infection with AIDS virus?	Yes	“Man” 男性 has been replaced with “person” 人.
Pre-intervention Questionnaire	Can showering or washing one’s genitals after sex prevent one from getting HIV?	Cleaning penis after sexual intercourse can prevent infection by HIV virus.	No / the Chinese has the word “genitals” not “penis”	
Pre-intervention Questionnaire	Are people likely to get HIV by deep kissing, putting their tongue into their partner’s mouth, if their partner has H	If one has AIDS, would his or her sexual partner get infected through kissing?	Yes / remainder clarified	“AIDS ” 艾滋病 has been changed to the commonly used term for “HIV carrier” 艾滋病病毒携带者.
Pre-intervention Questionnaire	Can a person get HIV by sitting in a Hot tub or swimming pool with a person who has HIV?	By using the same bathtub with many other people or swimming pool cause HIV infection?	Yes	“AIDS patient” 艾滋病患者 has been changed to the commonly used term for “HIV carrier” 艾滋病病毒携带者.
Pre-intervention Questionnaire	Can a person get HIV by having oral sex (putting a man’s penis in their mouth)?	Would people be infected with AIDS virus through oral sex?	Yes	“Woman’s mouth” 女性口 has been replaced with “sexual partner’s mouth” 性伴侣口.

Pre-intervention Questionnaire	Can a woman look at her body and tell if she has gonorrhoea?	Can people tell whether a woman has gonorrhoea through the observation of the female body?	No / the Chinese has “woman” not “people”	
Pre-intervention Questionnaire	Can a man get genital warts only by having vaginal sex?	Does only vaginal intercourse result in the appearance of warts on the male penis?	No / the Chinese has “vaginal” not “virginal”	
Pre-intervention Questionnaire	Can a woman who has Genital Herpes pass the infection on to her baby during childbirth?	Would pregnant women with genital herpes transmit virus down to foetus?	No / the Chinese contains the word “childbirth”	
Pre-intervention Questionnaire	Can a person get Hepatitis B if they have vaginal sex?	Does Hepatitis B transmit through vaginal intercourse?	No / the Chinese has “vaginal” not “virginal”	
Pre-intervention Questionnaire	Can Hepatitis B be passed on from a mother to her baby when it is born?	Would pregnant women with hepatitis B transmit virus down to foetus?	No / the Chinese contains the word “childbirth”	
Pre-intervention Questionnaire	If a person is an injecting drug user, can they get HIV if they use a needle that someone who has HIV has already used?	If someone is an intravenous drug user, would using the same syringe as an AIDS patient cause HIV virus infection?	Yes	“She” 她 has been added so it now reads “He/she” 他/她. “AIDS patient” 艾滋病患者 has been changed to the commonly used term for “HIV carrier” 艾滋病病毒携带者.
Pre-intervention	It is only necessary to list up to 3	Each question has three answers only need	Yes	This sentence has

Questionnaire	sources for each of these questions.	for you to list more than three items.		been changed from 对每个问题的回答罗列可多于 3 个。 Which indicated that more than 3 sources could be given for each answer. This has been replaced with 您只需对每个问题罗列 3 个途径 which more correctly conveys the English meaning.
Pre-intervention Questionnaire	Which of the following did you find as the most important source of your knowledge about puberty?	From all the factors below which did you think is the most important way to learn about adolescence?	Yes	“Adolescence” 青春期 has been replaced by 青春发育期 which more clearly conveys “puberty”. This translator suggested using 发育期 but after discussion with other translators it was felt that this term can still be confused with adolescence rather than the changes that occur during puberty.
Post-intervention Questionnaire	What did you think about this peer education programme?	What do you think of this educational project?	No / the Chinese contains “peer”	
Post-intervention	Do you think that it is important	Do you think it is important that	Yes	“Teachers” 教师 has

Questionnaire	that the peer educators involved in the programme are from your ethnic group?	participating teacher should share the same nationality as you do?		been replaced by “peer educators” 同伴教育者
Post-intervention Questionnaire	Do you think that a programme like this would have been beneficial to you if it was available when you were a high school student?	Do you think if you had received similar educational projects like this in high school it might have benefited you more?	Yes	“More” 更多的 has been removed and the original sentence “您是否认为如果类似的教育在您高中时就能获得，可能会对您带来更多的益处？” has been rewritten as “您是否认为如果在您高中时就能获得类似的教育，可能会给您带来益处？” so that it is clearer in Chinese.

N.B.

1. In a subsequent interview with this translator, the discrepancies in translation were discussed. In order to eliminate any potential bias, the translator was asked to read each sentence in Chinese and then asked to translate these into spoken English. This helped to overcome some of the deficiencies seen in her written English translation.
2. Clarified in the table above means that the back translation, although showing apparent discrepancy with the original English translation, was clarified and conveyed the same meaning.

Appendix H2 - Analysis of Discrepancies in Chinese Back Translation No. 2

Document	Correct Wording	Back Translation	Alters intended meaning	Changes
Consent form (Volunteer Peer Educators)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	Course Design, Development and Evaluation of Sexually Transmitted Diseases and AIDS Prevention Peer Course for Multi-ethnic University Students in Universities of Northwestern China	Yes / remainder clarified	The word “implementation” 实施 has been used instead of 开展 which means “develop”.
Consent form (Volunteer Peer Educators)	I understand what I need to do if I take part in this project.	I know my duties after participating in this project.	Yes	“If” 如果 is missing. The word for “Clear” 清楚 has been added to bring further clarity to the Chinese.
Consent form (all participants)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	Course Design, Development and Evaluation of Sexually Transmitted Diseases and AIDS Prevention Peer Course for Multi-ethnic University Students in Universities of Northwestern China	Yes / remainder clarified	The word “implementation” 实施 has been used instead of 开展 which means “develop”.
Consent form (all participants)	I understand what I need to do if I take part in this project.	I will know my duties after participating in this project.	Yes	“If” 如果 is missing. The word for “Clear” 清楚 has been added to bring further clarity to the Chinese.
Information Sheet	Information Sheet (For all	Project Description (for Subjects)	Yes	Change from “for

(For all participants)	participants)			subjects” 供受试者 to “for participants” 供参与者
Information Sheet (For all participants)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	Course Design, Development and Evaluation of Sexually Transmitted Diseases and AIDS Prevention Peer Course for Multi-ethnic University Students in Universities of Northwestern China	Yes / remainder clarified	The word “implementation” 实施 has been used instead of 开展 which means “develop”.
Information Sheet (For all participants)	I am a medical scientist	I am also a medical researcher	No	
Information Sheet (For all participants)	I am currently conducting a research project for my PhD degree in International Health.	At present I am working on my PhD research project.	Yes	“International health” 国际卫生 added.
Information Sheet (For all participants)	The aim of this project is to see how useful an educational programme is in helping students understand how people catch sexually transmitted diseases and HIV. Also what they can do to avoid getting these infections.	The purpose of this project is, to evaluate an educational project to help university students acknowledge the transmission of sexually transmitted disease and AIDS and their prevention. Meanwhile, how to avoid being infected by such diseases.	No/ useful is implied in the Chinese.	
Information Sheet (For all participants)	I hope that you decide to help me with this project.	I sincerely hope that you can take part in this education project.	Yes	This sentence has been changed from 我衷心的希望您能参加本教育项目 to 我衷心地希望您能做出参加本教育项目的决定 so that it reads better in the

				Chinese. The word “decide” 决定 has been added.
Information Sheet (For all participants)	When the project is finished a summary of the results will be available for you.	When the project is finished, you can ask for the research result from the researcher.	Yes	The initial sentence “当项目完成后, 您可以向研究者索取项目的结果汇报”。indicated that all of the results would be available for participants. This has been replaced with “当项目完成后, 该项目总结报告可供您参阅” where the word “summary” 总结 has been added.
Information Sheet (For all participants)	Just telephone me and let me know that you no longer want to take part in the project.	All you need to do is to call us and inform us that you are not willing to continue any more.	No / clarified the word used is “me” not “us”	
Information Sheet (For all participants)	My project supervisor	My tutor	No / clarified	
Information Sheet (For all participants)	If you have any complaints during this study you can contact the Human Research Ethics Committee Secretary of Curtin University at hrec@curtin.edu.au .	If you have any complaints to make during the participation of this project, please contact the secretary of Research and Development Office of Curtin University, the email address is hrec@curtin.edu.au	No / clarified. In the Chinese “Human Research Ethics Committee”	

			is present, not “Research and Development Office”	
Information Sheet (For all participants)	The way this project is done will be in accordance with the Australian National Health and Medical Research Council’s National Statement on Ethical Conduct in Human Research.	The implementation of this project will be in strict accordance with the regulations of “Human Research Ethics” made by Australian Government National Health and Research Council.	No /clarified	
Information Sheet (For all participants)	This study has been approved by the Curtin University Human Research Ethics Committee (Approval Number HR 158/2011). The Committee is comprised of members of the public, academics, lawyers, doctors, and pastoral carers. Its main role is to protect participants. If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee	This project has been approved by Research and Development Office of Curtin University (Approval No. HR 158/2011). The aim is to protect the subjects of this project and members of the Research and Development Office, which include general public, scholars, lawyers, doctors and people who work in Care and Counselling fields. If you have any further needs, please ask for related information from Research and Development office of Curtin University via the following address	Yes / In the Chinese “Human Research Ethics Committee” is present, not “Research and Development Office”. Remainder clarified.	The word “verification” 核实 has been added.
Information Sheet (For all participants)	Thank you for taking the time to read this information sheet.	Thank you for reading the above information.	No	
Information Sheet (For volunteer peer educators)	Information Sheet (For volunteer peer educators)	Project Description (for Volunteer Peer Educators)	No	

Information Sheet (For volunteer peer educators)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	Course Design, Development and Evaluation of Sexually Transmitted Diseases and AIDS Prevention Peer Course for Multi-ethnic University Students in Universities of Northwestern China	Yes / remainder clarified	The word “implementation” 实施 has been used instead of 开展 which means “develop”.
Information Sheet (For volunteer peer educators)	I am a medical scientist	I am also a medical researcher	No	
Information Sheet (For volunteer peer educators)	I am currently conducting a research project for my PhD degree in International Health.	At present I am working on my PhD research project.	Yes	“International health” 国际卫生 was added.
Information Sheet (For volunteer peer educators)	The aim of this project is to see how useful an educational programme is in helping students understand how people catch sexually transmitted diseases and HIV. Also what they can do to avoid getting these infections.	The purpose of this project is, to evaluate an educational project to help university students acknowledge the transmission of sexually transmitted disease and AIDS and their prevention. Meanwhile, how to avoid being infected by such diseases.	No/ useful is implied in the Chinese.	
Information Sheet (For volunteer peer educators)	At the end of the three training sessions I will check to see that you fully understand the material that you have seen. If I am satisfied that you have completed the requirements of the training programme and you feel confident then you and your classmate, who has also attended the training sessions, can then begin teaching your classmates.	After the training, I will evaluate if you completely understand the content of the training courses. If I am satisfied with your accomplishing training content (what you have learnt), and you are confident in yourselves as well. Then you may start training your classmates.	No	
Information Sheet	I hope that you decide to help me	I sincerely hope that you can take part in this	Yes	This sentence has

(For volunteer peer educators)	with this project.	education project.		been changed from 我衷心的希望您能参加本教育项目 to 我衷心地希望您能做出参加本教育项目的决定 so that it reads better in the Chinese. The word “decide” 决定 has been added.
Information Sheet (For volunteer peer educators)	When the project is finished a summary of the results will be available for you.	When the project is finished, you can ask for the research result from the researcher.	Yes	The initial sentence “当项目完成后, 您可以向研究者索取项目的结果汇报”。indicated that all of the results would be available for participants. This has been replaced with “当项目完成后, 该项目总结报告可供您参阅” where the word “summary” 总结 has been added.
Information Sheet (For volunteer peer educators)	Just telephone me and let me know that you no longer want to take part in the project.	All you need to do is to call us and inform us that you are not willing to continue any more.	No / clarified the word used is “me” not “us”	
Information Sheet (For volunteer	My project supervisor	My tutor	No / clarified	

peer educators)				
Information Sheet (For volunteer peer educators)	If you have any complaints during this study you can contact the Human Research Ethics Committee Secretary of Curtin University at hrec@curtin.edu.au .	If you have any complaints to make during the participation of this project, please contact the secretary of Research and Development Office of Curtin University, the email address is hrec@curtin.edu.au	No / clarified. In the Chinese “Human Research Ethics Committee” is present, not “Research and Development Office”	
Information Sheet (For volunteer peer educators)	The way this project is done will be in accordance with the Australian National Health and Medical Research Council’s National Statement on Ethical Conduct in Human Research.	The implementation this project will be in strict accordance with the regulations of “Human Research Ethics” made by Australian Government National Health and Research Council.	No /clarified	
Information Sheet (For volunteer peer educators)	This study has been approved by the Curtin University Human Research Ethics Committee (Approval Number HR 158/2011). The Committee is comprised of members of the public, academics, lawyers, doctors, and pastoral carers. Its main role is to protect participants. If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee	This project has been approved by Research and Development Office of Curtin University (Approval No. HR 158/2011). The aim is to protect the subjects of this project and members of the Research and Development Office, which include general public, scholars, lawyers, doctors and people who work in Care and Counselling fields. If you have any further needs, please ask for related information from Research and Development office of Curtin University via the following address	Yes / In the Chinese “Human Research Ethics Committee” is present, not “Research and Development Office”.	The word “verification” 核实 has been added.

			Remainder clarified.	
Information Sheet (For volunteer peer educators)	Thank you for taking the time to read this information sheet.	Thank you for reading the above information.	No	
Pre-intervention Questionnaire	Can a person get HIV if someone who has HIV coughs or sneezes on them?	When AIDS patients cough or sneeze on people, will this transmit HIV virus?	Yes	“AIDS patient” 艾滋病患者 has been changed to the commonly used term for “HIV carrier” 艾滋病病毒携带者.
Pre-intervention Questionnaire	Can a person get HIV if they share a glass of water with someone who has HIV?	Will it be infectious to share a cup with an AIDS patient?	Yes	“AIDS patient” 艾滋病患者 has been changed to the commonly used term for “HIV carrier” 艾滋病病毒携带者. Also “glass of water” 杯水 has been added and “drinking cup” 饮水杯 has been deleted.
Pre-intervention Questionnaire	Does pulling out the penis from a woman's vagina, before a man climaxes, prevent infection from getting HIV during sex?	Could it be possible for a woman to avoid infection through the extracorporeal ejaculation before the male orgasm.	No	
Pre-intervention Questionnaire	Can a person get HIV if they have anal sex (penis inside the anus) with a man?	Will man get infected with HIV by having anal sex?	Yes	“Man” 男性 has been replaced with “person” 人.
Pre-intervention Questionnaire	Will all pregnant women infected with HIV have babies born with AIDS?	Do all the children who are given birth by HIV infected gravidas have AIDS?	No	
Pre-intervention Questionnaire	Are people likely to get HIV by deep kissing, putting their tongue into their partner's mouth?	If one has AIDS, will his or her partner get infected with HIV by having French Kiss?	Yes	“AIDS ” 艾滋病 has

	partner's mouth, if their partner has H			been changed to the commonly used term for "HIV carrier" 艾滋病病毒携带者.
Pre-intervention Questionnaire	Does having sex with more than one partner increase a person's chance of being infected with HIV?	Will having more than one sex partner increase the rate of getting infected?	No	
Pre-intervention Questionnaire	Can a person get HIV by sitting in a Hot tub or swimming pool with a person who has HIV?	Will it be infectious to stay in the same bathtub or swimming pool with an AIDS patient?	Yes	"AIDS patient" 艾滋病患者 has been changed to the commonly used term for "HIV carrier" 艾滋病病毒携带者.
Pre-intervention Questionnaire	Can a person get HIV by having oral sex (putting a man's penis in their mouth)?	Will it be HIV infectious to have oral sex (put penis into woman's mouth)?	Yes	"Woman's mouth" 女性口 has been replaced with "sexual partner's mouth" 性伴侣口.
Pre-intervention Questionnaire	Does using Vaseline or baby oil with condom lower the chances of getting HIV?	Will it reduce the risk of getting infected with HIV by using condoms, vaseline or baby oil at the same time?	No	
Pre-intervention Questionnaire	If a man has gonorrhoea, may he have a discharge (pus) from his penis?	If a man has gonorrhoea, will there be secretion (pus) on the penis mouth (glans)?	No	
Pre-intervention Questionnaire	Do Genital Herpes sores on a man's penis come and go?	Will genital herpes show up recurrently on penis?	No	
Pre-intervention Questionnaire	Can a woman who has Genital Herpes pass the infection on to her baby during childbirth?	Will a foetus infected with genital herpes during the process of being given birth by a gravida who has genital herpes ?	No	

Pre-intervention Questionnaire	Can Hepatitis B be passed on from a mother to her baby when it is born?	Will hepatitis B transmit to foetuses during the gravidas' process of giving birth ?	No	
Pre-intervention Questionnaire	If a person is an injecting drug user, can they get HIV if they use a needle that someone who has HIV has already used?	If someone is an intravenous drug user, will he get infected with HIV by using the same hypodermic syringe which has been used by the AIDS patients?	Yes	“She” 她 has been added so it now reads “He/she” 他/她. “AIDS patient” 艾滋病患者 has been changed to the commonly used term for “HIV carrier” 艾滋病病毒携带者.
Pre-intervention Questionnaire	It is only necessary to list up to 3 sources for each of these questions.	Please note that every question has three answers unless it's necessary for you to list more than three items.	Yes	This sentence has been changed from 对每个问题的回答罗列可多于 3 个。 Which indicated that more than 3 sources could be given for each answer. This has been replaced with 您只需对每个问题罗列 3 个途径 which more correctly conveys the English meaning.
Pre-intervention Questionnaire	Which of the following did you find as the most important source of your knowledge about puberty?	Among all the factors below which do you think is the most important way to learn about adolescence?	Yes	“Adolescence” 青春期 has been replaced by 青春发育期 which more clearly conveys

				“puberty”. This translator suggested using 发育期 but after discussion with other translators it was felt that this term can still be confused with adolescence rather than the changes that occur during puberty.
Pre-intervention Questionnaire	Which of the following did you find as the most important source of your knowledge about sexuality?	Among the ways below, which do you think is the most important way to learn about sex?	No	
Post-intervention Questionnaire	What did you think was the best part of this education programme?	What in your opinion is the best part of this project?	No	
Post-intervention Questionnaire	Do you think that it is important that the peer educators involved in the programme are from your ethnic group?	Do you think that it is important for teachers participating in this project and yourself to be from the same ethnic group?	Yes	“Teachers” 教师 has been replaced by “peer educators” 同伴教育者
Post-intervention Questionnaire	Do you think that a programme like this would have been beneficial to you if it was available when you were a high school student?	Do you think that you would have benefited more if you could have had access to similar education when you were in senior high school?	Yes	“More” 更多的 has been removed and the original sentence “您是否认为如果类似的教育在您高中时就能获得，可能会对您带来更多的益处？” has been rewritten as “您是否认为如果在您高中时就能获得类似的教育，可能会给您带来益处？” so that it

				is clearer in Chinese.
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N.B.

1. In a subsequent interview with this translator, the discrepancies in translation were discussed. In order to eliminate any potential bias, the translator was asked to read each sentence in Chinese and then asked to translate these into spoken English. This helped to overcome some of the deficiencies seen in her written English translation.
2. Clarified in the table above means that the back translation, although showing apparent discrepancy with the original English translation, was clarified and conveyed the same meaning.

Appendix H3 - Analysis of Discrepancies in Mongolian Back Translation No. 1

Document	Correct Wording	Back Translation	Alters intended meaning	Changes
Consent form (Volunteer Peer Educators)	Volunteer peer educator	Letter of application to join(offer to those who joined already)	Yes	Volunteer peer educator missing.
Consent form (Volunteer Peer Educators)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	Prepare lesson and manner of preventing STD and AIDS at nationalities universities of west China.	Yes / remainder clarified	Development, evaluation, multi-ethnic missing.
Consent form (Volunteer Peer Educators)	By signing this form I agree to participate in this project as a volunteer peer educator.	I sign my name before joining this group (activity)	Yes	Volunteer peer educator missing
Consent form (Volunteer Peer Educators)	I have been given the opportunity to ask questions.	Gave me the right to ask someone.	Yes	Opportunity missing. Delete “right” and change sentence to indicate the participant is the one asking the questions.
Consent form (Volunteer Peer Educators)	I understand that any information that might be used to identify me will not be used in any published material.	No ID card and numbers or names are used in the documents.	No	

Consent form (all participants)	Consent Form (For all participants)	Letter of application to join (offer to anyone who wants to apply to join)	No	
Consent form (all participants)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	Prepare lesson and manner of preventing STD and AIDS at nationalities universities of west China.	Yes / remainder clarified	Development, evaluation, multi-ethnic missing.
Consent form (all participants)	By signing this form I agree to participate in this project.	I sign my name before joining this group (activity).	No	
Consent form (all participants)	I have been given the opportunity to ask questions.	Gave me the right to ask someone.	Yes	Opportunity missing. Delete “right” and change sentence to indicate the participant is the one asking the questions.
Consent form (all participants)	I understand that any information that might be used to identify me will not be used in any published material.	No ID card and numbers or names are used in the documents.	No	
Information Sheet (For all participants)	Information Sheet (For all participants)	Materials introduced (offer to anyone who wants to apply to take part)	Yes	Change to “All participants”
Information Sheet (For all participants)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest	Prepare lesson and manner of preventing STD and AIDS at nationalities universities of west China.	Yes / remainder clarified	Development, evaluation, multi-ethnic missing.

	China.			
Information Sheet (For all participants)	I am a medical scientist and PhD candidate at the Centre for International Health at Curtin University in Western Australia.	I am a medical science research worker and doctoral candidate in the national public hygienic center of science university of west Australia.	Yes/ remainder clarified.	“Medical scientist” and “Centre for International Health” are missing.
Information Sheet (For all participants)	I am currently conducting a research project for my PhD degree in International Health.	Now I am writing my doctoral thesis.	Yes/ remainder clarified.	“International Health” is missing.
Information Sheet (For all participants)	This aim of this project is to see how useful an educational programme is in helping students understand how people catch sexually transmitted diseases and HIV. Also what they can do to avoid getting these infections.	This research’s assignment is: tell to the college students how to prevent STD and AIDS and teach them how to avoid these diseases.	Yes/ remainder clarified.	“Useful” is missing.
Information Sheet (For all participants)	You will be required to complete a questionnaire about your knowledge of sexually transmitted diseases and HIV. You only have to reply: Yes, No or Don’t Know to most of the questions.	You should complete an investigation questionnaire about STD and AIDS. You just mark yes, no and don’t know is okay.	Yes	“Knowledge” and “most of the questions” are missing.
Information Sheet (For all participants)	These will be taught by two of your classmates who have been trained by me.	I will have this lesson and two students take into their hands.	Yes	This needs to be rewritten in Mongolian to reflect the English meaning.
Information Sheet (For all participants)	You will be seeing some Power Point presentations which show the signs and symptoms of some of the commonest sexually transmitted diseases. You will find out how to avoid catching these diseases. You	You’ll watch many of the movies about how STDs can pass on by sex. From this you’ll know how do you prevent these diseases, also watch movies about AIDS and divide into group and have a discussion.	Yes	“You will be seeing some Power Point presentations which show the signs and symptoms of some of the commonest

	will also watch a short movie about HIV/AIDS and have a chance to participate in discussions about these things.			sexually transmitted diseases” is missing. Change to “movie about HIV/AIDS”.
Information Sheet (For all participants)	After the last session, you will be required to complete another questionnaire.	At last, you should complete another investigation questionnaire.	Yes	Add the word “complete”.
Information Sheet (For all participants)	I hope that you decide to help me with this project.	I really need your help in my education work	Yes	
Information Sheet (For all participants)	Your name or identity will not be shown on the questionnaires, and will not be revealed in the analysis or results of the study.	Your name and ID card numbers will not be shown in the investigation questionnaire.	No	
Information Sheet (For all participants)	When the project is finished a summary of the results will be available for you.	<i>No back translation given for this.</i>	Yes	
Information Sheet (For all participants)	Your participation in this project is entirely voluntary.	<i>No back translation given for this.</i>	Yes	
Information Sheet (For all participants)	All data relating to the study will be kept for 7 years. I will be the only person who has access to the data. After 7 years the data will be destroyed.	You should keep these materials for seven years about the project, you just keep your own materials by yourself, after seven years burn all of them.	No / Clarified	
Information Sheet (For all participants)	My project supervisor is Dr B-K Tan who can be contacted at BK.Tan@curtin.edu.au	And you can get in touch with my guidance teacher Doctor BK Tan by E-mail: BK.Tan@curtin.edu.au .	Yes	Change word for “teacher” to “project supervisor”.
Information Sheet (For all participants)	If you have any complaints during this study you can contact the Human Research Ethics Committee	During the investigation questionnaire time, if you have any suggestions, please get in touch with the secretary by e-mail. E-mail:	Yes /remainder clarified	“Complaints” and “Human Research Ethics Committee”

	Secretary of Curtin University at hrec@curtin.edu.au .	hrec@curtin.edu.au .		are missing.
Information Sheet (For all participants)	The way this project is done will be in accordance with the Australian National Health and Medical Research Council's National Statement on Ethical Conduct in Human Research.	This activity has been approved by the national public hygenic center of science university of west Australia, in accordance with <people's biology and custom's manner>.	Yes	This needs to be rewritten in Mongolian to reflect the English meaning.
Information Sheet (For all participants)	This study has been approved by the Curtin University Human Research Ethics Committee (Approval Number HR 158/2011).	Talking group in science university of west Australia approved (approved numbers:HR 158/2011).	Yes	Change to "Curtin University Human Research Ethics Committee".
Information Sheet (For all participants)	The Committee is comprised of members of the public, academics, lawyers, doctors, and pastoral carers. Its main role is to protect participants.	Our main purpose is protect these volunteers, so our talking group is made up of common people, students, doctors....	Yes	Change to "The Committee is comprised of members of the public, academics, lawyers, doctors, and pastoral carers".
Information Sheet (For all participants)	If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee	If you need you can find some materials at this address:	Yes	Change to "If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee".
Information Sheet (For all participants)	This study has also been approved by Qinghai Nationalities University	Qinghai Nationalities University approved this investigation questionnaire	No	
Information Sheet	Information Sheet (For volunteer	Materials introduced (offer to anyone who	Yes	Change to "For

(For volunteer peer educators)	peer educators)	wants to apply to take part)		volunteer peer educators”
Information Sheet (For volunteer peer educators)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	Prepare lesson and manner of preventing STD and AIDS at nationalities universities of west China.	Yes / remainder clarified	Development, evaluation, multi-ethnic missing.
Information Sheet (For volunteer peer educators)	I am a medical scientist and PhD candidate at the Centre for International Health at Curtin University in Western Australia.	I am medical science research worker and doctoral candidate in the national public hygienic center of science university of west Australia.	Yes/ remainder clarified.	“Medical scientist” and “Centre for International Health” are missing.
Information Sheet (For volunteer peer educators)	I am currently conducting a research project for my PhD degree in International Health.	Now I am writing my doctoral thesis.	Yes/ remainder clarified.	“International Health” is missing.
Information Sheet (For volunteer peer educators)	This aim of this project is to see how useful an educational programme is in helping students understand how people catch sexually transmitted diseases and HIV. Also what they can do to avoid getting these infections.	This research’s assignment is: to tell the college students how to prevent STDs and AIDS and teach them how to avoid these diseases.	Yes/ remainder clarified.	“Useful” is missing.
Information Sheet (For volunteer peer educators)	I will personally train you with the help of a translator who is fluent in your dialect.	The lessons will be translated into your best known language.	Yes	Change to “ I will personally train you with the help of a translator who is fluent in your dialect”.
Information Sheet (For volunteer peer educators)	If you are a male, you will be in a group of 8 males from your department.	If you are a boy, you’ll be in a group with 8 boys from your department, and have lessons together.	Yes	Change word used for “department”.

Information Sheet (For volunteer peer educators)	If you are a female, you will be in a group of 8 females from your department.	If you are a girl, you'll be in a group of 8 girls from your department, and have lessons together.	Yes	Change word used for "department".
Information Sheet (For volunteer peer educators)	You will be seeing some Power Point presentations which show the signs and symptoms of some of the commonest sexually transmitted diseases. You will find out how to avoid catching these diseases. You will also watch a short movie about HIV/AIDS and have a chance to participate in discussions about these things.	You'll watch many of the movies about how STDs can pass on by sex. From this you'll know how do you prevent thses diseases, also watch movies about AIDS and divide into group and have a discussion.	Yes	"You will be seeing some Power Point presentations which show the signs and symptoms of some of the commonest sexually transmitted diseases" is missing. Change to "movie about HIV/AIDS".
Information Sheet (For volunteer peer educators)	At the end of the three training sessions I will check to see that you fully understand the material that you have seen. If I am satisfied that you have completed the requirements of the training programme and you feel confident then you and your classmate, who has also attended the training sessions, can then begin teaching your classmates.	At last, you should complete another investigation questionnaire. After class, I'll check up you about the lesson. If I am sure you understand the material and you are also sure yourself, you can teach your friends about it.	Yes / remainder clarified	Add the word "complete".
Information Sheet (For volunteer peer educators)	I hope that you decide to help me with this project.	I'm really need your help in my education work	Yes	
Information Sheet (For volunteer peer educators)	Your name or identity will not be shown on the questionnaires, and will not be revealed in the analysis	Your name and ID card numbers will not be shown on the investigation questionnaire.	No	

	or results of the study.			
Information Sheet (For volunteer peer educators)	When the project is finished a summary of the results will be available for you.	<i>No back translation given for this.</i>	Yes	
Information Sheet (For volunteer peer educators)	Your participation in this project is entirely voluntary.	<i>No back translation given for this.</i>	Yes	
Information Sheet (For volunteer peer educators)	All data relating to the study will be kept for 7 years. I will be the only person who has access to the data. After 7 years the data will be destroyed.	You should keep these materials for seven years about the project, you just keep your own materials by yourself, after seven years burn all of them.	No / Clarified	
Information Sheet (For volunteer peer educators)	My project supervisor is Dr B-K Tan who can be contacted at BK.Tan@curtin.edu.au	And you can get in touch with my guidance teacher Doctor BK Tan by E-mail: BK.Tan@curtin.edu.au .	Yes	Change word for “teacher” to “project supervisor”.
Information Sheet (For volunteer peer educators)	If you have any complaints during this study you can contact the Human Research Ethics Committee Secretary of Curtin University at hrec@curtin.edu.au .	During the investigation questionnaire time, if you have any suggestions, please get in touch with the secretary by e-mail. E-mail: hrec@curtin.edu.au .	Yes /remainder clarified	“Complaints” and “Human Research Ethics Committee” are missing.
Information Sheet (For volunteer peer educators)	The way this project is done will be in accordance with the Australian National Health and Medical Research Council’s National Statement on Ethical Conduct in Human Research.	This activity has been approved by the national public hygenic center of science university of west Australia, in accordance with <people’s biology and custom’s manner>.	Yes	This needs to be rewritten in Mongolian to reflect the English meaning.
Information Sheet (For volunteer peer educators)	This study has been approved by the Curtin University Human Research Ethics Committee (Approval Number HR 158/2011).	Talking group in science university of west Australia approved (approved numbers:HR 158/2011).	Yes	Change to “Curtin University Human Research Ethics Committee”.

Information Sheet (For volunteer peer educators)	The Committee is comprised of members of the public, academics, lawyers, doctors, and pastoral carers. Its main role is to protect participants.	Our main purpose is to protect these volunteers, so our talking group is made up of common people, students, doctors....	Yes	Change to “The Committee is comprised of members of the public, academics, lawyers, doctors, and pastoral carers”.
Information Sheet (For volunteer peer educators)	If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee	If you need you can find some materials at this address:	Yes	Change to “If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee”.
Information Sheet (For volunteer peer educators)	This study has also been approved by Qinghai Nationalities University	Qinghai Nationalities University approved this investigation questionnaire	No	
Pre-intervention Questionnaire	Please tick the box corresponding to the appropriate response.	You just need to mark your question answers.	No	
Pre-intervention Questionnaire	Thank you for your cooperation.	Thank you for your joining.	No	
Pre-intervention Questionnaire	Can a person get HIV if someone who has HIV coughs or sneezes on them?	Can you be infected with AIDS if the AIDS patient sneezes on you?	Yes	“Cough” is missing.
Pre-intervention Questionnaire	Can a person get HIV if they share a glass of water with someone who has HIV?	Can you get the AIDS when you share a cup with an AIDS patient?	Yes	“Water” is missing.
Pre-intervention Questionnaire	Can a person get HIV if they have anal sex (penis inside the anus) with a man?	Does having anal sex with a man pass on AIDS?	Yes	“Person” is missing.
Pre-intervention Questionnaire	Do all people who have been infected with HIV quickly show serious signs of being infected?	Can you find (feel) the symptoms soon after you get AIDS?	Yes	“Serious” is missing.

Pre-intervention Questionnaire	Are people likely to get HIV by deep kissing, putting their tongue into their partner's mouth, if their partner has HIV?	When lovers are kissing, if one of them has got AIDS, can the other one be infected with AIDS too?	Yes	"Deep kissing is missing (tongue in partner's mouth)".
Pre-intervention Questionnaire	Can a woman get HIV if she has sex during her period?	If the women make love daily, dose she get AIDS?	Yes	No mention of "period". This question needs to be rewritten in Mongolian to reflect the English meaning.
Pre-intervention Questionnaire	Can a person get HIV if he or she is taking antibiotics?	If a woman takes vaccine medicine, can she be infected with AIDS?	Yes	"Antibiotics" is missing as is the Chinese word for this in parentheses.
Pre-intervention Questionnaire	Does having sex with more than one partner increase a person's chance of being infected with HIV?	If somebody has many sexual partners, will they be infected with AIDS sooner?	Yes / remainder clarified.	"Increase a person's chance" is missing.
Pre-intervention Questionnaire	Can a person get HIV by sitting in a hot tub or swimming pool with a person who has HIV?	Can you get AIDS,if you take a bath with an AIDS patient?	Yes	"Hot tub" and "swimming pool" are missing.
Pre-intervention Questionnaire	Can a person get HIV by having oral sex (putting a man's penis in their mouth)?	Can you get AIDS by having oral sex?	Yes	"Person" is missing.
Pre-intervention Questionnaire	Is it easier to get HIV if a person has another sexually transmissible disease?	If somebody has an STD, will they be more easily infected with AIDS?	Yes	"Another" is missing.
Pre-intervention Questionnaire	If a man has gonorrhoea, may he have a discharge (pus) from his penis?	If a man has gonorrhoea, is there something that comes out of his urethra?	Yes	"Pus" is missing.
Pre-intervention Questionnaire	Can a woman look at her body and tell if she has gonorrhoea?	Can a woman know if she is infected with gonorrhoea or not by watching herself?	No / clarified	
Pre-intervention Questionnaire	Can syphilis infect a baby before it is born?	Dose she infect syphilis before the baby born?	Yes	"Can the baby be infected" is missing.

