

THE FITPACK STUDY

THE FITPACK STUDY:
**A survey of 'hidden' drug injectors with minimal
drug treatment experience.**

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EXECUTIVE SUMMARY

The issues

Most injecting drug users (IDUs) have never been in drug treatment yet much research is done on samples with high treatment rates drawn from agency and peer recruited populations. This bias is of concern for three main reasons. Firstly, trends in HIV risk behaviour among the large numbers of 'hidden' IDUs may go undetected. Secondly, information about the large numbers of drug injectors who are not known to treatment agencies is important to guide the development of more effective public health responses to the spread of HIV and other blood-borne viral infections such as hepatitis B and hepatitis C. Thirdly, research on agency and peer recruited samples with high 'ever in treatment' rates may reinforce some false public stereotypes about people who inject drugs which could undermine strategies which aim to reduce the harm associated with drug injecting.

The study

This research attempted to access 'hidden' IDUs with little or no history of drug treatment. Over 66% of needles and syringes (N&S) provided to IDUs in Western Australia (WA) are sold by community pharmacies in hard disposal containers called 'Fitpacks' which contain five N&S.

Over a six week period from mid September 1995 Fitpacks sold to IDUs through 193 community pharmacies state-wide were accompanied by a brief, anonymous questionnaire designed with input from IDUs and pharmacists. The Questionnaire included questions about: demographics; drug treatment history; hepatitis C testing; drug use; and HIV risk behaviour. Respondents could either return completed questionnaires sealed in their attached envelope through the mail free post, or return them to participating pharmacies in exchange for a free Fitpack. Strategies were employed to reduce the likelihood that respondents would complete more than one questionnaire to earn a free needle pack and procedures implemented to detect and exclude any such corrupted returns. Pharmacies were paid 50 cents for each questionnaire that they distributed and \$2-60 (the wholesale price of a Fitpack at the time of data collection) for each Fitpack given out in exchange for a completed questionnaire.

The study was endorsed and supported by the Health Department of WA, the Pharmaceutical Council of WA and The Australian Pharmacy Guild (WA Branch).

In order to determine the effectiveness of the current study in reaching the group of 'hidden' injectors with little prior contact with specialist drug treatment agencies, results have been compared with those of a peer and agency recruited interview study of drug injectors in Perth. Data for this benchmark study, conducted by our colleagues (Bevan, Loxley, & Carruthers, 1996) as part of the Australian Study of HIV and Injecting Drug Use (ASHIDU), which were collected between July and November 1994.

The purpose of this comparison is not to show that any one sample is more representative than the other, nor that together these samples will represent the total population of drug injectors. Different recruitment strategies would be expected to result in different sub-populations being sampled. While the differences between the samples may largely reflect the means employed to recruit them, they serve to emphasise the need to employ a variety of such means if a more representative picture of drug injectors is to be obtained.

Different methodologies have their advantages and disadvantages. The face to face interview possible with agency and peer recruited samples allows a level of detail about drug using to be studied in a way that is not possible in a self completion 'mail back' survey such as the one

described here. However, the present study aimed to collect information on a group rarely reached by agency and peer recruitment methods.

The results

The pharmacies which agreed to participate in the study accounted for 60% of Fitpack sales across the state. These pharmacies reported that 2558 questionnaires were given to Fitpack clients and 511 (20.0%) uncorrupted questionnaires were returned. Given that some may have been given to Fitpack buyers who had already been given one, the actual return rate is likely to have been above 20.0%. It is worth noting that the conservative figure of 20.0% is well above that estimated by us (7.6%) for the only known comparable research (Anglia and Oxford Regional Health Authority, 1995) which did not employ an inducement for return.

Representativeness of the sample. It is not possible to say that the resulting sample in this study is representative of the sample of all drug injectors. The sample is possibly more representative of drug users who buy their needles through pharmacies than it is of drug injectors as a whole. In as much as the bulk of needle provision to IDUs in WA is through pharmacy sales rather than other sources (eg needle exchange), this group is an important one to study. The data collected in the current study is an addition to the body of knowledge which is based on studies using other recruitment methodologies such as agency and peer based methods.

The strategies employed to prevent and identify multiple responders proved effective. Overall, the number of corrupted returns was small, (10.9%) of all questionnaires returned, and these were easily identified, thus maximising the integrity of the data.

Reaching 'hidden' drug injectors with little drug treatment history. The present study has succeeded at accessing a large number of respondents from this group. Only 51.0% of the sample had any prior drug treatment, and the proportion of respondents having had contact with a specialist drug treatment agency was far less in this study (28.7%) than in the agency and peer recruited sample (63.5%) of Bevan, Loxley and Carruthers (1996).

Demographics. Many of the demographic characteristics of this sample are inconsistent with the stereotype of the drug injector held by many in the wider non-injecting community. The mean age of respondents was 26.2 years. Just over two fifths (43.4%) of the sample were women, a similar proportion (44.3%) were married or living with their sexual partner, and 41.7% had at least one child, 33.6% having a child in their care. All of these proportions were greater than those found in the Perth ASHIDU sample (Bevan, Loxley and Carruthers, 1996). Just under a quarter (23.8%) listed senior high school as their highest level of education completed, 22.4% listed trade or technical school and 6.8% had completed a university or college course. Only 30.3% of the sample were unemployed. A larger number of the current respondents were employed (46.4%) than in the ASHIDU study and the majority (66.4%) of these were in full time employment. The trades and labouring were the most common occupations. Just over half (53.0%) the sample earned \$20,000 or less in the last financial year while just under a third (29.4%) earned over \$30,000 in the same period. Those in the higher income brackets were more likely to be trades persons than those in the lower income levels. Whilst the majority (59.6%) of the sample lived in rental accommodation, just over one in six (16.8%) owned or were buying their place of residence, and just under one in six (15.4%) lived in their parent's home.

Hepatitis C testing. The majority (64.9%) of the sample stated that they had been tested for hepatitis C. Those tested were more likely to have children, to have been charged with a drug offence, and to have had contact with a specialist drug treatment agency. A quarter (25.2%) of those tested reported that they had a positive result, substantially less than the 42.3% in the Perth ASHIDU sample (Bevan, Loxley and Carruthers, 1996).

Fitpacks. Most respondents wanted to see sterile water (75.7%) and swabs (65.6%) sold with Fitpacks, and 79.7% wanted Fitpacks available in vending machines. Those who would like to see Fitpacks available in vending machines were more likely to be under 18 years of age when they first injected, to have said depressants were injected with the needles in the Fitpack, and to have injected at least daily in the past month. Whilst 28.3% of respondents wanted to see three needle Fitpacks available in WA, 75.0% wanted to see ten needle packs available.

Thirty six percent of the sample reported that they never had problems buying Fitpacks, 29.0% had problems rarely and 34.7% had problems at least sometimes. The most common problems specified by those in the latter group being negative attitude of pharmacy staff (64.1%) and unavailability (41.0%), eg. after hours, while only 6.2% identified price as an issue. Three quarters (75.5%) of the sample said they had problems with the Fitpacks themselves or the needles in them. Over two fifths (42.2%) of this group identified needles that were loose, bent, blunt or broken, and 31.9% said that needles had been locked into the Fitpack prior to purchase. Half (49.5%) of the sample purchased more than five Fitpacks in the previous month.

The vast majority (85.5%) of respondents paid between \$4.05 and \$5.00 for the Fitpack with a range from \$3-00 to \$10-00. At the time of data collection the recommended retail price for a Fitpack was \$3.60. Three quarters (75.7%) thought that the price they paid for it was not fair, with those who paid \$4-50 or less being more likely to see the price as fair than those who paid more than this figure.

The majority (81.9%) of respondents used the Fitpack for the first time within an hour of buying it. A third (33.0%) of the sample had used the Fitpack less than 10 minutes after purchase. In 86.9% of cases the Fitpack was used by more than one person and 40.3% said that it was used by more than three people, those who did this being more likely to have first injected at less than 18 years of age. Only a minority (27.6%) of respondents said that the Fitpack was only used on one injecting session, and 34.3% use it on only two sessions.

Approximately forty percent (39.1%) of the sample re-used their own needles from the Fitpack. Those who re-used their needles were more likely to be married or living with their sexual partner, to have shared needles in the past month, and to have shared other injecting equipment in the past month. The most common reasons for re-use were concern with expense and economy of re-use (26.7%), that they did not have enough fits for the number of injecting sessions or people who were using (26.5%). Other reasons included not having enough money for new needles (14.3%), the belief that twice use was 'OK' (12.9%), and access problems (eg. after hours) (12.6%).

One in eight (12.6%) of the sample stated that some of the needles in the Fitpack had been shared, the most common reason given was again, that were not enough N&S for the number of injecting sessions or people using (50.1%). Other reasons were that they shared with their partner (19.2%) and economy of re-use or expense (9.7%) although the numbers here were small. Those respondents who stated that at least some of the needles in the Fitpack had been shared were more likely to have injected depressants in the past month, and to have shared needles in the past month.

The cost of needles and the numbers sold per pack appear to lead to needle re-use and sharing by some injectors. These findings have implications for the pricing of Fitpacks, the sizes of Fitpack available (as described above), as well as such things as what is included in Fitpacks and whether there are things which could be done to assist IDUs to minimise likelihood of accidental needle sharing. These findings also suggest that drug injectors may need education about the risks of re-use of own equipment. The message 'new fit for every hit' does not seem to be having the desired impact with a large minority of respondents.

Drug injecting behaviour. The mean age at which respondents first injected a drug was 19.0 years. The mean number of years the sample had been injecting was 7.1 years, less than the 9.2 years for subjects in the ASHIDU sample (Bevan, Loxley and Carruthers, 1996). While the majority (61.2%) had injected less frequently than daily over the previous month, this was less than the 85.0% for subjects in the Perth ASHIDU sample. This is not surprising given the different treatment rates in the two studies.

The drug that was injected by most respondents in the past month was amphetamine (72.9%), followed by heroin (50.8%) and other opiates (excluding heroin, methadone, homebake) (12.8%). Over the past month two fifths (42.6%) of respondents only injected stimulants, and just under a third (30.7%) injected drugs from both the stimulant and depressant classes. Just over a quarter (26.7%) of respondents stated that over the past month they had only injected depressant drugs. The group who injected both stimulants and depressants in the past month should be further studied to understand the dynamic and functional aspects of this pattern of use.

The vast majority (80.7%) of respondents reported that they usually injected in their own home, just over a quarter (29.4%) in a friend's home and just over one in five (22.1%) identified a car as a place where they usually inject. Those respondents who injected 'outside' (either car, park / beach / street, or pub / club) were more likely to have said that depressants were injected with the needles in the Fitpack and to have shared needles in the past month.

Most respondents reported that they disposed of their used fits by locking them into the Fitpack (68.3%). Just under a third got rid of the used fits quickly (31.6%), forced the needle into the barrel (30.9%), saved their used fits for reuse later (29.3%) or threw them into the household rubbish bin (29.3%).

Sharing. In the past month 27.7% had used a needle after someone else, compared to 15.9% for subjects in the Perth ASHIDU sample (Bevan, Loxley and Carruthers, 1996). Overall, 39.9% of the sample shared (either passed on and/or received) a needle in the past month. Those who shared were more likely to be under 26 years of age. They were also more likely to have injected at least daily and to have shared other equipment (eg. spoon, filter, water, tourniquet) over the past month. Most of those who shared needles in the past month did so with their sexual partner (59.1%) or a close friend (39.6%).

Over half the sample 58.5% reported that they shared other injecting equipment (eg. spoon, filter, water, tourniquet) in the past month. On at least one occasion in the previous 12 months over a third (35.6%) of the sample had shared a needle because they didn't have enough money to buy a Fitpack. Those who had done this were more likely to have shared needles and other injecting equipment in the past month.

There is further evidence that the cost of needles appears to lead to needle sharing by some injectors. The higher rates of injecting and N&S sharing found in this study compared to that using more traditional agency and peer recruited samples supports similar findings from overseas studies and suggests that there may be a higher level of risk behaviour among 'hidden' injectors with little contact with drug treatment agencies. This risk behaviour appears to be occurring below our current epidemiological radar and points to a need for ongoing monitoring of this population which is not reached by agency and peer based research. It may also be that the anonymity provided by the current methodology minimises the impact of any social desirability in response styles which is more likely to be evident in face-to-face interviews, particularly on items concerning frequency of injecting and needle sharing.

Knowledge regarding blood-borne viral infections. The majority of respondents (65.3%) understood a positive result to mean that 'you have HIV', whilst 15.3% believed it meant that 'you have been exposed to HIV but may not have it'. Only 8.5% of respondents stated that a positive HIV test result meant that 'you had AIDS'. When asked how effective they thought bleach was at killing the hepatitis C virus when needles are shared 36.9% of the sample thought it was 'probably better than nothing', 30.9% 'did not know' and 14.5% believed that it was 'not effective at all'.

Sexual behaviour. A majority (58.1%) of respondents had sexual intercourse with only one person in the past month. About a quarter of respondents (24.7%) had not engaged in vaginal /

anal sexual intercourse in that period of time. The majority (64.1%) of those who had intercourse in the past month did not use condoms at all. Only 12.6% of the sample stated that they had used condoms every time they had sexual intercourse in the past month, compared to 21.2% in the Perth ASHIDU sample (Bevan, Loxley and Carruthers, 1996). This difference may be explained by the larger number of subjects married or living with their sexual partner in the current study.

Concluding comments

Inaccurate stereotypes. This study demonstrates that there are many drug injectors who do not fit the negative stereotype held by some in the community who do not inject drugs. The data presented here challenge the 'them and us' view which marginalises and stigmatises drug injectors. Challenging stereotypes and stigma is likely to be important in further supporting efforts to prevent the spread of blood borne viruses such as HIV, hepatitis B and hepatitis C.

Different strokes for different folks. There needs to be more sophistication and refinement in prevention efforts in this area. Strategies need to be implemented which involve drug injectors and address their wide diversity. These contrast with strategies which stereotype injectors and respond as if all injectors were the same. While some injectors are affluent others are financially poor. While many can afford the price of a five needle Fitpack, at times others may not and as a result may share. Whilst most will inject at home, others will in a car or a public toilet without access to swabs or sterile water. While some may not have problems accessing clean equipment, others may be less likely to share if Fitpacks are available in vending machines. Providing better blood-borne virus protection for the public, be they injectors, their children, or sexual partners, means providing a range of alternatives and choices which reflect the variety of life situations and needs of this varied community group of people who happen to inject drugs.

No room for complacency. It is of concern that the 'hidden' IDUs whom this study has reached reported higher rates of injecting and needle sharing than has been found in studies using agency and peer recruited sampling techniques with higher ever in treatment rates. Thus far we may have prevented the 'second wave' of HIV infection among drug injectors and through them to people who do not inject. However, while there is evidence that rates of needle sharing have reduced among well researched populations of injectors, these data suggest that needle sharing and unprotected sex occurs more often among this under researched group. These data warn against complacency in prevention of HIV, hepatitis B, hepatitis C and other, perhaps yet to be discovered, blood-borne viral infections among and from drug injectors.