Pre-intervention Questionnaire	Can a person develop sores on their genitals (penis or vagina) soon after they become infected with syphilis?	If the man is infected with syphilis, are there herpes on his male genitals?	Yes	Word for “sore” is missing and herpes is a mistranslation.
Pre-intervention Questionnaire	Can Human Papilloma Virus (HPV) cause cancer in women?	Can the papilloma virus infect AIDS to the baby?	Yes	“Cancer” is missing. This has been mistranslated as HIV.
Pre-intervention Questionnaire	Can a man get genital warts only by having vaginal sex?	Does the verruca acuminata emerge on male genitals?	Yes	This needs to be rewritten in Mongolian to reflect the English meaning.
Pre-intervention Questionnaire	Do Genital Herpes sores on a man’s penis come and go?	Does the genital herpes relapse?	Yes	This needs to be rewritten in Mongolian to reflect the English meaning.
Pre-intervention Questionnaire	Can a woman who has Genital Herpes pass the infection on to her baby during childbirth?	If the pregnant woman is infected with herpes, will she pass it on to her baby?	Yes	“Pass the infection during childbirth is missing”.
Pre-intervention Questionnaire	Must a person who has Genital Herpes have open sores to give the infection to his or her sexual partner?	If somebody is infected with herpes, will he pass it on to his sexual partners?	Yes	Use “person”. “Open sore” is missing.
Pre-intervention Questionnaire	Does chlamydia cause obvious symptoms in most women?	Are most women feeling uncomfortable because of chlamydia?	Yes	“Obvious symptoms” is missing.
Pre-intervention Questionnaire	Can chlamydia cause pain when a person urinates?	If somebody has chlamydia, dose his stomachache when he passes urine?	Yes	Delete “stomach”.
Pre-intervention Questionnaire	Can a person get Hepatitis B if they have vaginal sex?	Can hepatitis B be passed on to each other by sex ?	No / clarified	
Pre-intervention Questionnaire	Can Hepatitis B be passed on from a mother to her baby when it is born?	Dose the pregnant woman pass on hepatitis B to her baby?	Yes	“Passed on from mother to baby when it is born is missing”.
Pre-intervention Questionnaire	If a person is an injecting drug user, can they get HIV if they use a needle	If somebody shares a needle with a drug addict who is an AIDS patients, will he get		

	that someone who has HIV has already used?	AIDS?		
Pre-intervention Questionnaire	The following questions ask you about where you obtained information from regarding: puberty, sexuality, sexually transmissible infections and HIV/AIDS. If you obtained information from more than one source please rank the importance of these sources numerically. Where 1 means the most important, 2 means the next in importance and 3 was less important than the other two. It is only necessary to list up to 3 sources for each of these questions.	These questions are your general knowledge about STD and AIDS. Where did you learn this knowledge first? Please put in order like example.	Yes	The following is missing – “If you obtained information from more than one source please rank the importance of these sources numerically. Where 1 means the most important, 2 means the next in importance and 3 was less important than the other two. It is only necessary to list up to 3 sources for each of these questions”.
Pre-intervention Questionnaire	Which of the following did you find as the most important source of your knowledge about puberty?	which are your important places to learn the knowledge when you are young, please put in order.	No / clarified There is no word for puberty in Mongolian therefore this needs to be explained to participants when the questionnaire	

			is administered.	
Pre-intervention Questionnaire	Which of the following did you find as the most important source of your knowledge about sexuality?	Which are your important places to get knowledges about sex?	No / clarified - Word used is sexuality.	
Post-intervention Questionnaire	What did you think about this peer education programme?	What do you think about homeosexuality?	Yes	This needs to be rewritten in Mongolian to reflect the English meaning.
Post-intervention Questionnaire	What did you think was the best part of this education programme?	Which parts do you think are important?	Yes	“Best” is missing.
Post-intervention Questionnaire	What things do you think might be improved on that will benefit future education programmes?	Which side is short of these knowledge ?	Yes	This needs to be rewritten in Mongolian to reflect the English meaning.
Post-intervention Questionnaire	Do you think that it is important that the peer educators involved in the programme are from your ethnic group?	If you have this lesson, is it important if the teacher is your nationality or not?	Yes	Change word “teacher” to “peer educator”.
Post-intervention Questionnaire	Do you think that a programme like this would have been beneficial to you if it was available when you were a high school student?	Do you think, if you learn this knowledge at middle school it is better?	Yes	This needs to be rewritten in Mongolian to reflect the English meaning.
Post-intervention Questionnaire	Do you have any other comments that you to make?	Do you hav any other ideas or new things to add ?	No	

N.B.

1. In a subsequent telephone interview with this translator, the discrepancies in translation were discussed. In order to eliminate any potential bias, the translator was asked to read each sentence in Mongolian and then asked to translate these into spoken English. This helped to overcome some of the deficiencies seen in his written English translation.
2. Clarified in the table above means that the back translation, although showing apparent discrepancy with the original English translation, was clarified and conveyed the same meaning.

Appendix H4 – Analysis of Discrepancies in Mongolian Back Translation No. 2

Document	Correct Wording	Back Translation	Alters intended meaning	Changes
Consent form (Volunteer Peer Educators)	Consent form (Volunteer Peer Educators)	<u>Agreement Form</u> (For those who are interested to participate)	Yes	Volunteer peer educators missing.
Consent form (Volunteer Peer Educators)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	The method and prevention of Sexually Transmitted Infections (STI) and HIV program among University students in Northwest Minorities University in China.	Yes	Development, evaluation, multi-ethnic missing. Northwest Minorities university to be deleted.
Consent form (Volunteer Peer Educators)	By signing this form I agree to participate in this project as a volunteer peer educator.	By signing this form I agree to participate in this program.	Yes	Volunteer peer educator missing
Consent form (Volunteer Peer Educators)	I have been given the opportunity to ask questions.	I have the right to ask questions about the lessons.	Yes	Opportunity missing. Delete “right” and change sentence to indicate the participant is the one asking the questions.
Consent form (all participants)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among	The method and prevention of Sexually Transmitted Infections (STI) and HIV program among University students in Northwest Minorities University in China.	Yes	Development, evaluation, multi-ethnic missing. Northwest Minorities University to be

	University students in Northwest China.			deleted.
Consent form (all participants)	I have been given the opportunity to ask questions.	I have the right to ask questions about the lessons.	Yes	Opportunity missing. Delete right and change sentence to indicate the participant is the one asking the questions.
Information Sheet (For all participants)	Information Sheet (For all participants)	Introduction of the research program (For those who are interested to participate)	Yes	Change to “All participants”
Information Sheet (For all participants)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	His method of the pre-education program is prevention of sexually transmitted infections (STI) and HIV training among Northwest Nationalities University in China.	Yes	“Development, evaluation” and “multi-ethnic” are missing. Northwest Nationalities University to be deleted.
Information Sheet (For all participants)	I am a medical scientist and PhD candidate at the Centre for International Health at Curtin University in Western Australia.	I am a public health educator doctoral student at Health Science Curtin University in Western Australia.	Yes/ remainder clarified.	“Medical scientist” and “Centre for International Health” are missing.
Information Sheet (For all participants)	I am currently conducting a research project for my PhD degree in International Health.	Right now I am writing my doctorate degree research program.	Yes/ remainder clarified.	“International Health” is missing.
Information Sheet (For all participants)	This aim of this project is to see how useful an educational programme is in helping students understand how people catch sexually transmitted diseases and HIV. Also what they	The purposes of this research are: How to prevent sexually transmitted infections (STI) and HIV among the university’s students. Also help the students to understand how others are infected with	Yes/ remainder clarified.	“Useful” is missing.

	can do to avoid getting these infections.	STI & HIV.		
Information Sheet (For all participants)	You will be required to complete a questionnaire about your knowledge of sexually transmitted diseases and HIV. You only have to reply: Yes, No or Don't Know to most of the questions.	You have to fill in the evaluation form about how the STI & HIV effects. And just answer the questions as Yes, No, Don't know.	Yes	"Knowledge" and "most of the questions" are missing.
Information Sheet (For all participants)	These will be taught by two of your classmates who have been trained by me.	I will teach the session, so we will learn it together.	Yes	This needs to be rewritten in Mongolian to reflect the English meaning.
Information Sheet (For all participants)	You will be seeing some Power Point presentations which show the signs and symptoms of some of the commonest sexually transmitted diseases. You will find out how to avoid catching these diseases. You will also watch a short movie about HIV/AIDS and have a chance to participate in discussions about these things.	A lot of times you will be hearing how people are infected with STI and HIV through sexual contacts. Through this program you will learn how to prevent yourself from being infected with STI and HIV. Also you will watch the movie about the STI & HIV and you will share in the groups about what you have understood.	Yes	"You will be seeing some Power Point presentations which show the signs and symptoms of some of the commonest sexually transmitted diseases" is missing. Change to "movie about HIV/AIDS".
Information Sheet (For all participants)	After the last session, you will be required to complete another questionnaire.	At the end you will fill out the evaluation form about the STI & HIV.	Yes	Add the word "complete".
Information Sheet (For all participants)	I hope that you decide to help me with this project.	I will be so happy if you understand the point of the sessions, how these diseases infect others.	Yes	This needs to be rewritten in Mongolian to reflect the English meaning.
Information Sheet (For all participants)	When the project is finished a summary of the results will be available for you.	If you want to know more about the research you can contact me.	Yes	This needs to be rewritten in Mongolian to reflect

				the English meaning.
Information Sheet (For all participants)	Your participation in this project is entirely voluntary.	<i>No back translation given for this.</i>	Yes	This sentence is missing in the Mongolian version.
Information Sheet (For all participants)	My project supervisor is Dr B-K Tan who can be contacted at BK.Tan@curtin.edu.au	Also you can contact my teacher Dr BK Tan, her email address is: Bk.Tan@curtin.edu.au	Yes	Change word for “teacher” to “project supervisor”. “His” is not in the Mongolian.
Information Sheet (For all participants)	If you have any complaints during this study you can contact the Human Research Ethics Committee Secretary of Curtin University at hrec@curtin.edu.au .	If you have any other suggestions or comments on my research program you can contact our University secretary at: hrec@curtin.edu.au	Yes	“Complaints” and “Human Research Ethics Committee” are missing.
Information Sheet (For all participants)	The way this project is done will be in accordance with the Australian National Health and Medical Research Council’s National Statement on Ethical Conduct in Human Research.	Also you can write mail to: Public Health Education, Health Science Curtin University in Western Australia.	Yes	This needs to be rewritten in Mongolian to reflect the English meaning.
Information Sheet (For all participants)	This study has been approved by the Curtin University Human Research Ethics Committee (Approval Number HR 158/2011).	Approved by, Health Science Curtin University in Western Australia. The serial number of research is: HR 158/2011	Yes	Change to “Curtin University Human Research Ethics Committee”.
Information Sheet (For all participants)	The Committee is comprised of members of the public, academics, lawyers, doctors, and pastoral carers. Its main role is to protect participants.	The main purpose is to protect the participant(s) in this research program. The participant(s) are: citizen, student, doctor.	Yes	Change to “The Committee is comprised of members of the public, academics, lawyers, doctors, and pastoral carers”.
Information Sheet (For all participants)	If needed, verification of approval can be obtained either by writing to	If you need more information, you can write mail to the following address.	Yes	Change to “If needed, verification

participants)	the Curtin University Human Research Ethics Committee			of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee”.
Information Sheet (For all participants)	This study has also been approved by Qinghai Nationalities University	This research program is approved by Northwest Nationalities University in Qinghai, China.	No/clarified	
Information Sheet (For all participants)	Thank you for taking the time to read this information sheet.	Thank you for your time.	No/clarified	
Information Sheet (For volunteer peer educators)	Information Sheet (For volunteer peer educators)	Introduction of the research program (For all participants)	Yes	Change to “For volunteer peer educators”
Information Sheet (For volunteer peer educators)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	His method of the pre-education program is prevention of sexually transmitted infections (STI) and HIV training among Northwest Nationalities University in China.	Yes	“Development, evaluation” and “multi-ethnic” are missing. Northwest Nationalities University to be deleted.
Information Sheet (For volunteer peer educators)	I am a medical scientist and PhD candidate at the Centre for International Health at Curtin University in Western Australia.	I am a public health educator doctoral student at Health Science Curtin University in Western Australia.	Yes/ remainder clarified.	“Medical scientist” and “Centre for International Health” are missing.
Information Sheet (For volunteer peer educators)	I am a medical scientist and PhD candidate at the Centre for International Health at Curtin University in Western Australia.	I am a public health educator doctoral student at Health Science Curtin University in Western Australia.	Yes/ remainder clarified.	“International Health” is missing.
Information Sheet (For volunteer	This aim of this project is to see how useful an educational programme is	The purposes of this research are: How to prevent sexually transmitted	Yes/ remainder	“Useful” is missing.

peer educators)	in helping students understand how people catch sexually transmitted diseases and HIV. Also what they can do to avoid getting these infections.	infections (STI) and HIV among the university's students. Also help the students to understand how others are infected with STI & HIV.	clarified.	
Information Sheet (For volunteer peer educators)	I will personally train you with the help of a translator who is fluent in your dialect.	The person will teach you in your own dialect.	Yes	Change to " I will personally train you with the help of a translator who is fluent in your dialect".
Information Sheet (For volunteer peer educators)	If you are a male, you will be in a group of 8 males from your department.	If you are a man, you will be in a group with 8 other male students.	Yes	Change word used for "department".
Information Sheet (For volunteer peer educators)	If you are a female, you will be in a group of 8 females from your department.	If you are a woman, you will be in a group with 8 other female students.	Yes	Change word used for "department".
Information Sheet (For volunteer peer educators)	You will be seeing some Power Point presentations which show the signs and symptoms of some of the commonest sexually transmitted diseases. You will find out how to avoid catching these diseases. You will also watch a short movie about HIV/AIDS and have a chance to participate in discussions about these things.	A lot of times you will be hearing how people are infected with STI and HIV through sexual contacts. Through this program you will learn how to prevent yourself from being infected with STI and HIV. Also you will watch the movie about STI & HIV and you will share in the groups about what you have understood.	Yes	"You will be seeing some Power Point presentations which show the signs and symptoms of some of the commonest sexually transmitted diseases" is missing. Change to "movie about HIV/AIDS".
Information Sheet (For volunteer peer educators)	At the end of the three training sessions I will check to see that you fully understand the material that you have seen. If I am satisfied that you have completed the	At the end you will fill out the evaluation form about STI & HIV. I will be so happy if you understand the point of the sessions, how these diseases infect others. So you can teach or tell your friends about it.	Yes / remainder clarified	Add the word "complete".

	requirements of the training programme and you feel confident then you and your classmate, who has also attended the training sessions, can then begin teaching your classmates.			
Information Sheet (For volunteer peer educators)	I hope that you decide to help me with this project.	I will be so happy if you understand the point of the sessions, how these diseases infect others.	Yes	This needs to be rewritten in Mongolian to reflect the English meaning.
Information Sheet (For all participants)	When the project is finished a summary of the results will be available for you.	If you want to know more about the research you can contact me.	Yes	This needs to be rewritten in Mongolian to reflect the English meaning.
Information Sheet (For all participants)	Your participation in this project is entirely voluntary.	<i>No back translation given for this.</i>	Yes	This sentence is missing in the Mongolian version.
Information Sheet (For volunteer peer educators)	My project supervisor is Dr B-K Tan who can be contacted at BK.Tan@curtin.edu.au	Also you can contact my teacher Dr BK Tan, her email address is: Bk.Tan@curtin.edu.au	Yes	Change word for “teacher” to “project supervisor”. “His” is not in the Mongolian.
Information Sheet (For volunteer peer educators)	If you have any complaints during this study you can contact the Human Research Ethics Committee Secretary of Curtin University at hrec@curtin.edu.au .	If you have any other suggestions or comments on my research program you can contact our University secretary at: hrec@curtin.edu.au	Yes	“Complaints” and “Human Research Ethics Committee” are missing.
Information Sheet (For volunteer peer educators)	The way this project is done will be in accordance with the Australian National Health and Medical Research Council’s National Statement on Ethical Conduct in Human Research.	Also you can write mail to: Public Health Education, Health Science Curtin University in Western Australia.	Yes	This needs to be rewritten in Mongolian to reflect the English meaning.

Information Sheet (For volunteer peer educators)	This study has been approved by the Curtin University Human Research Ethics Committee (Approval Number HR 158/2011).	Approved by, Health Science Curtin University in Western Australia. The serial number of research is: HR 158/2011	Yes	Change to “Curtin University Human Research Ethics Committee”.
Information Sheet (For all participants)	The Committee is comprised of members of the public, academics, lawyers, doctors, and pastoral carers. Its main role is to protect participants.	The main purpose is to protect the participant(s) in this research program. The participant(s) are: citizen, student, doctor.	Yes	Change to “The Committee is comprised of members of the public, academics, lawyers, doctors, and pastoral carers”.
Information Sheet (For all participants)	If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee	If you need more information, you can write mail to following address.	Yes	Change to “If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee”.
Information Sheet (For volunteer peer educators)	This study has also been approved by Qinghai Nationalities University	This research program is approved by Northwest Nationalities University in Qinghai, China.	No/clarified	
Information Sheet (For all participants)	Thank you for taking the time to read this information sheet.	Thank you for your time.	No/clarified	
Pre-intervention Questionnaire	Dwelling :Farming area <input type="checkbox"/> Nomad area <input type="checkbox"/> Township <input type="checkbox"/> City <input type="checkbox"/>	Home address: Province <input type="checkbox"/> City <input type="checkbox"/> District <input type="checkbox"/>	Yes	This needs to be rewritten in Mongolian to reflect the English meaning.
Pre-intervention Questionnaire	Can a person get HIV if someone who has HIV coughs or sneezes on them?	If a person who has HIV sneezes on another person, does he infect them?	Yes	“Cough” is missing.

Pre-intervention Questionnaire	Can a person get HIV if they share a glass of water with someone who has HIV?	If a person shares the same cup with a person who has HIV, does he infect them?	Yes	“Water” is missing.
Pre-intervention Questionnaire	Can a person get HIV if they have anal sex (penis inside the anus) with a man?	When men have anal sex does it protect them from HIV?	Yes	“Person” is missing.
Pre-intervention Questionnaire	Can showering or washing one’s genitals after sex prevent one from getting HIV?	After sex if a man washes his penis, does it protect him from HIV?	No / clarified	
Pre-intervention Questionnaire	Do all people who have been infected with HIV quickly show serious signs of being infected?	When a person gets HIV, does he get any symptoms right away?	Yes	“Serious” is missing.
	Is there a vaccine that can prevent people from getting HIV?	Does used needle protect the person from HIV?, does a used needle infect a person with HIV?	Yes	Word for “vaccine” is missing and the question needs to be rewritten in Mongolian to reflect the English meaning.
Pre-intervention Questionnaire	Are people likely to get HIV by deep kissing, putting their tongue into their partner’s mouth, if their partner has HIV?	If a person who has HIV kisses another person, will the person contract HIV?	Yes	“Deep kissing is missing (tongue in partner’s mouth)”.
Pre-intervention Questionnaire	Can a woman get HIV if she has sex during her period?	When a woman has sex often, does it cause her to have HIV?	Yes	No mention of “period”. This question needs to be rewritten in Mongolian to reflect the English meaning.
Pre-intervention Questionnaire	Can a person get HIV if he or she is taking antibiotics?	If the person takes medicine, does it protect the person from HIV?	Yes	“Antibiotics” is missing as is the Chinese word for this in parentheses.
Pre-intervention Questionnaire	Does having sex with more than one	If a person has sex with many others, will it	Yes /	“Increase a person’s

Questionnaire	partner increase a person's chance of being infected with HIV?	spread the HIV?	remainder clarified.	chance" is missing.
Pre-intervention Questionnaire	Will taking a test for HIV one week After having sex tell a person if he or she has HIV?	If a person has sex and he took a medical test after a week, will he get the right result?	No / clarified	
Pre-intervention Questionnaire	Can a person get HIV by sitting in a Hot tub or swimming pool with a person who has HIV?	If a person takes a bath together with someone who has HIV, does he protect himself from HIV?	Yes	"Hot tub" and "swimming pool" are missing.
Pre-intervention Questionnaire	Can a person get HIV by having oral sex (putting a man's penis in their mouth)?	Can oral sex protect from HIV?	Yes / The Mongolian meaning is "Can you get HIV by having oral sex?"	"Person" is missing.
Pre-intervention Questionnaire	Does using Vaseline or baby oil with a condom lower the chances of getting HIV?	If a person uses hand cream or Baby oil for his condom, does it protect him from HIV?	Yes	"Vaseline" has been mistranslated as hand cream.
Pre-intervention Questionnaire	Is it easier to get HIV if a person has another sexually transmissible disease?	If a person has a sexual transmitted infection, does he get HIV easily?	Yes	"Another" is missing.
Pre-intervention Questionnaire	Can a person get gonorrhoea from anal sex (inserting a man's penis inside their anus)?	When people have anal sex, do they contract Gonorrhea?	No / clarified	
Pre-intervention Questionnaire	If a man has gonorrhoea, may he have a discharge (pus) from his penis?	If a man has Gonorrhea, does any stuff come out of his penis?	Yes	"Pus" is missing.
Pre-intervention Questionnaire	Can syphilis infect a baby before it is born?	Can a woman get Syphilis during pregnancy?	Yes	"Can the baby be infected" is missing.

Pre-intervention Questionnaire	Can a person develop sores on their genitals (penis or vagina) soon after they become infected with syphilis?	Does Genital herpes come out on a man's penis when he's infected with Syphilis?	Yes	Word for "sore" is missing and herpes is a mistranslation.
Pre-intervention Questionnaire	Can Human Papilloma Virus (HPV) cause cancer in women?	Does Human Papilloma Virus (HPV) cause women to have HIV?	Yes	"Cancer" is missing. This has been mistranslated as HIV.
Pre-intervention Questionnaire	Is there a vaccine that can prevent infection with Human Papilloma Virus (HPV)?	Does used needle protect the person from HPV?	Yes	Word for "vaccine" is missing. ". This question needs to be rewritten in Mongolian to reflect the English meaning.
Pre-intervention Questionnaire	Can a man get genital warts only by having vaginal sex?	Does HPV come out of a man's penis?	Yes	This needs to be rewritten in Mongolian to reflect the English meaning.
Pre-intervention Questionnaire	Do Genital Herpes sores on a man's penis come and go?	Can a man be infected with Genital herpes again?	Yes	This needs to be rewritten in Mongolian to reflect the English meaning.
Pre-intervention Questionnaire	Can a woman who has Genital Herpes pass the infection on to her baby during childbirth?	Does Genital herpes infect an infant child?	Yes	"Pass the infection during childbirth is missing".
Pre-intervention Questionnaire	Must a person who has Genital Herpes have open sores to give the infection to his or her sexual partner?	If a husband or wife has Genital herpes does it infect one another when they have sex?	Yes	Remove "husband and wife" and use "person". "Open sore" is missing.
Pre-intervention Questionnaire	Does chlamydia cause obvious symptoms in most women?	Does a woman feel dizzy when they get	Yes	"Obvious symptoms" is missing. This has

		Chlamydia?		been mistranslated as dizzy.
Pre-intervention Questionnaire	Can chlamydia cause pain when a person urinates?	If a person who has Chlamydia urinates does he/she feel pain in the stomach?	Yes	Delete “stomach”.
Pre-intervention Questionnaire	Is there a vaccine that can prevent Hepatitis B?	Does used needle protect from Hepatitis B disease?	Yes	Word for “vaccine” is missing. This question needs to be rewritten in Mongolian to reflect the English meaning.
Pre-intervention Questionnaire	Can a person get Hepatitis B if they have vaginal sex?	Does a person contract Hepatitis B through sex?	No / clarified - Vaginal sex is implied by the word used for sex.	
Pre-intervention Questionnaire	Can Hepatitis B be passed on from a mother to her baby when it is born?	When a woman is pregnant, will the baby contract Hepatitis B?	Yes	“Passed on from mother to baby when it is born is missing”.
Pre-intervention Questionnaire	The following questions ask you about where you obtained information from regarding: puberty, sexuality, sexually transmissible infections and HIV/AIDS. If you obtained information from more than one source please rank the importance of these sources numerically. Where 1 means the most important, 2 means the next in importance and 3 was less important than the other two. It is only necessary to list up to	The following questions will describe your childhood knowledge of sex. Also it will describe how you get the knowledge of Sexually Transmitted Infections (STI) and HIV. You can answer the questions numbering 1 to 3 according to following example.	Yes	The following is missing – “If you obtained information from more than one source please rank the importance of these sources numerically. Where 1 means the most important, 2 means the next in importance and 3 was less important

	3 sources for each of these questions.			than the other two. It is only necessary to list up to 3 sources for each of these questions”.
Pre-intervention Questionnaire		Permit paper	Yes	Delete. This is not listed as one of the sources of knowledge in questions 43-45.
Pre-intervention Questionnaire	Which of the following did you find as the most important source of your knowledge about puberty?	Who has given you the most knowledge about being a young adult?	No / clarified There is no word for puberty in Mongolian therefore this needs to be explained to participants when the questionnaire is administered.	
Pre-intervention Questionnaire	Which of the following did you find as the most important source of your knowledge about sexuality?	Who has given you the most knowledge about sex?	No / clarified - Word used is sexuality.	
Pre-intervention Questionnaire	Which of the following did you find as the most important source of your knowledge about sexually transmissible infections, HIV and AIDS?	Which has given you knowledge of STI & HIV?	Yes	Word for “AIDS” is missing.

Post-intervention Questionnaire	What did you think about this peer education programme?	What is your opinion about homosexuality?	Yes	This needs to be rewritten in Mongolian to reflect the English meaning.
Post-intervention Questionnaire	What did you think was the best part of this education programme?	What is your highlight of this research program?	Yes	“Best” is missing.
Post-intervention Questionnaire	What things do you think might be improved on that will benefit future education programmes?	Did we give you enough information and is there anything we need to change or to fix in this program?	Yes	This needs to be rewritten in Mongolian to reflect the English meaning.
Post-intervention Questionnaire	Do you think that it is important that the peer educators involved in the programme are from your ethnic group?	Does it matter when the same nationality teacher teaches this program?	Yes	Change word “teacher” to “peer educator”.
Post-intervention Questionnaire	Do you think that a programme like this would have been beneficial to you if it was available when you were a high school student?	Does it help anyone to have this knowledge?	Yes	This needs to be rewritten in Mongolian to reflect the English meaning.
Post-intervention Questionnaire	Do you have any other comments that you would like to make?	Is there any suggestion or comment about this research program?	No	

N.B.

1. In a subsequent interview with this translator, the discrepancies in translation were discussed. In order to eliminate any potential bias, the translator was asked to read each sentence in Mongolian and then asked to translate these into spoken English. This helped to overcome some of the deficiencies seen in his written English translation.
2. Clarified in the table above means that the back translation, although showing apparent discrepancy with the original English translation, was clarified and conveyed the same meaning.

Appendix H5 - Analysis of Discrepancies in Mongolian Back Translation No. 3

Document	Correct Wording	Back Translation	Alters intended meaning	Changes
Consent form (Volunteer Peer Educators)	Consent form (Volunteer Peer Educators)	Consent Form (peer educator)	No – word for volunteer is actually in the Mongolian.	
Consent form (Volunteer Peer Educators)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	Peer education program, development and evaluation towards multi-ethnic college students in Western China	Yes – implementation and north are missing.	
Consent form (Volunteer Peer Educators)	By signing this form I agree to participate in this project as a volunteer peer educator.	After I signed this consent form, I agreed to participate in this project as a peer educator.	No – word for volunteer is actually in the Mongolian.	
Consent form (Volunteer Peer Educators)	I understand what I need to do if I take part in this project.	I fully understand the things I have to do after I participate in this project.	No	
Consent form (all participants)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	Peer education program, development and evaluation towards multi-ethnic college students in Western China.	Yes – implementation and north are missing.	

Consent form (all participants)	I understand what I need to do if I take part in this project.	I fully understand the things I have to do after I participate in this project.	No	
Information Sheet (For all participants)	Information Sheet (For all participants)	Introduction (Toward participants)	No	
Information Sheet (For all participants)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	Peer education program, and evaluation towards multi-ethnic college students in Western China	Yes – implementation and north are missing.	
Information Sheet (For all participants)	Hello. My English name is John Walkingshaw. I am a medical scientist and PhD candidate at the Centre for International Health at Curtin University in Western Australia. I have lived in Xining for 10 years. I am currently conducting a research project for my PhD degree in International Health.	Hello, My name is John Walkingshaw, I am from Curtin University International public health, I am doing my PhD study and research on Medicine. I have been in Xining for 10 years. Now I am doing my PhD project about international public health.	Yes – Medical scientist rewording. Remove Public from 1 st sentence.	
Information Sheet (For all participants)	The aim of this project is to see how useful an educational programme is in helping students understand how people catch sexually transmitted diseases and HIV. Also what they can do to	The main purpose of this project is to introduce the STD and AIDS transmission, prevention as well as introduce and educate the methods of prevention and treatments.	No – useful is in Mongolian.	

	avoid getting these infections.			
Information Sheet (For all participants)	You will be required to complete a questionnaire about your knowledge of sexually transmitted diseases and HIV. You only have to reply: Yes, No or Don't Know to most of the questions.	If you agreed to participate in our project, you have to answer all the questionnaires about STD and AIDS. For most of the questions you have to answer, Yes, No, or Don't know. You have to participate 4 times 2hours class, and this class will be taught by 2 of your classmates who were trained by myself in advance.	No	
Information Sheet (For all participants)	Male students will be taught by their male classmates and female students will be taught by their female classmates. There will be separate educational programmes for male and female students.	The class will be divided into two classes by the gender. And boys will be taught by boys and girls by girls.	No	
Information Sheet (For all participants)	You will be seeing some Power Point presentations which show the signs and symptoms of some of the commonest sexually transmitted diseases.	During the class, you will see some videos and picture which show the symptoms, and signs of STDs, and will help you to understand how to prevent those diseases.	Yes – change video to Power Point	
Information Sheet (For all participants)	I hope that you decide to help me with this project. I believe that your participation in this project and the knowledge you learn will be very beneficial for you.	I hope you will be willing to participate in this project. I believe you will get a lot of information and knowledge about STDs and AIDS	Yes – change to “help” with this project.	
Information Sheet (For all participants)	When the project is finished a summary of the results will be available for you.	You have the right to understand and read the report of analysis and results.	No	
Information Sheet (For all participants)	I will be the only person who has access to the data.	I will be the only person who has access to the data	No	

participants)				
Information Sheet (For all participants)	The way this project is done will be in accordance with the Australian National Health and Medical Research Council's National Statement on Ethical Conduct in Human Research.	This study will be done following " Human research ethical conduct" policy by the Australian national medical and health research committee.	No	
Information Sheet (For all participants)	This study has been approved by the Curtin University Human Research Ethics Committee (Approval Number HR 158/2011).	This project has been approved by Curtin University ethical committee (approval No. HR 158/2011).	Yes – Human Research is missing.	
Information Sheet (For all participants)	The Committee is comprised of members of the public, academics, lawyers, doctors, and pastoral carers. Its main role is to protect participants.	The main propose of this approval is to protect the participants of this project.This ethical committee members consist of citizen, researchers, lawyers, doctors and consultants.	No	
Information Sheet (For volunteer peer educators)	Information Sheet (For volunteer peer educators)	Introduction (For peer educators)	No – volunteer is in Mongolian	
Information Sheet (For volunteer peer educators)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.			
Information Sheet (For volunteer peer educators)	I am a medical scientist and PhD candidate at the Centre for International Health at Curtin University in Western Australia.	Hello, My name is John Walkingshaw, I am from Curtin University International public health, I am doing my PhD study and research on Medicine. I have been in Xining for 10 years. Now I am doing my PhD project about international public		

		health.		
Information Sheet (For volunteer peer educators)	This aim of this project is to see how useful an educational programme is in helping students understand how people catch sexually transmitted diseases and HIV. Also what they can do to avoid getting these infections.	The main purposes of this project is to introduce the STD and AIDS transmission, prevention as well as introduce and educate the methods of the prevention and treatments.		
Information Sheet (For volunteer peer educators)	I will personally train you with the help of a translator who is fluent in your dialect.	this class will be assisted by an interpreter with your dialect and language.	No	
Information Sheet (For volunteer peer educators)	You will be seeing some Power Point presentations which show the signs and symptoms of some of the commonest sexually transmitted diseases.	During the class, you will see some videos and picture which show the symptoms, and signs of STDs, and will help you to understand how to prevent those diseases.		
Information Sheet (For volunteer peer educators)	I hope that you decide to help me with this project. I believe that your participation in this project and the knowledge you learn will be very beneficial for you.	I hope you will be willing to participate in this project. I believe you will get a lot of information and knowledge about STDs and AIDS		
Information Sheet (For all participants)	When the project is finished a summary of the results will be available for you.	You have the right to understand and read the report of analysis and results.		
Information Sheet (For volunteer peer educators)	The way this project is done will be in accordance with the Australian National Health and Medical Research Council's National Statement on Ethical Conduct in Human Research.	This study will be done following " Human research ethical conduct" policy by the Australian national medical and health research committee		
Information Sheet (For volunteer	This study has been approved by the Curtin University Human	This project has been approved by Curtin University ethical committee (approval No.		

peer educators)	Research Ethics Committee (Approval Number HR 158/2011).	HR 158/2011).		
Information Sheet (For all participants)	The Committee is comprised of members of the public, academics, lawyers, doctors, and pastoral carers. Its main role is to protect participants.	The main propose of this approval is to protect the participants of this project. This ethical committee members consist of citizens, researchers, lawyers, doctors and consultants.		
Pre-intervention Questionnaire	Thank you for your cooperation.	Appreciate your participation and cooperation.	Yes	
Pre-intervention Questionnaire	Can a person get HIV if they share a glass of water with someone who has HIV?	If you share a cup with a person who has HIV, do you think HIV virus will infect you?	Yes – share a glass of water missing.	
Pre-intervention Questionnaire	Can a person get HIV if they have anal sex (penis inside the anus) with a man?	Does having anal sex infect HIV to a man?	No	
Pre-intervention Questionnaire	Are people likely to get HIV by deep kissing, putting their tongue into their partner’s mouth, if their partner has HIV?	Does HIV infect people by deep kissing?	Yes – needs to in putting their tong their partner’s mouth.	
Pre-intervention Questionnaire	Can a person get HIV by sitting in a Hot tub or swimming pool with a per who has HIV?	Can a person get HIV by sharing a bath tub or swimming pool with an HIV positive person?	No – change bath to hot tub.	
Pre-intervention Questionnaire	Can a person get HIV by having oral sex (putting a man’s penis in their mouth)?	Do people get HIV by having oral sex ?	Yes – change penis into mouth,	
Pre-intervention Questionnaire	Does using Vaseline or baby oil with condom lower the chances of getting HIV?	Using paroline or baby oil on a condom will decrease people to get infected by HIV?	Yes – change word for Vaseline.	
Pre-intervention Questionnaire	Is it easier to get HIV if a person has another sexually transmissible	If a person already has another STD, does this person easily get infected by HIV?	No	

	disease?			
Pre-intervention Questionnaire	Is there a cure for gonorrhoea?	Is there any treatments for gonorrhea?	No	
Pre-intervention Questionnaire	Can a person get gonorrhoea from anal sex (inserting a man's penis inside their anus)?	If a person will get gonorrhea after having anal sex?	Yes – include inserting a man's penis inside their anus.	
Pre-intervention Questionnaire	Can a woman look at her body and tell if she has gonorrhoea?	Can a woman tell if she has gonorrhea according to looking at her body and sign?	No	
Pre-intervention Questionnaire	Is there a cure for syphilis?	Is there any treatment for syphilis?	No	
Pre-intervention Questionnaire	Can a person develop sores on their genitals (penis or vagina) soon after they become infected with syphilis?	After a person gets infected by syphilis, can this person get sores on their genitals?	No	
Pre-intervention Questionnaire	Can a man get genital warts only by having vaginal sex?	Does only having vaginal sex cause warts in man?	No	
Pre-intervention Questionnaire	Do Genital Herpes sores on a man's penis come and go?	Does genital herpes appear again and again in man?	No	
Pre-intervention Questionnaire	Must a person who has Genital Herpes have open sores to give the infection to his or her sexual partner?	Does only a person who has genital herpes and open sores able to give the infection to their sexual partner?	No	
Pre-intervention Questionnaire	Is there a cure for chlamydia?	Is there a treatment for chlamydia?	No	
Pre-intervention Questionnaire	It is only necessary to list up to 3 sources for each of these questions.		Yes - It is only necessary to list up to 3 sources for	

			each of these questions.	
Pre-intervention Questionnaire	School teachers 2 Friends 1 Television 3	Teachers from school2; Parents, friends 1 Internet, TV 3	Yes – change lines to match English.	
Pre-intervention Questionnaire	Which of the following did you find as the most important source of your knowledge about sexually transmissible infections, HIV and AIDS?	Which of the following is the most important sources for you to learn and get knowledge and information about STDs and HIVs?	No AIDS is in the Mongolian.	
Post-intervention Questionnaire	Do you think that it is important that the peer educators involved in the programme are from your ethnic group?	Do you think that is important to have someone from your ethnic group to be involved in this program?	Yes – Peer educator involved in the programme is form your ethnic group.	
Post-intervention Questionnaire	Do you think that a programme like this would have been beneficial to you if it was available when you were a high school student?	Do you think that it would be more beneficial for you to learn about this program when you are in high school?	No	

Appendix H6 - Analysis of Discrepancies in Tibetan Back Translation No. 1

Document	Correct Wording	Back Translation	Alters intended meaning	Changes
Consent form (Volunteer Peer Educators)	Volunteer peer educator	Consenting paper	No / Clarified	Suggests use of a linking word so that the Tibetan sounds better. དང་ལྷན་ཁྱེད་ཀྱི་མཐུན་གྱི་ཟབ་ཁྲིད་མཁན།
Consent form (Volunteer Peer Educators)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	College students in southwest of china About preventing HIV and AIDS	Yes / The Tibetan word used is northwest not southwest. Remainder clarified.	Multi-ethnic མི་རིགས། missing in title. This word was in a previous draft but changed by the Tibetan professor who reviewed all of the documents.
Consent form (Volunteer Peer Educators)	By signing this form I agree to participate in this project as a volunteer peer educator.	After signing my name on this consenting paper, I agreed to join this project.	No / Clarified	
Consent form (Volunteer Peer Educators)	I have been given the opportunity to ask questions.	I have had opportunity to ask questions.	No / Clarified	
Consent form (Volunteer Peer Educators)	I understand that any information that might be used to identify me will not be used in any published	I know my information offered in this project will not be used in publishing materials.	No / Clarified	

	material.			
Consent form (all participants)	Consent Form (For all participants)	Consenting paper (provided to the participants)	No / Clarified	
Consent form (all participants)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	College students in southwest of china About preventing HIV and AIDS	Yes / The Tibetan word used is northwest not southwest. Remainder clarified.	Multi-ethnic མི་རིགས། missing in title. This word was in a previous draft but changed by the Tibetan professor who reviewed all of the documents.
Consent form (all participants)	By signing this form I agree to participate in this project.	After signing my name on this consenting paper, I agreed to join this project.	No / Clarified	
Consent form (all participants)	I have been given the opportunity to ask questions.	I have had opportunity to ask questions.	No / Clarified	
Consent form (all participants)	I understand that any information that might be used to identify me will not be used in any published material.	I know my information offered in this project will not be used in publishing materials.	No / Clarified	
Information Sheet (For all participants)	Information Sheet (For all participants)	<i>No written back translation was given for this.</i>	No / Clarified	
Information Sheet (For all participants)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	College students in southwest of china About preventing HIV and AIDS	Yes / The Tibetan word used is northwest not southwest. Remainder clarified.	Multi-ethnic མི་རིགས། missing in title. This word was in a previous draft but changed by the Tibetan professor

				who reviewed all of the documents.
Information Sheet (For all participants)	I am a medical scientist and PhD candidate at the Centre for International Health at Curtin University in Western Australia.	I am not only a medical scientist, but also a doctor in the Centre for International Health, Curtin University, south Australia.	No / Tibetan word used is west not south. Remainder clarified.	
Information Sheet (For all participants)	This aim of this project is to see how useful an educational programme is in helping students understand how people catch sexually transmitted diseases and HIV. Also what they can do to avoid getting these infections.	The purpose of this project is to let students know how you get HIV and AIDS and how to prevent them.	No – The word for useful is missing but the meaning is implied / Remainder clarified	
Information Sheet (For all participants)	You will be required to complete a questionnaire about your knowledge of sexually transmitted diseases and HIV. You only have to reply: Yes, No or Don't Know to most of the questions.	Please write down knowledge of getting and preventing HIV and AIDS on the questionnaire. and answer yes, no questions.	No / Clarified	This translator thinks that the change in wording suggested by the 2 nd translator is unnecessary. The meaning in Tibetan is very clear.
Information Sheet (For all participants)	These will be taught by two of your classmates who have been trained by me.	the courses will be taught by your classmates that I have trained.	Yes	The word for 2 གཉིས། is absent. Replace ཚོས། with གཉིས་ཀྱིས།
Information Sheet (For all participants)	You will be seeing some Power Point presentations which show the signs and symptoms of some of the commonest sexually transmitted	During the class you will see the symptoms of same kind of HIV, and will know how to prevent them. In addition, a short film related to HIV,AIDS will be played and	Yes / The word for commonest is missing.	Suggests using the following wording: ལྷོད་ཀྱིས་ཚེས་རྒྱན་ལྗན་གྱི་

	diseases. You will find out how to avoid catching these diseases. You will also watch a short movie about HIV/AIDS and have a chance to participate in discussions about these things.	you will have chance to discuss about it.	Remainder clarified.	མཚན་མའི་ནད་འགའ་ ཤས་ཀྱི་ནད་རྟགས་ལ་ཤས་ མཐོང་ཐུབ།
Information Sheet (For all participants)	I hope that you decide to help me with this project.	I hope you sincerely support this project	No / Clarified	Although the word རྒྱུ་སྐྱོར། sometimes has a financial connotation. It would require a modifier before it to specify financial support དཔལ་འབྱོར་སྐྱོར་གྱི་རྒྱུ་ སྐྱོར། Therefore no change to the existing wording is required.
Information Sheet (For all participants)	All data relating to the study will be kept for 7 years. I will be the only person who has access to the data. After 7 years the data will be destroyed.	These documents/materials will be kept for 7 years. I am the keeper of these materials. It will be destroyed after 7years.	No / Clarified	
Information Sheet (For all participants)	If you have any complaints during this study you can contact the Human Research Ethics Committee Secretary of Curtin University at hrec@curtin.edu.au .	If you have any suggestions during participating ,you can directly contact the secretary of Curtin University Human Research Ethics Committee via this email address:hrec@curtin.edu.au	No / Clarified	
Information Sheet (For all participants)	The way this project is done will be in accordance with the Australian National Health and Medical	This project will be conducted according to the principles of man and biology studies of Health and medical studies committee,	No / Clarified	

	Research Council's National Statement on Ethical Conduct in Human Research.	Australia.		
Information Sheet (For all participants)	This study has been approved by the Curtin University Human Research Ethics Committee (Approval Number HR 158/2011).	This project got permission from Curtin University Human Research Ethics Committee.(permission number is -----)	No / Clarified	
Information Sheet (For all participants)	This study has also been approved by Qinghai Nationalities University	This project also got permission from Qinghai University for nationalities.	No / Clarified	
Information Sheet (For volunteer peer educators)	Information Sheet (For volunteer peer educators)	<i>No written back translation was given for this.</i>	No / Clarified	
Information Sheet (For volunteer peer educators)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	College students in southwest of china About preventing HIV and AIDS	Yes / The Tibetan word used is northwest not southwest. Remainder clarified.	Multi-ethnic མི་རིགས། missing in title. This word was in a previous draft but changed by the Tibetan professor who reviewed all of the documents.
Information Sheet (For volunteer peer educators)	I am a medical scientist and PhD candidate at the Centre for International Health at Curtin University in Western Australia.	I am not only a medical scientist, but also a doctor in the Centre for International Health, Curtin University, south Australia.	No / Tibetan word used is west not south. Remainder clarified.	
Information Sheet (For volunteer peer educators)	This aim of this project is to see how useful an educational programme is in helping students understand how people catch sexually transmitted diseases and HIV. Also what they	The purpose of this project is to let students know how you get HIV and AIDS and how to prevent them.	No / Clarified.	

	can do to avoid getting these infections.			
Information Sheet (For volunteer peer educators)	I will personally train you with the help of a translator who is fluent in your dialect.	I will train you through someone who is a fluent speaker of your language.	No / Clarified.	
Information Sheet (For volunteer peer educators)	You will be seeing some Power Point presentations which show the signs and symptoms of some of the commonest sexually transmitted diseases. You will find out how to avoid catching these diseases. You will also watch a short movie about HIV/AIDS and have a chance to participate in discussions about these things.	During the class you will see the symptoms of same kind of HIV, and will know how to prevent them. In addition, a short film related to HIV,AIDS will be played and you will have chance to discuss about it.	Yes / The word for commonest is missing. Remainder clarified.	Suggests using the following wording: ཁྱོད་ཀྱིས་ཆེས་རྒྱན་ལྡན་གྱི་ མཚན་མའི་ནད་འགའ་ ཤས་ཀྱི་ནད་རྟགས་ཁ་ཤས་ མཐོང་ཐུབ།
Information Sheet (For volunteer peer educators)	At the end of the three training sessions I will check to see that you fully understand the material that you have seen. If I am satisfied that you have completed the requirements of the training programme and you feel confident then you and your classmate, who has also attended the training sessions, can then begin teaching your classmates.	After finish training , I will check whether you understand completely or not. If I am satisfied with your standard and you yourself have confidence, then you and your classmates, and other students who participate in my training could train others.	No / Clarified.	
Information Sheet (For volunteer peer educators)	I hope that you decide to help me with this project.	I hope you sincerely support this project	No / Clarified	Although the word རྒྱུ་སྐྱོད། sometimes has a financial connotation. It would require a modifier

				before it to specify financial support i.e. དཔལ་འབྱོར་སློང་གི་རྒྱབ་སྐྱོར་ Therefore no change to the existing wording is required.
Information Sheet (For volunteer peer educators)	All data relating to the study will be kept for 7 years. I will be the only person who has access to the data. After 7 years the data will be destroyed.	These documents/materials will be kept for 7 years. I am the keeper of these materials. It will be destroyed after 7years.	No / Clarified	
Information Sheet (For volunteer peer educators)	If you have any complaints during this study you can contact the Human Research Ethics Committee Secretary of Curtin University at hrec@curtin.edu.au .	If you have any suggestions during participating ,you can directly contact the secretary of Curtin University Human Research Ethics Committee via this email address:hrec@curtin.edu.au	No / Clarified	
Information Sheet (For volunteer peer educators)	The way this project is done will be in accordance with the Australian National Health and Medical Research Council's National Statement on Ethical Conduct in Human Research.	This project will be conducted according to the principles of man and biology studies of Health and medical studies committee, Australia.	No / Clarified	
Information Sheet (For volunteer peer educators)	This study has been approved by the Curtin University Human Research Ethics Committee (Approval Number HR 158/2011).	This project got permission from Curtin University Human Research Ethics Committee.(permission number is -----)	No / Clarified	
Information Sheet (For volunteer peer educators)	This study has also been approved by Qinghai Nationalities University	This project also got permission from Qinghai University for nationalities.	No / Clarified	
Pre-intervention	Thank you for your cooperation.	<i>No written back translation was given for</i>	No / Clarified	Suggests using རྒྱབ་

Questionnaire		<i>this.</i>		ལྷོ་ལྷོ་ལྷོ་ instead of རྒྱལ་ལྷོ་ ལྷོ་ལྷོ་ for cooperation.
Pre-intervention Questionnaire	Can a person get HIV if they share a glass of water with someone who has HIV?	If someone uses the same cup as an AIDS patient can they be infected?	Yes	The words “water” and “drink” are missing. Change to ལྷོ་ལྷོ་ལྷོ་
Pre-intervention Questionnaire	Does pulling out the penis from a woman’s vagina, before a man climaxes, prevent a woman from getting HIV during sex?	When having sex, can you be infected if the penis is taken out of the vagina before orgasm?	No / Clarified.	
Pre-intervention Questionnaire	Can a person get HIV if they have anal sex (penis inside the anus) with a man?	Does anal sex transmit AIDS?	No / Clarified.	
Pre-intervention Questionnaire	Can showering or washing one’s genitals after sex prevent one from getting HIV?	Can you get infected if you wash the penis after having sex?	No / The Tibetan word was genitals. Remainder clarified.	
Pre-intervention Questionnaire	Can a woman get HIV if she has sex during her period?	Can you get AIDS when having sex with a woman who is menstruating?	No / Clarified.	
Pre-intervention Questionnaire	Is there a female condom that can help decrease a woman’s chance of getting HIV?	Do women have any contraception in order to lower the rate of getting AIDS?	No / Clarified.	
Pre-intervention Questionnaire	Can a person get HIV if he or she is taking antibiotics?	Can it prevent AIDS if a person has --- ?	Yes / Remainder clarified.	Change the word for antibiotics རྒྱལ་ལྷོ་ལྷོ་ and include the Chinese word in

				brackets i.e. སྲིན་ འགོག་མཁུན། (抗生素)
Pre-intervention Questionnaire	Can a person get HIV by having oral sex (putting a man's penis in their mouth)?	Can people get AIDS if they have oral sex?	No / Clarified.	
Pre-intervention Questionnaire	Can a woman look at her body and tell if she has gonorrhoea?	Can woman realize she has gonorrhoea by checking her body her self?	Yes	The Tibetan བརྟག་ ནས། means “to check” and has been changed to བརྟགས་པ་ ལས། which means “to look at”.
Pre-intervention Questionnaire	Can a person develop sores on their genitals (penis or vagina) soon after they become infected with syphilis?	After someone has syphilis, is there any scar that appears on his penis?	No / The Tibetan word was genitals. Remainder clarified.	
Pre-intervention Questionnaire	Can Human Papilloma Virus (HPV) cause cancer in women?	Does human ---can develop woman's --?	No / gaps clarified.	
Pre-intervention Questionnaire	Can a man get genital warts only by having vaginal sex?	is the ---produce only through normal sexual action?	No / “normal sexual action” equated to “vaginal sex”. Remainder clarified.	
Pre-intervention Questionnaire	Can a woman who has Genital Herpes pass the infection on to her	Can infant get ---- if a woman who has this disease?	No / gap and remainder	

	baby during childbirth?		clarified.	
Pre-intervention Questionnaire	Can a person get Hepatitis B if they have vaginal sex?	Can hepatitis B be caught if people have normal sex?	No / Clarified	
Pre-intervention Questionnaire	Can Hepatitis B be passed on from a mother to her baby when it is born?	Can the infant get hepatitis B if a woman has that disease?	No / Clarified	
Pre-intervention Questionnaire	less important than the other two	generally important.	Yes	Change words used for “less important” than the other two.
Post-intervention Questionnaire	Thank you for your cooperation.	<i>No written back translation was given for this.</i>	No / Clarified	Suggests using ལྷོད། instead of རྒྱལ། ལྷོད། for cooperation.
Post-intervention Questionnaire	What did you think about this peer education programme?	How do you treat this educational project?	Yes / remainder clarified.	Delete the word མཚན་མའི། for sexually transmitted diseases.
Post-intervention Questionnaire	What did you think was the best part of this education programme?	Which do you think is the best in this sex education?	Yes / Remainder clarified.	Delete the word མཚན་མའི། for sex. Suggests adding the grammar particle དེ། after the word ལེག་པ། so that the sentence reads better in Tibetan.
Post-intervention Questionnaire	What things do you think might be improved on that will benefit future education programmes?	To improve this work what do you think we should do?	Yes / Remainder clarified.	The word for future མ་འོངས་པ། is missing. Should be ལྷོད་ཀྱིས་། བལྟས་ན་ང་ཚོས་ད་དུང་།

				ལས་གཞི་འདི་མ་འོངས་པར་ ཡར་རྒྱས་སུ་གཏོང་བར་ལས་ ཅི་ཞིག་བྱ་དགོས་སམ།
Post-intervention Questionnaire	Do you think that it is important that the peer educators involved in the programme are from your ethnic group?	<i>No written back translation was given for this.</i>	No / Clarified	
Post-intervention Questionnaire	Do you think that a programme like this would have been beneficial to you if it was available when you were a high school student?	Do you think is it more helpful if you had this education when you were a high school student?	No / Clarified	This translator does not agree with the 2 nd translator that the comparative Tibetan term དེ་ལས་ཀྱང་། should be deleted. The meaning in Tibetan is very clear and accurately reflects the English.
Post-intervention Questionnaire	Do you have any other comments that you would like to make?	Do you have any ideas or suggestions to add?	No / Clarified	

N.B.

1. In a subsequent telephone interview with this translator, the discrepancies in translation were discussed. In order to eliminate any potential bias, the original statements were read to him in Tibetan and he was then asked to translate these into English. This helped to overcome some of the deficiencies seen in his written English translation. Later a face to face interview was also conducted in which the translator was shown the Tibetan statements and asked to translate these into English.
2. Clarified in the table above means that the back translation, although showing apparent discrepancy with the original English translation, was clarified and conveyed the same meaning.
3. It is possible that some of the changes which were incorrectly recommended by the Tibetan professor, who reviewed all of the documents, may be due to the fact that he was comparing the Tibetan translation to Chinese rather than the original English version.

Appendix H7 - Analysis of Discrepancies in Tibetan Back Translation No. 2

Document	Correct Wording	Back Translation	Alters intended meaning / Clarified	Changes
Consent form (Volunteer Peer Educators)	Volunteer peer educator	Volunteering educator	No / Clarified	
Consent form (Volunteer Peer Educators)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	Preparations and practice on the book of sexually transmitted diseases and AIDS prevention of Northwest of China. (Examining the work)	Yes / remainder clarified	Multi-ethnic མི་རིགས། missing in title. This word was in a previous draft but changed by the Tibetan professor who reviewed all of the documents.
Consent form (Volunteer Peer Educators)	By signing this form I agree to participate in this project as a volunteer peer educator.	I agree to participate in this work as an obligatory educator after it is compiled.	Yes	འགན་བབས། implies obligatory and should be replaced with དང་སྦྲངས། for voluntary. This word was in a previous draft but changed by the Tibetan professor who reviewed all of the documents.
Consent form	I have been given the opportunity to ask	I was given the chance to raise my questions.	No /	

(Volunteer Peer Educators)	questions.		Clarified	
Consent form (Volunteer Peer Educators)	I understand that any information that might be used to identify me will not be used in any published material.	I was told that my personal information will not be published.	No / Clarified	
Consent form (all participants)	Consent Form (For all participants)	Agreement (supply to the participant)	No / Clarified	
Consent form (all participants)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	Preparations and practice on the book of sexually transmitted diseases and AIDS prevention of Northwest of China.	Yes / remainder clarified	Multi-ethnic མི་རིགས། missing in title. This word was in a previous draft but changed by the Tibetan professor who reviewed all of the documents.
Consent form (all participants)	By signing this form I agree to participate in this project.	I agree to join this work after it is compiled.	No / Clarified	
Consent form (all participants)	I have been given the opportunity to ask questions.	I was given the chance to raise my questions.	No / Clarified	
Consent form (all participants)	I understand that any information that might be used to identify me will not be used in any published material.	I was told that my personal information will not be published.	No / Clarified	
Information Sheet (For all participants)	Information Sheet (For all participants)	Work explanation (supply to all participants)	No / Clarified	
Information Sheet (For all participants)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention	Preparations and practice on the book of sexually transmitted diseases and AIDS prevention of Northwest of China. (Examining	Yes / remainder clarified	Multi-ethnic མི་རིགས། missing in title. This word

	of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	of the work)		was in a previous draft but changed by the Tibetan professor who reviewed all of the documents.
Information Sheet (For all participants)	Centre for International Health at Curtin University in Western Australia	Centre for International Health Faculty of Health Science in Curtin University, Australia.	No / Clarified	
Information Sheet (For all participants)	This aim of this project is to see how useful an educational programme is in helping students understand how people catch sexually transmitted diseases and HIV. Also what they can do to avoid getting these infections.	The purpose of this work is to let students understand how sexually transmitted diseases and AIDS infects and how to prevent them.	No – The word for useful is missing but the meaning is implied / Clarified	
Information Sheet (For all participants)	You will be required to complete a questionnaire about your knowledge of sexually transmitted diseases and HIV. You only have to reply: Yes, No or Don't Know to most of the questions	Please write down the things that you know about how to prevent AIDS. Please answer as many questions as you can.	No / Clarified	Suggested change to make the 2 nd sentence clearer is use the following wording. ཁྱེད་ཀྱིས་རེད་དང་མ་ རེད། ཡང་ན་ངོ་ས་ལན་ འདི་མི་ཤེས་ཟེར་ནས་ ལན་འདེབས་ན་ཚོགས། This needs to be discussed with other translators.
Information Sheet (For all	These will be taught by two of your classmates who have been trained by	The class will be taught by your classmate who I had given lessons to before.	Yes	The word for 2

participants)	me.			གཉིས། is absent. Replace ཚོས། with གཉིས་ཀྱིས།
Information Sheet (For all participants)	You will be seeing some Power Point presentations which show the signs and symptoms of some of the commonest sexually transmitted diseases. You will find out how to avoid catching these diseases. You will also watch a short movie about HIV/AIDS and have a chance to participate in discussions about these things.	During the teaching you will see the symptoms for some of the sexually transmitted diseases and you will also learn how to prevent the diseases. Films about AIDS and related diseases will be shown during the classes, and you will have the chance to discuss the films.	Yes / remainder clarified	The word for commonest ལྔན་ ལྔན་ is absent.
Information Sheet (For all participants)	I hope that you decide to help me with this project.	I sincerely hope you would support my work.	Yes	རྒྱབ་སྐྱོར། has a financial connotation and therefore it is better to use རོགས་ རོགས་ for “help”.
Information Sheet (For all participants)	All data relating to the study will be kept for 7 years. I will be the only person who has access to the data. After 7 years the data will be destroyed.	The work sheets will be kept for seven year only by me. After seven years, all the documents will be destroyed.	No / Clarified	
Information Sheet (For all participants)	If you have any complaints during this study you can contact the Human Research Ethics Committee Secretary of Curtin University at hrec@curtin.edu.au .	If you have any complaints about the work you can also directly contact to the secretary of the anthropology research in Curtin University by this email address: hrec@curtin.edu.au	No / Clarified	
Information Sheet (For all participants)	The way this project is done will be in accordance with the Australian National Health and Medical Research Council’s	The work will proceed according to <i>the principle of humanity and biology ethics</i> by Australian health and medicine research	No / Clarified	

	National Statement on Ethical Conduct in Human Research.	committee.		
Information Sheet (For all participants)	This study has been approved by the Curtin University Human Research Ethics Committee (Approval Number HR 158/2011).	The research is authorized by the ethic committee of Curtin University. (Authority code is HR 1582011).	Yes	The term for Human Research མིའི་རྟོགས་པ་ཞེས་འདུག is absent.
Information Sheet (For all participants)	This study has also been approved by Qinghai Nationalities University	The work is also authorized by the Qinghai Nationalities University.	No / Clarified	
Information Sheet (For volunteer peer educators)	Information Sheet (For volunteer peer educators)	Work explanation (supply to all participants)	No / Clarified	
Information Sheet (For volunteer peer educators)	Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.	Preparations and practice on the book of sexually transmitted diseases and AIDS prevention of Northwest of China. (Examining of the work)	Yes / remainder clarified	Multi-ethnic མི་རྟོགས། missing in title. This word was in a previous draft but changed by the Tibetan professor who reviewed all of the documents.
Information Sheet (For volunteer peer educators)	Centre for International Health at Curtin University in Western Australia	Centre for International Health Faculty of Health Science in Curtin University, Australia.	No / Clarified	
Information Sheet (For volunteer peer educators)	This aim of this project is to see how useful an educational programme is in helping students understand how people catch sexually transmitted diseases and	The purpose of this work is to let students understand how sexually transmitted diseases and AIDS infect and how to prevent them.	No – The word for useful is missing	

	HIV. Also what they can do to avoid getting these infections.		but the meaning is implied / Clarified	
Information Sheet (For volunteer peer educators)	I will personally train you with the help of a translator who is fluent in your dialect.	I will teach you by inviting a person who can speak your dialect fluently.	No / Clarified	
Information Sheet (For volunteer peer educators)	You will be seeing some Power Point presentations which show the signs and symptoms of some of the commonest sexually transmitted diseases. You will find out how to avoid catching these diseases. You will also watch a short movie about HIV/AIDS and have a chance to participate in discussions about these things.	During the teaching you will see the symptoms for some of the sexually transmitted diseases and you will also learn how to prevent the diseases. Films about AIDS and related diseases will be shown during the classes, and you will have the chance to discuss the films.	Yes / remainder clarified	The word for commonest ལྷན་ ལྷན་ is absent.
Information Sheet (For volunteer peer educators)	At the end of the three training sessions I will check to see that you fully understand the material that you have seen. If I am satisfied that you have completed the requirements of the training programme and you feel confident then you and your classmate, who has also attended the training sessions, can then begin teaching your classmates.	At the end of the class I will check if you have understood all the relevant knowledge. If you did a good job on your course, then you and your classmates, and other students who attended my class can teach other students.	No / Clarified	
Information Sheet (For volunteer peer educators)	I hope that you decide to help me with this project.	I sincerely hope you would support my work	Yes	སྲོལ་སྲོལ་ has a financial connotation and therefore it is

				better to use རོགས་ རམ། for “help”.
Information Sheet (For volunteer peer educators)	All data relating to the study will be kept for 7 years. I will be the only person who has access to the data. After 7 years the data will be destroyed.	The work sheets will be kept for seven year only by me. After seven years, all the documents will be destroyed.	No / Clarified	
Information Sheet (For volunteer peer educators)	If you have any complaints during this study you can contact the Human Research Ethics Committee Secretary of Curtin University at hrec@curtin.edu.au .	If you have any complaints about the work you can also directly contact to the secretary of the anthropology research in Curtin University by this email address: hrec@curtin.edu.au	No / Clarified	
Information Sheet (For volunteer peer educators)	The way this project is done will be in accordance with the Australian National Health and Medical Research Council’s National Statement on Ethical Conduct in Human Research.	The work will proceed according to <i>the principle of humanity and biology ethics</i> by Australian health and medicine research committee.	No / Clarified	
Information Sheet (For volunteer peer educators)	This study has been approved by the Curtin University Human Research Ethics Committee (Approval Number HR 158/2011).	The research is authorized by the ethic committee of Curtin University. (Authority code is HR 158/2011).	Yes	The term for Human Research མིའི་རོགས་པ་ཞིབ་ འཇུག is absent.
Information Sheet (For volunteer peer educators)	This study has also been approved by Qinghai Nationalities University	The work is also authorized by the Qinghai Nationalities University.	No / Clarified	
Pre-intervention questionnaire	Thank you for your cooperation.	Thanks for your support.	Perhaps	The word used for cooperation རོགས་ སྐྱུར། may have a possible financial meaning therefore རོགས་རམ། may be

				more appropriate. This needs to be discussed with other translators.
Pre-intervention questionnaire	Hui	Mongolians (Nomadic people of northern Tibet)	No / Clarified	
Pre-intervention questionnaire	Can a person get HIV if someone who has HIV coughs or sneezes on them?	If a person with AIDS sneezes(打喷嚏) or spits towards you, will you be infected?	No / Clarified	
Pre-intervention questionnaire	Does pulling out the penis from a woman's vagina, before a man climaxes, prevent a woman from getting HIV during sex?	Is it infective to have sex with a person with AIDS before you reach the climax?	No / Clarified	
Pre-intervention questionnaire	Can a person get HIV if they have anal sex (penis inside the anus) with a man?	If you have anal sex with a person who has AIDS, will you be infected?	No / Clarified	
Pre-intervention questionnaire	Can showering or washing one's genitals after sex prevent one from getting HIV?	If you wash your genitals after having sex, will it prevent infection?	No / Clarified	
Pre-intervention questionnaire	Do all people who have been infected with HIV quickly show serious signs of being infected?	If a person is infected with AIDS, will she/he have immediate symptoms?	No / Clarified	
Pre-intervention questionnaire	Is there a vaccine that can prevent people from getting HIV?	Is there any medicine to prevent AIDS?	No / Clarified	
Pre-intervention questionnaire	Are people likely to get HIV by deep kissing, putting their tongue into their partner's mouth, if their partner has HIV?	If you kiss someone who has AIDS, will you be infected?	No / Clarified	

Pre-intervention questionnaire	Can a woman get HIV if she has sex during her period?	If a woman has sex during her period, will she/you be infected?	No / Clarified	
Pre-intervention questionnaire	Is there a female condom that can help decrease a woman's chance of getting HIV?	Is a condom helpful to prevent AIDS infection for women?	No / Clarified	
Pre-intervention questionnaire	Does having sex with more than one partner increase a person's chance of being infected with HIV?	If a person has sex with more than one person at the same time, is there a higher risk of AIDS infection?	No / Clarified	
Pre-intervention questionnaire	Does using Vaseline or baby oil with a condom lower the chances of getting HIV?	If a person putz Vaseline (凡士林) or infant cream (婴儿油) on his condom, is it helpful for AIDS preventions?	No / Clarified	
Pre-intervention questionnaire	Can a person get gonorrhoea from anal sex (inserting a man's penis inside their anus)?	If people have anal sex, will she/he be infected with gonorrhea?	No / Clarified	
Pre-intervention questionnaire	Can a woman look at her body and tell if she has gonorrhoea?	Does a woman know if she has gonorrhea according to her body symptoms?	Yes	The Tibetan བརྟག་ཅིང་མཐོང་བ་ means "to check" and has been changed to བརྟག་བྱ་ལས་མཐོང་བ་ which means "to look at".
Pre-intervention questionnaire	Can Human Papilloma Virus (HPV) cause cancer in women?	Does human papilloma virus ((人乳头瘤病毒)) cause ulcers in women?	No / Clarified. Tibetan word used is cancer not ulcer.	
Pre-intervention questionnaire	Is there a vaccine that can prevent infection with Human Papilloma Virus	Is there any medicine to prevent human papilloma virus?	No / Clarified	

	(HPV)?			
Pre-intervention questionnaire	Can a man get genital warts only by having vaginal sex?	Does only usual sex causes genital warts (生殖器疣) on men's penis (or in a woman's vagina)?	No / Clarified	
Pre-intervention questionnaire	Must a person who has Genital Herpes have open sores to give the infection to his or her sexual partner?	If a person gets genital herpes (生殖器疱疹) from the person whom he is sleeping with, does his penis always have an open wound?	No / Clarified	
Pre-intervention questionnaire	Is there a vaccine that can prevent Hepatitis B?	Is there any medicine to prevent Hepatitis B (乙肝病毒)?	No / Clarified	
Pre-intervention questionnaire	The following questions ask you about where you obtained information from regarding: puberty, sexuality, sexually transmissible infections and HIV/AIDS.	The questions below check the source of your knowledge about adolescence, AIDS and other relevant diseases.	No / Clarified	
Post-intervention Questionnaire	Thank you for your cooperation.	Thanks for your support.	Perhaps	The word used for cooperation རོགས་སྐྱོར། may have a possible financial meaning therefore རོགས་རམ། may be more appropriate. This needs to be discussed with other translators.
Post-intervention Questionnaire	What did you think about this peer education programme?	What is your understanding about this educational lesson on sexually transmitted diseases?	Yes	Delete the word བཅོམ་མའི། which has been translated as

				sexually transmitted diseases.
Post-intervention Questionnaire	What did you think was the best part of this education programme?	Which of the sexual lessons is the best one for you?	Yes	Delete the word མཚན་མའི། which has been translated as sexual.
Post-intervention Questionnaire	What things do you think might be improved on that will benefit future education programmes?	What can we do to improve the lessons according to your suggestions?	Yes	The word for future མ་འོངས་པ། is missing.
Post-intervention Questionnaire	Do you think that it is important that the peer educators involved in the programme are from your ethnic group?	Do you think is it necessary to have a person from the same nationality with you to teach the sexual lessons?	No / Clarified	
Post-intervention Questionnaire	Do you think that a programme like this would have been beneficial to you if it was available when you were a high school student?	If you had this kind of lessons when you were in High school, do you think it is more helpful to have this kind of class now than in the high school?	Yes	Delete the comparative Tibetan term དེ་ལས་ ཉུང་། which then restores the original English meaning.
Post-intervention Questionnaire	Do you have any other comments that you would like to make?	Do you have any more thoughts or suggestions to add?	No / Clarified	

N.B.

1. In a subsequent telephone interview with this translator, the discrepancies in translation were discussed. In order to eliminate any potential bias, the original statements were read to him in Tibetan and he was then asked to translate these into English. This helped to overcome some of the deficiencies seen in his written English translation. Later a face to face interview was also conducted in which the translator was shown the Tibetan statements and asked to translate these into English.