Fitpack buyers as consumers. The purchasers and users of Fitpacks who were the respondents in this study are consumers of a product. This study gave them an opportunity to provide feedback to the manufacturers and retailers of this product and the public health officials who have responsibility for developing and maintaining effective strategies to prevent the spread of blood-borne viral infections such as HIV, hepatitis B and hepatitis C. It has shown that this group of consumers is very interested in having a say about issues that affect them and they possess information which is valuable and important to policy makers, health bureaucrats, pharmacists, researchers and others.

Recommendations

- That there is acknowledgement that people who inject drugs constitute a widely diverse group which emphasises the inaccuracy of negative stereotypes about drug injectors.
- That those who aim to reduce the spread of blood borne viral infections among drug injectors recognise that this is a very heterogeneous group and that a range of strategies will need to be available for drug injectors across the demographic spectrum.

- That acknowledgement is given to those pharmacies which, with the support of The Pharmaceutical Council, The Pharmacy Guild and The Health Department of WA, sell needles to drug injectors. The data presented suggest that pharmacies are reaching a group of injectors who have had little or no contact with drug treatment agencies. In undertaking this sometimes challenging role, pharmacies have made a major contribution in preventing the spread of blood borne viruses among drug injectors and the wider non-injecting community.
- That further efforts are made to study the large number of drug injectors who do not come into contact with specialist drug treatment agencies. This research provides a methodology which could be applied across Australia in all states which sell Fitpacks. It is also able to reach rural drug injectors who have often been neglected in research which has recruited injectors in large population centres. Future applications of this methodology will need to involve local drug injectors, pharmacists and their professional organisations in study design and implementation to make the research relevant and workable.
- That the study, prevention and treatment of hepatitis C is continues to be a priority in this country. The data presented in this report provide support for the importance of this work and suggest that ongoing efforts will be needed to make testing accessible and attractive to current, as well as past, injectors who have not been tested.
- That Fitpacks of each of the three sizes (ie. three, five, and ten needles), and particularly ten needle packs, should be made available in Western Australia and other states where Fitpacks are sold, as there is evidence that some injectors had re-used and shared needles as there were not enough in the pack (of five needles) for the number of sessions or people injecting.
- That other equipment, notably sterile water and swabs should be made available to drug injectors who buy their needles in pharmacies. This is particularly relevant given the use of Fitpacks by many respondents within ten minutes of purchase, and the use in cars, and other places outside of a home where other equipment is less likely to be available.
- That further efforts should be made to inform drug injectors about the risks associated with sharing other injecting equipment (including spoons, water, swabs, filters, tourniquet). It should be noted that behaviour change requires, at the very least, both information and access to the means (in this case to other equipment).
- That barriers to drug injectors buying needles should be rapidly addressed. The availability of Fitpacks in vending machines, especially after hours, should be expedited.
- That companies involved in the supply of needles and packing of Fitpacks attend to quality control issues given that a majority of the sample reported having problems with the Fitpacks or the needles in them.
- That, as a part of ongoing professional education, all members of the pharmacy profession should be given the opportunity to consider drug use issues, their attitudes to the sale of needles, and the scientific evidence for needle provision as a way of reducing the spread of blood-borne viral infections.
- That the retail price of Fitpacks be considered by community pharmacists and the professional bodies, as there is evidence that the price of Fitpacks has contributed to needle sharing by some injectors at various times.
- That consideration be given to strategies to reduce the risk of needle sharing by those who may be injecting with others, and may inadvertently share needles when they think that they

are re-using their own needle. The advice and involvement of current injectors needs to be sought on many issues including this one.

- That the role of general practitioners in providing drug treatment to drug injectors be acknowledged and further studied. Ways of supporting and further developing the role of general practice in servicing drug injectors should be explored.

- That education about the risks of re-using one's own equipment and the message 'new fit for every hit' be reviewed in the light of evidence of needle re-use and sharing among this sample.
- That education about the less than ideal effectiveness of bleach as a decontamination procedure be continued and the recommended guidelines for decontamination be clarified.
- That programs which promote adoption of safer sexual practices include strategies which aim to reach those drug injectors with little or no contact with drug treatment agencies.

1.0 INTRODUCTION

1.1 HIV, INJECTING DRUG USE AND NEEDLE PROVISION

In Australia, as in other western countries, one of the main routes of transmission of blood-borne viral infections (BBVIs) such as HIV and hepatitis C is the sharing of needles and syringes (N&S) and other injecting equipment (spoons, water, filters, etc.) by injecting drug users (Des Jarlais & Friedman, 1994). Research has shown that many drug injectors have non-injecting sexual partners (Donoghoe, 1992). Sexual contact, and transmission from mother to child, are considered the main routes for spread of HIV infection from drug injectors into the wider, non-injecting, community. In most western countries where the spread of HIV through IDUs has emerged as an actual or potential problem, the primary public health strategy has been to make new N&S readily available to drug injectors (Des Jarlais & Friedman, 1993).

Western Australia (WA) is thought to have one of the lowest rates of HIV infection among IDUs in the western world. Largely due to the provision of N&S to IDUs, the prevalence of HIV among drug injectors in WA is thought to be between 1 and 2% (Health Department of Western Australia, 1993; Bevan, Loxley and Carruthers, 1995). This compares with rates of between 50 and 60% among IDUs in some parts of the USA and Europe (Des Jarlais and Friedman, 1992).

Since July 1987 the Health Department of WA has administered a program of providing new N&S to IDUs. Under this program N&S have been provided through the WA AIDS Council's drug outreach van and (until recently) office; a gay sauna; through drug treatment agencies, hospitals and nursing posts; and primarily through retail pharmacies (Swensen, Westlund and Baker, 1992).

Despite this, until 1994 the provision of injecting equipment to IDUs in WA was illegal. Pharmacists and other health workers could theoretically be charged for engaging in such activity under the Aiding and Abetting provisions [Sections 7-9, 44(1) and 44(4)] of the WA Criminal Code]. Legislation to make the provision of N&S to drug users legal was only passed by both houses of the WA State Parliament in April 1994 as the Poisons Amendment Act 1994.

The 'Fitpack' Program that operates through community pharmacies in WA does not incorporate an exchange component, but rather the emphasis is on providing N&S with a 'safe' disposal container. In WA five N&S are sold in each 'Fitpack'. These hard plastic containers are designed to enable used syringes to be 'locked-in' for disposal so they cannot be removed for re-use or cause injury to children. In other states needles are also available in Fitpacks containing three or ten needles, however, thus far the Pharmacy Guild (WA Branch) has only endorsed the five packs for sale in this state. During 1994 over 1.7 million N&S were provided to IDUs in WA, 87% being in the Perth metropolitan area. Over 66% of the total number of needles and syringes sold or provided to IDUs during 1994 were sold through community pharmacies (Government of Western Australia, 1995). The large proportion of needles distributed through pharmacies is not surprising given their number and dispersion throughout the community, factors which make them ideal routes for getting N&S to IDUs. Hawks (1993) has also noted that among the reasons given by IDUs for not using specialised needle exchanges is the fear of being identified as drug users, particularly in the case of IDUs who have not been in treatment, for whom access to needles and education are particularly important. For this group the 'anonymity' provided by a discrete pharmacy service is no doubt attractive.

1.2 DRUG INJECTORS - A CHANGING PROFILE

The profile of injecting drug use in Australia has been changing over recent years. The commonly held stereotype of the injecting drug user as a male heroin dependent user in their mid to late 20's, is far from the typical IDU, even though recent articles in the popular press suggest that heroin may be coming back into vogue (Osfield, 1996).

From the late 1980's through the first half of the 1990's in WA there has been a resurgence in the recreational use of amphetamine and other psychostimulants (Lenton, 1993). This phenomenon, which has happened across the country, has occurred primarily among the young. However, unlike amphetamine use in the 1950's and 1960's amphetamines, in the 1990's are much more commonly injected by young people. A recent national survey (Carroll, 1993) found that 12.3% of 15 to 35 year olds had used amphetamines and of these, 19% had injected. A National Campaign Against Drug Abuse national household survey of 3850 respondents aged 14 and over found 1.3% had "ever" injected an illegal drug and 0.6% had injected 'in the previous 12 months' (Commonwealth Department of Health, and Family Services, 1996).

1.3 WHY TRY AND REACH 'HIDDEN' DRUG INJECTORS?

Most injecting drug users (IDUs) have never been in drug treatment (Frischer, 1992) yet much research is done on samples with high treatment rates drawn from agency and peer recruited populations (Samuels et al., 1992).

This bias is of concern for three main reasons. Firstly, trends in HIV risk behaviour among these large numbers of 'hidden' IDUs may go undetected. Overseas research has found higher levels of drug related HIV risk behaviour among non treatment as compared to treatment populations (Lampinen et al, 1991; Donoghoe et al., 1993). Secondly, information about the large numbers of drug injectors who are not known to treatment agencies is important to guide the development of more effective public health responses to the spread of HIV and other BBVIs (Griffiths, Gossop, Powis & Strang, 1993). Thirdly, research on agency and peer recruited samples with high ever in treatment rates may reinforce some false public stereotypes about who injects drugs which could undermine strategies which aim to reduce the harm associated with drug injecting. In Australia, little is known about the large group of users who have had little or no contact with drug treatment agencies and choose to get their injecting equipment through the relatively anonymous route of community retail pharmacies. This is particularly true of those IDUs who live outside the metropolitan area (Lenton et al., 1994).

1.4 AGENCY AND PEER RECRUITED SAMPLES: INJECTING AND SHARING

In the WA sample of the Australian National AIDS and Injecting Drug Use Study (ANAIIDUS) which was undertaken in 1990, 150 subjects were interviewed of whom 81 were in treatment at the time of interview. Subjects were recruited by advertising (through user groups, universities, treatment agencies, needle kits sold through community pharmacies, and in coffee shops, book shops, etc.), referrals from drug agency staff, personal contacts, and snowballing (Loxley, McDonald and Marsh, 1992). Of the 23% who had never been in treatment, most were under the age of 23, were more likely to inject with more people present, knew fewer other IDUs, and were less likely to have had a HIV test than those who had ever been in treatment (Loxley, McDonald and Marsh, 1992). Injecting more than once per day in the last month was reported by 38.8% of the sample and only 13% had shared a needle within the last month.

Never having been in treatment was a stratifying variable in the Australian Study of HIV and Injecting Drug Use (ASHIDU) for which data were collected between July and November 1994 (Loxley, Carruthers and Bevan, 1995). Subjects in this study were recruited by advertising and snowballing. Recruitment start points included the mobile needle and syringe exchange, drug treatment agencies, youth agencies, educational institutions and interviewer networks. The sample was stratified according to gender, residential location, age, drug treatment and sexual orientation. No fewer than 33% of the sample were required to have never been in drug treatment. As a result, 33.6% of the Perth ASHIDU sample had never been in formal drug

treatment^[1] (Bevan, Loxley and Carruthers, 1996). Injecting at least once per day in the last month was reported by 15.0% of the sample and in the last month 15.9% had used a needle after someone else and 15.5% had passed a needle on after using it..

^[1] This figure was based on a re-analysis of Perth ASHIDU data in which home and self managed detoxification were not counted as 'treatment' in the formal sense and missing cases were included.

1.5 STUDIES WITH LARGER NON-TREATMENT SAMPLES

In Australia, studies using non-agency based recruitment methodologies have accessed a large proportion of injectors who were not in treatment. However, these have tended to target younger users or users of psychostimulants, both of whom are less likely to have been in treatment. Loxley (1995) in her study of young injecting drug users in Perth found only 26.7% had prior contact with a specialist drug treatment agency because of their drug use. Spooner, Flaherty and Hommel (1992) found 89% of their Sydney street intercept sample (n = 581) of young users (aged 15 to 21 years) had never been in drug treatment. Ross, Cohen, Darke, Hando and Hall (1994) found 68% of the 301 regular amphetamine users they interviewed in Sydney had never been in treatment.

In other countries, research comparing IDUs who attend needle exchanges with those who got their needles from other sources, such as pharmacies, has shown that needle exchange attendees had greater knowledge of AIDS and maintained more harm reduction practices than those who got their needles from pharmacies, suggesting that the latter group was an important one to study (Frischer and Elliott, 1993).

1.6 STUDIES USING MAILBACK METHODOLOGIES

The Anglia and Oxford Regional Health Authority in England undertook a mail back survey of drug injectors in 1993 and 1994. The questionnaire comprised seven questions on a single side of one page with gummed sides and a reply paid address on the reverse (Anglia and Oxford Regional Health Authority, 1995). In the 1994 survey, 5,000 questionnaires were printed and distributed to those in contact with drug injectors (needle exchanges, drug services, retail pharmacies, accident and emergency departments etc.) over a six month period, however, it was unclear how many were actually given to IDUs (Anglia and Oxford Regional Health Authority, Personal communication). In this survey 189 questionnaires were received from drug users, of whom 12% stated they had shared injection equipment in the last 4 weeks, and 39% were not currently in contact with a drug treatment agency, other than to access clean equipment. No inducement was offered in this study for IDUs to return questionnaires. However, even if only half the printed questionnaires made it into the hands of IDUs, the return rate would have been 7.6%.

In 1994 a small survey (AIDS Bureau, Health Department of Western Australia, unpublished) was undertaken to determine the best way of getting information to those who used Fitpacks. Brief questionnaires were given to clients of the WA Alcohol and Drug Authority's treatment services. Twenty-three completed questionnaires were returned. As part of this study respondents could make other comments about Fitpacks. Many comments referred to Fitpacks being too expensive, and some said this had led to needle sharing. Other comments referred to specific problems with the equipment, and suggested that the negative attitude of some pharmacy staff discouraged needle purchases from pharmacies.

1.7 STEREOTYPING OF DRUG INJECTORS

For many members of the public illicit drug users, particularly injectors and users of 'hard drugs', are stereotyped as a deviant, homogeneous and separate group from the non-injecting 'general' community. In a survey of the general public's attitudes to drug injectors and harm reduction strategies, it was found that 66% of respondents believed that most injecting drug users were 'addicts' and 51% of the sample did not believe that most people who injected illegal drugs were capable of acting responsibly to lessen the risk of HIV spreading (Lenton, 1994).

Australia has been noteworthy in its adoption of a nation-wide harm reduction strategy. Thus far this approach has succeeded in minimising the spread of HIV among drug injectors and through them to people who do not inject (Commonwealth Department of Health, 1985; Kaldor, 1992). However, it has been suggested that more controversial strategies may be required to continue to prevent the epidemic and that this will not be possible without strong community support (Wodak & Des Jarlais, 1993). Challenging stereotypes which stigmatise and marginalise drug injectors will be an important part of this process, yet research with drug injectors which has used samples with high treatment rates may unintentionally re-inforce some of these stereotypes. Loxley, McDonald and Marsh (1992), found that just over half (53.0%) their sample had not completed high school, 35.3% were unemployed, and 38.7% were on a pension or benefits. Bevan, Loxley and Carruthers (1996) found that only 24.2% of their sample had completed secondary school, and 80.0% were unemployed.