2. Clarified in the table above means that the back translation, although showing apparent discrepancy with the original English translation, was clarified and conveyed the same meaning.
3. It is possible that some of the changes which were incorrectly recommended by the Tibetan professor, who reviewed all of the documents, may be due to the fact that he was comparing the Tibetan translation to Chinese rather than the original English version.

Appendix I 1 – Male Sexually Transmitted Diseases Power Point (English version)

Sexually Transmitted Diseases

John Walkingshaw

Version 2.0/01/01

Sexually Transmitted Diseases

- How do you get them?
- How do you avoid getting them?
- How do you know if you have an STD?
- Can all STD's be treated successfully?
- What should you do if you think you have acquired an STD?

How do you get them?

- By having unprotected sexual intercourse with someone who is infected.
- You can acquire STD's by vaginal, oral or anal sex.
- Some STD's, such as AIDS or Hepatitis B, you can also acquire if you share a needle with someone who is infected.

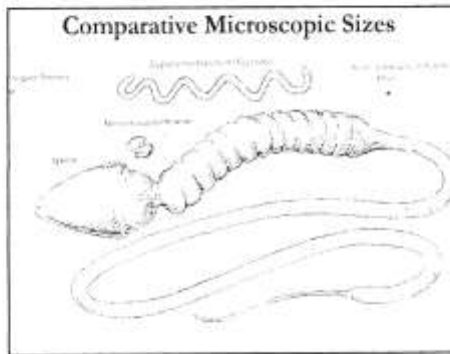
How do you know who is infected?

- You don't!
- Anyone may have an STD.
- Many people with STD's may NOT have visibly obvious symptoms.
- Do **NOT** have sex with prostitutes as most of them have STD's.
- Your partner may have had sex with other people before they met you.



How do you avoid getting them?

- > Abstinence is the **ONLY 100%** effective method!!!
- > If you do have sex with someone **ALWAYS USE A CONDOM**
It could save your life but remember condoms are **NOT 100%** effective.



Having sex without using a condom.....

- > Is like walking across a busy street with your eyes closed
- SOONER** or later you are going to get hit by a car !!!
- > The more you do it and the more partners you have the more likely you are to get an STD.

How do you use a condom?

- Open the packet carefully.
- Do not use your teeth or scissors to open the packet.
- Be careful not to put holes in the condom with your fingernails.
- Always use a water based lubricant on the outside of the condom such as KY-Jelly. Oil based condoms may cause the condom to break.
- Condoms must be put on your penis only when it is erect.
- If you are uncircumcised you must pull your foreskin back before putting the condom on your penis.

How to use a condom – STEP 1

- Hold the condom by the tip and expel the air from the tip of the condom before placing it on your erect penis.



How to use a condom – STEP 2

- Hold the tip of the condom with one hand.
- With the other hand carefully roll the condom down your penis.



How to use a condom – STEP 3

- Ensure the condom is rolled to the base of your penis.



How to use a condom – STEP 4

- After you have ejaculated. Hold the condom firmly by the rim then gently remove your penis, while it is still erect, from your partner's vagina.
- Carefully dispose of the condom. Ensure that other people, especially children, do not come into contact with it.
- **NEVER REUSE A CONDOM**

How do you know if you have an STD ?

- There are many different types of STD.
- Men are more likely to show symptoms of STD's than women.
- The symptoms may be different for different STD's.
- You can acquire many STD's, including Hepatitis B, if you don't use a condom.
- Now we will look at some of these STD's.

Gonorrhoea

- This is one of the top 5 infectious diseases in China.
- Symptoms include the following
 - Burning sensation on passing urine
 - Yellowish discharge from the penis

Gonorrhoea



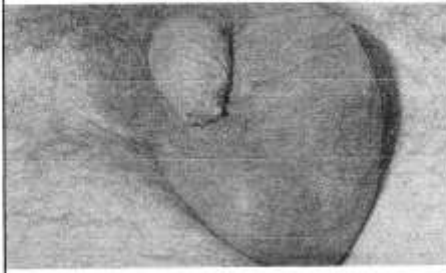
Treatment and complications of Gonorrhoea

- Gonorrhoea responds well to treatment with the correct antibiotics.
- If untreated Gonorrhoea may cause:
 - Infertility
 - Epididymitis
 - Arthritis
 - Rash
 - Fever

Gonococcal epididymitis



Gonococcal Epididymitis



Chlamydia

- Dual infections with Gonorrhoea and Chlamydia are common.
- Symptoms of Chlamydia include:
 - Pain or burning sensation when passing urine
 - Clear to yellowish discharge
 - Pain in the testicles
 - Pain on ejaculation

Chlamydia



Treatment and complications of Chlamydia

- Chlamydia responds well to the correct antibiotics.
- If untreated Chlamydia may cause:
 - Infertility
 - Epididymitis
 - Arthritis
 - Eye infections

Syphilis

- If diagnosed early it can be treated successfully.
- If untreated it can result in:
 - Alopecia
 - Heart disease
 - Blindness
 - Paralysis
 - Insanity
 - **DEATH**

Primary Syphilis of the Penis



Penile Syphilitic Chancre



Primary Syphilitic Chancre



Secondary Syphilis Rash

- ▶ Palms of the hands and soles of the feet are typically involved.



Secondary Syphilis Rash

- Appears 2 weeks to 6 months after the chancre disappears.
- May also have swollen lymph glands, sore throat and flat bumps that look like scars around the penis and the mouth.



Secondary Syphilis Alopecia



Tertiary Syphilis - Gumma



Primary Genital Herpes

- Often there are no symptoms.
- If you do have symptoms they can include:
 - Painful lesions that appear on the penis
 - Enlarged lymph nodes in the groin (may last for several weeks to months)
 - Fever
 - Malaise
 - Muscle pain
 - Meningitis

Primary Genital Herpes



Primary Genital Herpes



Primary Genital Herpes



Treatment and prognosis for Genital Herpes


- Treatment can shorten the length of time that people suffer symptoms.
- >80% of people will go on to develop 4 or 5 recurrent episodes within 1 year.
- Symptoms of recurrent Herpes are usually milder and don't last as long.

Genital Warts


- This disease is caused by the Human Papilloma Virus.
- Condoms may not prevent you from acquiring infection.
- This virus can cause cancer.
- Treatment includes topical applications but surgical removal may be necessary.
- There is an effective vaccine available to prevent infection.

Genital warts


- As a result of oral sex, genital warts may infect the throat and larynx.



Genital Warts




Genital Warts



Pubic Lice

- Wearing a condom will not prevent you from becoming infested. They cause itching but treatment is very effective.



pubic lice (crabs)
www.healthai.org

HIV / AIDS

- Using condoms may reduce your risk of acquiring HIV.
- There are many symptoms in early disease that may include:
 - Fever
 - Swollen lymph glands
 - Sore throat
 - Rash
 - Muscle and joint pains
 - Diarrhoea
 - Headache

Kaposi's sarcoma in an AIDS patient



AIDS

- AIDS is the leading cause of death by infectious diseases in China.
- Treatment may prolong life but THERE IS NO CURE.

AIDS IS FATAL.

What should you do if you think you have a Sexually Transmitted Disease?

- See a doctor **AS SOON AS POSSIBLE.**
- The sooner an accurate diagnosis is made
The sooner correct treatment can begin
The less likely you are to develop complications
- Let your partner know so they can be treated too

REMEMBER

- Abstinence is the **ONLY 100%** effective method!!!
- If you do have sex with someone **ALWAYS USE A CONDOM**
It could save your life but remember condoms are **NOT 100%** effective.



Appendix I2 – Male Sexually Transmitted Diseases Power Point (Chinese Version)

性传播疾病

作者: 多杰(John Walkingshaw)

Version 2.0 (2014)

Author: John Walkingshaw

性传播疾病

- 传播途径?
- 如何预防性传播疾病?
- 如何发现自己是否患有性传播疾病?
- 所有的性传播疾病都能彻底治愈吗?
- 如果怀疑自己得了性传播疾病该怎么办?

Author: John Walkingshaw

性传播疾病的传播途径

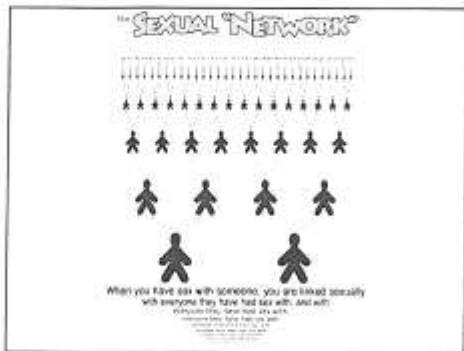
- 与患有性传播疾病的人发生没有任何保护措施的性行为。
- 正常的性交及口交,肛交均可传播性疾病。
- 有些性传播疾病,如艾滋病和乙型肝炎,还可以通过使用性病患者已使用过的注射器或输液器传播。

Author: John Walkingshaw

如何发现谁是被感染者?

- 不能!
- 任何人都可能患有性传播疾病。
- 部分性传播疾病患者并没有明显的临床症状。
- 避免与性工作者发生性行为,因为他们多患有性传播疾病。
- 你的性伙伴可能在遇到你之前就与他人发生过性关系。

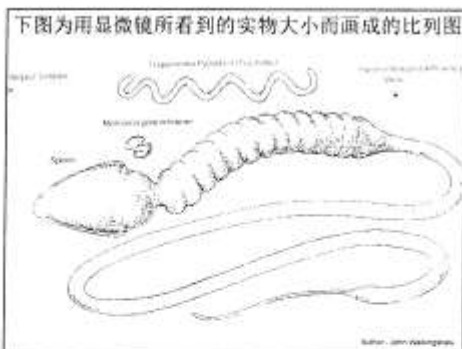
Author: John Walkingshaw



如何预防?

- 避免性交是**100%**有效的预防办法!!!
- 如果要与某人发生性关系一定要使用**避孕套**它可能挽救你的生命。
- 切记! 使用避孕套并不是**100%**有效的预防性传播疾病的方法。

Author: Jan Waplingman



没有保护措施性行为会导致.....

- 就像是蒙起自己的双眼穿梭于繁忙的街道之中.....
- 早晚你将被车辆碰到或碰伤!!!
- 发生性关系的频率越多, 性交伙伴越多被传染的可能性也就越大。

Author: Jan Waplingman

如何正确使用避孕套?

- 打开包装袋
- 不要用牙齿或剪刀打开包装袋
- 谨防用指尖划破避孕套
- 尽量使用水性润滑剂,如KY液等,油性润滑剂有可能损害避孕套
- 避孕套只有在你的拍档的阴茎达到完全勃起时才能套于阴茎上
- 如果你的拍档有包皮过长的情况时,要将他的包皮完全剥离阴茎头表面后再套上避孕套

Author: John Worthington

避孕套的使用 - 步骤 1

- 在将避孕套套在勃起阴茎时用手捏住避孕套的最前端将里面的空气完全排空



Author: John Worthington

避孕套的使用 - 步骤 2

- 用一只手捏住避孕套的顶端
- 另一只手则将卷叠的避孕套末端轻轻向勃起的阴茎根部展开



Author: John Worthington

避孕套的使用 - 步骤 3

- 确定避孕套已完全展开至阴茎的根部



Author: John Worthington

避孕套的使用 - 步骤 4

- 当你射精后, 紧握住避孕套的根部 (橡皮环), 然后慢慢将仍然勃起的阴茎从你的拍档阴道抽出
- 使用后避孕套的处理
- 切不可重复使用避孕套

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如何发现自己是否患有性传播疾病

- 性传播疾病可分为多种不同的类型。
- 患性传播疾病后, 男性较女性更易出现症状。
- 不同的性传播疾病有着不同的症状。
- 乙型肝炎等其他性传播疾病也可通过无保护措施的性行为进行传播。
- 下面我们来认识一些在没有使用避孕套的性行为时容易感染的性传播疾病。

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淋病

- 淋病是中国五大常见性传播疾病之一
- 淋病常见症状有:
 - ◆ 排尿时有烧灼及疼痛感
 - ◆ 黄色分泌物自尿道流出

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淋病



淋病的治疗及其常见并发症

- 正确的抗生素使用对治疗淋病效果明显
- 未给予及时治疗的淋病可能出现以下并发症:
 - ◆ 不育不孕
 - ◆ 附睾炎
 - ◆ 关节炎
 - ◆ 皮疹
 - ◆ 发热

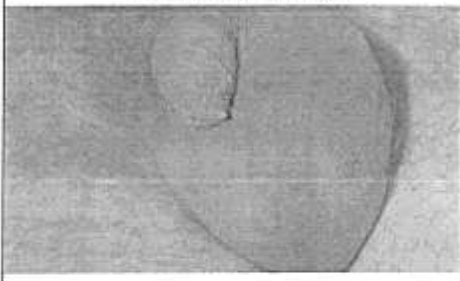
Author: John Worthington

淋病导致附睾炎



epididymitis (a complication of gonorrhea) www.healthac.org

淋病导致附睾炎



衣原体感染

- 衣原体与淋病合并感染较常见
- 感染衣原体后可出现以下症状:
 - ◆ 排尿时可有尿道灼烧感及疼痛
 - ◆ 清亮或黄色的分泌物自尿道排出
 - ◆ 睾丸疼痛
 - ◆ 射精时有疼痛感

Author: John Worthington

衣原体感染



Kultur: John H. Johnson

衣原体感染的治疗及其常见并发症

- 正确的抗生素使用对治疗淋病效果明显
- 未给予及时治疗的衣原体感染可能出现以下并发症:
 - ◆ 不育不孕
 - ◆ 附睾炎
 - ◆ 关节炎
 - ◆ 眼部感染

Kultur: John H. Johnson

梅毒

- 及时发现后梅毒可被成功治愈
- 长期未给予治疗时可导致:
 - ◆ 斑秃
 - ◆ 心脏疾病
 - ◆ 失明
 - ◆ 瘫痪
 - ◆ 精神症状
 - ◆ 死亡

Kultur: John H. Johnson

一期梅毒



阴茎表面梅毒硬性下疳



黏膜下梅毒硬性下疳



二期梅毒表现--- 皮疹

▶ 手掌及脚掌为主要的特征性侵犯对象



二期梅毒表现--- 皮疹

- 一般在硬性下疳消退后的2周至6个月内出现
- 有时也可出现类似淋病结、咽喉痛、类似疣的小疱疹遍布于阴囊和口腔周围



二期梅毒---斑秃



Author: John H. Abingdon

晚期梅毒瘤



初发生殖器疱疹

- 一般没有明显症状
- 若有症状时,常见症状包括:
 - ◆ 在阴茎表面可出现多处小片状糜烂灶,疼痛明显
 - ◆ 股沟区出现肿大淋巴结(可持续几周至几个月)
 - ◆ 发热
 - ◆ 身体不适
 - ◆ 肌肉疼痛
 - ◆ 脑膜炎

Author: John H. Abingdon

初发生殖器疱疹



Author: John H. Abingdon



生殖器疱疹的治疗及预后

- 治疗可有效缩短症状持续时间
- 约>80%的患者在治疗后一年内复发4到5次
- 复发时的症状要比初发时轻缓且持续时间较短

Author: John Watergreen


生殖器疣

- 这种疾病是由人乳头瘤病毒引起的
- 使用避孕套可避免感染生殖器疣
- 这种病毒可以引起癌症。
- 治疗可以是局部药物治疗但必要时需进行手术治疗
- 有一种疫苗可以有效的预防这种疾病

Author: John Watergreen

生殖器疣

➢ 口交可导致疣体出现在生殖器,肛门和喉部等部位



Source: www.health.gov.au

生殖器疣



© 2008 Health.gov.au

生殖器疣



阴虱

• 避孕套无法防止阴虱的传播,但感染后的治疗是非常简单且有效的



pubic lice ('crabs')
www.health.gov.au

艾滋病病毒/艾滋病

- 使用避孕套将可能减小被传染艾滋病毒的可能
- 早期症状包括如下:
 - 发热
 - 淋巴结肿大
 - 喉咙痛
 - 皮疹
 - 肌肉及关节疼痛
 - 腹泻
 - 头痛

Author: 2011-10-10

艾滋病患者遍布全身的卡氏肉瘤



Author: 2011-10-10

艾滋病

- 根据报道在中国艾滋病是第一大致死亡
的传染性疾病。
- 治疗只能延长生命但

目前没有治愈的办法
艾滋病是致命的!

Author: 2011-10-10

发现自己得了性传播疾病后该怎么办?

- 尽快去看医生
- 越是早诊断,早治疗,发生并发症的可能也就
越小
- 说服你的性伴侣也尽快接受治疗,以免再次
相互传播

Author: 2011-10-10

请记住

- 避免性交是**100%**有效的预防办法!!!
- 如果要与某人发生性关系一定要使用**避孕套**它可能挽救你的生命。
- 切记! 使用避孕套并不是**100%**有效的预防性传播疾病的方法。

Adapted - JIM WASHINGTON

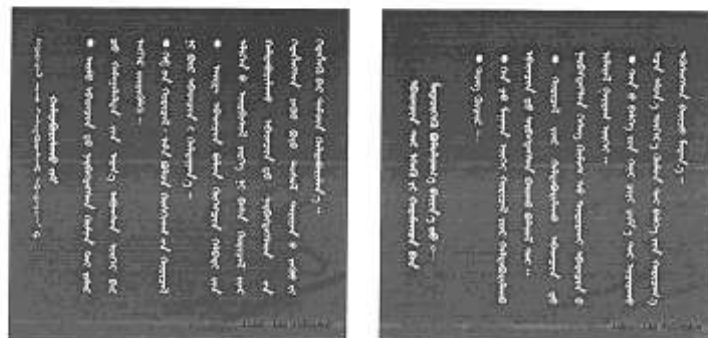


爱的明智

健康生活

Adapted - JIM WASHINGTON

Appendix I3 – Male Sexually Transmitted Diseases Power Point (Mongolian version)



بازرسی در ساق راست

- ساق راست و ساق چپ - در وقت ایستادن
- در وقت ایستادن در وقت ایستادن
- در وقت ایستادن در وقت ایستادن
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بازرسی در ساق چپ

- ساق چپ و ساق راست - در وقت ایستادن
- در وقت ایستادن در وقت ایستادن
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بازرسی در ساق راست

- ساق راست و ساق چپ - در وقت ایستادن
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بازرسی در ساق چپ



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Author - Jila Wakkajani

میتراکوت و پتنگ تلم پتنگه‌تلمه



Author - Jila Wakkajani

میتراکوت

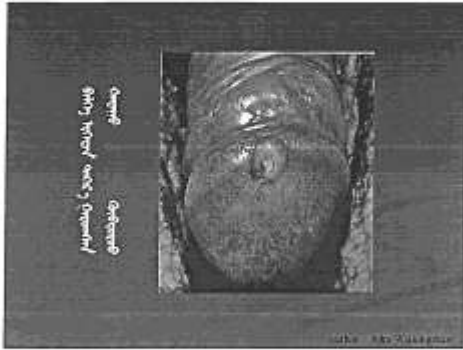
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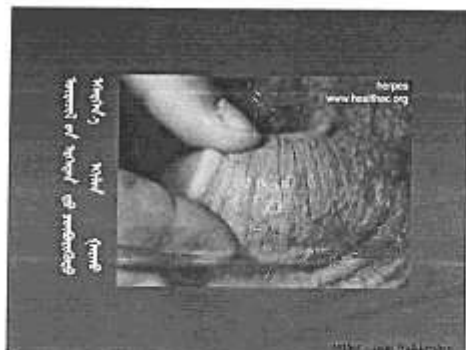
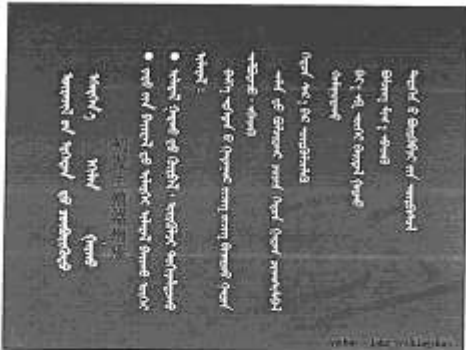
Author - Jila Wakkajani

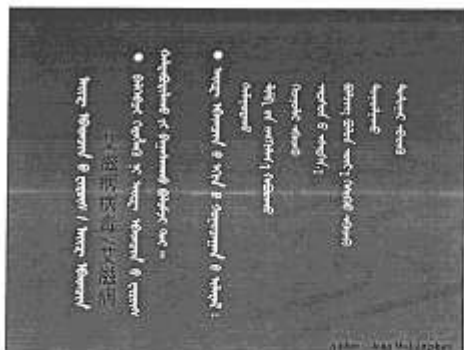
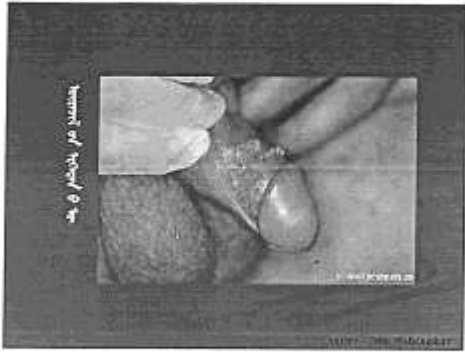
میتراکوت و پتنگ تلم پتنگه‌تلمه

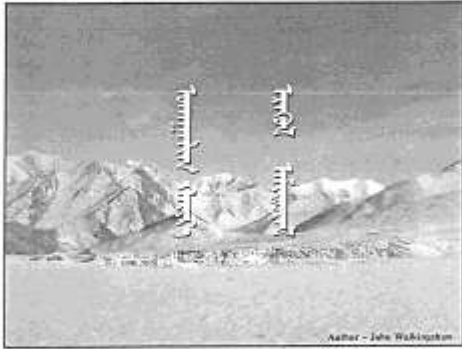


Author - Jila Wakkajani









Appendix I4 – Male Sexually Transmitted Diseases Power Point (Tibetan Version)

འཕྲིག་རྩྭ་ལས་འགོས་པའི་རིམས་ནད།

ཚོལ་པ་ རྗེ། (John Walkingshaw)

Version 4 21/8/2018
Author - John Walkingshaw

འཕྲིག་རྩྭ་ལས་འགོས་པའི་རིམས་ནད།

- ཚུལ་མི་ལྟར་འགོས་པ།
- འཕྲིག་རྩྭ་འགོས་ནད་དེ་རང་ཉིད་ལ་འགོས་ཡོད་མེད་མི་ལྟར་ཤེས་ཐུབ།
- འཕྲིག་རྩྭ་འགོས་ནད་དེ་རང་ཉིད་ལ་འགོས་ཡོད་མེད་མི་ལྟར་ཤེས་ཐུབ།
- འཕྲིག་རྩྭ་འགོས་ནད་ཡོད་ཚད་ཚུ་བ་ནས་གསོ་བཅོས་ཉིད་ཐུབ་པམ།
- གལ་ཏེ་རང་ཉིད་ལ་འཕྲིག་རྩྭ་རིམས་ནད་འགོས་ཡོད་པར་དོགས་སྐར་ཕྱིན་ཚེ་མི་ལྟར་ཉེན་ཉེས།

Author - John Walkingshaw

འཕྲིག་རྩྭ་རིམས་ནད་ཀྱི་འགོས་ཚུལ།

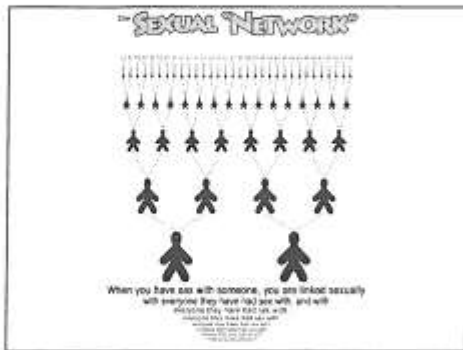
- འཕྲིག་རྩྭ་འགོས་ནད་ཡོད་པའི་མི་དེ་ལ་འགོག་རྒྱུ་མཁས་གང་པར་མེད་པར་འཕྲིག་པ་རྩྭ་དཔ།
- ཚུན་མཚན་གྱི་འཕྲིག་པ་རྩྭ་ཚུལ་གང་ལ་ཡིས་འཕྲིག་པ་རྩྭ་ཚུལ། ལམ་ལུགས་ཀྱི་འཕྲིག་པ་རྩྭ་ཚུལ་གང་ཀྱང་གཞན་མཁས་རྩྭ་རིམས་ནད་པའོ་ཉིད།
- འཕྲིག་རྩྭ་རིམས་ནད་དེ་དཔེར་ན་མེ་མོ་དང་མཚན་ཚད་ལྟར་ལྟོང་། མེ་མོ་མེ་མོ་ལྟར་ལྟོང་། འཕྲིག་རྩྭ་རིམས་ནད་འགོས་ཡོད་པའི་ནད་པ་གཞན་གྱིས་འགོས་རྩྭ་ལེན་པའི་མཚན་ལས་འགོས་རྩྭ་ལེན་པ་ལྟར་ལྟོང་།

Author - John Walkingshaw

གཞན་ལ་འགོས་ཡོད་མེད་མི་ལྟར་ཤེས་ཐུབ་པམ།

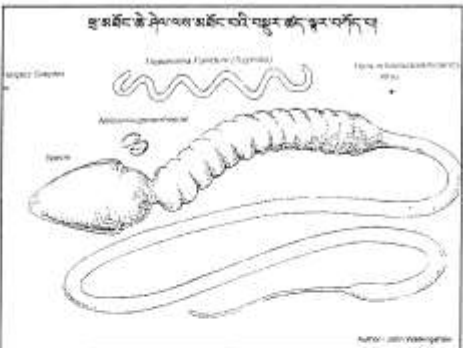
- རྩྭ་ལྱིམ་མི་ཤེས།
- མི་གང་ཀྱང་ལྱིམ་ལ་འཕྲིག་རྩྭ་རིམས་ནད་དེ་འགོས་ཡོད་ཉིད།
- འཕྲིག་རྩྭ་འགོས་ནད་ཡོད་པའི་མི་ལ་ལའི་ནད་ཉེན་མཚན་གསལ་མིན།
- རྩྭ་འཚོང་མ་ལ་གཏུན་ནས་འཕྲིག་པ་རྩྭ་མི་ཀྱང་། དེའི་རྩྭ་མཚན་ནི་ཚོ་ཚོ་མང་ཅེ་བར་འགོས་ནད་ཡོད་ཉིད།
- རྩྭ་དང་འཕྲིག་པ་རྩྭ་གྲོགས་དེ་རྩྭ་ལ་མ་ཐུག་གོང་མི་གཞན་ལ་འཕྲིག་པ་རྩྭ་ཡོད་ཉིད།

Author - John Walkingshaw



ཚུན་འགོག་ཇི་ལྟར་བྱ་དགོས་པའི་རྟོག་པོ།

- འཕྲིག་པ་གཏན་ནས་མེ་རློན་པ་ནི་ **100%** ལེ་ཚུན་འགོག་ཐབས་ལམ་བཟང་པོ་དེ་ཡིན།
- ཀམ་ཏེ་མི་གཞན་ལ་འཕྲིག་པ་རློན་ཏུ་ཡིན་ཕྱིར་ངེས་པར་དུ་རྒྱང་ཁྲུག་པོ་ལོ་ལ་དགོས།
- དེས་རློན་ཀྱི་ཚ་ཚོག་རྒྱབ་ཅིང།
- ཡིན་ཡང་རྒྱང་ཁྲུག་པོ་ལང་ **100%** ལེ་ཚུན་འགོག་ཐབས་ལམ་བཟང་པོ་དེ་ཡིན།



རྒྱང་ཁྲུག་མ་ལོན་པར་འཕྲིག་པ་རློན་ཏུ་ཚུལ་དེ་ནི་.....

- མང་གི་ཚིག་གཉིས་ལག་ལས་ལག་ལ་ཞེ་བཅུ་ཚིག་སྟོང་འདུམ་ཀྱི་རྒྱ་བྱང་དུ་འགོ་བ་དང་འདྲ་ལ།.....
- དུས་རྒྱུ་མིག་ལ་རྒྱང་ས་འགོར་ཀྱིས་དུང་ནས་རྒྱུན་ཞེས་ལེས་ལས་ཀྱིན་པ་ཞེ།
- འཕྲིག་པ་རློན་ཐེངས་དང་རློན་ཚོགས་ཇི་ལྟར་མང་ན་འགོས་ནད་དེ་ལྟར་ལོ་ལྷིང།

ལྷང་ལྷངས་ཀྱི་ལྷང་ཡང་དག་པར་བརྟོན་གྱི་ལོ་རྒྱུད་བྱ་དགོས།

- ལྷང་ལྷངས་བཅུག་པའི་རྒྱན་ལྷན་དེའི་ལ་ལེམས་ལྷང་ལྷང་ལེན་པའི་ཕྱིན་པ།
- མོ་དང་ལེ་ལྷུ་ལེམས་ལྷང་ལྷངས་བཅུག་པའི་རྒྱན་ལྷན་དེའི་ལ་ལེན་མི་བྱང་།
- རེན་མོ་ལེམས་ལྷང་ལྷངས་ལ་གཞི་དུ་རྒྱན་པའོ་མི་བྱང་།
- ལག་ལུས་མི་རྒྱལ་རྒྱལ་རྒྱ་ལོ་རང་བཞིན་ལན་གྱི་གཤེར་པག་ལན་མའོ་ལོ་སོ་དེ་བརྟོན་ན་བཟང་། ལེམས་ལྷང་ KY ལེམས་ལྷང་རྒྱ། ལྷན་གྱི་རང་བཞིན་ལན་གྱི་གཤེར་པག་མའོ་ལོ་སོ་ཡིས་ལྷང་ལྷངས་ལ་གཞི་དུ་རྒྱན་པའོ་བྱིང་།
- ལྷང་ལྷངས་དེ་ལྷོད་ཀྱི་ལོ་མཚན་མེ་མེར་རྒྱལ་དུ་ལ་ལོག་ལ་བཞོན་དགོས།
- ལག་ལེན་གྱི་ལོ་མཚན་ལ་བཅས་པའི་རྒྱ་མོ་ཡོད་ན། ལེམས་ལྷང་གྱི་ལྷངས་ལོ་རྒྱ་མོ་དེ་རྒྱ་ལར་བཅེས་ཤིང་ད་གཞི་དུ་ལོག་ཀྱང་བཞོན་དགོས།

Autor: 2010 Holografen

ལྷང་ལྷངས་བརྟོན་མཁས་ཀྱི་ལོ་རིམ་དང་ལོ།

- ལྷང་ལྷངས་དེ་མེར་རྒྱལ་བཅུག་པའི་རྒྱན་གྱི་ལོ་མཚན་ལྟེ་ལོག་ལ་མ་བཞོན་གོང་ལྷང་ལྷངས་ཀྱི་ཚེ་ལམ་བཟང་གི་ལན་དེ་དེམས་ལྷང་གཞི་དུ་བྱོན་དགོས།



Autor: 2010 Holografen

ལྷང་ལྷངས་བརྟོན་མཁས་ཀྱི་ལོ་རིམ་གཉིས་པ།

- ལག་ལ་གཤིག་གིས་ལྷང་ལྷངས་ཀྱི་ཚེ་མོ་བཅེས་དགོས།
- ལག་ལ་གཤིག་གིས་དེའི་ལུག་ལ་ལེས་ལོད་པའི་ལྷང་ལྷངས་ཀྱི་ཚེ་མོ་ནུས་ལམས་ལྷེ་ཡང་མོར་མེར་རྒྱལ་བཅུག་པའི་ལོ་མཚན་ལོག་ཀྱང་ལེས་བཞིན་བཞོན་དགོས།



Autor: 2010 Holografen

ལྷང་ལྷངས་བརྟོན་མཁས་ཀྱི་ལོ་རིམ་གསུམ་པ།

- ལྷང་ལྷངས་དེ་ལོ་མཚན་གྱི་རྒྱ་རེད་ལོད་ལེད་ལ་གཏམ་དགོས།



Autor: 2010 Holografen

བྱང་ལྷན་པོ་ལ་མཁམ་བྱི་གོ་རིམ་བཞི་བ།

- བྱང་ལྷན་བཅའ་རྒྱུ་ལྷན་གྱི་ལ་དམ་པོར་བྱང་ནས་མེར་རླུང་བཟུབ་པའི་ཚེ་མཚན་དེ་ཚོ་མཚན་ནས་ཕྱིར་ལོན་དགོས།
- ལོག་ཕྱིན་ལུང་རྒྱུ་ལྷན་ལྷན་དེ་གང་ལས་འཕེན་མི་འདོད། མི་ལམ་ནན་དང་རྒྱལ་པོར་དུ་ཕྱིར་ལོག་ལས་འཕེན་མི་འདོད།

➢ བྱང་ལྷན་དེ་ཡང་བརྒྱུར་ལོག་ཕྱིན་བྱ་མི་འདོད།

Author: John Wangchenpa

རང་ལ་འབྲིག་ཕྱིན་ལོག་ཕྱིན་ཡོད་མེད་མི་རྒྱུར་ཤེས་སྟབས་ལམ།

- འབྲིག་ཕྱིན་ལོག་ཕྱིན་དེ་ལ་རིགས་མང་པོ་ཡོད།
- འབྲིག་ཕྱིན་ལོག་ཕྱིན་དེ་འགོ་མ་གྱི་ཚོ་ལས་ལོ་ལ་ནད་རྟགས་དེ་མཚོན་ལྟར་ཡིན།
- འབྲིག་ཕྱིན་ལོག་ཕྱིན་རིགས་མི་འདུ་བ་ལས་ནད་རྟགས་ཀྱང་རིགས་མི་འདུ་བ་ཕྱིར་མཚོན།
- བྱང་ལྷན་ལོག་ཕྱིན་མ་ལུས་ན་ཕྱིན་ལ་འབྲིག་ཕྱིན་རིམ་ནད་རིགས་མང་པོ་འགོ་ཕྱིན། མཚན་ཚད་རིམ་མི་(L.H.I)ཀྱང་དེ་ལྟར་དུ་གཏོགས། ལམ་ལ་དུང་ཚོས་འབྲིག་ཕྱིན་རིམ་ནད་འགའ་ལ་ལོས་འཕོན་བྱ་ལྟོ།

Author: John Wangchenpa

ཕྱི་རིམ་ལ། (## མོ།)

མ་མཁམ་ལ་ནས་ནད་འདིའི་མིང་ལ་བྱང་གཞིའི་ནད་ཤེས་འཕོད།

- ཕྱི་རིམ་ལ་ཕྱི་ནད་ནི་རྒྱལ་ལས་འདིའི་རྒྱུ་མཚོན་གྱི་འབྲིག་ཕྱིན་ལོག་ཕྱིན་ན་ལེ་ནད་གསེས་ཤིག་ཡིན།
- ཕྱི་རིམ་ལ་ཕྱི་ནད་རྟགས་ལ།
 - གཅིན་གཏོང་དུས་ན་རྒྱག་ལངས་ལ།
 - རྒྱག་གིས་འོ་ཕྱིར་མོན་ལ།