2.0 STUDY AIMS

There are a number of unanswered questions about drug injectors who buy Fitpacks. For example, what are the characteristics of users who buy their injecting equipment from pharmacies and how do they differ from the groups of injectors already studied? What is the current level of sharing among those IDUs who buy their needles in this way? What is their level of knowledge about HIV and other BBVIs? What do they think of the Fitpack scheme and what would they like to better meet their needs? If, as seems to be the case, education of this group will be an important factor in changing their risk-taking behaviour, then their demographic and drug-using characteristics must be known before effective education programs can be designed.

In order to determine the effectiveness of the current study in reaching the group of 'hidden' injectors with little prior contact with specialist drug treatment agencies, results have been compared with those of a peer and agency recruited interview study of drug injectors in Perth. Data for this benchmark study, conducted by our colleagues (Bevan, Loxley, & Carruthers, 1996) as part of the Australian Study of HIV and Injecting Drug Use (ASHIDU), were collected between July and November 1994.

The purpose of these comparisons is not to show that any one sample is more representative than the other, nor that together these samples will represent the total population of drug injectors. Different recruitment strategies would be expected to result in different sub-populations being sampled. Should differences between the samples be found, they are likely to reflect the means employed to recruit them, and thus emphasise the need to employ a variety of such means if a more representative picture of drug injectors is to be obtained. By using different recruitment methodologies samples with different characteristics can be studied. Different methodologies have their advantages and disadvantages. The face to face interview, possible with agency and peer recruited samples, allows a level of detail about drug using to be studied in a way that is not possible in a self completion 'mail back' survey such as the one described here. However, the present study aimed to collect information on a group rarely reached by agency and peer recruitment methods.

The overall aim of the study was to describe the characteristics, HIV related knowledge and risk behaviours and service views of the injecting drug users (IDUs) who are the users of the "Fitpack" syringe and needle-kits distributed to users throughout WA pharmacies. The specific objectives were to:

- Compile details of the basic demographics of the end-users as well as noting the drugs injected, frequency of injection and other risky drug using behaviours, knowledge about HIV and other BBVIs, attitudes toward the "Fitpack" scheme and other services for drug injectors.
- Trial and compare the effectiveness of both a "mail-back questionnaire" and "questionnaire for equipment" methodology to see whether those who are accessed through these means are occasional IDUs who have no contact with treatment agencies, and do not typically come forward for research projects.
- Compare the characteristics of drug injectors recruited in this study with samples recruited by other methods, namely agency and peer recruitment with regard to ever in treatment rates, demographics, and HIV risk behaviour.
- Provide health educators with a profile of the "Fitpack end-user population", so that this may be taken into account in the design of future strategies to minimise HIV risk behaviour among this group.

- Help establish a base-line of the behaviour patterns of this group that can be used for comparison in future years

It is hoped that the results of the research will be of value to policy makers, practitioners and other researchers in the area of public health generally, and specifically in the area of the reduction of harm associated with the use of injectable illicit drugs.

3.0 METHOD

3.1 GENERAL OUTLINE

The project was designed to provide for the highest possible return rate. A brief (5 minute) questionnaire was designed which included items based on the HIV Risk-Taking Behaviour Scale (HRBS) (Ward, Darke and Hall, 1990) adapted for self administration. Additionally, there were questions about gender, age, employment status, treatment status, hepatitis C test status, drug of choice, reasons for commencing injecting, attitudes to the Fitpack scheme, and what services injecting drug users would like to see implemented. Users were encouraged to have input into the design of the questionnaire from its early development, and it was pilot tested before being utilised for the study.

Two methods of collecting information about a non-treatment group were piloted. Questionnaires were distributed attached to Fitpacks sold over the period of six weeks. Respondents were able to return completed, sealed questionnaires either by mailing them back (using the free-post "mail-back" option), or alternatively, returning them to a retail pharmacy selling Fitpacks in exchange for a new free Fitpack (the "questionnaire for equipment" option).

No name or identifying information was requested from respondents. The questionnaire was designed in such a way that it folded into three and sealed, rather like an airmail envelope. This could then be placed in a mailbox, reply-paid, and returned to the NCRPDA, or returned sealed to a pharmacy in exchange for a free Fitpack (with or without a copy of the questionnaire enclosed). Postage was paid to the Post Office via a Freepost Number. Pharmacies providing free Fitpacks from existing stocks were reimbursed by the researchers upon receipt of the sealed, completed questionnaires.

The questionnaires were placed in packs distributed to most of the pharmacies involved in the Fitpack program. Participating pharmacists were requested by mail to encourage purchasers to return their questionnaires. Users purchasing the Fitpacks received the questionnaire with each pack. Instructions on the form requested the user not to complete the questionnaire if they had already done so, or, if possible, to hand the form on to another user for completion (qualitative research had shown that often more than one user may use the N&S contained in one Fitpack). Questionnaires were sent out over a six week period, with data analysis commencing after a further month.

3.2 ETHICAL ISSUES

Ethical clearance for the study was granted by the Curtin University Institutional Ethics Committee.

The data were collected anonymously by self completed questionnaire, sealed by the respondent prior to return by mail or handing in to pharmacy staff. Participation in the study was voluntary. The questionnaire incorporated a brief description of the study and its aims, to facilitate informed consent.

Respondents were not paid for participation, however, they had the option of returning the sealed questionnaire to a community pharmacy in return for a free "Fitpack" which retailed for a recommended price of \$3-60. It was considered that as an inducement to participate in the study this constituted little more than a token recognition of the respondent's time and input. All data were identified only by a numerical code. All completed questionnaires and accompanying data

bases are kept securely and remain the property of The National Centre for Research into the Prevention of Drug Abuse at Curtin University where they will be stored for no less than 5 years.

3.3 QUESTIONNAIRE DEVELOPMENT AND DESCRIPTION

Key informant interviews

Key informant interviews with injecting drug users were conducted as part of the questionnaire development process to provide an overview of issues pertinent to this population. Interviewees were recruited largely by informal channels (i.e. word-of-mouth) and flyers distributed through some community pharmacies and various organisations such as The Hepatitis C Council of WA; The WA AIDS Council's mobile needle exchange van; and The Health Department of Western Australia. Participation in these interviews was on a voluntary basis, and participants were asked to read a standard information sheet which explained the project and addressed ethical aspects of their participation (see Appendix A). Interviewees were reimbursed for their time with a payment of twenty dollars. A total number of 11 people (5 females; 6 males) were interviewed. All interviews were conducted on a face-to-face basis by one interviewer, and participants were interviewed singly or with a partner. During the interview, participants were asked to give their views on the following:

- **General issues relating to injecting drug use** including the demographic spread of IDUs and their characteristics, issues regarding HIV/AIDS & other BBVIs, bleach use; safer sex; needle-sharing; and the use of Fitpacks.
- **Specific issues relating to public knowledge about injecting drug use** including what they saw to be important for government bodies and health educators to know about IDUs.
- **Methodology to be employed in the Fitpack project** including the best ways to address sensitive issues with IDUs; preferred 'street terms' for drugs and equipment; and feedback as to areas of inquiry that they would find objectionable.
- **Questionnaire design** including ways to make questionnaire appealing, undaunting and non-patronising in order to capture the largest possible group of respondents; issues to include and/or exclude; and their concerns and suggested wording regarding the explanation of anonymity and confidentiality issues.

Interviews were tape-recorded with the consent of participants, and each lasted approximately 75-90 minutes.

Pilot testing

Following the key informant interviews, a draft questionnaire was designed. To pilot-test these drafts, a total of 5 individuals (3 males and 2 females) were interviewed. The focus of these interviews was to obtain initial reactions to the draft questionnaire as well as suggestions for changes to be made. As with previous focus-group interviews, participants were reimbursed for their efforts with a payment of twenty dollars and were interviewed either singly or with a partner. During the interview, participants were requested to familiarise themselves with the layout and contents of the questionnaire by filling one out. The content of the entire questionnaire were then systematically discussed to raise constructive criticism and suggestions from participants. Interviews varied between 45 and 60 minutes in duration.

Pharmacy consultation group

A consultation group comprising the researchers, community pharmacists, the Pharmacy Guild (WA Branch) and the Pharmaceutical Council of Western Australia was established. The

primary aim of this group was to provide feedback from a pharmacy perspective at key-points in the project, and to contribute effective trouble-shooting strategies in its implementation. In the course of the project, this group met on three occasions: prior to questionnaire distribution to assess the completed questionnaire; during the pharmacy liaison period to assist in this process; and during data-collection to provide feedback on the logistics of questionnaire distribution and collection and the Fitpack exchange.

The final questionnaire

The final questionnaire was structured so that a self-addressed return envelope and the questionnaire were part of the same sheet of paper separated by a perforated line. The questionnaire with envelope measured 415mm long and 216mm wide and was printed on both sides and incorporated a press seal strip with a peel back covering.

The front side of the questionnaire consisted of a list of brief instructions on filling out the response-section, and 26 multiple-choice and structured questions. The reverse side of the questionnaire consisted of the remaining 27 questions and an optional section for comments about the project. The front face of the return envelope consisted of a return address and marked sections for distributing and returning pharmacy stamps and distribution and collection dates. The back face functioned to publicise and introduce the project and incorporated the press seal strip. The questionnaire and envelope structure was folded in a 'concertina' fashion (i.e. into 3 lengthways) prior to distribution so that the 'publicity section' was the first thing seen by the prospective respondents. Care was taken to ensure that the colours used in this section were similar to those used on Fitpack packages to enhance the association between Fitpacks and the questionnaire. The rest of the questionnaire was printed in black. A reduced copy of the full questionnaire and envelope layout is provided in Appendix B.

The top and bottom banners of the publicity section were designed to catch Fitpack buyers attention by asking if they wanted a free Fitpack and wanted to have a say. The text:

- Emphasised that the project was from the Drug Research Centre at Curtin University of Technology where the researchers (we) wanted to hear from users of Fitpacks about issues that affected them.
- Offered the study as an opportunity for users to correct the general community's unrealistic view of drug injectors.
- Outlined the mechanism for returning the questionnaire and receiving an exchange free Fitpack for returns through pharmacy.

The questionnaire itself began with a panel of instructions for completion which:

- Emphasised that it was designed with input from Fitpack users and had appropriate ethics committee approval.
- Explained that responses were anonymous.
- Asked respondents to answer all questions and return only one questionnaire per person.
- Encouraged those who may have received more than one questionnaire to hand it on to a friend.
- Gave those wanting to capitalise on the free Fitpack offer by returning more than one questionnaire an easy response option (i.e. easier than 'faking' responses to each item) which allowed easy identification of these returned questionnaires, but still allowed the respondent to get a free Fitpack in exchange.

The questions themselves addressed:

- **General feedback about Fitpacks** including number purchased in past month, other equipment desired, availability in vending machines, sizes available, and information about the frequency and nature of problems with purchasing Fitpacks and the Fitpacks themselves.

- **Specific information about the use of the Fitpack bought with the questionnaire** including the purchase price and whether the respondent thought this was fair, how soon after purchase needles in it were used, drugs injected, number of people and injecting sessions, and information about re-use and sharing of needles in the Fitpack.
- **General information about injecting** including needle sharing due to lack of money to buy a Fitpack, disposal practices, and age when first injected. Respondents were asked about their frequency of injecting, drugs injected, place of injecting, sharing of needles and other injecting equipment and use of bleach, in the past month.
- **Agency contact** including prior drug treatment and whether they had ever been arrested for a drug offence.
- **Hepatitis C testing** self report of whether they had ever been tested for hepatitis C and the result of that test. The term 'tested for hepatitis C' was used for simplicity rather than the technically correct 'tested for hepatitis C virus antibodies'.
- **Knowledge of Blood Borne Viral Infections** including the meaning of a positive HIV test result and the effectiveness of bleach at killing the hepatitis C virus.
- **Sexual behaviour** including the number of sexual intercourse partners and the frequency of condom use.
- **Demographics** including gender, age, marital status, number of children, country of birth, ethnicity, language spoken in family home, education, employment, income and place of residence.

Five of the six questions from the Drug Use Sub Scale of HRBS (Ward, Darke and Hall, 1990) were modified for self administration and included among general questions on injecting in Fitpack questionnaire. The question which was omitted was that (Question 6) which referred to cleaning needles after re-use without specifying the use of bleach. Pilot testing revealed that there was considerable ambiguity in the interpretation of this item, and given the limited space on the questionnaire it was considered more useful to ask about the use of bleach, particularly given serious doubts about its effectiveness as a decontamination agent (Shapshak, McCoy, Rivers, et al., 1993). In its place a question on the sharing of other injecting equipment, spoons, filter, water, tourniquet) was included. Whilst this precluded comparisons with the full Drug Use Sub Scale scores (Ward, Darke and Hall, 1990) comparisons by individual item have been made with the WA data from the ASHIDU study (Bevan, Loxley and Carruthers, 1996).

Subjects were also encouraged to make any other comments in a few lines at the end of the questionnaire. These responses have not been included in the present report but will be reported in a subsequent publication.

3.4 SAMPLING AND QUESTIONNAIRE DISTRIBUTION

NOTE: A detailed account of procedures for sampling, questionnaire distribution and collection is provided in Appendix C.

Sampling

Invitations were mailed to all 469 retail pharmacies in WA which described the project and invited them to participate (See Appendix D). A total of 3,050 Fitpack questionnaires were printed. These were allocated to participating pharmacies based on the estimated number of Fitpacks each had retailed over the previous 4 weeks.

Questionnaire distribution and collection

Pharmacies agreeing to participate in the project were requested to nominate a Fitpack Liaison Officer who would be in charge of co-ordinating the implementation of the study in that pharmacy. Detailed instructions regarding the distribution to and collection of questionnaires from Fitpack clients were communicated to individual pharmacists through their Liaison Officer (See Appendices E and F).

Whilst stocks lasted questionnaires were distributed to customers purchasing Fitpacks over a six-week data collection period from mid September to the end of October 1995. To minimise disruption in the pharmacy staff were advised that any transactions involving completed questionnaires and free Fitpacks made beyond that deadline would be reimbursed.

Pharmacy staff involved in Fitpack sales were requested to observe, where possible, that only one questionnaire was to be given out to each Fitpack client in order to minimise the number of duplicate responses (from the same individual). However, it was advised that the least disruptive route be taken at all times to avoid staff-client confrontation on the issue (See Appendix E).

The procedure for pharmacy staff to use in receiving returned questionnaires is outlined in Appendix D. Respondents returning completed questionnaires were thanked and given a free Fitpack in exchange.