Author: John Wangchenpa



ལྷི་རིམས་ནད་ཀྱི་ཕགོ་བོའི་དང་རྒྱན་མཚོང་སྐྱོན་གཏན་ཉིན་ནད་ཉགས།

- ཡང་དག་པའི་བྱིན་པ་ཤོག་སྐྱོན་ལས་དང་ན་ལྷི་རིམས་ཀྱི་ནད་པ་ལ་ཚང་པ་ཚང་ན་གསལ་ཟུག་
- ཕགོ་བོའི་དུལ་སྐྱོང་མ་ཉུང་བ་ལས་རྒྱང་པའི་ལྷི་རིམས་ཀྱི་སྐྱ་གཞན་ཀྱི་ནད་པ་ལ་ཕྱེས་གསལ་ཟུག་
- ◆ མངའ་ཚུགས་ཀྱི་འཇུག་མི་ཉུང་པ།
- ◆ རྫོང་རིམ་ཀྱི་ནད།
- ◆ མིགས་ན་པ།
- ◆ ལགས་པར་རྒྱ་ལྟུང་འཇུག་པ།
- ◆ རྫོང་མངའ་པ།


Author : Jam Wagsangpa

ལྷི་རིམས་ཀྱི་ནད་ལས་བྱུང་བའི་རྫོང་རིམ་ཀྱི་ནད།



epididymitis (a complication of gonorrhea) www.who.org

ལྷི་རིམས་ཀྱི་ནད་ལས་བྱུང་བའི་རྫོང་རིམ་ཀྱི་ནད།



Author : Jam Wagsangpa

ལྱང་ཉིན་ཚོགས་མང་མ། (衣原体感染)

- ལྱང་ཉིན་ཚོགས་མང་མ་དང་ཉུང་གཞི་གཉིས་མཉམ་དུ་འབྱུང་བ་ཉུགས་ཟེ།
- ལྱང་ཉིན་ཚོགས་མང་མ་ལ་ཤོས་ཤིས་གསལ་ཀྱི་ནད་ཉགས་འདི་དག་འབྱུང་གྱི།
- ◆ ལྷི་རིམས་གཏོང་བའི་རྒྱལ་མཉམ་ཀྱི་གཞིན་ལམ་ལ་ཚོའམ་ཉེད་པ་དང་ན་ལྟག་ཉེད་པ།
- ◆ དངའ་ལའངས་མེད་པའི་མགས་མོན་རྒྱལ་གཞིན་ལམ་ནས་མོན་པ།
- ◆ རྫོང་རིམ་ན་པ།
- ◆ ལྷི་རིམས་ཀྱི་ནད་ལས་བྱུང་བའི་ཉུང་མངའ་པ།

Author : Jam Wagsangpa



**ལུང་རྟེན་ཚོགས་མང་མ་པའོ་བཅོས་ཉེད་མཁུལ་དང་དེའི་རྩུན་མཚོང་
ཐུ་གཉན་ཕྱིན་པ།**

➢ ལུང་རྟེན་པའི་རྩུན་བཅོག་ཐུན་འཇུག་ན་ལུང་རྟེན་ཚོགས་མང་མའི་རྩུན་བཅོས་པ་བཟུལ་གྱི་
མཁུལ་འོ་བཅུང་བེད།

➢ ལུའོ་བཅོས་དུལ་རྩུང་མ་ལུང་དའི་ལུང་རྟེན་ཚོགས་མང་མ་ནི་དེར་འཇུག་ཐུ་པའི་ནད་ལྟོ།

- མངལ་མཉམ་ལུ་འཇུག་ལེ་ལུལ་པ།
- ལྷོང་འོ་ལ་ན་པ།
- དུལ་ཚོགས་ན་པ།
- མིག་ལ་འཚོམ་ལུང་ལོག་པ།

Author : John Makingsham

ལྷེ་ཚོག་ / རེག་དུག (梅毒)

➢ དུལ་རྩུན་པོམ་བཅུང་ན་བཅོམ་གྱི་ནད་རྩུལ་འདི་ལང་མངལ་དུགས་ལུ་བཟོ་རྟུག།

➢ དུལ་རྩུན་མིང་ལོར་ལུའོ་བཅོས་མ་ལུང་དང་ལུ་འཇུག་ཐུ་པའི་ནད་ལྟོ།

- ལུ་ལྷེ་པ།
- ལྷོང་ན་པ།
- མིག་ལ་ན་པ།
- དུལ་ལོ་ན་པ།
- ལྷོ་པ།
- ◆ འཇུག་པ།

Author : John Makingsham





ལྷན་པོ་ལྟོ་མེད་ལྟོ་མེད་ལྟོ་མེད་ལྟོ་མེད་ལྟོ་མེད་ལྟོ་མེད་

➢ ལྷན་པོ་ལྟོ་མེད་ལྟོ་མེད་ལྟོ་མེད་ལྟོ་མེད་ལྟོ་མེད་ལྟོ་མེད་

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ལྷན་པོ་ལྟོ་མེད་ལྟོ་མེད་ལྟོ་མེད་ལྟོ་མེད་ལྟོ་མེད་ལྟོ་མེད་

- ལྷན་པོ་ལྟོ་མེད་ལྟོ་མེད་ལྟོ་མེད་ལྟོ་མེད་ལྟོ་མེད་ལྟོ་མེད་
- ལྷན་པོ་ལྟོ་མེད་ལྟོ་མེད་ལྟོ་མེད་ལྟོ་མེད་ལྟོ་མེད་ལྟོ་མེད་

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ཚོག་མདུ་བཟོ་མོག་རྐབས་ལས་ལེན་གྱི་རྒྱུ་ཤིང་། (初发生殖器疱疹)

➢ རྒྱུ་ཤིང་ལེན་གྱི་རྒྱུ་ཤིང་ལེན་གྱི་རྒྱུ་ཤིང་།

- ལམ་ལེན་གྱི་རྒྱུ་ཤིང་ལེན་གྱི་རྒྱུ་ཤིང་ལེན་གྱི་རྒྱུ་ཤིང་།
- རྒྱུ་ཤིང་ལེན་གྱི་རྒྱུ་ཤིང་ལེན་གྱི་རྒྱུ་ཤིང་ལེན་གྱི་རྒྱུ་ཤིང་།
- ལམ་ལེན་གྱི་རྒྱུ་ཤིང་ལེན་གྱི་རྒྱུ་ཤིང་ལེན་གྱི་རྒྱུ་ཤིང་།
- ལམ་ལེན་གྱི་རྒྱུ་ཤིང་ལེན་གྱི་རྒྱུ་ཤིང་ལེན་གྱི་རྒྱུ་ཤིང་།
- ལམ་ལེན་གྱི་རྒྱུ་ཤིང་ལེན་གྱི་རྒྱུ་ཤིང་ལེན་གྱི་རྒྱུ་ཤིང་།
- ལམ་ལེན་གྱི་རྒྱུ་ཤིང་ལེན་གྱི་རྒྱུ་ཤིང་ལེན་གྱི་རྒྱུ་ཤིང་།
- ལམ་ལེན་གྱི་རྒྱུ་ཤིང་ལེན་གྱི་རྒྱུ་ཤིང་ལེན་གྱི་རྒྱུ་ཤིང་།

Author : John S. M. S. M. S.





ཚོག་མའི་སྤྱེ་འཕེལ་མ་ལག་གི་རྒྱར་འབྱུང་ནད་ཀྱི་གསོ་བཅོས་
དང་རྫོན་དཔག་ནད་ཉེན་ལ།

- > གསོ་བཅོས་བྱས་ན་ནད་ཉེན་ལ་མངོན་པའི་དུས་ལྟར་བྱང་དུར་འགྲོ།
- > >80% རྒྱར་པ་གསོ་བཅོས་བྱས་ཆེས་ལོ་གཅིག་གི་ནང་ནད་དེ་མེད་པ་བཞི་ནས་ལྔ་ཡང་བསྐྱར་འབྱུང་།
- > བསྐྱར་འབྱུང་གི་ནད་ཉེན་ལ་དེ་ཚོག་མར་སྤོང་བའི་ནད་ཉེན་ལ་དང་བསྐྱར་ནད་ལ་ཡང་བ་དང་ནད་ལྟར་མེ་བྱང་དུ་འགྲོ།

Author: John W. Berggren

སྤྱེ་དབང་ག་མཚོན། (生殖器疣)

- > རྒྱར་འབྱུང་གི་མིའི་ཕུ་ཉིན་སྤྱེ་དབང་ག་ (人乳头瘤病毒) ལས་བསྐྱེད་པ་རེད།
- > བྱང་ལྷུང་ལ་ཕོ་ལ་སྤྱིར་བཏང་ན་སྤྱེ་དབང་ག་ མཚོན་པའི་མི་རྒྱུ་པའི་ལེས་པ་མེད།
- > རྒྱར་དུག་འདི་ལ་སྤྱིར་བཏང་ན་སྤྱེ་དབང་ག་ རྒྱར་ལ་དང་བྱང་ལ་ལར་གསལ་བཅོས་བྱ་དགོས།
- > རྒྱར་དུག་འདི་ལ་སྤྱིར་བཏང་ན་སྤྱེ་དབང་ག་ རྒྱར་ལ་དང་བྱང་ལ་ལར་གསལ་བཅོས་བྱ་དགོས།

Author: John W. Berggren

ཕྱི་དབང་ག་མཚོན།

➤ ཁ་ཡིས་འབྲིག་པ་ཕྱི་དབང་ག་མཚོན་དེ་ཕྱི་དབང་ཚོར་མཐུན་ཏེ་
མཚོན་ཏུ་བཞོལ་བ།



Author: Lynn Wangkham

ཕྱི་དབང་ག་མཚོན།



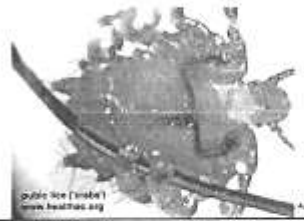
ICD WAKUCHIHEAD

ཕྱི་དབང་ག་མཚོན།



འདོན་མཁ་ཤིག (附虱)

➤ ལྷང་ལྷུང་གིས་འདོན་མཁ་ཤིག་འདོན་པ་འགག་འདོན་ལྱིད་མི་རྒྱལ་པ་མ་འབྲུགས་ཡངས་ལོན་
མིན་པར་བཞོལ་ཞེས་ཞུ་བ་ཚོས་ལྱིད་ཟུ་བ་དང་འབྲུག་ན་གས་ལྷང་མཚོན་འགས་མིན།



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Author: Lynn Wangkham

མེ་ཅི་ནད་ཕྱི་ནད་དུག་ མེ་ཅི་ནད། (艾滋病毒/艾滋病)

- ལྷན་ལྷན་བཞོན་སྤྱོད་ཀྱིས་ལྷན་ན་མེ་ཅི་ནད་ལྷན་པའོ་ལོ་ཚེ་ལས་མེ་ཅི་ནད་དུ་གཏོང་བྱུང་།
- མིལ་མང་ལྷན་སྤྲུལ་མང་པོ་ཞིག་མཚན་པ་གསུམ་པལ་ལས་ན་ག།
- མེ་ཅི་ནད་ལྷན་པའོ་ལོ་ཚེ་ལས་མེ་ཅི་ནད་དུ་གཏོང་བྱུང་།
- མེ་ཅི་ནད་ལྷན་པའོ་ལོ་ཚེ་ལས་མེ་ཅི་ནད་དུ་གཏོང་བྱུང་།
- ལྷན་པའོ་ལོ་ཚེ་ལས་མེ་ཅི་ནད་དུ་གཏོང་བྱུང་།
- ལྷན་པའོ་ལོ་ཚེ་ལས་མེ་ཅི་ནད་དུ་གཏོང་བྱུང་།
- ལྷན་པའོ་ལོ་ཚེ་ལས་མེ་ཅི་ནད་དུ་གཏོང་བྱུང་།
- ལྷན་པའོ་ལོ་ཚེ་ལས་མེ་ཅི་ནད་དུ་གཏོང་བྱུང་།

Author: John Wanggiphar

མེ་ཅི་ནད་པོའི་ཕྱུག་ལོང་ས་ལ་བརྒྱུ་མོན་པོའི་ཁ་ཕྱིའི་ཁ་ཕྱུག་།



Author: John Wanggiphar

མེ་ཅི་ནད། (艾滋病)

- ལྷན་པའོ་ལོ་ཚེ་ལས་མེ་ཅི་ནད་དུ་གཏོང་བྱུང་། མེ་ཅི་ནད་ནི་མི་རྒྱུས་ཀྱི་ལམ་དུ་བརྒྱུ་མོན་པོའི་ཁ་ཕྱུག་ནད་ཨང་དང་པོ་ཡིན་པར་བཤད།
- ལོ་ལོ་ལོ་ལོ་ལྷན་པའོ་ལོ་ཚེ་ལས་མེ་ཅི་ནད་དུ་གཏོང་བྱུང་། མེ་ཅི་ནད་ནི་མི་རྒྱུས་ཀྱི་ལམ་དུ་བརྒྱུ་མོན་པོའི་ཁ་ཕྱུག་ནད་ཨང་དང་པོ་ཡིན་པར་བཤད།

མེ་ཅི་ནད་ནི་མི་རྒྱུས་ཀྱི་ལམ་དུ་བརྒྱུ་མོན་པོའི་ཁ་ཕྱུག་ནད་ཨང་དང་པོ་ཡིན་པར་བཤད།

Author: John Wanggiphar

མེ་ཅི་ནད་པོའི་ཕྱུག་ལོང་ས་ལ་བརྒྱུ་མོན་པོའི་ཁ་ཕྱུག་དུ་གཏོང་བྱུང་།

- ལྷན་པའོ་ལོ་ཚེ་ལས་མེ་ཅི་ནད་དུ་གཏོང་བྱུང་།
- ལྷན་པའོ་ལོ་ཚེ་ལས་མེ་ཅི་ནད་དུ་གཏོང་བྱུང་། མེ་ཅི་ནད་ནི་མི་རྒྱུས་ཀྱི་ལམ་དུ་བརྒྱུ་མོན་པོའི་ཁ་ཕྱུག་ནད་ཨང་དང་པོ་ཡིན་པར་བཤད།
- ལྷན་པའོ་ལོ་ཚེ་ལས་མེ་ཅི་ནད་དུ་གཏོང་བྱུང་། མེ་ཅི་ནད་ནི་མི་རྒྱུས་ཀྱི་ལམ་དུ་བརྒྱུ་མོན་པོའི་ཁ་ཕྱུག་ནད་ཨང་དང་པོ་ཡིན་པར་བཤད།

Author: John Wanggiphar

ཚོང་གྲིལ་ལེན་ལ་འཛིན་དགོས་པ་ནི།

- འཕྲིག་པ་མི་རྒྱུད་པ་ནི་ 100% མི་རྒྱུན་འགོག་མཁུ་ལམ་བཟང་པོ་དེ་ཡིན།
- ལལ་ནེ་མི་གཞན་ལ་འཕྲིག་པ་རྒྱུད་ལྷ་ཡིན་ཕྱིན་ལེས་པར་དུ་རྒྱུང་གྲུབས་བཀོད་དགོས།
- དེས་ཚོང་གྲིལ་ཚེ་ཤོག་རྒྱུ་བྱིང་།
- ཡིན་ལང་རྒྱུ་གྲུབས་ལང་ 100% མི་རྒྱུན་འགོག་མཁུ་ལམ་བཟང་པོ་དེ་ཡིན།

Author - Jami WRIGHT



Author - Jami WRIGHT

Appendix J1 – Female Sexually Transmitted Diseases Power Point (English version)

Sexually Transmitted Diseases

John Walkingshaw

Version 1.0 2012

Sexually Transmitted Diseases

- How do you get them?
- How do you avoid getting them?
- How do you know if you have an STD?
- Can all STD's be treated successfully?
- What should you do if you think you have acquired an STD?

How do you get them?

- By having unprotected sexual intercourse with someone who is infected.
- You can acquire STD's by vaginal, oral or anal sex.
- Some STD's, such as AIDS or Hepatitis B, you can also acquire if you share a needle with someone who is infected.

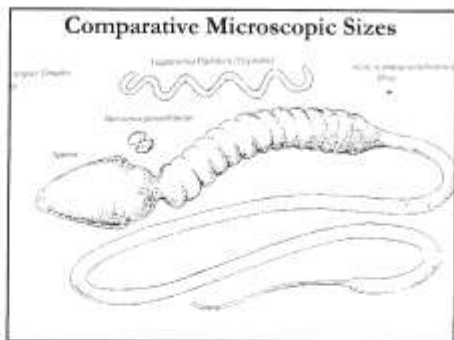
How do you know who is infected?

- You don't!
- Anyone may have an STD.
- Many people with STD's may NOT have visibly obvious symptoms.
- Your partner may have had sex with other people before they met you.



How do you avoid getting them?

- > Abstinence is the **ONLY 100%** effective method!!!
- > If you do have sex with someone **ALWAYS USE A CONDOM**
It could save your life but remember condoms are **NOT 100%** effective.



Having sex without using a condom.....

- > Is like walking across a busy street with your eyes closed
- SOONER** or later you are going to get hit by a car !!!
- > The more you do it and the more partners you have the more likely you are to get an STD.

Who is responsible for your protection?

- YOU ARE !!!
- You **MUST** insist that your partner wear a condom if he wants to have intercourse with you.
- You should always have a supply of condoms if you intend having sex because your partner may not have any with him.
- You must know the correct way for a condom to be worn as your partner may not.
- If a condom is not worn correctly it will offer you **NO PROTECTION** against STD's.

How do you use a condom?

- Open the packet carefully
- Do not use your teeth or scissors to open the packet
- Be careful not to put holes in the condom with your fingernails
- Always use a water based lubricant on the outside of the condom such as KY-Jelly. Oil based condoms may cause the condom to break.
- Condoms must be put on your partner's penis only when it is erect
- If he is uncircumcised you must pull his foreskin back before putting the condom on his penis.

How to use a condom – STEP 1

- Hold the condom by the tip and expel the air from the tip of the condom before placing it on his erect penis.



How to use a condom – STEP 2

- Hold the tip of the condom with one hand
- With the other hand carefully roll the condom down his penis



How to use a condom – STEP 3

- Ensure the condom is rolled to the base of his penis:



How to use a condom – STEP 4

- After he has ejaculated. Tell him to hold the condom firmly by the rim then gently remove his penis, while it is still erect, from your vagina.
- Carefully dispose of the condom. Ensure that other people, especially children, do not come into contact with it.
- **NEVER REUSE A CONDOM**

How do you know if you have an STD ?

- There are many different types of STD.
- Men are more likely to show symptoms of STD's than women.
- The symptoms may be different for different STD's.
- You can acquire many STD's, including Hepatitis B, if you don't use a condom.
- Now we will look at some of these STD's.

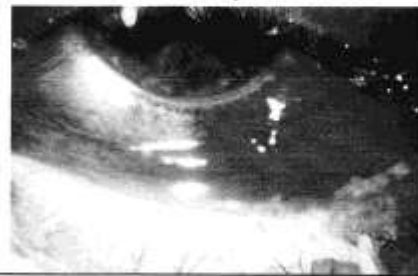
Gonorrhoea

- This is one of the top 5 infectious diseases in China.
- Up to 30% of women may show no symptoms for a long time.
- Symptoms include the following:
 - Vaginal discharge
 - Painful burning sensation on urination
 - Lower abdominal pain
 - Fever

Treatment and complications of Gonorrhoea

- > Gonorrhoea responds well to treatment with the correct antibiotics.
- > If untreated Gonorrhoea may cause:
 - Infertility
 - Intra-uterine death of your baby
 - Spontaneous abortion
 - Ectopic pregnancy
 - Pelvic inflammatory disease
 - Eye infections in your newborn baby
 - Arthritis
 - Rash
 - Fever

Gonococcal Eye Infection



Chlamydia

- > About 80% of women are asymptomatic until complications arise.
- > Symptoms include:
 - Vaginal discharge
 - Pain and burning sensation on urination
 - Bleeding between menstrual periods
 - Lower abdominal pain
 - Fever

Treatment and complications of Chlamydia

- > Chlamydia responds well to the correct antibiotics.
- > If untreated Chlamydia may cause:
 - Infertility
 - Intra-uterine death of your baby
 - Spontaneous abortion
 - Ectopic pregnancy
 - Pelvic inflammatory disease
 - Eye, ear and lung infections in your newborn baby

Neonatal eye infection



Syphilis

- > If diagnosed early it can be treated successfully.
- > If untreated it can result in:
 - ◆ Alopecia
 - ◆ Heart disease
 - ◆ Blindness
 - ◆ Paralysis
 - ◆ Insanity
 - ◆ **DEATH**

Complications in Pregnancy

- Syphilis can be passed on to your unborn baby after the 16th week of pregnancy.
- When a baby is born with Syphilis it may have the following abnormalities:
 - ◆ Facial abnormalities
 - ◆ Abnormalities of the bones and teeth
 - ◆ Central nervous system abnormalities
 - ◆ Enlarged liver and spleen
 - ◆ Anaemia
 - ◆ Deafness
 - ◆ Rash

Congenital Syphilis



Congenital Syphilis



Primary Syphilitic Chancre



Secondary Syphilis Rash

- Palms of the hands and soles of the feet are typically involved.



Secondary Syphilis Rash

- Appears 2 weeks to 6 months after the chancre disappears.
- May also have swollen lymph glands, sore throat and flat bumps that look warts around the vagina, anus and the mouth.



Secondary Syphilis Alopecia



Late Syphilis Gumma



Primary Genital Herpes

- Often there are no symptoms.
- If you do have symptoms they can include:
 - Painful lesions that appear on labia minora and majora, cervix and sometimes vagina about 5 days after sex
 - Enlarged lymph nodes in the groin (may last for several weeks to months)
 - Fever
 - Malaise
 - Muscle pain
 - Meningitis

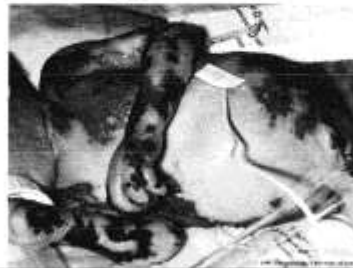
Treatment and prognosis for Genital Herpes

- Treatment can shorten the length of time that people suffer symptoms.
- >80% of people will go on to develop 4 or 5 recurrent episodes within 1 year.
- Symptoms of recurrent Herpes are usually milder and don't last as long.

Complications of Herpes in Pregnancy

- When babies are born to an infected mother they may acquire the disease during birth.
- Symptoms in newborn babies include:
 - Central nervous system problems
 - Seizures
 - Enlarged liver and spleen
 - Jaundice
 - Blood disorders
 - Eye problems
 - Rash

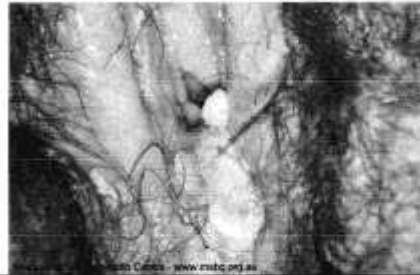
Congenital Herpes



Genital Warts


- This disease is caused by the Human Papilloma virus.
- Condoms may not prevent you from acquiring infection.
- Treatment includes topical applications but surgical removal may be necessary.
- The major complication in women is **CANCER**
- Every year many women **DIE** of cervical cancer
- There is an effective vaccine available to prevent this disease.

Vulval Warts




Genital Warts

- As a result of oral sex, genital warts may infect the throat and larynx.
- Complications in Pregnancy
- This can also cause warts on the baby's genitals, anus and in the throat.



Pubic Lice

- Wearing a condom will not prevent you from becoming infested. They cause itching but treatment is very effective.




Pubic lice (phthirus)
www.banffal.org

HIV / AIDS

- Using condoms may reduce your risk of acquiring HIV.
- There are many symptoms in early disease that may include:
 - Fever
 - Swollen lymph glands
 - Sore throat
 - Rash
 - Muscle and joint pains
 - Diarrhoea
 - Headache

Kaposi's sarcoma in an AIDS patient



AIDS

- AIDS is the leading cause of death by infectious diseases in China.
- Treatment may prolong life but **THERE IS NO CURE.**

AIDS IS FATAL

What should you do if you think you have a Sexually Transmitted Disease?

- See a doctor **AS SOON AS POSSIBLE**
- The sooner an accurate diagnosis is made
The sooner correct treatment can begin
The less likely you are to develop complications
- Let your partner know so they can be treated too

REMEMBER

- Abstinence is the **ONLY 100%** effective method!!!
- If you do have sex with someone
ALWAYS USE A CONDOM
It could save your life but remember
condoms are **NOT 100%** effective.



Appendix J2 – Female Sexually Transmitted Diseases Power Point (Chinese Version)

性传播疾病

作者: 多杰(JohnWalkingshaw)

Version 1 2014/2015

Author: John Walkingshaw

性传播疾病

- 传播途径?
- 如何预防性传播疾病?
- 如何发现自己是否患有性传播疾病?
- 所有的性传播疾病都能彻底治愈吗?
- 如果怀疑自己得了性传播疾病该怎么办?

Author: John Walkingshaw

性传播疾病的传播途径

- 与患有性传播疾病的人发生没有任何保护措施性行为。
- 正常的性交及口交,肛交均可传播性疾病。
- 有些性传播疾病,如艾滋病和乙型肝炎,还可以通过使用性病患者已使用过的注射器或输液器传播。

Author: John Walkingshaw

如何发现谁是被感染者?

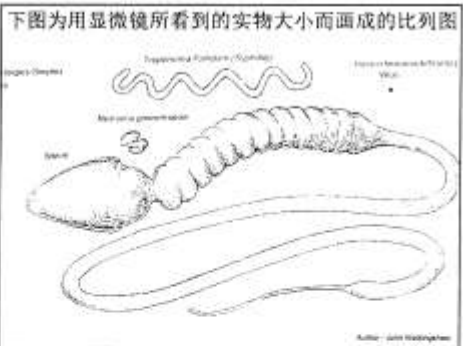
- 很难!
- 任何人都有可能患有性传播疾病。
- 部分性传播疾病患者并没有明显的临床症状。
- 你的性伙伴可能在遇到你之前就与他人发生过性关系。

Author: John Walkingshaw



如何预防?

- 避免性交是**100%**有效的预防办法!!!
- 如果要与某人发生性关系一定要使用**避孕套**，它可能挽救你的生命。
- 切记！使用避孕套并不是**100%**有效的预防性传播疾病的方法。



没有保护措施性行为会导致.....

- 就像是蒙起自己的双眼穿梭于繁忙的街道之中.....
- 早晚你将被车辆碰到或碰伤!!!
- 发生性关系的频率越多, 性交伙伴越多被传染的可能性也就越大。

谁应承担起保护的责任?

- 你自己
- 如要于你的拍档发生性关系那么就一定要坚持劝服他使用避孕套。
- 在发生性关系之前你应该准备避孕套以防你的拍档没有准备避孕套。
- 确保具备使用避孕套的基本知识,因为你的拍档可能没有掌握避孕套的正确使用方法。
- 不正确的避孕套使用可能起不到保护的作用,从而也就无法避免性疾病的传播。

Author: John Westergaard

如何正确使用避孕套?

- 打开包装袋
- 不要用牙齿或剪刀打开包装袋
- 谨防用指尖划破避孕套
- 尽量使用水性润滑剂,如KY液等,油性润滑剂有可能损害避孕套
- 避孕套只有在你的拍档的阴茎达到完全勃起时才能套于阴茎上
- 如果你的拍档有包皮过长的情况时,要将他的包皮完全剥离阴基头表面后再套上避孕套

Author: John Westergaard

避孕套的使用 – 步骤 1

- 在将避孕套套在勃起阴茎时用手捏住避孕套的最前端将里面的空气完全排空。

Author: John Westergaard

避孕套的使用 – 步骤 2

- 用一只手捏住避孕套的顶端
- 另一只手则将卷叠的避孕套末端轻轻向勃起的阴茎根部展开

Author: John Westergaard

避孕套的使用 – 步骤 3

- 确定避孕套已完全展开至阴茎的根部

Author: John Wangqian

避孕套的使用 – 步骤 4

- 当你的拍档射精后, 让他紧握住避孕套的根部(橡皮环), 然后慢慢将仍然勃起的阴茎从你的阴道抽出。
- 使用后避孕套的处理。
- 切不可重复使用避孕套

Author: John Wangqian

如何发现自己是否患有性传播疾病

- 性传播疾病可分为多种不同的类型。
- 患性传播疾病后, 男性较女性更易出现症状。
- 不同的性传播疾病有着不同的症状。
- 乙型肝炎等其他性传播疾病也可通过无保护措施性行为进行传播。
- 下面我们来认识一些在没有使用避孕套的性行为时容易感染的性传播疾病。

Author: John Wangqian

淋病

- 淋病是中国五大常见性传播疾病之一
- 大约30%的患病女性可在长时间内不出现任何症状
- 淋病常见症状有:
 - ◆ 阴道分泌物
 - ◆ 排尿时有烧灼及疼痛感
 - ◆ 下腹部疼痛
 - ◆ 发热

Author: John Wangqian

淋病的治疗及其常见并发症

- 正确的抗生素使用对治疗淋病效果明显。
- 未给予及时治疗的淋病可能出现以下并发症:
 - 不育不孕
 - 胎儿死于子宫内
 - 自然流产
 - 异位妊娠
 - 盆腔感染及炎症
 - 新生儿眼部感染
 - 关节炎
 - 皮疹
 - 发热

Author: John Halsey/Getty

淋病导致的眼部并发感染



Author: John Halsey/Getty

衣原体感染

- 大约 80% 的女性在发生并发症之前不出现任何症状
- 症状包括:
 - 阴道分泌物增多
 - 排尿时有烧灼及疼痛感
 - 不规则阴道出血,即在月经期之外的阴道出血
 - 下腹部疼痛
 - 发热

Author: John Halsey/Getty

衣原体感染的治疗及其常见并发症

- 抗生素对衣原体感染的治疗效果较好
- 未给予及时治疗的衣原体可能出现以下并发症:
 - 不育不孕
 - 胎儿死于子宫内
 - 自然流产
 - 异位妊娠
 - 盆腔感染性疾病
 - 新生儿眼、耳及肺部感染

Author: John Halsey/Getty

新生儿眼部感染



Author: John H. Wang, MD

梅毒

➢ 及时发现后梅毒可被成功治愈

➢ 长期未给予治疗时可导致:

- ◆ 斑秃
- ◆ 心脏疾病
- ◆ 失明
- ◆ 瘫痪
- ◆ 精神症状
- ◆ 死亡

Author: John H. Wang, MD

妊娠期并发症

➢ 梅毒可在妊娠16周后通过母体传播给胎儿

➢ 在母体内感染梅毒的新生儿出生后可出现以下发育畸形:

- ◆ 面部畸形
- ◆ 骨骼及牙齿畸形
- ◆ 中枢神经系统发育异常
- ◆ 肝脏及脾脏增大
- ◆ 贫血
- ◆ 耳聋
- ◆ 皮疹

Author: John H. Wang, MD

梅毒所致新生儿畸形



Author: John H. Wang, MD

梅毒所致新生儿畸形



一期梅毒表现---硬性下疳



二期梅毒表现--- 皮疹

➢ 手掌及脚掌为主要的特征性侵犯对象



二期梅毒表现--- 皮疹

- 一般在硬性下疳消退后的2周至6个月内出现
- 有时也可出现肿大淋巴结, 腱鞘痛, 类似疣的小疱疹遍布于阴道, 肛门和口腔周围



二期梅毒--斑秃



Kumar / Janin / Hacking/et al

晚期梅毒瘤



初发生殖器疱疹

- 一般没有明显症状
- 若有症状时,常见症状包括:
 - 大约在性生活5天后,在大阴唇,小阴唇及子宫颈部可发现多处小片状溃疡灶,疼痛明显,有时也可出现在阴道内。
 - 股沟区出现肿大淋巴结(可持续几周至几个月)
 - 发热
 - 身体不适
 - 肌肉疼痛
 - 眼膜炎

Kumar / Janin / Hacking/et al

生殖器疱疹的治疗及预后

- 治疗可有效缩短症状持续时间
- 约>80%的患者在治疗后一年内复发4到5次
- 复发时的症状要比初发时轻缓且持续时间较短

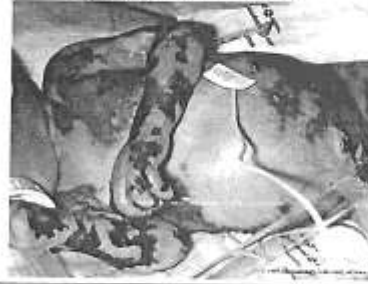
Kumar / Janin / Hacking/et al

感染生殖器疱疹后的妊娠期并发症

- 胎儿在出生时可能被患有生殖器疱疹的母亲感染
- 被感染后的新生儿可出现以下症状:
 - 中枢神经系统异常
 - 癫痫
 - 肝脏和脾脏增大
 - 黄疸
 - 血液
 - 眼部疾患
 - 皮疹

Author: John Wahlgren

先天性生殖器疱疹



生殖器疣

- 这种疾病是由人乳头瘤病毒引起的
- 有时使用避孕套并不能避免你感染生殖器疣
- 治疗可以是局部药物治疗但必要时需进行手术治疗
- 在女性生殖器疣患者中主要的并发症是**癌变**
- 每年都有数以万计的妇女死于宫颈癌!
- 有一种疫苗可以有效的预防这种疾病

Author: John Wahlgren

外阴生殖器疣



Author: John Wahlgren

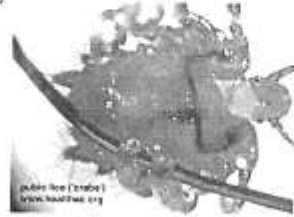
生殖器疣

- 性交可导致疣体出现在生殖器、肛门和颈部等部位
- 妊娠期可发病
- 疣体还可出现在新生儿的生殖器、肛门和颈部等部位



阴虱

- 避孕套无法防止阴虱的传播,但传染后的治疗是非常简单且有效的



艾滋病病毒/艾滋病

- 使用避孕套将可能减小被传染艾滋病病毒的可能
- 早期症状包括如下:
 - 发热
 - 淋巴结肿大
 - 喉咙痛
 - 皮疹
 - 肌肉及关节疼痛
 - 腹泻
 - 头痛

艾滋病患者遍布全身的卡氏肉瘤



艾滋病

➢ 根据报道在中国艾滋病是第一大致导致死亡的传染性疾病。

➢ 治疗只能延长生命但

目前没有治愈的办法

艾滋病是致命的！

Author: John Worthington

发现自己得了性传播疾病后该怎么办?

➢ 尽快去看医生

➢ 越是早诊断,早治疗,发生并发症的可能也就越小

➢ 说服你的性伴侣也尽快接受治疗,以免再次相互传播

Author: John Worthington

请记住

➢ 避免性交是100%有效的预防办法!!!

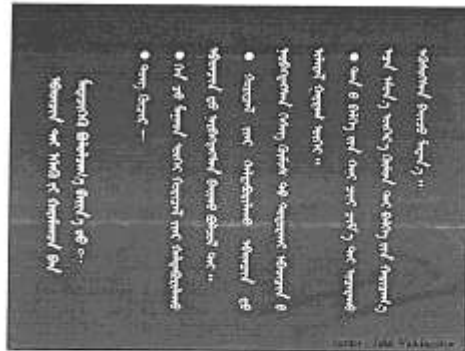
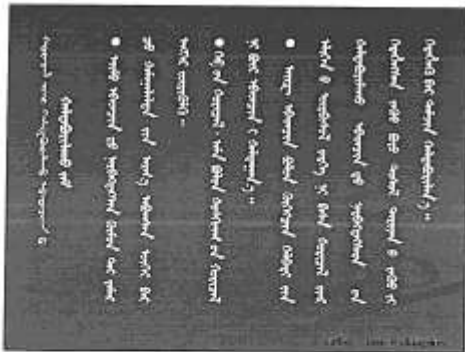
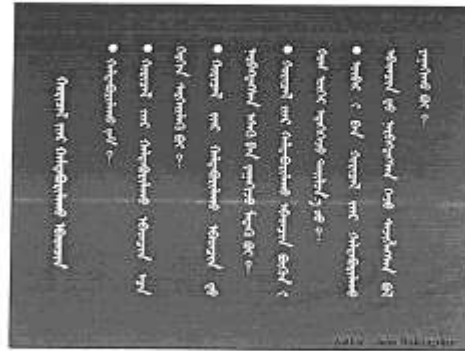
➢ 如果要与某人发生性关系一定要使用避孕套它可能挽救你的生命。

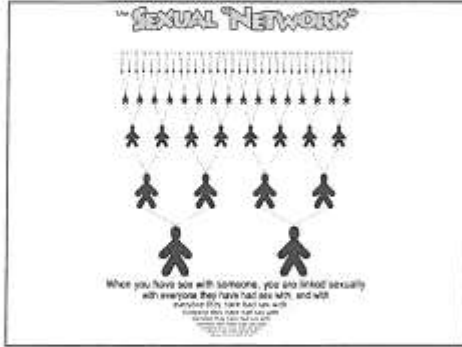
➢ 切记! 使用避孕套并不是100%有效的预防性传播疾病的方法。

Author: John Worthington



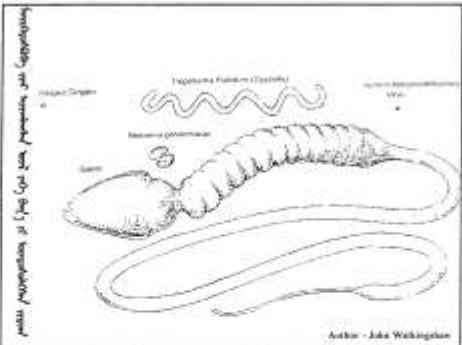
Appendix J3 – Female Sexually Transmitted Diseases Power Point (Mongolian Version)





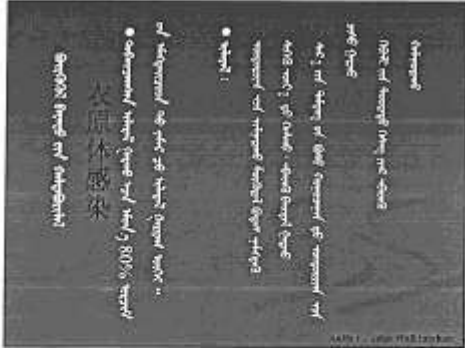
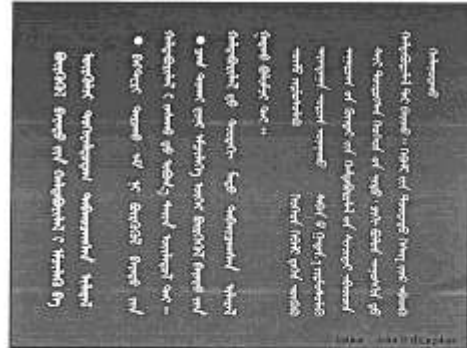
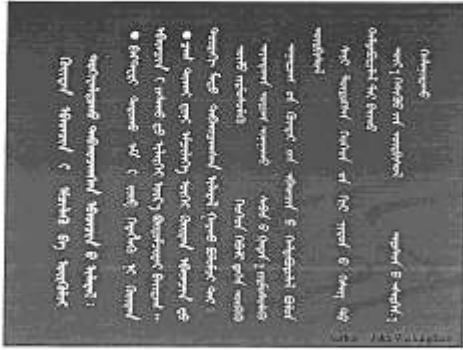
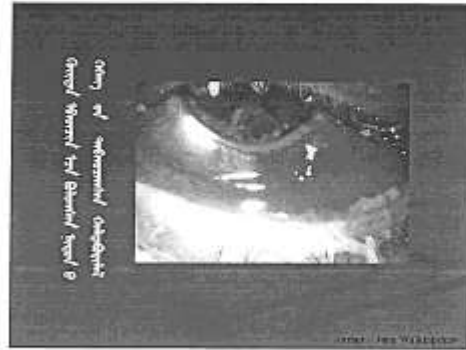
رابطه جنسی با هر فردی، شما را به شبکه جنسی آن فرد متصل می‌کند.

- هر فردی که با شما رابطه جنسی داشته باشد، به شبکه جنسی شما متصل می‌شود.
- هر فردی که با آن فرد رابطه جنسی داشته باشد، به شبکه جنسی شما متصل می‌شود.
- این فرآیند می‌تواند به سرعت گسترده شود.
- این شبکه جنسی می‌تواند به راحتی گسترده شود.



سیستم تناسلی زنانه شامل رحم، لوله‌های فالوپ، تخمدان‌ها و واژن است.

- رحم: محل رشد جنین است.
- لوله‌های فالوپ: کانال‌هایی هستند که تخمک را از تخمدان به رحم می‌رسانند.
- تخمدان: محل تولید تخمک است.
- واژن: کانالی است که از رحم به بیرون می‌رود.





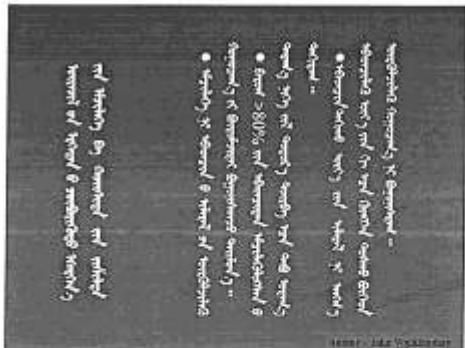
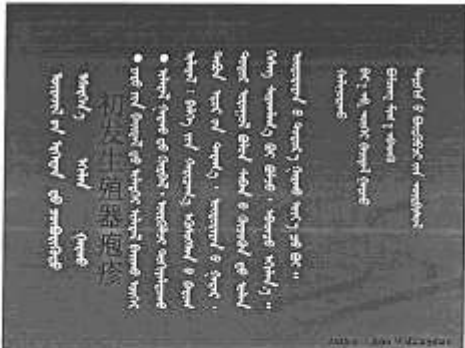
بھوکھ لڑکی

- بھوکھ لڑکی کو کھانسی سے بچانے کے لیے دیکھنا اور دیکھنا
- بھوکھ لڑکی کو دیکھنا اور دیکھنا
- بھوکھ لڑکی کو دیکھنا اور دیکھنا
- بھوکھ لڑکی کو دیکھنا اور دیکھنا
- بھوکھ لڑکی کو دیکھنا اور دیکھنا
- بھوکھ لڑکی کو دیکھنا اور دیکھنا

بھوکھ لڑکی

- بھوکھ لڑکی کو دیکھنا اور دیکھنا
- بھوکھ لڑکی کو دیکھنا اور دیکھنا
- بھوکھ لڑکی کو دیکھنا اور دیکھنا
- بھوکھ لڑکی کو دیکھنا اور دیکھنا
- بھوکھ لڑکی کو دیکھنا اور دیکھنا
- بھوکھ لڑکی کو دیکھنا اور دیکھنا





Appendix J4 – Female Sexually Transmitted Diseases Power Point (Tibetan Version)

འབྲིག་རྫོད་ལས་འགོས་པའི་རིམས་ནད།

རྒྱལ་པོ་ ཇོ་ འཕགས་པ། (John Walkingshaw)

Version 4 2014/2016

Author: John Walkingshaw

འབྲིག་རྫོད་ལས་འགོས་པའི་རིམས་ནད།

- ལྷོ་མི་ལྷར་འགོས་པ།
- འབྲིག་རྫོད་འགོས་ནད་དེ་མི་ལྷར་འགོག་དགོས།
- འབྲིག་རྫོད་འགོས་ནད་དེ་རང་ཉིད་ལ་འགོས་ཡོད་མེད་མི་ལྷར་ཤེས་ཤུག།
- འབྲིག་རྫོད་འགོས་ནད་ཡོད་ཚད་ཅུ་པ་ནས་གསོ་བཅོས་བྱེད་ཤུག་པམ།
- གལ་ཏེ་རང་ཉིད་ལ་འབྲིག་རྫོད་རིམས་ནད་འགོས་ཡོད་པར་འོགས་ལྷང་ལྷོས་མོ་མི་ལྷར་བྱ་དགོས།

Author: John Walkingshaw

འབྲིག་རྫོད་རིམས་ནད་ཀྱི་འགོས་ཚུལ།

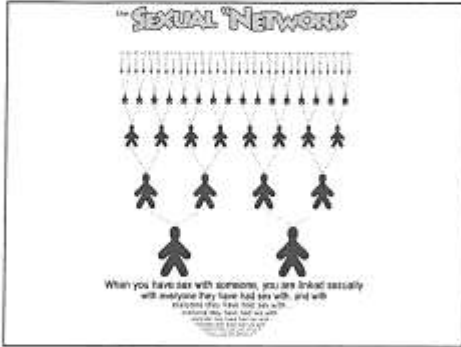
- འབྲིག་རྫོད་འགོས་ནད་ཡོད་པའི་མི་དེ་ལ་འགོག་བྱེད་ཐབས་གང་ཡང་མེད་པར་འབྲིག་པ་རྫོད་པ།
- ལྷན་རྒྱུ་ཀྱི་འབྲིག་པ་རྫོད་ཚུལ་གང་ལ་ཡོས་འབྲིག་པ་རྫོད་ཚུལ་བཟང་ལམ་ལུ་འབྲིག་པ་རྫོད་ཚུལ་གང་ཅུང་གིས་ཚགས་རྫོད་རིམས་ནད་བཏོན་ཅིང་།
- འབྲིག་རྫོད་རིམས་ནད་དེ། དཔེར་ན་མེ་མོ་དང་མཚན་ཚད་འགས་ B (ZIF) སྐྱེས་ཀྱི་རིམས་ནད་དང་འབྲིག་རྫོད་རིམས་ནད་འགོས་ཡོད་པའི་ནད་པ་གཞན་གྱིས་བཏོན་རྫོད་ལྷན་མེན་པའི་ལྷན་ཁག་བཏོན་རྫོད་ལྷན་ནའང་བཏོན་ཅིང་།

Author: John Walkingshaw

གསན་ལ་འགོས་ཡོད་མེད་མི་ལྷར་ཤེས་ཤུག་པམ།

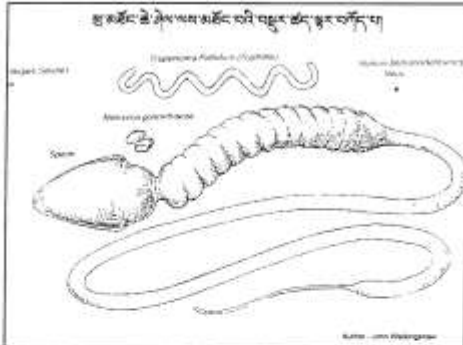
- ལྷོད་ཀྱིས་མི་ཤེས།
- མི་གང་ཅུང་ཞིག་ལ་འབྲིག་རྫོད་རིམས་ནད་དེ་འགོས་ཡོད་ཅིང་།
- འབྲིག་རྫོད་འགོས་ནད་ཡོད་པའི་མི་ལ་ལའི་ནད་རྒྱགས་མཚན་གསལ་མིན།
- ལྷན་འཚོང་མ་ལ་གཏམ་ནས་འབྲིག་པ་རྫོད་མི་ཅུང་། དེའི་རྒྱ་མཚན་ནི་ཁོ་ཚོ་མང་མེ་བར་འགོས་ནད་ཡོད་ཅིང་།
- ལྷོད་དང་འབྲིག་པ་རྫོད་རྒྱགས་དེ་ལྷོད་ལ་མ་ཤུག་གོང་མི་གསན་ལ་འབྲིག་པ་རྫོད་ཡོད་ཅིང་།

Author: John Walkingshaw



ཚུན་འགོག་མི་ལྟར་བྱ་དགོས་པའི་རྒྱུ་

- > འགྲིག་པ་གཏན་ནུག་མི་རྒྱུད་པ་ནི་ **100%** བེ་ཚུན་འགོག་ཐབས་ལམ་ལུང་ལོ་དེ་ཡིན།
- > ཀལ་ཏེ་མི་གཞན་ལ་འགྲིག་པ་རྒྱུད་ཆུ་ཡིན་ཕྱིར་ངེས་པར་དུ་ལྷང་ལྷང་སྐྱེས་པ་དགོས་དགོས།
- > དེས་རྒྱུད་ཀྱི་ཚོ་རིག་རྒྱུ་ཡིན།
- > ཡིན་ཡང་ལྷང་ལྷང་སྐྱེས་ཡང་ **100%** བེ་ཚུན་འགོག་ཐབས་ལམ་ལུང་ལོ་དེ་ཡིན།



ལྷང་སྐྱེས་མ་ལོན་པར་འགྲིག་པ་རྒྱུད་ཚུལ་དེ་ནི་.....

- > མང་གི་མིག་གཉིས་ལས་ལས་ལག་ལ་མེ་བུ་ཚོགས་རྒྱུད་འདུལ་ཀྱི་ཆུ་ལྷང་དུ་འགྲོ་བ་དང་འདྲ་ལ་.....
- > དུས་ནུས་མིག་ལ་རྒྱང་ས་འཁོར་ཕྱིས་དུང་ནས་རྒྱུད་མེའམ་ངེས་པས་ལྷན་ལ་ཚེ།
- > འགྲིག་པ་རྒྱུད་མེངས་དང་རྒྱུད་ཤོགས་མི་ལྟར་མང་ན་འགོས་ནད་དེ་རྒྱར་བཞོན་ཤིང་།

བྱང་ཕུངས་པོ་ལ་ཚབས་ཀྱི་གྱི་རིམ་པལྱམ་པ།

➢ བྱང་ཕུངས་དེ་འདི་ལོ་མཚན་གྱི་རྩེ་ལ་ཕྱིན་པོར་མེས་ལ་ལམ་ལ་པོ་ལ།



Author: John Aebischer

བྱང་ཕུངས་པོ་ལ་ཚབས་ཀྱི་གྱི་རིམ་པལྱམ་པ།

➢ བྱ་པ་ཕྱིར་བཟང་ཆེས་བྱང་ཕུངས་ཀྱི་ལ་པོར་ཕྱིན་ནས་མེས་ལུག་ལ་ཕྱིན་པའི་ལོ་མཚན་དེ་ལོ་མཚན་ནས་ཕྱིར་ལོན་དུ་འཇུག་དགོས།

➢ པོ་ལ་ཕྱིན་ཕྱུང་ཆེས་བྱང་ཕུངས་དེ་གང་ལས་ལ་ཕྱིན་པོ་ལྟར་ལ། མི་གཞན་ནས་རྒྱུ་པས་དུ་ཕྱིན་པའི་ལོན་ལས་ལ་ཕྱིན་པོ་ལྟར།

➢ བྱང་ཕུངས་དེ་ཡང་བསྐྱར་ལོ་ལ་ཕྱིན་ཕྱིན་བྱ་མི་ཅུང་།

Author: John Aebischer

རང་ལ་འབྲིག་རྫོང་འགོས་ནད་ཡོད་མེད་ཇི་ལྟར་སྟོན་སྟེ་འཇགས་པ།

- འབྲིག་རྫོང་འགོས་ནད་དེ་ལ་རིགས་མང་པོ་ཡོད།
- འབྲིག་རྫོང་འགོས་ནད་དེ་འགོས་མེད། མོ་ལས་ལོ་ལ་ནད་རྒྱུས་དེ་མཚོན་སྟེ་ལ་མིན།
- འབྲིག་རྫོང་འགོས་ནད་རིགས་མི་འདྲ་བ་ལས་ནད་རྒྱུས་བྱང་རིགས་མི་འདྲ་བ་ཕྱིར་མཚོན།
- བྱང་ཕུངས་པོ་ལ་ཕྱིན་པ་ལྱུང་ན་ཕྱིན་པ་འབྲིག་རྫོང་རིམས་ནད་རིགས་མང་པོ་འབྱོར་བ་མཚན་མཚན་རིགས་(Z.H)ལྱུང་པའི་ནད་དུ་གཏོགས། ལས་ལ་དུ་ལ་མོས་རྒྱུས་རྫོང་རིམས་ནད་འགག་པ་ལོས་འཇིན་བྱ་ཏེ།

Author: John Aebischer

སླེ་རིམས། (淋病)

- ལ་ཚུ་ལ་ལར་ནད་འདི་འི་འིང་ལ་བྱང་ཕུངས་ཀྱི་ནད་ཅེས་འཇོག།
- སླེ་རིམས་ཀྱི་ནད་ཀྱི་རྒྱལ་ཁབ་འདི་འི་རྒྱན་མཚོང་གི་འབྲིག་རྫོང་འགོས་ནད་ལྟ་ལོ་ནད་ལ་གཞེས་ཤིག་ལོན།
- ལས་ལས་ 30% ལི་ལྟར་མེད་ཀྱི་ནད་པ་དག་ལ་དུས་ལྡན་འིང་ལོར་ནད་རྒྱུས་ཅི་ཡང་མི་མཚོན།
- སླེ་རིམས་ཀྱི་ནད་རྒྱུས་ལ།
 - མོ་མཚན་ནས་རྒྱུ་ལོན་པ།
 - ལོ་ལོན་གཏོང་དུས་ན་རྒྱུ་ལོན་པ།
 - ལྱང་ལོན་ལྟར་དུ་གཞེས་པ།
 - མོ་ལངས་པ།

Author: John Aebischer

ཕྱི་རིམས་ནད་ཀྱི་གསོ་བཅོས་དང་རྒྱན་མཚོང་ཆ་གཉེན་ཕྱི་ནད་རྟགས།

- ལང་དུག་པའི་ཕྱིན་པ་ལོག་རྒྱན་པ་ལྟར་ན་ ཕྱི་རིམས་ཀྱི་ནད་ལ་རྒྱན་པ་ལོག་ཀྱི་རྒྱལ་པ་ཚེད་པའི་ཚིན་པ།
- གསོ་བཅོས་དུག་ལ་ལྟན་པ་ལས་རྒྱུང་པའི་ཕྱི་རིམས་ཀྱི་ཆ་གཉེན་ཕྱི་ནད་ལ་ལྟན་པ་གཉེན་པགས་ལྟར་།
- མངའ་མི་ཚགས་པ།
- རྒྱལ་ཁྲུ་མངའ་པ་དང་དུ་ལམ་ལ།
- པང་རྒྱུང་དུ་མངའ་པ་རྟོག་པ།
- བཞུག་མིའི་པར་མངའ་པ་ཚགས་པ།
- མོང་རོག་གཉེན་ཚེད་།
- བཀའ་རྒྱུ་ཕྱིས་པའི་མིག་ལ་ལོག་པ་ལྟར་ཡོད་པ།
- མོགས་ན་པ།
- བཀའ་པར་རྒྱ་ལུགས་ལྟར་པ།
- མོ་ལངས་པ།

Author : John Hwangkham

ཕྱི་རིམས་ཀྱི་ནད་ལས་བྱུང་པའི་མིག་གི་ལོག་པ་ནད།



Author : John Hwangkham

ལུང་རྟེན་ཚོགས་མཐར་ལ། (衣原体感染)

- ལུང་རྟེན་ཚོགས་ཚོར་ལེ་ལྟར་ལེའི་ནད་ལ་བྱུང་རྟོག་ནད་རྟགས་ཅི་པར་མི་ལྟར་།
- ལུང་རྟེན་ཚོགས་མཐར་ལ་ལྟན་པ་དུས་ལྟར་ཀྱི་ནད་རྟགས་པའི་དུག་ལྟར་ལོག་པ།
- ཚོས་ཚོན་ནལ་རྒྱན་ཚོན་པ།
- ལཱིའི་གཉེན་པའི་རྒྱལས་ལུ་གཉེན་པའི་ཚོས་ཚོན་པ་ལྟར་པ་དང་ན་རྒྱལ་པའི་པ།
- རྒྱན་ཚད་མིན་པར་གཉེན་པའི་ནད་རྟག་ཚོན་པ། དེ་ནི་རྒྱ་མཚོན་ལ་ཡིན་པའི་གཉེན་པའི་ནད་ཚོན་པའི་ལྟར་ལོག་པ།
- ལུང་རོག་རྒྱུང་དུ་ལམ་ལ།
- མོ་ལངས་པ།

Author : John Hwangkham

ལུང་རྟེན་ཚོགས་མཐར་ལའི་ལོག་པ་ལྟར་དའི་རྒྱན་མཚོང་ཆ་གཉེན་ཕྱི་ནད།

- ལང་དུག་པའི་ཕྱིན་པ་ལོག་རྒྱན་པ་ལྟར་ན་ ལུང་རྟེན་ཕྱི་ནད་ལ་བྱུང་པ་ལྟར་ལུ་མཐར་ལའི་ལྟར་ལོག་པ།
- གསོ་བཅོས་དུག་ལ་ལྟན་པ་ལས་རྒྱུང་པའི་ལུང་རྟེན་ཚོགས་མཐར་ལ་དེར་བྱུང་ཆ་པའི་རྒྱ་གཉེན་ཕྱི་ནད་ལོ།
- མངའ་མི་ཚགས་པ།
- རྒྱལ་ཁྲུ་མངའ་པ་དང་དུ་ལམ་ལ།
- པང་རྒྱུང་དུ་མངའ་པ་རྟོག་པ།
- བཞུག་མིའི་པར་མངའ་པ་ཚགས་པ།
- མོང་རོག་གཉེན་ཚེད་།
- བཀའ་རྒྱུ་ཕྱིས་པའི་མིག་ལ་རྒྱ་ཚོ་ལ་ལྟན་པ་ལོག་པ་ལྟར་ཡོད་པ།

Author : John Hwangkham



བཞེ་མོག་ / རིག་དྲག་ (མེ་མེ)

> ཇུས་རྒྱུ་ལོག་བཞེ་མོག་ན་བཞེ་མོག་གི་ནད་རྒྱུ་ལོག་པའི་ལའང་ཁའངས་དྲགས་ལུ་འགོ་རྒྱུ།
 > ཇུས་རྒྱུ་ལོག་པོར་གཞི་བཞེ་མོག་མ་གཞན་ན་འབྲུང་ལྔ་ལོ་ནད་ལྟེ།

- ◆ མུ་ཕྱི་བ
- ◆ རྩེང་རྩ་བ
- ◆ མིག་མུ་བ
- ◆ ཇུས་ལོ་མུ་བ
- ◆ རྩེ་བ
- ◆ འཕྲི་བ།

Author: John Hwangphoo

མའལ་རྒྱུ་ལཱ་ཇུས་འབྲུང་ལཱ་བཞེ་མོག་དང་འབྲེལ་ལཱ་ལོག་ནད།

> བཞེ་མོག་གི་མའལ་རྒྱུ་ནད་དམངས་འགོ་བཅུ་དྲུག་ལོན་རྗེས་མ་ལི་ཕྱུག་བཞེ་མོག་ནད་རྒྱུ་ལོག་པའི་ལོག་ལོ།
 > མའི་ཕྱུག་ནད་བཞེ་མོག་གི་རྒྱུ་ལོག་ལཱ་མའལ་རྒྱུ་ལཱ་ཕྱི་ལཱ་ལུ་ཇུས་ལཱ་མའལ་གཞུགས་ལཱ་དེ་དག་འབྲུང་ལྟེ།

- མོ་བཞོེ་གི་གཞུགས་ལུ་བྱེད་ལ།
- ཇུས་ལཱ་ལུང་ལོ་ལ་ན་བཞུགས་ལུ་འབྲུང་བ།
- འཕྲི་བ་མའི་ལའང་རྩ་མའལ་ལའཚོའི་རྩེ་རྒྱུ་ལོག་ལོན་ལ།
- མའི་རྩ་ལ་འདྲ་མཚོན་བ་ལེན་རྒྱུ་ལཱ་ལ།
- འཕྲག་ལཱ་ལ།
- རྩ་ལ་ལོན་ལ།
- འགཞུག་ལུ་བྱེད།

Author: John Hwangphoo





མངམ་ལྷུ་མ་པའི་རྩི་ལྷེ་འཕེལ་མ་ལག་གི་རྩུ་འབྲུམ་དང་
འཕེལ་པའི་ནད།

➢ རྩི་འཕེལ་མ་ལག་མ་རྩུ་འབྲུམ་ནད་ལོད་པའི་མ་མར་རྩིས་པ་རྩི་དྲུང་གཤམ་རྩི་རྩིས་པར་རྩུ་འབྲུམ་ནད་འགོ་བྱེད།

➢ རྩུ་འབྲུམ་པའི་གཤམ་རྩི་རྩིས་པར་ལྷན་ཅི་པའི་ནད་ནི།

- འཕྱིར་མཚོའི་དཔལ་རྩུ་ལག་རྩུ་ལྷན་ལྷན་ལོན་པ།
- འབྲུམ་ལྷེའདྲ།
- མཚོན་པ་དང་མཚོན་པ་རྒྱུ་མེད།
- མཚོན་པ་ལ་མེད་ལོན་ལོན།
- ལྷན་རྩུ་མ་ལག་གི་ནད།
- མེན་ནད་ལྷན་པ།
- ལག་པ་ལྷན་པ།

Author: Jean Waltherstein

ལྷན་རྩུ་མ་རང་པའི་ནད་རྩི་ལྷེ་འཕེལ་མ་ལག་གི་རྩུ་འབྲུམ།



Author: Jean Waltherstein

སྦྱི་དབང་ཤ་མཚོན། (生體系統)

➢ རྩུ་འབྲུམ་གྱི་མཚོན་པ་རྩི་ལྷེ་རྩུ་ལྷན་ནད་དུ། (人乳及母乳) ལས་སྦྱིད་པ་ལོད།

➢ རྩུ་འབྲུམ་པའི་ལྷན་པ་རྩི་ལྷེ་དབང་ཤ་མཚོན་པའི་རྩུ་ལྷན་པའི་ལོན་པ་ལོད།

➢ རྩུ་འབྲུམ་པ་ལ་མེན་རྩུ་ལྷན་རྩུ་ལྷན་པའི་ལོན་པ་ལོད་པ་དང་རྩུ་ལྷན་པ་ལ་མར་ལྷན་པའི་ལོན་པ་ལོད།

➢ རྩུ་འབྲུམ་པ་རྩི་ལྷེ་དབང་ཤ་མཚོན་པ་དང་ལྷན་པའི་རྩུ་ལྷན་པའི་ནད།

འབྲུམ་འབྲུམ།

➢ འོ་ལོན་རྩུ་ལྷན་པའི་མངམ་པོ་ལྷན་པའི་རྩི་ལྷེ་ལ་འབྲུམ་འབྲུམ་རྩུ་ལྷན་པ་ལས་ཤི་པ་ལོད།

➢ རྩུ་འབྲུམ་པའི་རྩི་ལྷེ་ལྷན་པའི་རྩི་ལྷེ་ལ་རྩུ་ལྷན་པའི་ལོན་པའི་རྩུ་ལྷན་པའི་ནད།

Author: Jean Waltherstein

མཚོན་པའི་རྩུ་དབང་ཤ་མཚོན།



Author: Jean Waltherstein

ཐུང་བའི་གཞི་ལྗང་གི་མཚོན་པ།

> རང་ལུས་འདྲིལ་པ་ལྷན་པ་ལས་ཐུང་བའི་གཞི་ལྗང་གི་མཚོན་པ་དེ་མིང་ལ་དང་ཚོས་མཚན་ཉི་མཚོན་པ་ལྟ་བུ་འགོད་ཀྱི།
 > མངལ་རྒྱུ་ལའི་དུས་རྒྱུང་ལོའི་ཕྱི་དུས་ལ་གཞི་ལྗང་གི་མཚོན་པ་ལྷན་དང་འབྲེལ་པའི་ནད།
 • ལས་པ་ཕྱི་ཕྱིར་ལོའི་ཕྱི་འབྲེལ་མ་ལག་དང་འབྲེལ་པའི་ཚོས་མཚན་དང་མངལ་ལ་ལྷན་པ་ལྷན་པ་ལྟར།



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འཛོམས་ཤིག (阴虱)

> ལྷང་རྒྱུ་ལྱིས་འཛོམས་ཤིག་འགོ་ལ་ལགས། འགོ་ལྱེད་མི་རྒྱུ་ལ་ཐ་འབྲེལ་པ་ལས་འབྲེལ་པའི་ལོ་རྒྱུ་ལས་འགོ་ལ་འཛོམས་ཤིག་ལྷན་དང་འབྲེལ་པའི་ནད་རྒྱུ་ལྱིས་ལྷན་པ་ལྷན་པ་ལྟར།



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Kulso - John Mark Aguirre

མེ་ཅིན་དང་ཕྱི་ནད་ལྟུག་མེ་ཅིན་ (艾滋病/艾滋病)

> ལྷང་རྒྱུ་ལྱིས་ལྷན་པ་ལས་མེ་ཅིན་དང་ཕྱི་ནད་ལྟུག་ལོའི་ལོ་རྒྱུ་ལ་ཐ་འབྲེལ་པའི་ནད་རྒྱུ་ལྱིས་ལྷན་པ་ལྷན་པ་ལྟར།

- མིའི་མང་ནད་ལྟར་མང་པོ་ཞིག་མཚོན་པ་ལྷན་པ་ལྷན་པ་ལྟར།
- ཚོ་རྒྱུ་ལྷན་པ་
- རྒྱུ་ལྱིས་ལྷན་པའི་རྒྱུ་ལྱིས་ལྷན་པ་ལྷན་པ་ལྟར།
- ཚོས་མཚན་ལྷན་པ་
- ལྷང་ལྱིས་ལྷན་པ་
- ལྷང་ལྱིས་ལྷན་པའི་རྒྱུ་ལྱིས་ལྷན་པ་ལྷན་པ་ལྟར།
- ལྷང་ལྱིས་ལྷན་པ་
- ལྷང་ལྱིས་ལྷན་པ་

Kulso - John Mark Aguirre

མེ་ཅིན་དང་ཕྱི་ནད་ལྟུག་ལོའི་ལོ་རྒྱུ་ལ་ཐ་འབྲེལ་པའི་ནད་རྒྱུ་ལྱིས་ལྷན་པ་ལྷན་པ་ལྟར།



Kulso - John Mark Aguirre

Appendix K – Transcript of “Love wisely, live healthy”

Narrator - The following story is true. It is being played out in many Tibetan communities.

However, the people that you see in this movie are only actors they do not have AIDS (ཨ་ཇི་ཚི་

མེད།)

Nomad Guy - I am a nomad and these grasslands are my home. I am 25 years old and have so much to live for but I am dying. I am dying because of ignorance. I have AIDS and this is my story. Once you have heard my story you will not be ignorant. You will have to make a choice. I hope you choose Life.

Farmer Girl - I am a farmer and this is my village. I have lived here all of my life. I love my family and friends and have so much to live for but I am dying. I am dying because of ignorance. I have AIDS. Once you have heard my story you will not be ignorant. You will have to make a choice. I hope you choose Life.

Nomad Guy - I am like most other nomad guys my age. My life has been spent on the grasslands looking after my family's herds of yak and sheep. I love sleeping under the stars in summer and riding my horse over the hills and around the shores of the lake. I am a good rider and when I was younger I won horse races in our county many times. I enjoyed the company of my friends and my family and I lived life to the full. But now my life has changed, it has changed completely. I am no longer the carefree guy I used to be. My friends and family no longer look at me the same way and some of them will no longer talk to me or spend time with me. They think that just by being near me they can catch this disease but that is not true. I now know exactly how people get this disease. The doctors in the largest hospital in the Province have clearly told me about this disease. I hope after you have heard my story you will not treat people with AIDS the same way I have been treated by people I used to think were my friends. Once you have heard my story you will have the knowledge which can protect you from getting this disease or from giving it to people that you love. It will then be your choice to use that knowledge and learn from my experience or to ignore what I have said and put yourself and others at risk of getting this disease.

Farmer Girl - I was married for 3 years and have a baby boy who is 1yr old. I love my baby and want him to grow up to be a strong man but he won't. In fact he may only live for another

year or two because you see, he has AIDS too. Only last year my husband died of AIDS and then the doctors told me all about this disease. When they tested me and my baby, we too were infected. My relatives have taken us into their home and although they love us they find it hard to deal with the things that other villagers say about my husband and I and our baby when they gossip. Many people in my village that I grew up with no longer talk to me. They don't know the truth about this disease and they are afraid that even if they come too close to me or hold my hand that they will become infected. You can't catch this disease that way. Sometimes I feel so isolated even when there are many other people around me. After you have listened to my story you will know the truth about how you can get this disease and you will know that many of the ways people think that you can get this disease are not true.

Nomad Guy - Now when I am looking after the sheep and yak I don't sing the love songs that I used to. I no longer think about getting married or of having a family of my own. Although there is medicine that can make me live a little longer there is no cure for this disease, I know that I am beginning to get sicker and I don't think that it will be too long before I die. I am dying because of ignorance. Oh, how I wish someone had told me how easy it could have been to avoid getting this disease. Then I could have had; a long life, a wife, children and grandchildren but now only death awaits me. If you want to live then pay close attention to my words.