3.5 PAYMENT TO PHARMACIES

Pharmacies were paid \$0.50 for each questionnaire handed out to Fitpack clients and were reimbursed \$2.50 for each free Fitpack given out in exchange for completed questionnaires (See Appendix G). This payment had been set at the wholesale price of Fitpacks which meant that pharmacies retailing Fitpacks for approximately \$3.60 stood to gross an additional return of \$1.40 per exchange (questionnaire distribution and collection/exchange). Pharmacies retailing Fitpacks for approximately \$4.50 stood to gain an additional \$0.50 for their role in each exchange.

3.6 DATA ANALYSIS

Use of unique identifier to identify multiple responders

A masked unique identifier was used in order to identify cases where more than one questionnaire may have been completed by the same respondent. The unique identifier used was a combination of age, gender, highest level of education and post code. Age was used rather than date of birth as focus groups and pilot testing indicated IDUs were unwilling to give their date of birth as many saw this as a threat to anonymity. Post code was used rather than ethnicity, as suggested by other researchers (Brecht and Wichens, 1993; Woodward, Retka and Ng, 1984), as it was thought it would produce a higher degree of specificity in a Western Australian sample. Although postcode and highest education level are not permanent characteristics, this was not likely to produce significant problems over a six week data collection period. Indeed, Frischer (1992) achieved an adequate level of matching with three identifiers, gender, date of birth and surname initial. Surname initial was not used in the present study as it was desirable for the unique identifiers to be 'masked' within the questionnaire rather than perhaps raise confidentiality concerns or clearly identify matching information to the respondents.

Data weighting

In order to determine the geographical representativeness of the sample obtained from the survey, the geographic distribution of questionnaires by distributing pharmacy was compared to state-wide Fitpack sales figures (Government of Western Australia, 1995) with respect to the numbers of N&S distributed in metropolitan and non-metropolitan areas. Results of this preliminary analysis indicated there were significant differences between the proportions of returned questionnaires from metropolitan and country locations in the sample compared to Fitpack sales figures for the population (Chi-square=185.9681, df=24, p=.0000). Consequently, the data was weighted to control for biases in sampling in particular localities across both metropolitan and non-metropolitan areas.

TABLE 1: WEIGHTS USED TO CONTROL FOR N&S DISTRIBUTION IN METROPOLITAN AND NON-METROPOLITAN AREAS (ordered by postal code)

| LOCALITY | WEIGHT |
|------------------------------------|--------|
| METROPOLITAN AREA | |
| Perth Inner City | 5.6667 |
| Wembley - North Perth | 4.2500 |
| Mosman Park - Nedlands | 1.5714 |
| Scarborough - Karrinyup | 0.5125 |
| Osborne Park - Balcatta | 0.3669 |
| Duncraig - Kingsley | 1.0741 |
| Mount Lawley - Bayswater | 1.2750 |
| Bassendean - Glen Forrest | 1.7777 |
| Morley - Wanneroo | 0.7750 |
| Belmont - Cannington | 0.7368 |
| Gosnells - Armadale | 1.8269 |
| South of River | 1.0000 |
| Fremantle - Spearwood | 0.6500 |
| Kwinana - Safety Bay | 3.4167 |
| NON-METROPOLITAN AREA | |
| Mandurah - Pinjarra | 1.0454 |
| Bunbury - Collie | 1.3125 |
| Albany - Manjimup | 3.0000 |
| Busselton - Margaret River | 0.5833 |
| Kalgoorlie-Boulder - Kambalda West | 2.2692 |
| Esperance | 1.0000 |
| Northam - Moora | 3.0000 |
| Geraldton - Northampton | 0.8077 |
| Carnarvon | 1.0000 |
| Karratha - Newman | 2.5000 |
| Broome - Port Hedland | 0.7500 |

Population data for N&S distribution for 1994 was obtained from the report of The Task Force on Drug Abuse (Government of Western Australia, 1995). This report divided metropolitan and non-metropolitan WA into specific localities / regions. The same geographic divisions were translated into postal codes and applied to sample data. Where cell sizes (for particular localities) were too small, neighbouring geographic regions for which sample data existed were grouped to obtain larger cells. Data for a number of regions in non-metropolitan areas falling within the same statistical area were also grouped to reduce the total number of cells used in the

analysis (eg. Kalgoorlie / Boulder; Busselton / Margaret River). The weights for individual localities were then calculated by dividing the proportion of N&S distributed for each locality in the population by the corresponding proportion in the sample.

The weights used for the corresponding localities in metropolitan and non-metropolitan areas are displayed in Table 1.

Analyses undertaken

All analyses were performed on the SPARC 2 running Solaris 2.3 mini computer. As the majority of variables used in the study were categorical, cross-tabulation was used for descriptive purposes for two-way comparisons. Unless otherwise stated all hypothesis testing was conducted at the 5% significance level. Association between variables in the study was tested using the Pearson Chi square test, unless otherwise stated. Analysis of 2 x 2 tables employed the continuity correction. Comparisons between results of this study and those from other sources (eg. other studies) were conducted using the non parametric Chi square one sample test which allows specification of expected frequencies or proportions (SPSS Inc., 1990).

To determine the characteristics of respondents who responded in a certain way on a number of interesting criterion variables, bivariate comparisons were first conducted on a set of key variables using the following steps:

- Both the criterion and comparison variables were dichotomised to simplify interpretation of the data.
- Bivariate comparisons were conducted using the Chi Square test corrected for continuity and for each set of comparisons. Tables which summarise these comparisons are presented in Appendix H. For brevity only the top two cells of a 2 x 2 contingency table are presented and they comprise the first 2 cells of each row. The n value is the overall value for all cells in the 2 x 2 table. For example in Table 11 (Appendix H) 43.9% of those who had no previous drug agency contact were women, and 56.1% were men (this value is not presented but is calculated by subtracting 43.9% from 100%). Among those who did have previous drug agency contact 42.3% were women and 57.7% were men. The overall 2 x 2 comparison had a n of 451 and was not significant ($p=.8386$).
- To reduce the likelihood of a Type I error a Bonferroni adjustment was employed at an experiment wise error rate of .05, that is alpha for each comparison in the set was .05 divided by the number of comparisons.
- In order to determine the relative contribution of the variables which were significant on the bivariate comparisons stepwise backward logistic regression analyses were conducted on these variables using unweighted data. To simplify interpretation a simple logistic model was used which did not include interaction terms. Correlation matrices for the variables used in the model are presented in Appendix I. The vast majority of correlations between variables are small in magnitude and indicate that the analyses have not been compromised.

The dichotomous comparison variables employed covered the following domains, demographics, injecting history, hepatitis C testing, recent drug injecting, drug charges and contact with a specialist drug treatment agency. The domains and the indexing values of the comparison variables are presented in Table 2. Some of these terms used require explanation:

- 'Depressants' included: heroin, homebake, methadone, other opiates (eg morphine), tranquillisers (including benzodiazepines) and alcohol.
- Amphetamine was the only stimulant drug injected.

- 'Other [injecting] equipment' included spoons, water, swabs.
- Specialist drug agencies included those described as drug detoxification, counselling or methadone programmes.

Where for particular criterion variables some of the indexing variables have been excluded from the sets of comparisons, or other variables have been included, this is specified in the text of the results section. For example, in sets of comparisons where having a low income was considered likely to effect scores on the criterion variable last years income was included in the comparison dichotomised into less than \$10,000 or greater than or equal to \$10,000. Statistical advice was obtained from Data Analysis Australia.

TABLE 2: DOMAINS AND INDICATOR VALUES OF DICHOTOMOUS COMPARISON VARIABLES

| DOMAIN | |
|----------------------------------|---|
| Demographics | Under 26 years of age Females Are married or living with sex partner Have children Are employed Live in the city |
| Hepatitis C Testing(1) | Had a hepatitis C test Self report hepatitis C positive (for those tested only) |
| Injecting History | First injected at less than 18 years of age Less than 10 years of injecting |
| Recent Injecting | Stimulants injected with this Fitpack Depressants injected with this Fitpack Injected stimulants in past month Injected depressants in past month Injected at least daily in past month |
| Recent Risky Injecting Behaviour | Shared needles in past month Shared other equipment in past month |
| Drug Offending | Have been charged with a drug offence |
| Drug treatment | Had contact with specialist drug treatment agency |

(1) Note that as the term 'hepatitis C test' rather than the technically correct 'hepatitis C virus antibody test' was used in the questionnaire for simplicity and ease of comprehension, this terminology has been employed throughout this report.

4.0 RESULTS

Unless otherwise stated, all data presented here are weighted (See section 3.5 Data Analysis).

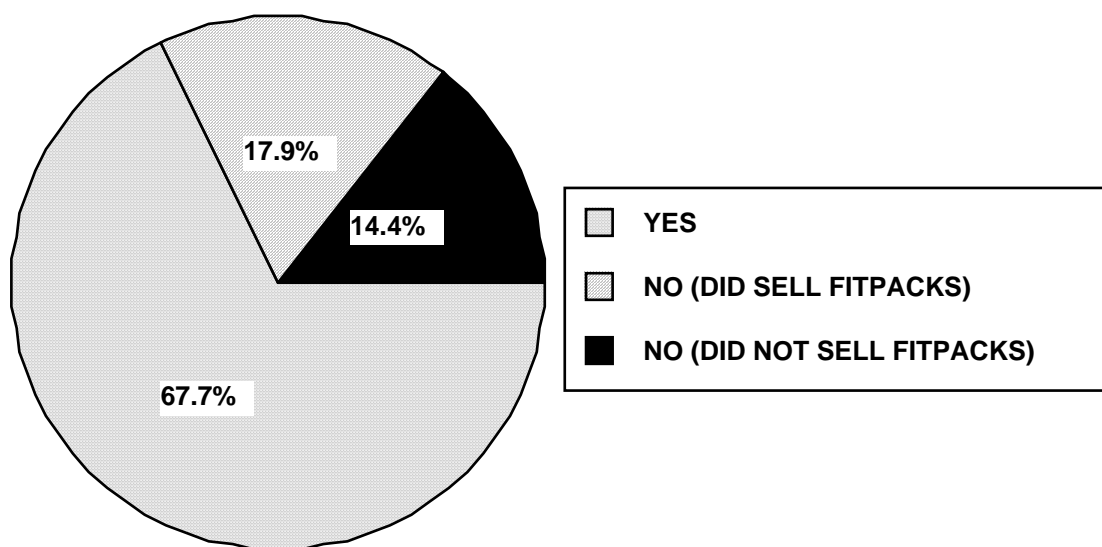
4.1 PROCEDURAL VARIABLES

Pharmacy response to survey proposal

Letters requesting participation in the Fitpack survey were sent out to all 469 pharmacies in WA (see Appendix B). Of this number, 284 (60.5%) pharmacies responded. The vast majority (85.9%; n=244) of pharmacies that retailed Fitpacks responded to the initial invitation to participate in the Survey.

Pharmacy participation

Of the 284 responses received from pharmacies invited to participate, 67.7% (n=193) agreed to do so. Only a small percentage (17.9%; n=51) of these comprised pharmacies that retailed Fitpacks but declined to participate. A further 14.4% (n=41) of pharmacies responded that they could not participate because they did not retail Fitpacks. The different categories of pharmacy responses are illustrated in Figure 1.



(n=284)

FIGURE 1: PHARMACY RESPONSES TO REQUESTS TO PARTICIPATE IN FITPACK SURVEY

Reasons for non-participation by pharmacies retailing Fitpacks

The 51 pharmacies that retailed Fitpacks which declined to participate in the study gave reasons for not participating. Of these, negative views regarding injecting drug users emerged as the most frequently cited reason. Drug injectors were perceived by some non-participating pharmacists to be opportunistic (e.g. 'leaning' on pharmacy staff for preferential treatment); unpredictable (liable to display potentially dangerous / abusive behaviour); and / or too 'stoned' or illiterate to successfully fill out a questionnaire. In the case of some pharmacists, negative personal experiences with drug injectors had served to discourage any further involvement with them. These experiences included theft (robberies; shoplifting), and other negative behaviour (e.g. verbal / physical abuse; intimidation of other customers; injecting or disposing of used

equipment in public facilities near the pharmacy; or ingesting other drugs on pharmacy premises).

Other pharmacists stated that they did not wish to participate as they had become disillusioned in their contact with drug injectors as they interpreted the repeated return of clients on methadone as suggesting that the program had failed. Reasons focusing on the logistics of the study itself were also given to explain non-participation. These included some pharmacies which sold large numbers of Fitpacks where it was perceived that the mechanics of questionnaire distribution and collection would be too much of a burden; insufficient staff; absence of the chief pharmacist to approve participation; or insufficient reimbursement for the pharmacy. A small number of pharmacists also expressed concern that the study would cement the link between illicit drug use and Fitpacks, and that participation would therefore be misread as an indication of support for drug use.

Fitpack sales represented by participating pharmacies

It was considered important to determine the proportion of Fitpack sales represented by the pharmacies which agreed to participate in the study. State-wide Fitpack sales figures for the 1st quarter of 1995 suggested that pharmacies that agreed to participate in the study accounted for 60.0% of total Fitpack sales across the state.

Outcome of Fitpack questionnaires distributed through participating pharmacies

A total of 3012 Fitpack survey questionnaires were sent to participating pharmacies to be given to customers buying Fitpacks. Participating pharmacies reported that of this number, 84.9% (n=2558) were actually given to customers buying Fitpacks during the study period. The researchers received 513 completed questionnaires returned through pharmacies or by direct-post. Two of these were from persons who indicated they only used insulin and were excluded from the sample. If the numbers of questionnaires reportedly given out all went to Fitpack buyers who had not previously been given a questionnaire the remaining 511 usable questionnaires would comprise a 20.0% response rate. A further 454 questionnaires were returned unused by these pharmacies as a result of pharmacies withdrawing from the project or lower than expected sales of Fitpacks during the data collection period. Only a small proportion 11.8% (n=69) of questionnaires returned by Fitpack customers were blank (n=46) incomplete (n=4), or through the vigilance of data coders or comparison of unique identifiers (n=19) it was determined that the same person had returned more than one questionnaire. The remaining 77.3% (n=1978) of questionnaires reaching respondents that have not been returned to the researchers cannot be accounted for, and are assumed to have been destroyed, lost or discarded by Fitpack buyers. These percentages are illustrated in Figure 2.