Like most other guys my age I liked beautiful girls and I liked to have sex with them. Once, after I had sex with a girl, I got Gonorrhoea (གྲང་གཞི་ནད།). I went to the county hospital and

the doctor there gave me some medicine and after 1 week I was fine. I didn't worry too much about this because I know most of my friends have had this too. I don't know now if it was at

that time I got HIV (ཨེ་ཙི་ནད་གི་དུག་འབྲུ) or not. None of the girls that I had sex with looked

sick but the expert doctors in the biggest hospital in the Province told me that you can't

usually tell just by looking at a person if they have a Sexually Transmitted Disease (ཚགས་སྲོད་

ཟིམས་ནད་). Many girls don't have symptoms for a long time if they have Sexually Transmitted

Diseases and for even a longer time if they have HIV. The doctors there gave me a small book that explained exactly how you get AIDS. Before I got this disease I did not even know there was such a disease but now I know that in China it is the third main cause of death by

infectious diseases(རིམས་ནད།). I found out that you can't get this disease by shaking hands with a person, eating with them or even if they sneeze on you. But you can get it by having unprotected sex with someone that means not using a condom. However, condoms are not 100% effective and you could still get many different types of Sexually Transmitted Diseases including AIDS even if you do use a condom. It is not only by having vaginal intercourse (རྒྱ་ལུ་གུ་གི་ཆགས་པ་སྦྱོད་སྲུང་།) but you can catch this disease if you also have oral (ཁ་གི་ཆགས་སྦྱོད་སྲུང་།) or anal sex (བཤང་ལམ་གི་ཆགས་པ་སྦྱོད་སྲུང་།). There are other ways too to catch this disease like if you use intravenous drugs, like heroin and share a needle with someone else or don't use properly sterilised needles. Even if you go to a hospital and they have already used the needles that they use to give you an IV, if the other person had AIDS you could get it. If only I had waited until I got married before having sex and then was faithful to my wife and only had sex with her then I would not be dying now. I beg you to be wise and learn from my mistake.

Farmer Girl - Perhaps one of the hardest things for me to deal with is to watch the other healthy children playing and to know that my baby will probably never grow up and be able to do that. I had such great hopes and dreams for my son but now he will never grow up and do any of those things. I was sad when my husband died because I loved him so much. I am sad that I will die too. Most of all I am sad that my son will die and the worst thing of all is that I may have to watch him die. Parents should die before their children not children before their parents. I keep my son close to me all of the time I am scared to be apart from him for one minute because the time we are going to have together will be so short. The doctors told me how people get this disease and even then I thought how is this possible? I was a virgin when I married my husband and I was faithful to him, I never had sex with another man. But then I remembered that my husband had been to a big city for a few days and I had heard that some of the men in our village who went to the city had sex with prostitutes (སྤྱད་འཛོང་མ་ར་གླ་མོ།). The doctors said that many prostitutes have AIDS but you usually can't tell just by

looking at them as many women don't get sick for a long time after they catch this disease. If only someone had told my husband about how you can get this disease then our 3 lives would have been spared. I did not choose to get this disease and even more terrible is that once I was infected although I did not realise, I passed this infection on to my child when he was born.

Nomad Guy - So what is the best way to avoid getting AIDS, this deadly disease? The only 100% effective way is not to have sex before you get married and make sure that your wife has done the same. You can both get a blood test before you get married and then you can be certain that you both don't have the disease. Once you are married you must not have sex with anyone else only with your wife. If you really love each other you will do this. If you do have sex before you get married you should always use a condom but remember that is not 100% effective you could still get infected.

Farmer Girl - I still go about my daily work but I no longer have any joy in my life. I used to love to dress up at Tibetan New Year and dress my son up in his best clothes. I was so proud of him and my husband looked so handsome. Now my son is often sick and he cries a lot and nothing that I can do seems to comfort him.

FINAL DIALOGUE - Both Actors in Unison

Now you have heard our stories. You are no longer ignorant like we were. It is time for you to make a choice. The choice you make now will not only affect your own lives but the lives of those you love. If you are a parent then tell your children about this before they become sexually active. Dear friends, if you have friends that you care about and they have not heard our stories then please tell them so they too can make a choice.

We beg you please choose Life. Choose an AIDS free life. Choose to live a long and healthy life.

Love wisely, live healthy.

Appendix L – Analysis of Questionnaire Evaluation of Pilot Testing Group

Question	Total No. Responding Yes (Percentage)	Total No. Responding No (Percentage)
1. Did you find this questionnaire easy to understand?	12 (50)	12 (50)
2. Are many of the medical words used in this questionnaire unfamiliar to you?	14 (58.3)	10 (41.7)
3. Are some of the medical words used in this questionnaire unfamiliar to you?	22 (91.7)	2 (8.3)
4. Is it helpful to also use the Chinese medical words on the Tibetan questionnaire?	22 (91.7)	2 (8.3)
5. Did you prefer to fill out the questionnaire in Tibetan?	23 (95.8)	1 (4.2)
6. Did you prefer to fill out the questionnaire in Chinese?	11 (45.8)	13 (54.2)
7. Did you find that the questionnaire was too long?	2 (8.7)	21 (91.3)
8. Do you think that there are other questions that should have been included in the questionnaire?	11(50)	11(50)

There were a total of 25 participants of which 16 were female and 9 male. 1 of the female participants did not return an evaluation sheet as she could not read or write Tibetan well but did speak the language.

Among the remaining 24 participants, 1 failed to supply an answer for question 7 and 2 for question 8.

Open Questions

9. Which questions did you find difficult to understand?

Question	Question	Total No.
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No.		Participants (percentage)
4	Can a person get HIV if someone who has HIV coughs or sneezes on them?	1 (4.2)
5	Can a person get HIV if they share a glass of water with someone who has HIV?	1 (4.2)
6	Does pulling out the penis from a woman's vagina, before a man c prevent a woman from getting HIV during sex?	2 (8.3)
7	Can a person get HIV if they have anal sex (penis inside the anus) with a man?	4 (16.7)
8	Can showering or washing one's genitals after sex prevent one from getting HIV?	1 (4.2)
9	Will all pregnant women infected with HIV have babies born with AIDS?	2 (8.3)
10	Do all people who have been infected with HIV quickly show serio being infected?	1 (4.2)
11	Is there a vaccine that can prevent people from getting HIV?	1 (4.2)
12	Are people likely to get HIV by deep kissing, putting their tongue partner's mouth, if their partner has HIV?	2 (8.3)
13	Can a woman get HIV if she has sex during her period?	1 (4.2)
14	Is there a female condom that can help decrease a woman's chance HIV?	1 (4.2)
15	Can a person get HIV if he or she is taking antibiotics?	2 (8.3)
16	Does having sex with more than one partner increase a person's ch being infected with HIV?	2 (8.3)
17	Will taking a test for HIV one week after having sex tell a person i has HIV?	1 (4.2)
18	Can a person get HIV by sitting in a hot tub or swimming pool wit who has HIV?	1 (4.2)
19	Can a person get HIV by having oral sex (putting a man's penis in their mouth)?	2 (8.3)
20	Does using Vaseline or baby oil with a condom lower the chances HIV?	4 (16.7)
21	Is it easier to get HIV if a person has another sexually transmissible disease?	2 (8.3)
22	Is there a cure for gonorrhoea?	1 (4.2)
23	Can a person get gonorrhoea from anal sex (inserting a man's pen their anus)?	2 (8.3)
24	If a man has gonorrhoea, may he have a discharge (pus) from his penis?	1 (4.2)
25	Can a woman look at her body and tell if she has gonorrhoea?	1 (4.2)
26	Can syphilis infect a baby before it is born?	4 (16.7)
27	Is there a cure for syphilis?	7 (29.2)
28	Can a person develop sores on their genitals (penis or vagina) soon become infected with syphilis?	4 (16.7)
29	Can Human Papilloma Virus (HPV) cause cancer in women?	4 (16.7)

30	Is there a vaccine that can prevent infection with Human Papilloma Virus (HPV)?	3 (12.5)
31	Can a man get genital warts only by having vaginal sex?	6 (25.0)
32	Do Genital Herpes sores on a man's penis come and go?	6 (25.0)
33	Are there medications available to cure Genital Herpes?	5 (20.8)
34	Can a woman who has Genital Herpes pass the infection on to her childbirth?	4 (16.7)
35	Must a person who has Genital Herpes have open sores to give the his or her sexual partner?	5 (20.8)
36	Does chlamydia cause obvious symptoms in most women?	5 (20.8)
37	Can chlamydia cause pain when a person urinates?	3 (12.5)
38	Is there a cure for chlamydia?	3 (12.5)
42	If a person is an injecting drug user, can they get HIV if they use a needle that someone who has HIV has already used?	4 (16.7)

N.B. Comments which did not specify a question number but stated a topic were included in the above table e.g. questions relating to gonorrhoea are recorded as question numbers 22, 23, 24, and 25.

One participant stated question numbers but commented that “Because of my Chinese level and unfamiliarity with medical words I found these questions difficult.”

Other comments which were made in response to this question but did not specify a question number that the participant found difficult, were not included in the table but are listed below:

- a) Medical words are quite difficult to understand – 1 participant.
- b) Difficult – 1 participant.
- c) Is it possible to know who has AIDS or women have infectious diseases? – 1 participant.
- d) Most people don't know about AIDS and what it is – 1 participant.
- e) Think that the translation of the medical words in Chinese and Tibetan are incorrect – 1 participant.

10. Which words did you find the most difficult to understand?

Word	Total No. Participants (percentage)
Antibiotics	2 (8.3)
Baby oil	1 (4.2)
Chlamydia	12 (50.0)
Drug users	2 (8.3)
Genital herpes	8 (33.3)
Genital warts	6 (25.0)
Gonorrhoea	3 (12.5)
Human papilloma virus	2 (8.3)
Sexually transmitted diseases	1 (4.2)
Syphilis (སྲི་ཚོག)	9 (37.5)
Syphilis (རེག་རྩུག)	4 (16.7)
Vaseline	4 (16.7)

11. Can you suggest alternative words for the words that you found difficult in the questionnaire?

English word	Suggested alternative Tibetan word	English meaning of alternative (researcher's comments)
Orgasm	འདྲོད་ཆགས་ཆེ་དུག	Sexually aroused
Sneeze	མྱ་སྒྱུད།	Sneeze (this is a very specific area dialect and not widely used)
Human papilloma virus	བུ་མགོའི་སྐྱེན་ནད་དུག	Breast cancer
Condom	སྐྱུ་མ་འགོག་ལྗེ་མོ།	Hat to stop pregnancy (this participant said the term was popular in rural areas. This may be true of their village but this is not a common term)

Another participant suggested using the word རེག་དུག instead of སྐྱེ་མོག for syphilis as they felt it was more widely used. The questionnaire lists both alternatives.

12. What additional questions would you like to have included in the questionnaire?

- List cures for each of the diseases.
- Suggest using vocabulary relating to sex found in Tsong Khapa's "The lamp that shows the path to enlightenment."
(N.B. This book is about morality and does not have any terms relating to sexually transmitted diseases)
- What does AIDS mean? What are the symptoms of AIDS and what changes in appearance are seen in infected individuals?
- Add more questions about AIDS.
- Knowledge about how to prevent these diseases.
- More questions about AIDS and what it is.
- Better to explain the words they don't understand.

13. Do you have any other comments that you would like to make?

- Suggest figures/pictures with the questions to make them easier to understand.
1. Questions with pictures and brief explanations.
2. Important to explain questions before doing questionnaire.
3. Add more choices to the multiple choice questions for sources of knowledge.
- These diseases are very common in society but people are ignorant about them. Therefore it is important to spread this education in rural areas.

- d) It is important to do this education programme in the Tibetan language in Tibetan areas and to test the people for STDs.
- e) This education about how to prevent AIDS should be disseminated widely.
- f) First of all thank you for giving this AIDS education to us. In addition in most Tibetan areas people are unfamiliar with these diseases. Thank you for taking every opportunity to tell them.
- g) It is good for us to have education about AIDS.
- h) In the future if you give education about these diseases, I think it might help to protect us from acquiring these diseases.

Appendix M – Analysis of Questionnaire Evaluation Form from Chinese Test – Retest Cohorts

Question	Number Responding Yes (%)			Number Responding No (%)		
	Male Total	Female		Male Total	Female	
1. Did you find this questionnaire easy to understand?	13 (86.7)	0 (0)	13 (38.2)	2 (13.3)	19 (100)	21 (61.8)
2. Are many of the medical words used in this questionnaire unfamiliar to you?	6 (40.0)	18 (94.7)	24 (70.6)	9 (60.0)	1 (5.3)	10 (29.4)
3. Are some of the medical words used in this questionnaire unfamiliar to you?	9 (60.0)	8 (42.1)	17 (50.0)	6 (40.0)	11 (57.9)	17 (50.0)
4. Did you find that the questionnaire was too long?	0 (0)	5 (26.3)	5 (14.7)	15 (100)	14 (73.7)	29 (85.3)
5. Do you think that there are other questions that should have been included in the questionnaire?	12 (80.0)	4 (21.0)	16 (47.1)	3 (20.0)	15 (79.0)	18 (52.9)

At the initial testing of the questionnaire there were 16 male participants. At retesting there were a total of 15 male participants. However, 2 of them had not come to the original testing of the pre-intervention questionnaire. The questionnaire evaluation information from all 15 has been used in compiling this report. There were 19 female participants present for both initial and retesting.

Open Questions

6. Which questions did you find difficult to understand?

Question No.	Question	Male (%)	Female (%)	Total No. Participants (percentage)
4	Can a person get HIV if someone who has HIV coughs or sneezes on them?	0	1 (5.3)	1 (2.9)
5	Can a person get HIV if they share a glass of water with someone who has HIV?	0	1 (5.3)	1 (2.9)
6	Does pulling out the penis from a woman's vagina before a man climaxes, prevent a woman	0	6 (31.6)	6 (17.6)

	from getting HIV during sex?			
7	Can a person get HIV if they have anal sex (penis inside the anus) with a man?	0	6 (31.6)	6 (17.6)
8	Can showering or washing one's genitals after sex prevent one from getting HIV?	1 (6.7)	5 (26.3)	6 (17.6)
9	Will all pregnant women infected with HIV have babies born with AIDS?	1 (6.7)	2 (10.5)	3 (8.8)
10	Do all people who have been infected with HIV show serious signs of being infected?	0	1 (5.3)	1 (2.9)
11	Is there a vaccine that can prevent people from getting HIV?	1 (6.7)	1 (5.3)	2 (5.9)
12	Are people likely to get HIV by deep kissing their tongue into their partner's mouth, if their partner has HIV?	0	3 (15.8)	3 (8.8)
13	Can a woman get HIV if she has sex during her period?	3 (20.0)	3 (15.8)	6 (17.6)
14	Is there a female condom that can help decrease a woman's chance of getting HIV?	2 (13.3)	2 (10.5)	4 (11.8)
15	Can a person get HIV if he or she is taking antibiotics?	1 (6.7)	4 (21.0)	5 (14.7)
16	Does having sex with more than one partner increase a person's chance of being infected with HIV?	1 (6.7)	4 (21.0)	5 (14.7)
17	Will taking a test for HIV one week after having sex with a person if he or she has HIV?	1 (6.7)	2 (10.5)	3 (8.8)
18	Can a person get HIV by sitting in a hot tub or swimming pool with a person who has HIV?	0	2 (10.5)	2 (5.9)
19	Can a person get HIV by having oral sex (putting a man's penis in their mouth)?	1 (6.7)	4 (21.0)	5 (14.7)
20	Does using Vaseline or baby oil with a condom decrease the chances of getting HIV?	2 (13.3)	2 (10.5)	4 (11.8)
21	Is it easier to get HIV if a person has another sexually transmissible disease?	1 (6.7)	3 (15.8)	4 (11.8)
22	Is there a cure for gonorrhoea?	5 (33.3)	3 (15.8)	8 (23.5)
23	Can a person get gonorrhoea from anal sex (a man's penis inside their anus)?	2 (13.3)	4 (21.0)	6 (17.6)
24	If a man has gonorrhoea, may he have a discharge (pus) from his penis?	3 (20.0)	4 (21.0)	7 (20.6)
25	Can a woman look at her body and tell if she has gonorrhoea?	2 (13.3)	4 (21.0)	6 (17.6)
26	Can syphilis infect a baby before it is born?	2 (13.3)	4 (21.0)	6 (17.6)
27	Is there a cure for syphilis?	4 (26.7)	4 (21.0)	8 (23.5)

28	Can a person develop sores on their genitals (vagina) soon after they become infected with syphilis?	3 (20.0)	3 (15.8)	6 (17.6)
29	Can Human Papilloma Virus (HPV) cause cancer in women?	5 (33.3)	2 (10.5)	7 (20.6)
30	Is there a vaccine that can prevent infection with Human Papilloma Virus (HPV)?	0	2 (10.5)	2 (5.9)
31	Can a man get genital warts only by having vaginal sex?	1 (6.7)	3 (15.8)	4 (11.8)
32	Do Genital Herpes sores on a man's penis come and go?	1 (6.7)	3 (15.8)	4 (11.8)
33	Are there medications available to cure Genital Herpes?	1 (6.7)	4 (21.0)	5 (14.7)
34	Can a woman who has Genital Herpes pass it on to her baby during childbirth?	0	2 (10.5)	2 (5.9)
35	Must a person who has Genital Herpes have to give the infection to his or her sexual partner?	1 (6.7)	2 (10.5)	3 (8.8)
36	Does chlamydia cause obvious symptoms in most women?	3 (20.0)	2 (10.5)	5 (14.7)
37	Can chlamydia cause pain when a person urinates?	5 (33.3)	2 (10.5)	7 (20.6)
38	Is there a cure for chlamydia?	1 (6.7)	1 (5.3)	2 (5.9)
40	Can a person get Hepatitis B if they have vaginal sex?	1 (6.7)	0	1 (2.9)
41	Can Hepatitis B be passed on from a mother to her baby when it is born?	2 (13.3)	0	2 (5.9)
42	If a person is an injecting drug user, can they get HIV if they use a needle that someone who has HIV has already used?	0	3 (15.8)	3 (8.8)

N.B. Comments which did not specify a question number but stated a topic were included in the above table e.g. questions relating to chlamydia are recorded as question numbers 36, 37 and 38.

Other comments which were made in response to this question but did not specify a question number that the participant found difficult, were not included in the table but are listed below:

- a) About medical problems.
- b) There are many medical words I don't recognise so don't know how to answer.
- c) Don't understand some medical words.
- d) The way that some diseases are transmitted.
- e) The way that STDs are transmitted.
- f) If two people have sex will they infect each other with the virus?
- g) Some of the questions about AIDS at the beginning. – *As the first 21 questions on the questionnaire deal with HIV it is impossible to tell which ones this participant is referring to.*
- h) Didn't understand many.

- i) Transmission modes of STDs.
- j) Don't understand most of the professional terms.
- k) Don't understand some words.
- l) Unfamiliar words – 2 participants.
- m) Questions about sex.

7. Which words did you find the most difficult to understand?

Word	Male (percentage)	Female (percentage)	Total No. Participants (percentage)
Anal sex	0	1 (5.3)	1 (2.9)
Baby oil	0	1 (5.3)	1 (2.9)
Chlamydia	6 (40.0)	11(57.9)	17 (50.0)
Genital herpes	1(6.7)	4 (21.0)	5 (14.7)
Gonorrhoea	8 (53.3)	13(68.4)	21(61.8)
Human papilloma virus	1(6.7)	2 (10.5)	3 (8.8)
Syphilis	5 (33.3)	14 (73.7)	19 (55.9)
Ulcer	0	1 (5.3)	1 (2.9)
Wart	4 (26.7)	5 (26.3)	9 (26.5)

8. Can you suggest alternative words for the words that you found difficult in the questionnaire?

English word	Suggested alternative Chinese word	English meaning of alternative (researcher's comments)
Warts	病原体 Bìng yuán tǐ	Pathogens (All organisms causing STIs are regarded as pathogens not just genital warts)
Warts and chlamydia	性病 Xìng bìng	Venereal disease (This term encompasses all STIs not just warts and chlamydia)
Chlamydia and syphilis	传染病 Chuán rǎn bìng	Infectious diseases (This term includes chlamydia and syphilis but also many other diseases not related to these two)
Gonorrhoea	梅毒 Méi dú	Syphilis (The Chinese for gonorrhoea is 淋病 Lín bìng which this participant wrote in response to question 7. This cannot be replaced by 梅毒 Méi dú)
Gonorrhoea and warts	性病代替爱滋病 Xìng bìng dài tì ài zī bìng	STDs instead of AIDS (Although gonorrhoea and

		warts are STDs and this term encompasses AIDS too each of these organisms is distinct and must be differentiated from each other)
Syphilis, chlamydia and gonorrhoea	性疾病 Xìng jí bìng	Sexually transmitted diseases (This term encompasses all STIs not just syphilis, chlamydia and gonorrhoea)
Human papilloma virus and warts	直接用病毒代替其它详细病毒名称 Zhí jiē yòng bìng dú dài tì qí tā xiáng xì bìng dú míng chēng	Use the word virus instead of other specific virus names (This is not practical due to the multitude of different viruses causing very distinct infections)

Other comments:

- a) Use the words that are commonly used in daily life. (This participant wrote syphilis in response to question 7).
- b) Are there any other words for gonorrhoea? (This participant wrote gonorrhoea and herpes in response to question 7).
- c) Use the words that we use in daily life or give more definition. (This participant wrote gonorrhoea, chlamydia and syphilis in response to question 7).
- d) Don't know. (2 participants wrote chlamydia infection in response to question 7)
- e) Can't suggest an alternative. (This participant wrote chlamydia in response to question 7).
- f) I can't suggest alternatives for specialised words (This participant wrote gonorrhoea in response to question 7).
- g) Don't know. (This participant wrote syphilis, chlamydia, genital herpes and warts in response to question 7).
- h) Don't know. (This participant wrote baby oil in response to question 7).
- i) Don't know. (This participant wrote chlamydia, gonorrhoea, syphilis, anal sex and warts in response to question 7).
- j) Don't know. (2 participants wrote gonorrhoea and syphilis in response to question 7).
- k) Don't know. (2 participants wrote syphilis, chlamydia and gonorrhoea in response to question 7).
- l) Don't know. (This participant wrote gonorrhoea in response to question 7).
- m) Don't know. (This participant wrote gonorrhoea, syphilis, human papilloma virus and herpes in response to question 7).
- n) Don't know. (This participant wrote gonorrhoea, syphilis, chlamydia, and genital herpes in response to question 7).
- o) Don't know. (This participant wrote gonorrhoea, chlamydia, syphilis and ulcer in response to question 7).
- p) Don't know. (This participant wrote syphilis in response to question 7).

9. What additional questions would you like to have included in the questionnaire?

- a) What do you do once you are infected with HIV?
- b) Include some questions about common problems associated with having sex.
- c) Knowledge about physiology.
- d) Knowledge about different types of sexually transmitted diseases.

- e) Talk more about how you get STDs and how to prevent them.
- f) Organs of the body.
- g) Is there any effective ways to prevent STDs?
- h) More questions about AIDS problems.
- i) How to prevent these diseases.
- j) Some common knowledge.
- k) Define some special medical words.
- l) How to avoid problems when having sex.
- m) Include questions about the symptoms of AIDS.
- n) How to prevent diseases between males and females.
- o) What sort of things we should pay attention to in daily life.
- p) The transmission modes of all different viruses.
- q) I think everything is complete.
- r) Questions about what you should pay attention to during pregnancy.
- s) More questions about classmates, friends and relatives.
- t) Unclear.
- u) Questions about how to prevent AIDS.

10. Do you have any other comments that you would like to make?

- a) Talk more about our physiology problems.
- b) At what age is it easy to get STDs?
- c) Thank you for this chance to let me know more things. I hope you will give us more information (communication) to let us know much more about this.
- d) You can survey many people who are having sex.
- e) Give us more open-ended questions so we can express our ideas and opinions.
- f) I feel that you should tell us more about these diseases and how to prevent them.
- g) Why are you surveying the knowledge about sex? Are there any ways to resolve some problems related to question 9? (N.B. this participant had not been to the initial testing).
- h) Some words in the questionnaire are very difficult so I don't understand. You should write some simple words.
- i) We don't understand, for us it is very difficult.
- j) Don't know how to answer the questions.
- k) Some medical words should give definitions.
- l) I think it is great because it gives me more knowledge and can help me in the future.
- m) Some words are unfamiliar to us so they are difficult to understand.

Appendix N - Analysis of Questionnaire Evaluation Form from Tibetan Test – Retest Cohorts

Question	Number Responding Yes (%)			Number Responding No (%)		
	Male Total	Female		Male Total	Female	
1. Did you find this questionnaire easy to understand?	8 (61.5)	5 (38.5)	13 (50.0)	5 (38.5)	8 (61.5)	13 (50.0)
2. Are many of the medical words used in this questionnaire unfamiliar to you?	7 (53.8)	12 (92.3)	19 (73.1)	6 (46.2)	1 (7.7)	7 (26.9)
3. Are some of the medical words used in this questionnaire unfamiliar to you?	10 (76.9)	10 (76.9)	20 (76.9)	3 (23.1)	3 (23.1)	6 (23.1)
4. Is it helpful to also use the Chinese medical words on the Tibetan questionnaire?	11 (84.6)	13 (100.0)	24 (92.3)	2 (15.4)	0	2(7.7)
5. Did you prefer to fill out the questionnaire in Tibetan?	11 (84.6)	9 (75.0)	20 (80.0)	2 (15.4)	3 (25.0)	5 (20.0)*
6. Did you prefer to fill out the questionnaire in Chinese?	4 (30.8)	5 (38.5)	9 (34.6)	9 (69.2)	8 (61.5)	17 (65.4)
7. Did you find that the questionnaire was too long?	4 (30.8)	3 (23.1)	7 (26.9)	9 (69.2)	10 (76.9)	19 (73.1)
8. Do you think that there are other questions that should have been included in the questionnaire?	4 (36.4)	5 (38.5)	9 (37.5)**	7 (63.6)	8 (61.5)	15 (62.5)

At the initial testing of the questionnaire there were 13 male and 13 female participants. At retesting there were a total of 13 male participants. However, 1 failed to return for retesting and another 1 had not come to the original testing of the pre-intervention questionnaire. At retesting there were 13 females, 7 who had been at the original testing and an additional 6 who had not. It should be noted that during the intervening week there had been self-immolations in a town that many of the participants were from. In fact one of those who died was a relative of one of the girls in the original cohort. On the day of retesting all of the girls were in a meeting on their campus regarding these events and attendant security. Those who

did come for the retesting and subsequent education session were substantially delayed by this. Additionally, these events had a significant emotional impact on all participants.

*One female participant did not answer question 5.

** Two male participants did not answer question 8.

Open Questions

9. Which questions did you find difficult to understand?

Question No.	Question	Male (%)	Female (%)	Total No. Participants (percentage)
6	Does pulling out the penis from a woman's vagina before a man climaxes, prevent a woman from getting HIV during sex?	0	1 (7.7)	1 (3.8)
12	Are people likely to get HIV by deep kissing their tongue into their partner's mouth, if their partner has HIV?	0	1 (7.7)	1 (3.8)
13	Can a woman get HIV if she has sex during her period?	0	1 (7.7)	1 (3.8)
15	Can a person get HIV if he or she is taking antibiotics?	0	1 (7.7)	1 (3.8)
20	Does using Vaseline or baby oil with a condom reduce the chances of getting HIV?	2 (15.4)	1 (7.7)	3 (11.5)
22	Is there a cure for gonorrhoea?	3 (23.1)	2 (15.4)	5 (19.2)
23	Can a person get gonorrhoea from anal sex with a man's penis inside their anus?	3 (23.1)	2 (15.4)	5 (19.2)
24	If a man has gonorrhoea, may he have a discharge (pus) from his penis?	3 (23.1)	2 (15.4)	5 (19.2)
25	Can a woman look at her body and tell if she has gonorrhoea?	3 (23.1)	2 (15.4)	5 (19.2)
26	Can syphilis infect a baby before it is born?	4 (30.8)	4 (30.8)	8 (30.8)
27	Is there a cure for syphilis?	4 (30.8)	5 (38.5)	9 (34.6)
28	Can a person develop sores on their genitals (penis or vagina) soon after they become infected with syphilis?	4 (30.8)	4 (30.8)	8 (30.8)
29	Can Human Papilloma Virus (HPV) cause cancer in women?	1 (7.7)	3 (23.1)	4 (15.4)
30	Is there a vaccine that can prevent infection with Human Papilloma Virus (HPV)?	1 (7.7)	4 (30.8)	5 (19.2)
31	Can a man get genital warts only by having vaginal sex?	1 (7.7)	3 (23.1)	4 (15.4)
32	Do Genital Herpes sores on a man's penis come and go?	1 (7.7)	2 (15.4)	3 (11.5)
33	Are there medications available to cure Genital Herpes?	1 (7.7)	2 (15.4)	3 (11.5)

34	Can a woman who has Genital Herpes pass it on to her baby during childbirth?	1 (7.7)	2 (15.4)	3 (11.5)
35	Must a person who has Genital Herpes have to give the infection to his or her sexual partner?	1 (7.7)	2 (15.4)	3 (11.5)
36	Does chlamydia cause obvious symptoms in most women?	3 (23.1)	8 (61.5)	11 (42.3)
37	Can chlamydia cause pain when a person urinates?	3 (23.1)	6 (46.2)	9 (34.6)
38	Is there a cure for chlamydia?	3 (23.1)	6 (46.2)	9 (34.6)

N.B. Comments which did not specify a question number but stated a topic were included in the above table e.g. questions relating to chlamydia are recorded as question numbers 36, 37 and 38.

Other comments which were made in response to this question but did not specify a question number that the participant found difficult, were not included in the table but are listed below:

- a) Haven't seen some medical words before. Also medical words about diseases are difficult to understand.
- b) Don't understand some professional medical words.
- c) Most of these questions are difficult to understand.
- d) I have never heard of some of these diseases.
- e) Many medical words (this participant did state gonorrhoea and syphilis as well which are included in the table above)
- f) Don't understand some medical words.
- g) Some of these words are a little difficult to understand but if you write them in Chinese I can understand.
- h) Don't understand most of them.
- i) These questions are not too difficult.

10. Which words did you find the most difficult to understand?

Word	Male (percentage)	Female (percentage)	Total No. Participants (percentage)
Antibiotics	0	1 (7.7)	1 (3.8)
Baby oil	2 (15.4)	0	2 (7.7)
Cancer	1 (7.7)	0	1 (3.8)
Chlamydia	5 (38.5)	7 (53.8)	12 (46.2)
Genital herpes	3 (23.1)	2 (15.4)	5 (19.2)
Genital warts	1 (7.7)	4 (30.8)	5 (19.2)
Gonorrhoea	2 (15.4)	3 (23.1)	5 (19.2)
Human papilloma virus	2 (15.4)	2 (15.4)	4 (15.4)
Sexual intercourse	0	1 (7.7)	1 (3.8)
Sexually transmissible diseases	1 (7.7)	0	1 (3.8)

Syphilis	9 (69.2)	6 (46.2)	15 (57.7)
Vaseline	2 (15.4)	2 (15.4)	4 (15.4)

The following comments were also written in response to this question:

- a) For example the Chinese word for antigens 抗原 Kàng yuán tǐ. I didn't know before especially in Tibetan. (The word antigens is not in the questionnaire, in either Chinese or Tibetan. It is probable that this participant intended to write 衣原体 Yī yuán tǐ which is Chinese for Chlamydia).
- b) Feeling like that.
- c) I have heard these words before but don't understand the meaning and don't have knowledge about them so it is a little difficult.
- d) Haven't seen some medical words before. Also medical words about diseases are difficult to understand.
- e) Yes. (This participant had written gonorrhoea, HPV and syphilis in response to question 9 so these have been included in the above table).

11. Can you suggest alternative words for the words that you found difficult in the questionnaire?

- a) Yes. (This male participant did not suggest any alternatives).
- b) In daily life we seldom hear these words so they are difficult to understand and don't know what they are. (This female participant did not suggest any alternatives).
- c) I am sorry I don't know because I don't have any experience. (This female participant did not suggest any alternatives).

12. What additional questions would you like to have included in the questionnaire?

- a) It is better to write the questionnaire's aim, target group and time for the questionnaire.
- b) It is better to have some questions about Tuberculosis.
- c) Can young girls (children) get STDs?
- d) You should have many questions about how to prevent STDs.
- e) It is difficult for me to give suggestions because I don't know much about it.
- f) The knowledge and experience of my family is very bad.
- g) Origin and history of AIDS.
- h) About Hepatitis B.
- i) You should give the definitions for unfamiliar words and then it is easier to answer the questions.

13. Do you have any other comments that you would like to make?

- a) It is better to write "Thank you for your time" on the questionnaire. (N.B. the questionnaire has "Thank you for your cooperation" after the instructions).
- b) Where does AIDS come from apart from sex?
- c) It is important and beneficial for many people to obtain knowledge about these things.
- d) Apart from infectious diseases what diseases cannot be prevented?

- e) Apart from that I think it will be better if you spread this knowledge so more people will know about these diseases.
- f) Before I saw this questionnaire I didn't pay much attention to this but it is important for many people to pay attention to this.
- g) I think that as we are University students now it is good for us to pay attention to it so that we don't become infected.
- h) Because of the Tibetan environment and way of thinking the knowledge about AIDS is very limited.
- i) I don't know the relationship between Hepatitis B and STDs.
- j) At the beginning give an introduction to the meaning of some medical words and symptoms.
- k) You should give clear introduction to the unfamiliar medical words and diseases.
- l) My hope is that you will tell people about other infectious diseases, thank you. Finally, my wish is that people will not be sick.

Appendix O – Analysis of the Questionnaire Evaluation of the Mongolian Test – Retest cohorts

Question	Number Responding Yes (%)			Number Responding No (%)		
	Male Total	Female		Male Total	Female	
1. Did you find this questionnaire easy to understand?	8 (57.1)	2 (11.1)	10 (31.2)	6 (42.9)	16 (88.9)	22 (68.8)
2. Are many of the medical words used in this questionnaire unfamiliar to you?	12 (85.7)	16 (88.9)	28 (87.5)	2 (14.3)	2 (11.1)	4 (12.5)
3. Are some of the medical words used in this questionnaire unfamiliar to you?	9 (64.3)	13 (72.2)	22 (68.8)	5 (35.7)	5 (27.8)	10 (31.2)
4. Is it helpful to also use the Chinese medical words on the Mongolian questionnaire?	14 (100)	12 (66.7)	26 (81.2)	0	6 (33.3)	6 (18.8)
5. Did you prefer to fill out the questionnaire in Mongolian?	14 (100)	7 (38.9)	21 (65.6)	0	11 (61.1)	11 (34.4)
6. Did you prefer to fill out the questionnaire in Chinese?	0	10 (55.6)	10 (31.2)	14 (100)	8 (44.4)	22 (68.8)
7. Did you find that the questionnaire was too long?	4 (28.6)	3 (16.7)	7 (21.9)	10 (71.4)	15 (83.3)	25 (78.1)
8. Do you think that there are other questions that should have been included in the questionnaire?	11(78.6)	6 (35.3)	17 (54.8)	3 (21.4)	*11 (64.7)	14 (45.2)

The male participants were from the 3rd and 4th year classes of the Mongolian department, female participants were from the 3rd year classes. At the initial testing of the SAQ there were 15 male and 18 female participants. One male participant did not return the questionnaire evaluation form. At retesting there were 7 male and 16 female participants. Between the test and retest the 4th year male participants (8) left the University as they had either found employment or had returned to their hometowns and were therefore unavailable for retesting.