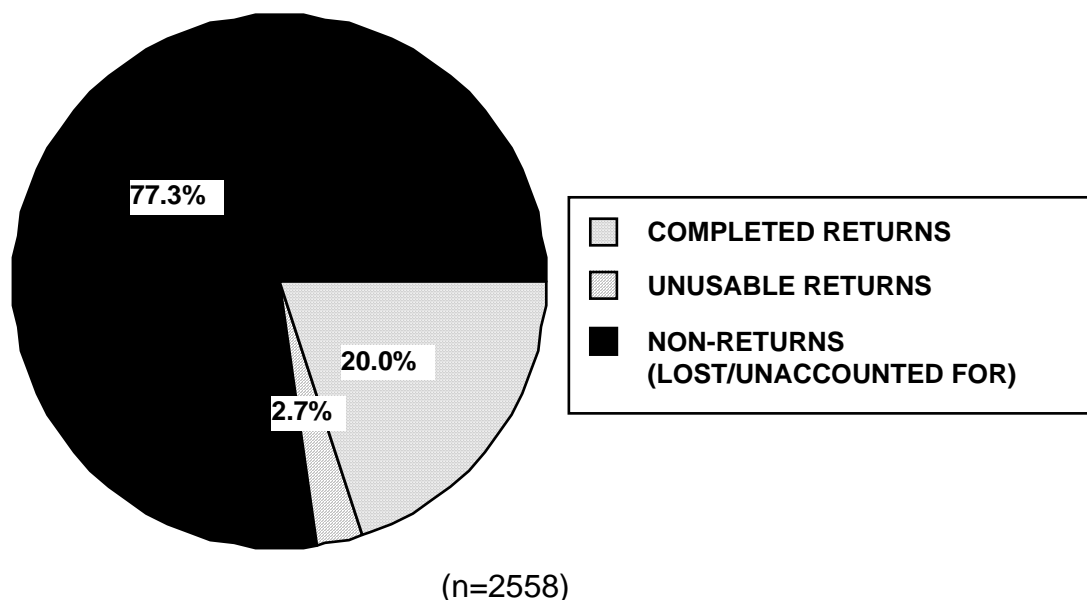
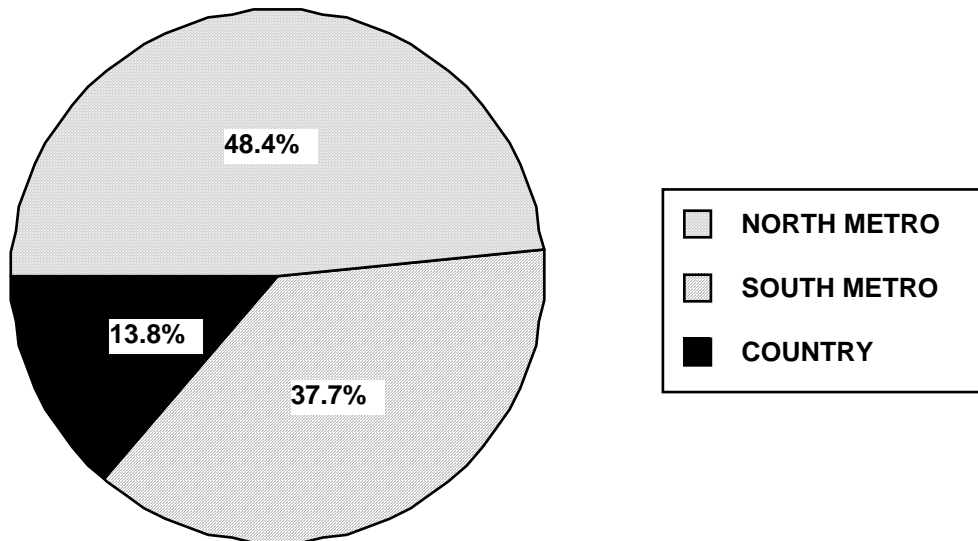


FIGURE 2: OUTCOME OF FITPACK QUESTIONNAIRES DISTRIBUTED THROUGH PARTICIPATING PHARMACIES

Distributing pharmacy locations

A total of 193 pharmacies participated in the project by distributing questionnaires to Fitpack clients with Fitpacks sold. Of the 511 usable questionnaires received, 86.2% (n=428) were distributed by pharmacies in Metropolitan Perth, and 13.8% (n=69) were from pharmacies in Non-Metropolitan (Country) Areas. More questionnaires were distributed in pharmacies north of the river (48.4%, n=241) than south of the river (37.7%, n=187). This is illustrated in Figure 3. Note that this is based on data weighted for Fitpack sales by locality.

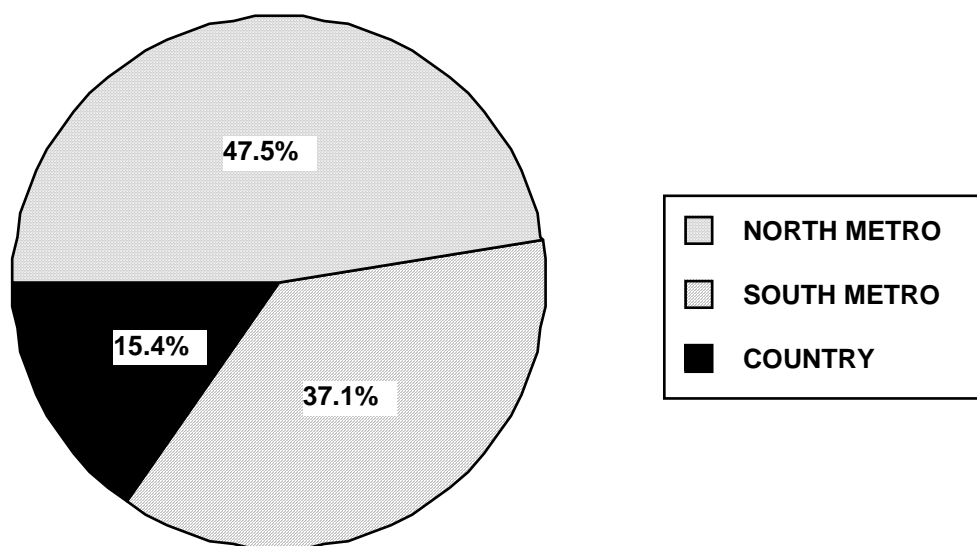


(n=510, missing=1)

FIGURE 3: QUESTIONNAIRES DISTRIBUTED FROM METROPOLITAN AND COUNTRY PHARMACIES

Returning pharmacy locations

Of the 193 pharmacies participating in the project, a total of 116 pharmacies received questionnaires from clients in exchange for free Fitpacks. The other 77 pharmacies did not have questionnaires returned to them during the study period. Questionnaires returned to pharmacies were then forwarded to the researchers at NCRPDA. Returning Pharmacies were identified by the pharmacy stamp in the 'Receiving Pharmacy Box' on the front of the questionnaires. Of the 511 usable questionnaires received, 84.6% (n=406) were returned through pharmacies in the Metropolitan Perth and 15.4% (n=74) from pharmacies in Non-Metropolitan (Country) areas. This is illustrated in Figure 4.

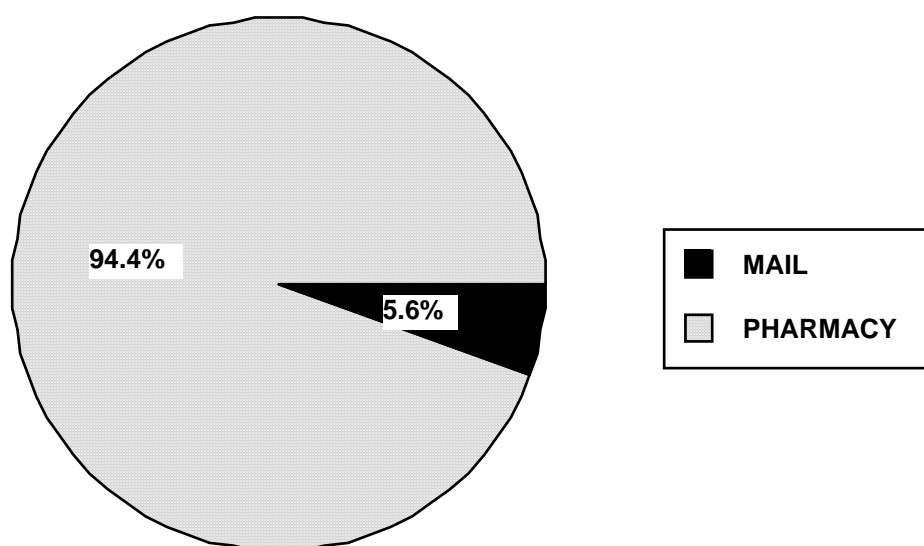


(n=497, missing=14)

FIGURE 4: QUESTIONNAIRES RETURNED THROUGH METROPOLITAN AND COUNTRY PHARMACIES

Method of questionnaire return

All survey respondents were given a choice of two methods of returning their completed questionnaires: through participating pharmacies in return for a free Fitpack; or through direct mail using the self-addressed envelope provided. Of the 511 remaining questionnaires returned to the researchers, 94.4% (n=481) were returned through participating pharmacies, and 5.6% (n=29) were returned directly through the postal system. This is illustrated in Figure 5.



(n=510, missing=1)

FIGURE 5: METHOD OF RETURN OF FITPACK QUESTIONNAIRE

Method of return of questionnaires by metropolitan / non-metropolitan division

A higher proportion of respondents from non-metropolitan areas (17.2%) compared to respondents from the metropolitan area (4.8%) chose to mail their completed questionnaires directly to the researchers (Chi Square_{continuity} = 10.95633, df=1, p=.0009) rather than return

them through participating pharmacies in exchange for free Fitpacks. These results are presented in Table 3.

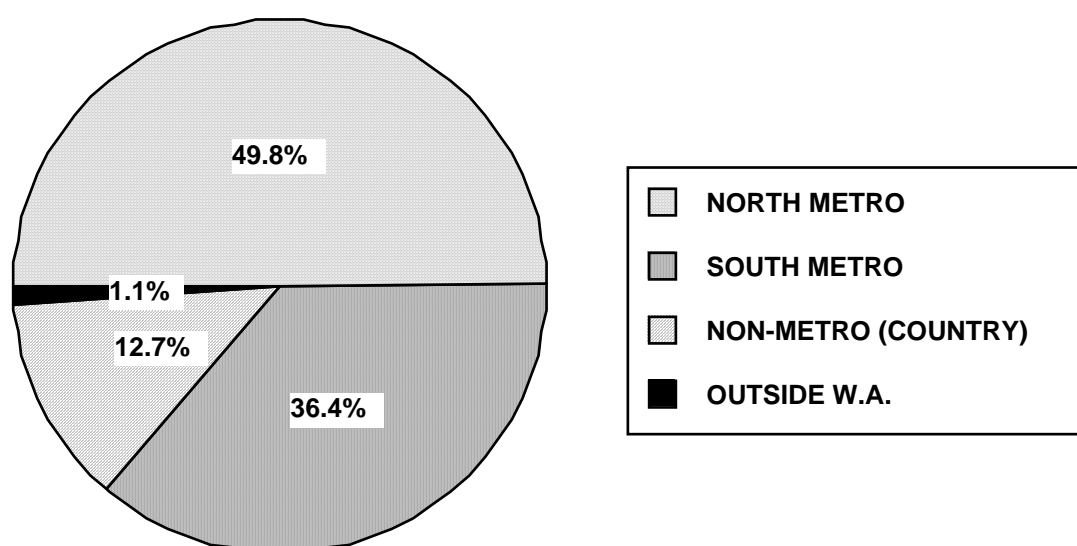
TABLE 3: METHOD OF RETURN OF FITPACK QUESTIONNAIRE BY METROPOLITAN / NON-METROPOLITAN DIVISION

| METHOD | % RESPONDENTS METRO. (n=398) | % RESPONDENTS NON-METRO. (n=26) |
|----------|------------------------------------|---------------------------------------|
| MAIL | 4.8 | 17.2 |
| PHARMACY | 95.4 | 82.8 |

4.2 DEMOGRAPHICS

Residence of respondents

Figure 6 shows the place of residence of the sample. The majority (86.2%, n=369) of respondents resided in the metropolitan area, 12.7% (n=55) were from country WA, and the remainder (1.1%, n=5) were from outside the State.



There were 82 missing cases.

(n=429)

FIGURE 6: AREA OF RESPONDENTS' CURRENT RESIDENCE (BY POSTAL CODE)

Age and gender

The sample was 56.6% male and 43.4% female. The sample comprised proportionally more females than the 32.7% found in the Perth ASHIDU sample (Bevan, Loxley and Carruthers, 1996) (Chi Square=13.9506, df=1, p=.0002), and the 37% in the 1990 Perth ANAIDUS (Loxley, McDonald and Marsh, 1992) (Chi Square=22.7665, df=1, p=.0000).

The average age of respondents was 26.2 years (sd=6.56, range=14 to 48). Only 5.3% (n=27) of the sample were under 18 years of age. There was no significant difference between the age distribution of male and female respondents (Chi Square=9.38045, df=4, p=.0523). The age distribution of respondents is given in Figure 7.

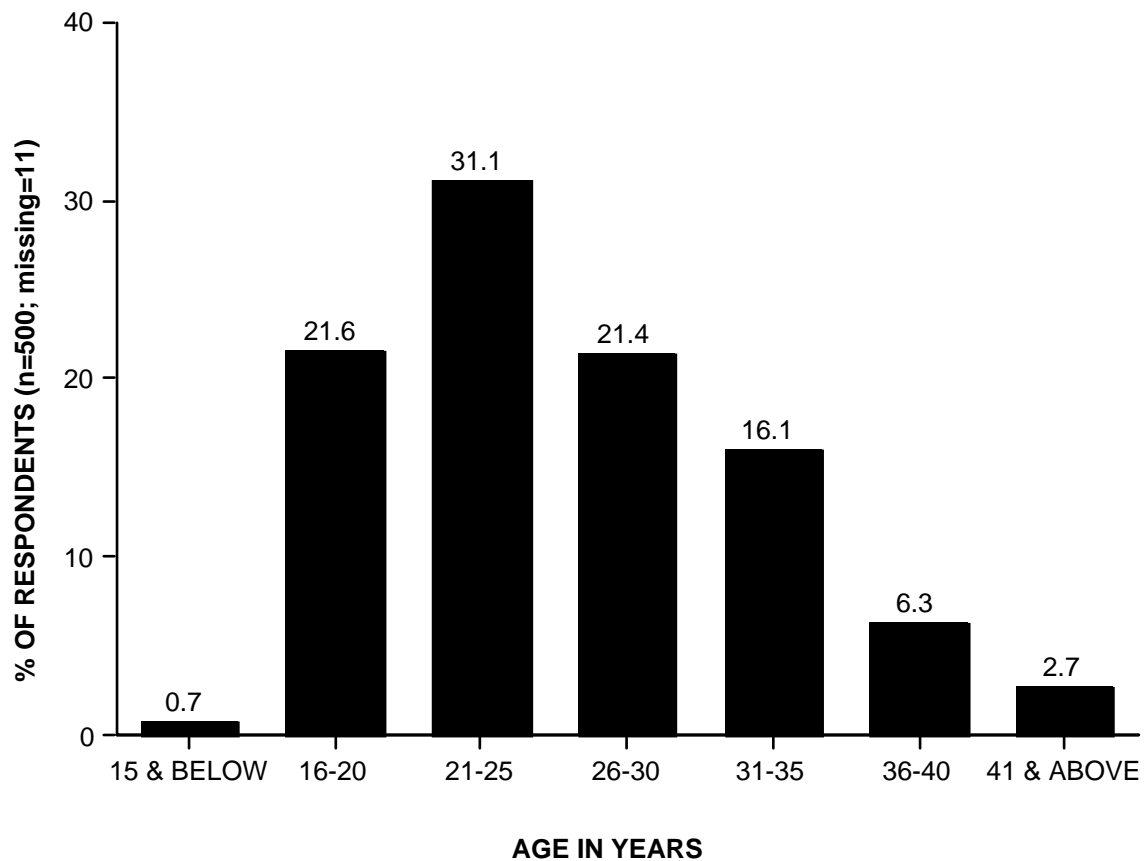


FIGURE 7: AGE BREAKDOWN OF RESPONDENTS

The age distribution of respondents in the present study was significantly different to that in the Perth ASHIDU study (Chi Square=49.2518, df=4, p=.0000). This comparison is presented in Figure 8. The ASHIDU sample was stratified for age with at least one third of respondents having to be under the age of 26 years (Loxley, Carruthers and Bevan, 1995). In the present study 53.4% (n=267) were under the age of 26, which was higher than the 46.4% in the Perth ASHIDU sample (Chi Square=11.5927, df=1, p=.0007).

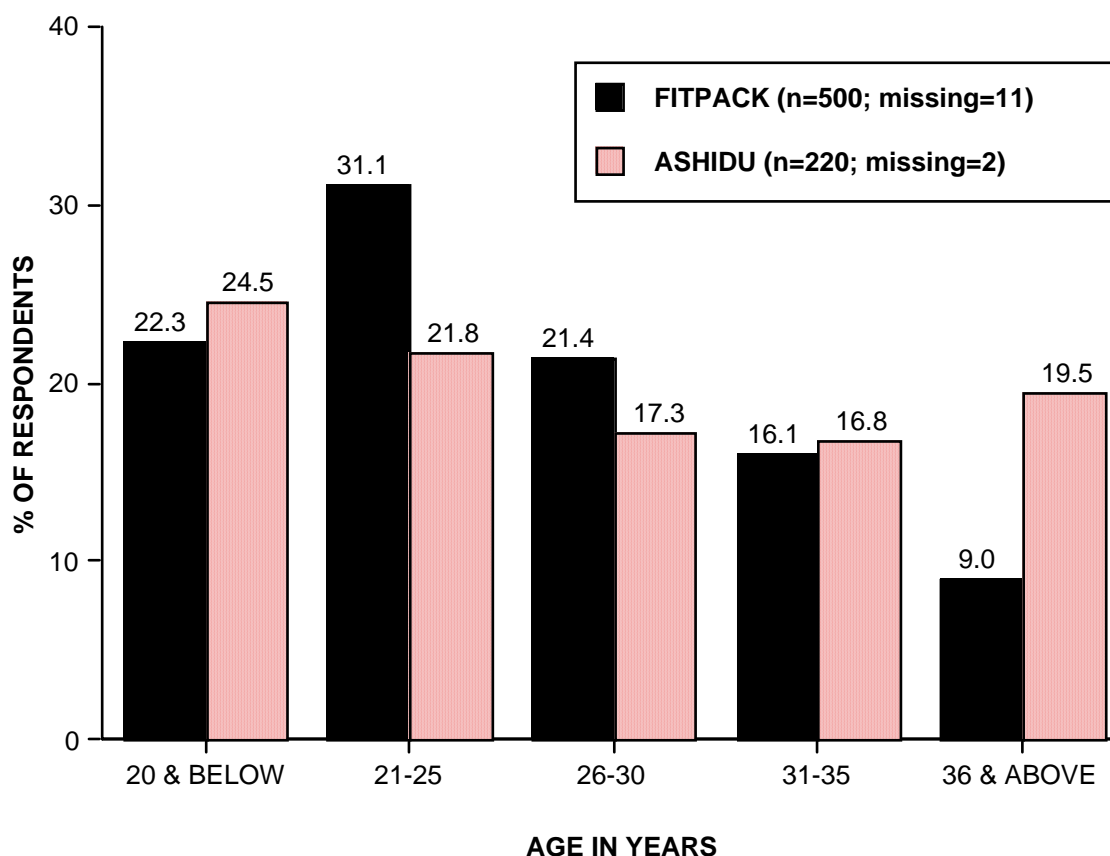


FIGURE 8: AGE COMPARISON WITH ASHIDU SAMPLE

Marital status and number of children

Just over half (55.7%, n=282) of the sample were single and the remainder (44.3%, n=224) were married or living with their sexual partner. This compares to the Perth ASHIDU study (Bevan, Loxley and Carruthers, 1996) in which 29.5% of respondents were married or living with their sexual partner (Chi Square=55.0565, df=1, p=.0000). Just over two fifths (41.7%, n=204) of the respondents had at least one child, and 150 (71.3% of those who responded to this item) had at least one child in their care. The proportion who had one child was greater than the 29.5% of respondents in the Perth ASHIDU sample (Chi Square=21.6619 df=1, p=.0000) who had children. The number of children respondents had, and the number in their care are presented in Figures 9 and 10.

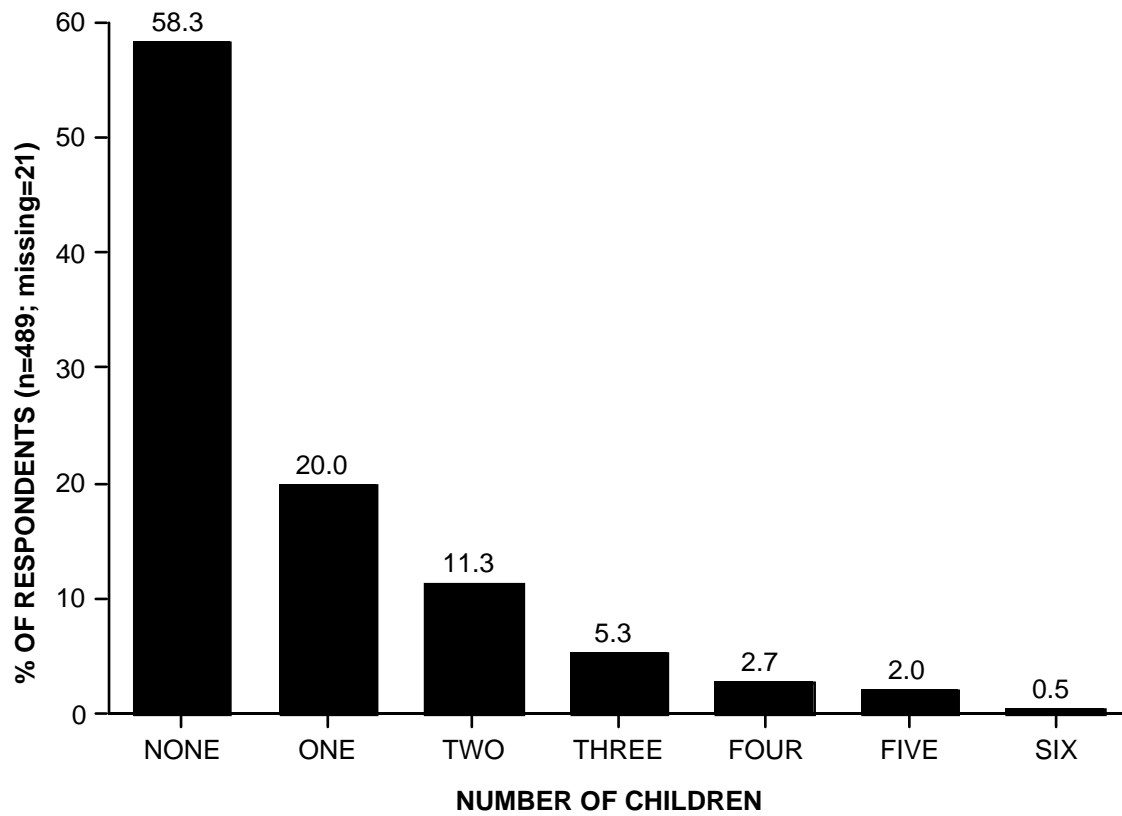


FIGURE 9: NUMBER OF CHILDREN RESPONDENT HAS

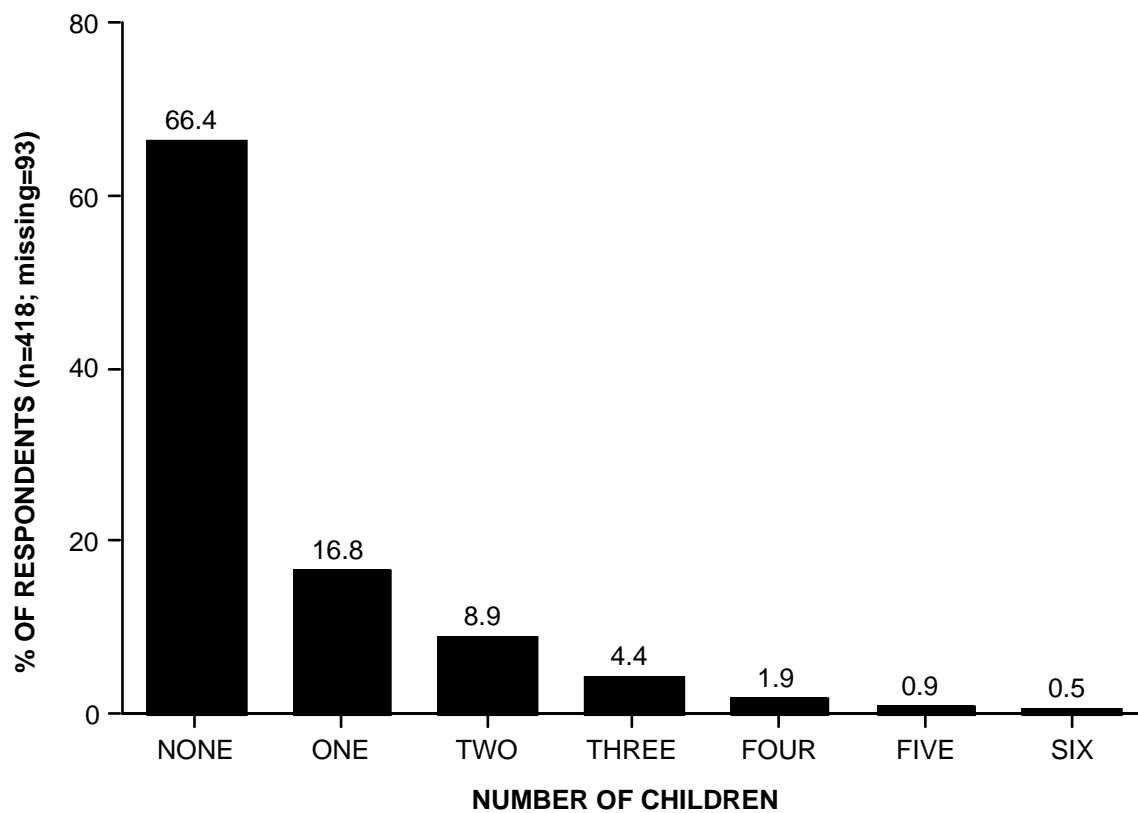


FIGURE 10: NUMBER OF CHILDREN IN RESPONDENT'S CARE

Country of birth and Aboriginality

Table 4 shows that the vast majority (88.1%) of respondents were Australian born. Fifteen (3.1%) of the 490 who responded stated that they were of Aboriginal or Torres Strait Islander descent.

TABLE 4: COUNTRY OF BIRTH

| COUNTRY OF BIRTH | f | % |
|----------------------|-----|-------|
| Australia | 447 | 88.1 |
| England | 24 | 4.7 |
| New Zealand | 14 | 2.8 |
| Europe (unspecified) | 5 | 1.0 |
| Brazil | 3 | 0.6 |
| Scotland | 3 | 0.5 |
| Cyprus | 2 | 0.3 |
| Italy | 2 | 0.3 |
| Israel | 2 | 0.3 |
| Malaysia | 1 | 0.2 |
| South Africa | 1 | 0.2 |
| Sweden | 1 | 0.2 |
| Singapore | 1 | 0.2 |
| Other (unspecified) | 1 | 0.2 |
| Total | 507 | 100.0 |

There were 4 missing cases

Language

Twelve (2.5%) of respondents stated that English was not spoken in the home that they grew up in. Twenty (4.0%) respondents stated that another European language, and 5 (1.1%) said that an Asian language, was spoken in the home that they grew up in.

Education

Respondents were asked 'What is the HIGHEST level of education that you have COMPLETED?' Just over a third (37.5%, n=191) of respondents listed 'junior high school', just under a quarter (23.8%, n=121) listed 'senior high school' and a slightly smaller proportion (22.4%, n=114) identified a 'trade, TAFE or technical course' as their highest level of education completed. These results are shown in Figure 11.

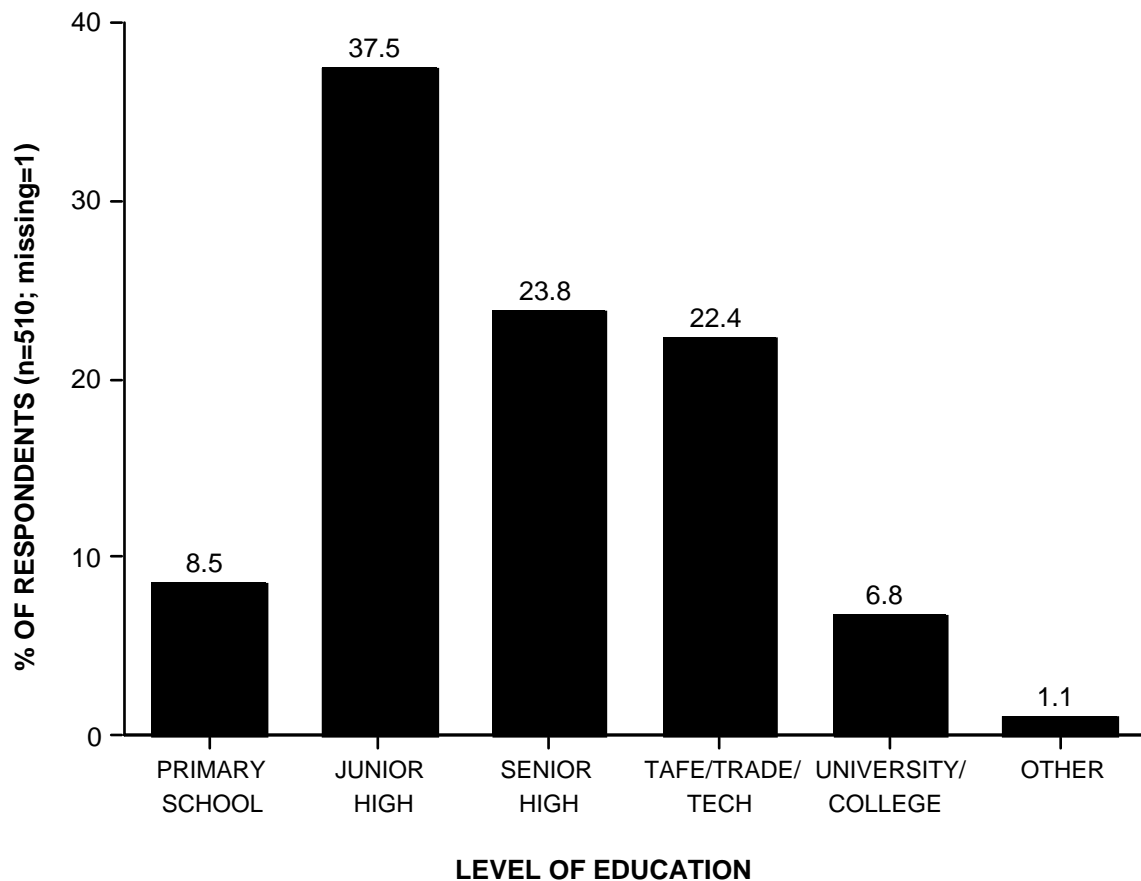


FIGURE 11: HIGHEST LEVEL OF EDUCATION COMPLETED BY RESPONDENT

Fifty seven (11.6%) respondents stated they were CURRENTLY enrolled in some kind of education. The form of education currently enrolled in is presented in Table 5.