* One female participant did not answer this question.

Open Questions

9. Which questions did you find difficult to understand?

Question No.	Question	Male (%)	Female (%)	Total No. Participants (percentage)
4	Can a person get HIV if someone who has HIV coughs or sneezes on them?		1(5.6)	1(3.1)
5	Can a person get HIV if they share a glass of water with someone who has HIV?		1(5.6)	1(3.1)
6	Does pulling out the penis from a woman's before a man climaxes, prevent a woman from getting HIV during s		4 (22.2)	4 (12.5)
7	Can a person get HIV if they have anal sex (inside the anus) with a man?		7 (38.9)	7 (21.9)
8	Can showering or washing one's genitals after sex prevent one from getting HIV?		4 (22.2)	4 (12.5)
9	Will all pregnant women infected with HIV babies born with AIDS?		4 (22.2)	4 (12.5)
10	Do all people who have been infected with I quickly show serious signs of being infected?		6 (33.3)	6 (18.8)
11	Is there a vaccine that can prevent people from getting HIV?		5 (27.8)	5 (15.6)
12	Are people likely to get HIV by deep kissing their tongue into their partner's mouth, if their partner has HIV?		3 (16.7)	3 (9.4)
13	Can a woman get HIV if she has sex during her period?	1(7.1)	6 (33.3)	7 (21.9)
14	Is there a female condom that can help decrease woman's chance of getting HIV?		6 (33.3)	6 (18.8)
15	Can a person get HIV if he or she is taking antibiotics?		6 (33.3)	6 (18.8)
16	Does having sex with more than one partner person's chance of being infected with HIV?		4 (22.2)	4 (12.5)
17	Will taking a test for HIV one week after ha tell a person if he or she has HIV?	1(7.1)	6 (33.3)	7 (21.9)
18	Can a person get HIV by sitting in a hot tub swimming pool with a person who has HIV?	1(7.1)	3(16.7)	4 (12.5)

19	Can a person get HIV by having oral sex (putting a man's penis in their mouth)?		6 (33.3)	6 (18.8)
20	Does using Vaseline or baby oil with a condom reduce the chances of getting HIV?	2 (14.3)	7 (38.9)	9 (28.1)
21	Is it easier to get HIV if a person has another sexually transmissible disease?		5 (27.8)	5 (15.6)
22	Is there a cure for gonorrhoea?	1(7.1)	10 (55.6)	11(34.4)
23	Can a person get gonorrhoea from anal sex (putting a man's penis inside their anus)?	1(7.1)	10 (55.6)	11(34.4)
24	If a man has gonorrhoea, may he have a discharge (pus) from his penis?		10 (55.6)	10 (31.2)
25	Can a woman look at her body and tell if she has gonorrhoea?		10 (55.6)	10 (31.2)
26	Can syphilis infect a baby before it is born?	1(7.1)	10 (55.6)	11(34.4)
27	Is there a cure for syphilis?	1(7.1)	8 (44.4)	9 (28.1)
28	Can a person develop sores on their genitals (penis or vagina) soon after they become infected with syphilis?		9 (50.0)	9 (28.1)
29	Can Human Papilloma Virus (HPV) cause cancer in women?		9 (50.0)	9 (28.1)
30	Is there a vaccine that can prevent infection with Human Papilloma Virus (HPV)?	1(7.1)	7 (38.9)	8 (25.0)
31	Can a man get genital warts only by having vaginal sex?	2 (14.3)	10 (55.6)	12 (37.5)
32	Do Genital Herpes sores on a man's penis come and go?		7 (38.9)	7 (21.9)
33	Are there medications available to cure Genital Herpes?		8 (44.4)	8 (25.0)
34	Can a woman who has Genital Herpes pass infection on to her baby during childbirth?		5 (27.8)	5 (15.6)
35	Must a person who has Genital Herpes have to give the infection to his or her sexual partner?		4 (22.2)	4 (12.5)
36	Does chlamydia cause obvious symptoms in most women?	1(7.1)	9 (50.0)	10 (31.2)
37	Can chlamydia cause pain when a person urinates?	2(14.3)	9 (50.0)	11(34.4)
38	Is there a cure for chlamydia?		8 (44.4)	8 (25.0)
39	Is there a vaccine that can prevent Hepatitis B?	1(7.1)	5 (27.8)	6 (18.8)
40	Can a person get Hepatitis B if they have vaginal sex?		5 (27.8)	5 (15.6)
41	Can Hepatitis B be passed on from a mother to her baby when it is born?		3 (16.7)	3 (9.4)

42	If a person is an injecting drug user, can they get HIV if they use a needle that someone who has HIV has already used?		4 (22.2)	4 (12.5)
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N.B. Comments which did not specify a question number but stated a topic were included in the above table e.g. questions relating to chlamydia are recorded as question numbers 36, 37 and 38.

Other comments which were made in response to this question but did not specify a question number that the participant found difficult, were not included in the table but are listed below:

- a) Treatment, disease names and medicines are difficult to understand.
- b) Medical words.
- c) All questions are difficult to understand so need to add an explanation.
- d) Difficult to understand because I don't know about these diseases.
- e) One male and one female participant wrote "Most of the questions".
- f) One male and one female participant wrote "A lot of terms are difficult to understand"
- g) I want to know more about what happens after you have a relationship between men and women?
- h) Anal.

10. Which words did you find the most difficult to understand?

Word	Male (percentage)	Female (percentage)	Total No. Participants (percentage)
AIDS	1 (7.1)		1 (3.1)
Anal		3 (16.7)	3 (9.4)
Chlamydia	1 (7.1)	7 (46.7)	8 (25.0)
Genital warts	1 (7.1)	3 (16.7)	4 (12.5)
Gonorrhoea	1 (7.1)	7 (46.7)	8 (25.0)
Herpes		4 (26.7)	4 (12.5)
Human immunodeficiency virus		2 (13.3)	2 (6.2)
Human papilloma virus		3 (16.7)	3 (9.4)
Injection		1 (6.7)	1 (3.1)
Sex	1 (7.1)		1 (3.1)
Syphilis		7 (46.7)	7 (21.9)
Vagina		1 (6.7)	1 (3.1)
Virus	1 (7.1)	3 (16.7)	4 (12.5)

The following comments were also written in response to this question:

- a) Medical words.
- b) Too many words.
- c) Understand everything.
- d) Understood the words but not the diseases.

- e) Medicine and disease names.
- f) Some special words.
- g) Disease names.
- h) 3 participants wrote “most of them are difficult to understand”.
- i) Mostly understand.

N.B. In response to this question some of the female participants only listed question numbers. In these instances the pathogens referred to in those questions have been included in the table above.

11. Can you suggest alternative words for the words that you found difficult in the questionnaire?

- a) Use Chinese names for diseases.
- b) Not enough time to say which words need replacing.
- c) Two male participants thought that all words were easy to understand.
- d) Disease names. However, this participant did not suggest any alternatives.
- e) Virus and disease.
- f) Change word for intercourse to relationship.
- g) Put explanation in brackets for medical words.
- h) Find some easier words to replace the medical words and disease names.
- i) Human papilloma virus.
- j) A lot of difficult words.
- k) Drug addicts, herpes and genital warts.
- l) Virus, sexual intercourse, anal, chlamydia, syphilis and herpes.
- m) Anal, virus, chlamydia, and vagina.
- n) Please find some words to replace.
- o) Can understand most of them. No suggestions for replacement.
- p) I don't know any words that can replace the hard words.
- q) All.
- r) Difficult words are those medical words and those about sex.
- s) STDs and AIDS.
- t) Please find words to difficult questions.

12. What additional questions would you like to have included in the questionnaire?

- a) About sex life.
- b) About sexual behaviour.
- c) Four participants wrote – How to have a better sex life.
- d) About male genitalia.
- e) About genitalia.
- f) General idea about how to prevent all kinds of diseases.
- g) How to protect themselves.
- h) Advice about marriage.
- i) It is difficult to answer this question as I don't have sufficient knowledge about AIDS and STDs.
- j) As young people it is important to know about these things.
- k) These are good.
- l) All those are very good.
- m) More things and details about how to prevent the diseases.

- n) Would be better to have some kind of questionnaire about other general diseases.
- o) All those are good.

13. Do you have any other comments that you would like to make?

- a) Two participants wrote this is a good project.
- b) In your daily life how to prevent AIDS?
- c) What is the method to prevent AIDS?
- d) I will come again to listen to your class and get a better understanding of all these questions.
- e) Want to know available quick treatment for AIDS.
- f) No but we didn't get any knowledge about these so willing to know more.
- g) This is very important for us.
- h) It is important to know how to prevent AIDS.
- i) No. It is very important for us to know how to prevent AIDS.
- j) It is very important for us.
- k) No suggestions but feel that we learned a lot of knowledge about STDs and health.
- l) No suggestions but we want to learn more and details about these diseases.

Appendix P1- The effect of individual test items on the score in the test for the Han cohort.

Item	number of observation in the scale	direction of item in the scale	item-test correlation	item-rest correlation	average interitem correlation	alpha
Cough1	35	+	0.1045	0.0386	0.1345	0.8551
Water1	35	+	0.1573	0.0921	0.1333	0.8539
Withdraw1	35	+	0.5106	0.4592	0.1257	0.8453
Ana1	35	+	0.3551	0.2954	0.1291	0.8492
Shower1	35	+	0.5584	0.5104	0.1247	0.8441
MTC1	35	-	0.1576	0.0923	0.1333	0.8539
Symptoms1	35	+	0.1668	0.1017	0.1331	0.8537
Vaccine1	35	+	0.2331	0.1693	0.1317	0.8521
Kissing1	35	+	0.2874	0.2252	0.1305	0.8508
Period1	35	+	0.2820	0.2196	0.1306	0.8510
Condom1	35	+	0.4239	0.3674	0.1276	0.8475
Antibiotics1	35	+	0.1857	0.1209	0.1327	0.8533
Partner1	35	+	0.7321	0.6991	0.1209	0.8394
Test1	35	+	0.5083	0.4569	0.1258	0.8454
Swimming1	35	+	0.4111	0.3540	0.1279	0.8478
Oral1	35	+	0.4610	0.4066	0.1268	0.8466
Vaseline1	35	+	0.5713	0.5243	0.1244	0.8437
STI1	35	+	0.4901	0.4374	0.1262	0.8458
Gono1	35	+	0.3826	0.3242	0.1285	0.8485
Ganall	35	+	0.4138	0.3568	0.1278	0.8477
Pus1	35	+	0.5078	0.4562	0.1258	0.8454
Appearance1	35	+	0.3109	0.2495	0.1300	0.8503
Neosyph1	35	+	0.3474	0.2873	0.1292	0.8494
Syphilis1	35	+	0.3680	0.3089	0.1288	0.8489
Sores1	35	+	0.6076	0.5634	0.1236	0.8428
Cancer1	35	+	0.3239	0.2630	0.1297	0.8500
Hvacc1	35	+	0.4168	0.3600	0.1277	0.8477
Warts1	35	+	0.4743	0.4207	0.1265	0.8462
Recurrence1	35	+	0.4334	0.3775	0.1274	0.8473
Herpes1	35	+	0.4078	0.3505	0.1279	0.8479
MTCHerp1	35	+	0.3785	0.3198	0.1286	0.8486
Hsores1	35	+	0.6193	0.5760	0.1234	0.8425
Chlsympt1	35	+	0.2892	0.2270	0.1305	0.8508
Chdys1	35	+	0.4104	0.3533	0.1279	0.8478
Chcure1	35	+	0.3153	0.2540	0.1299	0.8502
HBvacc1	35	+	0.1513	0.0859	0.1335	0.8541
HBvag1	35	+	0.5240	0.4735	0.1254	0.8450
MTCHBV1	35	+	0.4191	0.3624	0.1277	0.8476
IDU1	35	+	0.4423	0.3868	0.1272	0.8470
Test scale					0.1284	0.8517

There were no missing values in each item. Most items are in the same direction with the overall scale, and only one item, “MTC1” was reversed. Item-test correlations may not be adequate to detect items that fit poorly because the poorly fitting items may distort the scale (Nunnally, 1994). Item-rest correlation is the correlation

between an item and the scale that is formed by all other items, the lower the value, the less fitted that item is in the scale. Four items had item-rest correlation lower than 0.1: cough, water, MTC and HBvacc. Cronbach's alpha in the last column for the test scale consists of all items but the one item on that row. For example, the α coefficient on "cough" row, 0.8551, is the Cronbach's α coefficient that consists of all items but "cough". If we remove "cough" from the scale, the Cronbach's α coefficient will increase from 0.8517 to 0.8551.

Appendix P2 - The effect of individual test items on the score in the retest for the Han cohort.

Item	number of observation In the scale	direction of item in the scale	item-test correlation	item-rest correlation	average interitem correlation	alpha
Cough2	32	+	0.1069	0.0493	0.1842	0.8956
Water2	32	+	0.2038	0.1476	0.1818	0.8941
Withdraw2	32	+	0.4882	0.4424	0.1748	0.8895
Anal2	32	+	0.5586	0.5169	0.1731	0.8883
Shower2	32	+	0.5704	0.5295	0.1728	0.8881
MTC2	32	+	0.3762	0.3250	0.1776	0.8914
Symptoms2	32	+	0.6170	0.5793	0.1716	0.8873
Vaccine2	32	+	0.2358	0.1802	0.1810	0.8936
Kissing2	32	+	0.5706	0.5296	0.1728	0.8881
Period2	32	+	0.4329	0.3842	0.1762	0.8904
Condom2	32	+	0.2567	0.2016	0.1805	0.8933
Antibiotics2	32	+	0.5730	0.5322	0.1727	0.8881
Partner2	32	+	0.5583	0.5166	0.1731	0.8883
Test2	32	+	0.6007	0.5618	0.1720	0.8876
Swimming2	32	+	0.4001	0.3500	0.1770	0.8910
Oral2	32	+	0.5589	0.5173	0.1731	0.8883
Vaseline2	32	+	0.5041	0.4591	0.1744	0.8892
STI2	32	+	0.6767	0.6435	0.1702	0.8863
Gono2	32	+	0.5800	0.5397	0.1725	0.8879
Ganal2	32	+	0.4653	0.4182	0.1754	0.8899
Pus2	32	+	0.2642	0.2093	0.1803	0.8932
Appearance2	32	+	0.4063	0.3564	0.1768	0.8909
Neosyph2	32	+	0.4374	0.3889	0.1761	0.8903
Syphilis2	32	+	0.2329	0.1772	0.1811	0.8937
Sores2	32	+	0.4198	0.3705	0.1765	0.8906
Cancer2	32	+	0.6344	0.5979	0.1712	0.8870
Hvacc2	32	+	0.2896	0.2354	0.1797	0.8928
Warts2	32	+	0.5263	0.4826	0.1739	0.8889
Recurrence2	32	+	0.3701	0.3187	0.1777	0.8915
Herpes2	32	+	0.3334	0.2806	0.1786	0.8921
MTCHerp2	32	+	0.4911	0.4454	0.1747	0.8895
Hsores2	32	+	0.4829	0.4367	0.1749	0.8896
Chlsympt2	32	+	0.4638	0.4167	0.1754	0.8899
Chdys2	32	+	0.5294	0.4859	0.1738	0.8888
Chcure2	32	+	0.3722	0.3209	0.1777	0.8914
HBvacc2	32	+	0.1849	0.1283	0.1823	0.8944
HBvag2	32	+	0.6481	0.6126	0.1709	0.8868
MTCHBV2	32	+	0.4333	0.3846	0.1762	0.8904
IDU2	32	+	0.4570	0.4095	0.1756	0.8900
Test scale					0.1759	0.8928

In the retest, there was no item that was reversed on the scale. Only one item, “cough” had item-rest correlation coefficient lower than 0.1 in the retest. However, in both test and retest in the Han population, even if items with item-rest correlation lower

than 0.1 were removed, the Cronbach's α coefficient will not improve much (less than 0.01).

**Appendix P3 - The effect of individual test items on the
score in the test for the Tibetan cohort.**

Item	number of observation In the scale	direction of item in the scale	item-test correlation	item-rest correlation	average interitem correlation	alpha
Cough1	26	+	0.4580	0.4081	0.1560	0.8754
Water1	26	+	0.5951	0.5537	0.1528	0.8727
Withdraw1	26	+	0.2930	0.2361	0.1599	0.8785
Ana1	26	+	0.4925	0.4444	0.1552	0.8747
Shower1	26	+	0.4279	0.3764	0.1568	0.8760
MTC1	26	-	0.0872	0.0266	0.1647	0.8823
Symptoms1	26	+	0.1053	0.0449	0.1643	0.8820
Vaccine1	26	+	0.4698	0.4205	0.1558	0.8752
Kissing1	26	+	0.5804	0.5380	0.1532	0.8730
Period1	26	+	0.4954	0.4476	0.1552	0.8747
Condom1	26	+	0.4106	0.3583	0.1572	0.8763
Antibiotics1	26	+	0.4187	0.3667	0.1570	0.8762
Partner1	26	+	0.2498	0.1917	0.1609	0.8793
Test1	26	+	0.4226	0.3709	0.1569	0.8761
Swimming1	26	+	0.3463	0.2913	0.1587	0.8775
Oral1	26	+	0.6156	0.5757	0.1524	0.8723
Vaseline1	26	+	0.4291	0.3777	0.1567	0.8760
STI1	26	+	0.4823	0.4337	0.1555	0.8749
Gono1	26	+	0.6777	0.6428	0.1509	0.8710
Gana1	26	+	0.4692	0.4198	0.1558	0.8752
Pus1	26	+	0.4381	0.3871	0.1565	0.8758
Appearance1	26	+	0.2255	0.1668	0.1615	0.8798
Neosyph1	26	+	0.3715	0.3174	0.1581	0.8771
Syphilis1	26	+	0.5406	0.4955	0.1541	0.8738
Sores1	26	+	0.4595	0.4097	0.1560	0.8754
Cancer1	26	+	0.5212	0.4749	0.1546	0.8742
Hvacc1	26	+	0.1932	0.1339	0.1623	0.8804
Warts1	26	+	0.6440	0.6063	0.1517	0.8717
Recurrence1	26	+	0.4180	0.3660	0.1570	0.8762
Herpes1	26	+	0.4914	0.4433	0.1553	0.8748
MTCHerp1	26	+	0.3426	0.2874	0.1588	0.8776
Hsores1	26	+	0.2196	0.1608	0.1616	0.8799
Chlsympt1	26	+	0.3275	0.2718	0.1591	0.8779
Chdys1	26	+	0.3791	0.3254	0.1579	0.8769
Chcure1	26	+	0.3438	0.2887	0.1587	0.8776
HBvacc1	26	+	0.2156	0.1567	0.1617	0.8800
HBvag1	26	+	0.6365	0.5982	0.1519	0.8719
MTCHBV1	26	+	0.6318	0.5931	0.1520	0.8720
IDU1	26	+	0.5510	0.5066	0.1539	0.8736
Test scale					0.1569	0.8789

Appendix P4 - The effect of individual test items on the score in the retest for the Tibetan cohort.

Item	number of observation In the scale	direction of item in the scale	item-test correlation	item-rest correlation	average interitem correlation	alpha
Cough2	19	+	0.5407	0.5056	0.2690	0.9333
Water2	19	+	0.5454	0.5105	0.2689	0.9332
Withdraw2	19	+	0.4755	0.4372	0.2710	0.9339
Anal2	19	+	0.3305	0.2870	0.2753	0.9352
Shower2	19	+	0.6720	0.6445	0.2651	0.9320
MTC2	19	+	0.2277	0.1817	0.2784	0.9361
Symptoms2	19	+	0.6677	0.6399	0.2653	0.9321
Vaccine2	19	+	0.6564	0.6278	0.2656	0.9322
Kissing2	19	+	0.5303	0.4947	0.2693	0.9334
Period2	19	+	0.1007	0.0531	0.2821	0.9372
Condom2	19	+	0.4927	0.4552	0.2705	0.9337
Antibiotics2	19	+	0.6054	0.5737	0.2671	0.9327
Partner2	19	+	0.4928	0.4553	0.2705	0.9337
Test2	19	+	0.6476	0.6185	0.2659	0.9323
Swimming2	19	+	0.6470	0.6179	0.2659	0.9323
Oral2	19	+	0.4880	0.4503	0.2706	0.9338
Vaseline2	19	+	0.6933	0.6672	0.2645	0.9318
STI2	19	+	0.5817	0.5487	0.2678	0.9329
Gono2	19	+	0.5957	0.5635	0.2674	0.9328
Ganal2	19	+	0.4847	0.4468	0.2707	0.9338
Pus2	19	+	0.3502	0.3072	0.2747	0.9350
Appearance2	19	+	0.5083	0.4715	0.2700	0.9336
Neosyph2	19	+	0.7489	0.7268	0.2628	0.9313
Syphilis2	19	+	0.6043	0.5726	0.2671	0.9327
Sores2	19	+	0.6215	0.5909	0.2666	0.9325
Cancer2	19	+	0.5932	0.5608	0.2675	0.9328
Hvacc2	19	+	0.4909	0.4533	0.2705	0.9337
Warts2	19	+	0.3674	0.3249	0.2742	0.9349
Recurrence2	19	+	0.6653	0.6374	0.2653	0.9321
Herpes2	19	+	0.7012	0.6756	0.2643	0.9317
MTCHerp2	19	+	0.5933	0.5610	0.2675	0.9328
Hsores2	19	+	0.6164	0.5854	0.2668	0.9326
Chlsympt2	19	+	0.6124	0.5812	0.2669	0.9326
Chdys2	19	+	0.6555	0.6269	0.2656	0.9322
Chcure2	19	+	0.6264	0.5960	0.2665	0.9325
HBvacc2	19	+	0.4346	0.3946	0.2722	0.9343
HBvag2	19	+	0.5534	0.5189	0.2687	0.9332
MTCHBV2	19	+	0.2519	0.2064	0.2776	0.9359
IDU2	19	+	0.4554	0.4163	0.2716	0.9341
Test scale					0.2692	0.9349

In the Tibetan sample, “MTC” was the only reversed item in the test (Appendix 3), and no item was on a reversed scale in the retest (Appendix 4). In the test, “MTC” and “symptom” had item-rest correlation coefficients lower than 0.1, and in the retest,

only “period” was lower than 0.1. However, if any of them were removed this would make little change to the Cronbach’s α of the scale.

Appendix P5 – The effect of individual test items on the score in the in the test for the Mongolian cohort.

Item	number of observation In the scale	direction of item in the scale	item-test correlation	item-rest correlation	average interitem correlation	alpha
Cough0	32	+	0.3414	0.29	0.1873	0.8975
Water0	32	+	0.1114	0.0551	0.1931	0.9009
Withdraw0	32	+	0.5264	0.4836	0.1826	0.8946
Anal0	32	+	0.5976	0.5594	0.1808	0.8935
Shower0	32	+	0.5345	0.4922	0.1824	0.8945
MTC0	32	+	0.4131	0.3645	0.1855	0.8964
Symptoms0	32	+	0.4456	0.3985	0.1847	0.8959
Vaccine0	32	+	0.5403	0.4983	0.1823	0.8944
Kissing0	32	+	0.5933	0.5548	0.181	0.8936
Period0	32	+	0.5114	0.4678	0.183	0.8949
Condom0	32	+	0.4863	0.4413	0.1836	0.8953
Antibiotics0	32	+	0.518	0.4747	0.1829	0.8948
Partner0	32	+	0.4805	0.4352	0.1838	0.8954
Test0	32	+	0.4688	0.4229	0.1841	0.8955
Swimming0	32	-	0.1857	0.1303	0.1912	0.8998
Oral0	32	+	0.3696	0.3193	0.1866	0.8971
Vaseline0	32	+	0.3482	0.297	0.1871	0.8974
STI0	32	+	0.5864	0.5474	0.1811	0.8937
Gono0	32	+	0.4331	0.3855	0.185	0.8961
Ganal0	32	+	0.3236	0.2716	0.1877	0.8978
Pus0	32	+	0.5458	0.5042	0.1822	0.8943
Appearance0	32	+	0.6617	0.6281	0.1792	0.8925
Neosyph0	32	+	0.3408	0.2894	0.1873	0.8975
Syphilis0	32	+	0.5806	0.5412	0.1813	0.8938
Sores0	32	+	0.4769	0.4314	0.1839	0.8954
Cancer0	32	+	0.4861	0.4411	0.1837	0.8953
Hvacc0	32	+	0.6835	0.6515	0.1787	0.8921
Warts0	32	+	0.4739	0.4282	0.184	0.8955
Recurrence0	32	+	0.4293	0.3815	0.1851	0.8962
Herpes0	32	+	0.4371	0.3896	0.1849	0.896
MTCHerp0	32	+	0.58	0.5406	0.1813	0.8938
Hsores0	32	+	0.3328	0.2811	0.1875	0.8976
Chlsympt0	32	+	0.2004	0.1453	0.1908	0.8996
Chdys0	32	+	0.409	0.3603	0.1856	0.8965
Chcure0	32	+	0.7	0.6693	0.1783	0.8918
HBvacc0	32	+	0.5101	0.4664	0.183	0.8949
HBvag0	32	+	0.4986	0.4543	0.1833	0.8951
MTCHBV0	32	+	0.3049	0.2523	0.1882	0.8981
IDU0	32	+	0.208	0.153	0.1906	0.8995
Test scale					0.1845	0.8982

There was no missing value in each item. Most items are in the same direction with the overall scale, and only one items, “Swimming0” was reversed. Item-test correlations may not be adequate to detect items that fit poorly because the poorly fitting items may distort the scale (Nunnally, J. C., and I. H. Bernstein. 1994.

Psychometric Theory. 3rd ed. New York: McGraw–Hill.). Item-rest correlation is the

correlation between an item and the scale that is formed by all other items, lower the value, less fitted that item is in the scale. Only one item, Water0, had item-rest correlation lower than 0.1. Cronbach's alpha in the last column for the test scale consists of all items but the one item on that row. For example, the α coefficient on "cough" row, 0.8975, is the Cronbach's α coefficient that consists of all items but "cough". If we remove "cough" from the scale, the Cronbach's α coefficient will decrease from 0.8982 to 0.8975.

Appendix P6 – The effect of individual test items on the score in the retest for the Mongolian cohort.

Item	number of observation In the scale	direction of item in the scale	item-test correlation	item-rest correlation	average interitem correlation	alpha
Cough1	23	+	0.6349	0.6036	0.2397	0.9229
Water1	23	+	0.309	0.2627	0.2489	0.9264
Withdraw1	23	+	0.3749	0.3307	0.2471	0.9258
Ana1	23	+	0.5124	0.474	0.2431	0.9243
Shower1	23	+	0.2869	0.2401	0.2496	0.9267
MTC1	23	+	0.4411	0.3995	0.2452	0.9251
Symptoms1	23	+	0.4616	0.4209	0.2446	0.9248
Vaccine1	23	+	0.6769	0.6483	0.2385	0.9225
Kissing1	23	+	0.3341	0.2885	0.2482	0.9262
Period1	23	+	0.3766	0.3325	0.247	0.9257
Condom1	23	+	0.6908	0.6632	0.2381	0.9223
Antibiotics1	23	+	0.3419	0.2966	0.248	0.9261
Partner1	23	+	0.6697	0.6407	0.2387	0.9226
Test1	23	+	0.4806	0.4407	0.2441	0.9246
Swimming1	23	+	0.4974	0.4583	0.2436	0.9244
Oral1	23	+	0.6529	0.6228	0.2392	0.9227
Vaseline1	23	+	0.5338	0.4966	0.2425	0.9241
STI1	23	+	0.4177	0.3751	0.2458	0.9253
Gono1	23	+	0.6298	0.5981	0.2398	0.923
Ganall	23	+	0.3237	0.2779	0.2485	0.9263
Pus1	23	+	0.6966	0.6695	0.2379	0.9223
Appearance1	23	+	0.4712	0.4309	0.2443	0.9247
Neosyph1	23	+	0.6269	0.5951	0.2399	0.923
Syphilis1	23	+	0.5603	0.5245	0.2418	0.9238
Sores1	23	+	0.7203	0.6948	0.2372	0.922
Cancer1	23	+	0.6191	0.5868	0.2401	0.9231
Hvacc1	23	+	0.6419	0.611	0.2395	0.9229
Warts1	23	+	0.6559	0.6259	0.2391	0.9227
Recurrence1	23	+	0.4688	0.4283	0.2444	0.9248
Herpes1	23	+	0.5901	0.556	0.2409	0.9234
MTCHerp1	23	+	0.5998	0.5663	0.2407	0.9233
Hsores1	23	+	0.5464	0.5099	0.2422	0.9239
Chlsympt1	23	+	0.5346	0.4974	0.2425	0.924
Chdys1	23	+	0.3508	0.3058	0.2477	0.926
Chcure1	23	+	0.5086	0.47	0.2433	0.9243
HBvacc1	23	+	0.4866	0.447	0.2439	0.9246
HBvag1	23	+	0.6135	0.5808	0.2403	0.9232
MTCHBV1	23	+	0.369	0.3246	0.2472	0.9258
IDU1	23	+	0.2765	0.2293	0.2499	0.9268
Test scale					0.2431	0.9261

In the retest, there was no item that was reversed on the scale. None of the items had item-rest correlation coefficient lower than 0.1 in the retest.

However, in the test population, even remove items with item-rest correlation lower than 0.1, the Cronbach's α coefficient won't improve much (smaller than 0.01).

Appendix Q – Volunteer Peer Educator Training Form

Volunteer Peer Educator Training Form

- Attended Training Session 1
- Attended Training Session 2
- Attended Training Session 3
- Able to identify at least 80 % of modes of transmission of HIV
- Able to identify at least 80 % of modes of transmission of STIs
- Able to identify all methods for prevention of STIs and HIV

- Able to clearly explain (with the use of reference material) all modes of transmission of STIs and HIV

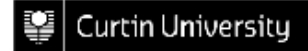
- Able to clearly explain (with the use of reference material) all methods for prevention of STIs and HIV

- Able to clearly explain (with the use of reference material) all the names and main symptoms of the most common STIs

- Able to clearly explain (with the use of reference material) all the names of the vaccine preventable STIs

- Able to clearly explain (with the use of reference material) where to seek appropriate medical attention for suspected STIs

Appendix R – Curtin University Human Research Ethics Committee Protocol Approval.



Memorandum

To	Dr B-K Tan, Centre for International Health
From	Professor Stephan Millett, Chair, Human Research Ethics Committee
Subject	Protocol Approval HR 158/2011
Date	30 March 2012
Copy	Mr John Walkingshaw Centre for International Health Associate Professor Jaya Earnest Centre for International Health

Office of Research and Development
Human Research Ethics Committee

TELEPHONE 9266 2784

FACSIMILE 9266 3793

EMAIL hrec@curtin.edu.au

Thank you for providing the additional information for the project titled "*Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STI) and HIV among University students in Northwest China*". The information you have provided has satisfactorily addressed the queries raised by the Committee. Your application is now **approved**.

- You have ethics clearance to undertake the research as stated in your proposal.
- The approval number for your project is **HR 158/2011**. Please quote this number in any future correspondence.
- Approval of this project is for a period of twelve months **30-03-2012 to 30-03-2013**. To renew this approval a completed Form B (attached) must be submitted before the expiry date **30-03-2013**.
- If you are a Higher Degree by Research student, data collection must not begin before your Application for Candidacy is approved by your Faculty Graduate Studies Committee.
- The following standard statement **must be included** in the information sheet to participants:
This study has been approved by the Curtin University Human Research Ethics Committee (Approval Number HR 158/2011). The Committee is comprised of members of the public, academics, lawyers, doctors and pastoral carers. If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee, c/- Office of Research and Development, Curtin University, GPO Box U1987, Perth, 6845 or by telephoning 9266 2784 or by emailing hrec@curtin.edu.au.

Applicants should note the following:

It is the policy of the HREC to conduct random audits on a percentage of approved projects. These audits may be conducted at any time after the project starts. In cases where the HREC considers that there may be a risk of adverse events, or where participants may be especially vulnerable, the HREC may request the chief investigator to provide an outcomes report, including information on follow-up of participants.

The attached **FORM B** should be completed and returned to the Secretary, HREC, C/- Office of Research & Development:

When the project has finished, or

- If at any time during the twelve months changes/amendments occur, or
- If a serious or unexpected adverse event occurs, or
- 14 days prior to the expiry date if renewal is required.
- An application for renewal may be made with a Form B three years running, after which a new application form (Form A), providing comprehensive details, must be submitted.

Yours sincerely,

Professor Stephan Millett
Chair Human Research Ethics Committee

Appendix S – Qinghai Nationalities University Project Approval

证明书

各院、系（部）：

John Walkingshaw 先生是澳大利亚科廷科技大学国际卫生专业在读博士研究生，现以自修留学生身份在我校开展题为“中国西部高校多民族大学生性传播（包括艾滋病）预防同伴教育课程的设计、开展及评估”的博士课题。为做好相应研究工作，John Walkingshaw 先生请示我中心在我校相关院、系（部）的支持和学生的配合下开展相应活动。

经审查，John Walkingshaw 先生研究课题已经得到科廷科技大学批准，属纯学术研究，拟在我校学生中开展的项目活动对我校学生具有相关知识传播和教育意义，学生本着完全自愿的原则参加活动。因此，请相关院、系（部）予以配合，并要求学生本着自愿、学习的态度参加项目活动，配合开展工作，不涉及与项目无关的内容，不从事与学生身份不符，违反学校纪律的活动。



Appendix T – Adverse Events Management Protocol

Adverse Events Management Protocol

For

Development, implementation and evaluation of a multi-ethnic peer education programme for the prevention of sexually transmissible infections (STIs) and HIV among University students in Northwest China.

1. Should any participants in the project feel that they require further information or support at any stage during the project they can contact the researcher.
2. Should any participant in the project feel distressed or anxious as a result of any aspect of the study (such as: reading the questionnaires, seeing the Power Points, watching the HIV/AIDS movie etc.) they will be referred to:
Mrs. Du Ying
Student Psychology/Counseling Services,
Qinghai Nationalities University.
Contact telephone number: 880 2764.
3. If any participant in the project, as a result of the information they learn during the project, believes they may have a sexually transmissible infection or HIV they can see the following doctors at their outpatient clinics:

Dr. Claudia Juzi (for female students)
Qinghai Red Cross Hospital
55 South Street,
Xining.

Dr. Jason Tompkins (for male students)
Qinghai Red Cross Hospital
55 South Street,
Xining.