TABLE 5: CURRENT EDUCATION STATUS

| CURRENT EDUCATION STATUS | f | % |
|--------------------------|-----|-------|
| None | 437 | 88.4 |
| TAFE / Trade / Tech. | 28 | 5.6 |
| University / College | 18 | 3.7 |
| School | 2 | 0.3 |
| Other | 9 | 1.8 |
| Total | 494 | 100.0 |

There were 17 missing cases

Employment and occupation

Just under half (46.4%, n=235) of the sample said they were in employment of some kind (full-time, part-time or casual employment). This compares to 20.0% for respondents in the Perth ASHIDU sample (Bevan, Loxley and Carruthers, 1996) (Chi Square=226.8518, df=1, p=.0000). One hundred and fifty six (30.8%) respondents stated they were in full time employment, 45 (8.9%) were casually employed and 34 (6.7%) were in part-time employment. One hundred and fifty four (30.3%) respondents stated they were unemployed and 35 (7.0%) stated that they engaged in dealing or other crime as a form of employment. These data are presented in Table 6.

TABLE 6: CURRENT EMPLOYMENT STATUS

| CURRENT EMPLOYMENT STATUS | f | % RESPONSES | % RESPONDENTS |
|---------------------------|-----|----------------|------------------|
| Full-Time Employed | 156 | 26.3 | 30.8 |
| Pension / Benefits | 79 | 13.3 | 15.5 |
| Home Duties | 60 | 10.1 | 11.9 |
| Casually Employed | 45 | 7.6 | 8.9 |
| Dealing / Crime | 35 | 5.9 | 7.0 |
| Part-Time Employed | 34 | 5.7 | 6.7 |
| Student | 26 | 4.3 | 5.1 |
| Other | 6 | 1.0 | 1.1 |
| Unemployed | 154 | 25.8 | 30.3 |
| Total | 595 | 100.0 | 117.3 |

There were 4 missing cases.

Respondents could choose more than one response.

Due to data weighting sum of frequencies does not equal total value listed.

For those 235 respondents who stated that they currently had a job, the most frequent occupation was Trades person (32.9%), followed by Labourer (25.2%) and Salesperson / Personal Service Worker (19.9%). These results are presented in Table 7.

TABLE 7: OCCUPATION

| OCCUPATION | f | % RESPONDENTS |
|---------------------------------------|-----|------------------|
| Trades person | 69 | 32.9 |
| Labourer etc. | 53 | 25.2 |
| Salesperson / Personal Service Worker | 41 | 19.9 |
| Plant / Machine Operator | 11 | 5.3 |
| Clerk | 20 | 9.4 |
| Para-professional | 10 | 4.8 |
| Manager / Administrator | 4 | 1.9 |
| Professional | 1 | 0.6 |
| Total | 209 | 100.0 |

There were 24 missing cases.

Due to data weighting sum of frequencies does not equal total value listed.

Income

Respondents were asked 'What was your approx. income LAST FINANCIAL YEAR?' and were prompted to 'Please write in your annual income from all sources in thousands of dollars'. Income data for the sample are given in Figure 12. The mean income of the sample (excluding the 159 cases where answers were not provided to this question) was \$28,036 (range \$0 - \$411,000). Just over half (53.0%) the sample earned \$20,000 or less in the last financial year while just under a third (29.4%) earned over \$30,000 in the same period.

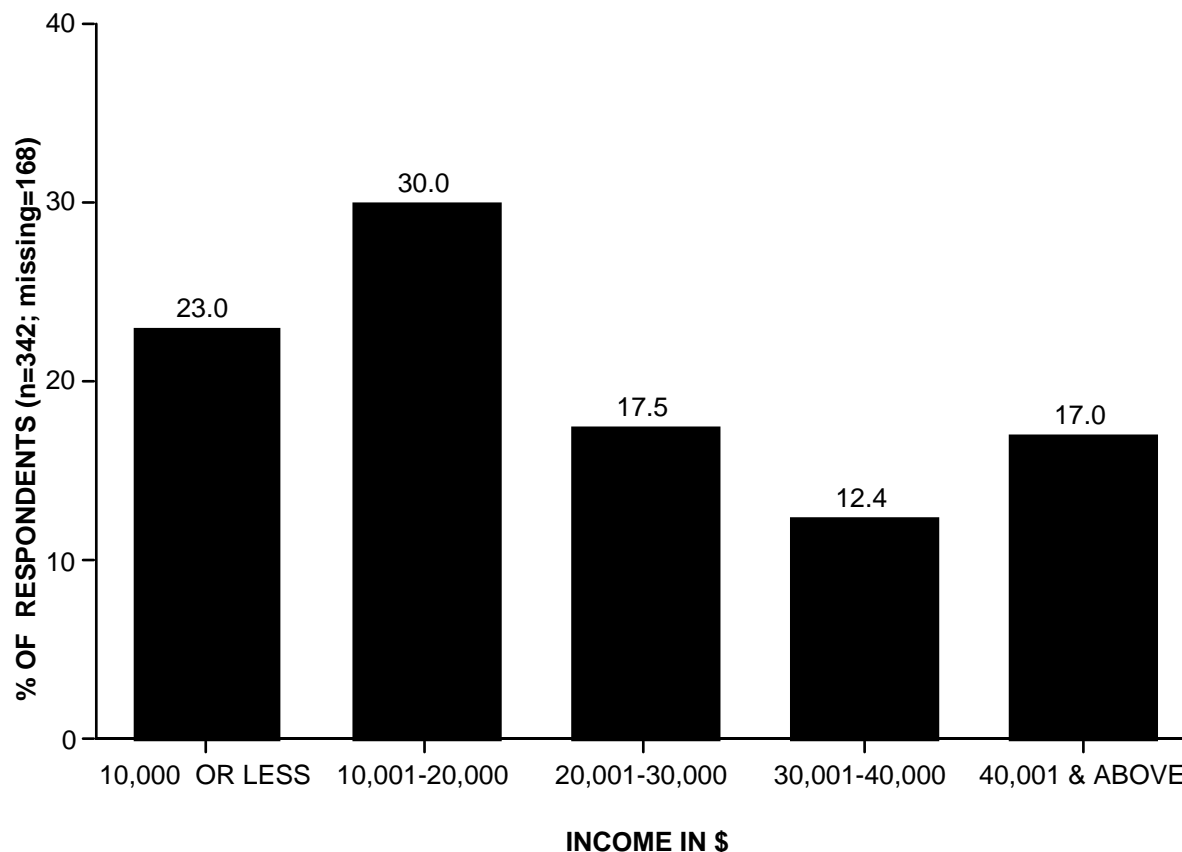


FIGURE 12: INCOME LEVEL RESPONDENT LAST FINANCIAL YEAR

In order to determine the characteristics of those who reported various annual incomes last financial year, respondents were compared according to variables of interest. Table 8 presents the gender and employment status breakdown for each of the income levels. Employing the Bonferroni adjustment at an experiment wise error rate of .05 sets alpha for each comparison at .0056. It can be seen that those who reported lower rather than higher incomes tended to be more likely to be women, unemployed, on pension or benefits or engaged in home duties. Those at higher incomes were more likely to be in full time employment. There were no significant differences across income levels in regards to part time or casual employment, being a student or involvement in dealing or crime as a source of income.

TABLE 8: INCOME LEVEL LAST FINANCIAL YEAR BY GENDER & CURRENT EMPLOYMENT STATUS: PERCENT RESPONDENTS

| | INCOME LEVEL RESPONDENT LAST FINANCIAL YEAR | | | | | Sig(1). |
|---------------------------|---|----------------------------|----------------------------|----------------------------|------------------------|----------|
| | \$10,000 OR LESS | \$10,001 TO \$20,000 | \$20,001 TO \$30,000 | \$30,001 TO \$40,000 | \$40,001 & ABOVE | |
| GENDER (n=320) | | | | | | |
| Females | 62.8 | 41.1 | 28.8 | 9.4 | 16.1 | .0000 |
| EMPLOYMENT (n=341) | | | | | | |
| Full-Time Employed | 4.1 | 32.2 | 49.8 | 70.9 | 61.0 | .0000 |
| Part-Time Employed | 4.9 | 12.7 | 9.8 | 4.2 | 7.4 | .4200(2) |
| Casually Employed | 11.1 | 9.6 | 12.4 | 9.0 | 3.5 | .5001 |
| Unemployed | 37.6 | 34.9 | 14.0 | 7.6 | 22.3(3) | .0002 |
| Pension / Benefits | 26.4 | 9.3 | 11.2 | 1.8 | 6.6 | .0002 |
| Student | 14.3 | 0.0 | 2.2 | 0.0 | 0.6 | .0668(2) |
| Home Duties | 26.7 | 11.3 | 6.7 | 2.7 | 0.6 | .0000 |
| Dealing / Crime | 8.2 | 2.2 | 4.5 | 4.5 | 18.2 | .0214(2) |

(1) *Pearson Chi Square test.*

(2) *Due to small expected frequencies cells were collapsed to \$30,000 and above and continuity correction employed.*

(3) *Note that as income relates to last financial year and employment status is based on current situation some of these individuals may have been employed in the previous year but are now unemployed. Six of the 13 (42.4%) respondents in this group were also involved in dealing or other crime.*

Figure 13 presents the occupational breakdown for persons employed at each of the income levels. It can be seen that at higher income levels those employed are more likely to be in the trades than they are at lower income levels.

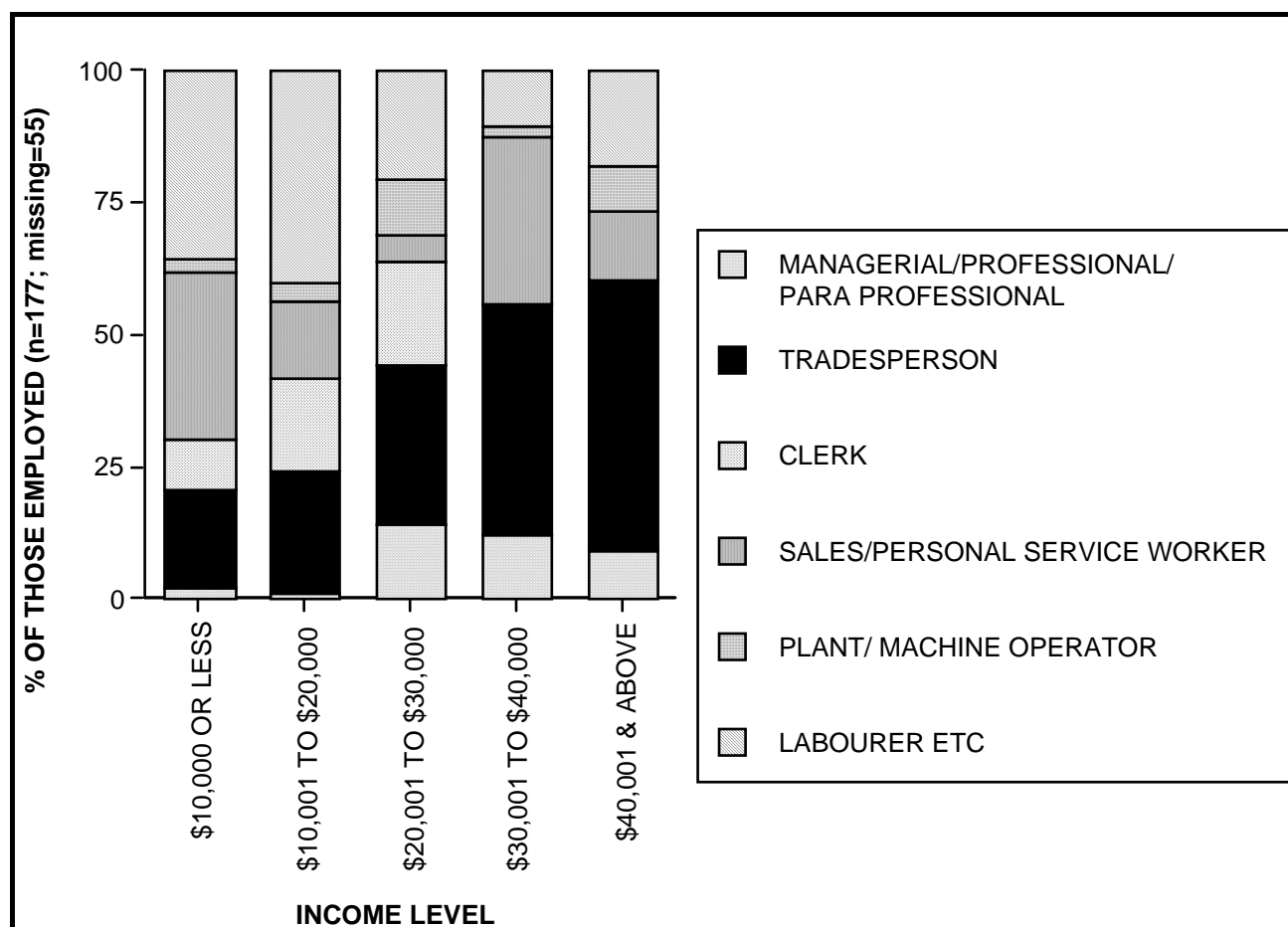


FIGURE 13: INCOME LEVEL BY JOB TYPE FOR THOSE EMPLOYED

Accommodation

The majority (59.6%) of respondents lived in rented accommodation, but just over one in six (16.8%) owned or were buying their place of residence, and just under one in six (15.4%) lived in their parent's home. These results are presented in Table 9.

TABLE 9: CURRENT ACCOMMODATION TYPE

| CURRENT ACCOMMODATION TYPE | f | % RESPONDENTS |
|----------------------------|-----|------------------|
| Rented Residence | 303 | 59.6 |
| Own Residence | 85 | 16.8 |
| Parent's Home | 79 | 15.4 |
| No Fixed Address | 14 | 2.8 |
| Shelter / Refuge | 4 | 0.7 |
| School Accommodation | 3 | 0.5 |
| Other | 21 | 4.1 |
| Total | 509 | 100.0 |

There were 2 missing cases

4.3 OTHER CHARACTERISTICS OF THE SAMPLE

Past drug treatment

Subjects were asked "Which of the following services have you EVER been in contact with due to your drug use (other than to get needles)?" They were told they could tick more than one service type. The results for this question are presented in Table 10. Of note is that just over half the sample (51.0%) stated that they had ever had contact with any service due to their drug use. This compares to 68.7% for respondents in the Perth ASHIDU sample^[1] (Bevan, Loxley and Carruthers, unpublished data) (Chi Square=67.1562, df=1, p=.0000). Just over a third (34.5%) of the sample had contact with a General Practitioner regarding their drug use.

TABLE 10: TREATMENT SERVICES CONTACTED RE DRUGS

| SERVICE | f | % RESPONSES | % RESPONDENTS |
|--------------------------------|-----|----------------|------------------|
| GP | 170 | 24.8 | 34.5 |
| Hospital | 51 | 7.4 | 10.3 |
| Drug detox facility | 72 | 10.5 | 14.6 |
| Counselling / treatment agency | 89 | 13.0 | 18.1 |
| Methadone program | 49 | 7.1 | 9.9 |
| Other | 14 | 2.1 | 2.9 |
| None of them | 241 | 35.1 | 49.0 |
| Total | 686 | 100.0 | 139.3 |

There were 19 missing cases.

Respondents could choose more than one response.

Due to data weighting sum of frequencies does not equal total value listed.

Further analysis of this data indicated that only 28.7% (n=144, missing=11) of the sample had ever had contact with a specialist drug agency (drug detoxification, counselling / treatment, or methadone program) because of their drug use. This compares to 63.5% for respondents in the Perth ASHIDU sample (Bevan, Loxley and Carruthers, unpublished data) (Chi Square=262.0926, df=1, p=.0000). Seventy eight respondents (15.6%) had only had contact with a General Practitioner, 1.3% (n=6, missing=11) had only had contact with a hospital, and 19.6% (n=98, missing=11) reported having had contact with either a General Practitioner or a hospital at some time regarding their drug use

Characteristics of those having had contact with a specialist drug treatment agency

Table 11 (see Appendix H) presents the results of the bivariate comparisons for those respondents having had contact with a specialist drug treatment agency.

[¹] In order to make the ASHIDU data comparable to that in the present study the ASHIDU data was re-analysed such that missing cases were excluded from the analysis and home and self managed detoxification were not included as 'treatment'.

The results of the logistic regression analysis to determine the relative contribution of the variables significant on the bivariate comparisons are summarised in Table 12. Due to missing data 472 cases were included in the analysis. As only 316 respondents had been tested for hepatitis C, the variable which indicated the number of positive hepatitis C tests was not included in the analysis to minimise the number of missing cases. Bivariate comparisons (see Table 11, Appendix H) suggested that of those who had been hepatitis C tested, those with previous drug agency contact were twice as likely to report a positive result than those without such contact.

Those respondents who had previously had contact with a specialist drug agency were distinguished from those who had not on 3 variables. They were approximately 3 times as likely to have had a hepatitis C test as those who had not had contact with a specialist drug treatment agency. Subjects with previous drug treatment agency contact were just over twice as likely than those without such contact to have injected at least daily over the past month, and were about twice as likely to have been charged with a drug offence.

TABLE 12: VARIABLES PREDICTING PAST CONTACT WITH SPECIALIST DRUG TREATMENT AGENCY

| VALUE LABEL | LOG. REG. COEFF. (b) | WALD | df | Sig. (p) | R | ODDS RATIO |
|---------------------------------------|----------------------|---------|----|----------|-------|------------|
| Had hepatitis C test | 1.0806 | 19.3632 | 1 | .0010 | .1739 | 2.94 |
| Injected at least daily in past month | .8290 | 14.7056 | 1 | .0001 | .1488 | 2.29 |
| Been charged with drug offence | .7050 | 10.4138 | 1 | .0013 | .1211 | 2.02 |
| constant | -2.3882 | 82.2932 | 1 | .0000 | | |

*This analysis included only variables significant on bivariate comparisons
Due to missing data 472 cases were included in the analysis.*

Drug charges

Subjects were asked whether they had ever been charged with a drug offence. Just under half the sample (48.6%, n=245, missing=7) reported that they had been so charged.

Characteristics of those ever been charged with a drug offence

Table 13 (see Appendix H) presents the results of the bivariate comparisons of whether respondents had previously been charged with a drug offence. The results of the logistic regression analysis summarised in Table 14. Due to missing data 424 cases were included in the analysis. As only 316 respondents had been tested for hepatitis C, the variable which indicated the number of positive hepatitis C tests was not included in the analysis to minimise the number of missing cases. Bivariate comparisons (see Table 13, Appendix H) suggested that of those who had been hepatitis C tested, those with a previous drug charge were more than twice as likely to report a positive result than those who had not been so charged.

Those respondents who had previously had a prior drug charge were distinguished from those who had not on five variables. They were twice as likely as those who had not to be males, were

1.5 times as likely to have been tested for hepatitis C, were 2.5 times as likely to have been injecting for 10 or more years, were over 1.5 times as likely to have injected at least daily in the past month, and were twice as likely to have had contact with a specialist drug agency.

TABLE 14: VARIABLES PREDICTING HAVING BEEN CHARGED WITH A DRUG OFFENCE

| VALUE LABEL | LOG. REG. COEFF. (b) | WALD | df | Sig. (p) | R | ODDS RATIO |
|---|----------------------|---------|----|----------|-------|------------|
| Male | .7727 | 12.5614 | 1 | .0004 | .1341 | 2.16 |
| Had hepatitis C test | .4779 | 4.4068 | 1 | .0358 | .0640 | 1.61 |
| Injecting for 10 or more years | .9589 | 15.1850 | 1 | .0001 | .1498 | 2.61 |
| Injected at least daily in past month | .6239 | 8.1751 | 1 | .0042 | .1025 | 1.87 |
| Prior contact with specialist drug agency | .7537 | 9.6961 | 1 | .0018 | .1144 | 2.12 |
| constant | -.7691 | 12.7798 | 1 | .0004 | | |

*This analysis included only variables significant on bivariate comparisons
Due to missing data 424 cases were included in the analysis.*

Hepatitis C testing

Subjects were asked whether they had ever had a test for hepatitis C. The majority (64.9%, n=327, missing=7) said that they had, compared to 76.4% of the Perth ASHIDU sample (Bevan, Loxley and Carruthers, 1996) (Chi Square=47.8489, df=1, p=.0000).

Characteristics of those ever been tested for hepatitis C

Table 15 (see Appendix H) presents the results of the bivariate comparisons of whether the respondents had previously been tested for hepatitis C.

The results of the logistic regression analysis summarised in Table 16 indicate that those respondents who had been tested for hepatitis C were distinguished from those who had not on 3 variables. They were 1.5 times as likely as those who had not to have children, were 1.5 times as likely to have been charged with a drug offence and were almost three times as likely to have had contact with a specialist drug agency.

TABLE 16: VARIABLES PREDICTING HAVING EVER BEEN TESTED FOR HEPATITIS C

| VALUE LABEL | LOG. REG. COEFF. (b) | WALD | df | Sig. (p) | R | ODDS RATIO |
|--------------------------------|----------------------|--------|----|----------|-------|------------|
| Have children | .4522 | 4.7531 | 1 | .0292 | .0668 | 1.57 |
| Been charged with drug offence | .4149 | 4.1315 | 1 | .0421 | .0588 | 1.51 |

| | | | | | | |
|--|--------|---------|---|-------|-------|------|
| Prior contact with specialist drug agency | 1.0553 | 18.8010 | 1 | .0000 | .1650 | 2.88 |
| constant | -.0762 | .2405 | 1 | .6238 | | |

*This analysis included only variables significant on bivariate comparisons
Due to missing data 472 cases were included in the analysis.*

Self reported hepatitis C test results

Self reported test results for those who stated they had been tested are given in Table 17. Just under a quarter (23.2%) of those who had been tested reported they were told the test was positive. Excluding those 14 cases who 'didn't get their results' and the 12 who said they 'couldn't remember' what their test result, the rate of self reported hepatitis C positivity was 25.2%, compared to 42.3% of the Perth ASHIDU sample (Bevan, Loxley and Carruthers, 1996) when missing cases are excluded from that study (Chi Square=34.4465, df=1, p=.0000).

TABLE 17: SELF REPORTED HEPATITIS C TEST RESULTS FOR THOSE WHO STATED THEY HAD BEEN TESTED

| RESULT | f | % RESPONDENTS |
|--------------------------------------|-----|------------------|
| I was told I didn't have hepatitis C | 222 | 68.9 |
| I was told I had hepatitis C | 75 | 23.2 |
| I didn't get the test results | 14 | 4.2 |
| I can't remember | 12 | 3.6 |
| Total | 327 | 100.0 |

There were 5 missing cases

Characteristics of those tested for hepatitis C whose result was positive

Table 18 (see Appendix H) presents the results of the bivariate comparisons of whether the respondents had been tested for hepatitis C, knew the result (were told and remembered it) and said that it was positive.

The result of the logistic regression analysis summarised in Table 19 indicates that among those respondents who stated that they had been tested for hepatitis C, and were aware of the result, those who reported they were positive for hepatitis C were over six times as likely to have been injecting for 10 years or more, were over four times as likely to have said that depressants were injected with needles in this Fitpack, and were almost three times as likely to have had prior contact with a specialist drug agency.

TABLE 19: VARIABLES PREDICTING SELF REPORTED POSITIVE HEPATITIS C RESULT

| VALUE LABEL | LOG. REG. COEFF. (b) | WALD | df | Sig. (p) | R | ODDS RATIO |
|---|-------------------------|---------|----|----------|-------|---------------|
| 26 years of age or over | .8560 | 3.5071 | 1 | .0611 | .0684 | 2.35 |
| Injecting for 10 or more years | 1.8689 | 19.6938 | 1 | .0000 | .2344 | 6.48 |
| Depressants injected with this Fitpack | 1.4647 | 11.7138 | 1 | .0006 | .1736 | 4.33 |
| Prior contact with specialist drug agency | 1.0045 | 8.2649 | 1 | .0040 | .1395 | 2.73 |

| | | | | |
|----------|--------|---------|---|-------|
| constant | 3.8444 | 62.5614 | 1 | .0000 |
|----------|--------|---------|---|-------|

*This analysis included only variables significant on bivariate comparisons
Due to missing data 278 cases were included in the analysis.*

The comparison of self reported rates of hepatitis C positivity by years of injecting was significant (Chi Square=83.1877, df=3, p=.0000). The rates of hepatitis C among those who had been injecting for 10 years or more were substantially higher than those who had been injecting for less than 10 years. These results were similar for that in the Perth ASHIDU, although there were significant differences between the proportions who were hepatitis C positive in the 5 to 9 years (Chi Square=11.8063, df=1, p=.0006) and the over 15 years (Chi Square=14.3907, df=1, p=.0001) of injecting groups. These results are presented in Figure 14. The rate of self reported hepatitis C positivity among those who had been injecting for less than 10 years was 7.9% while for those injecting for 10 or more years the rate was 53.9% (Chi Square_{continuity}=72.2177, df=1, p=.0000).

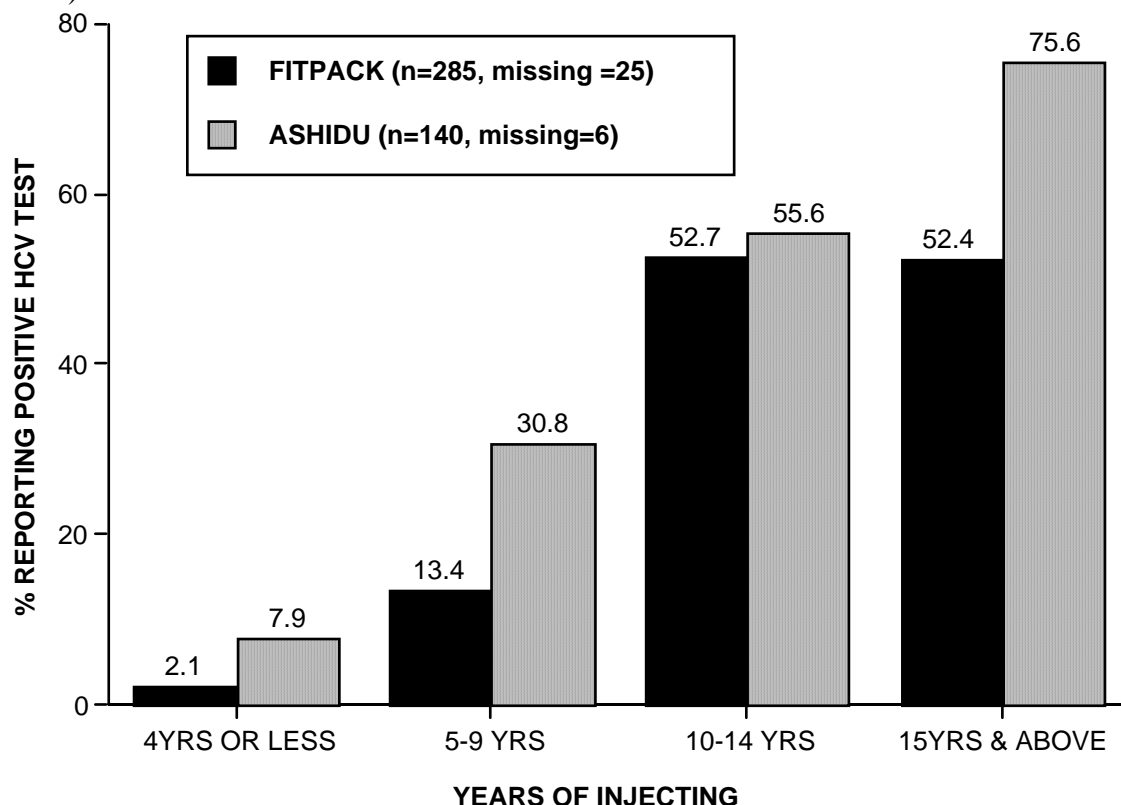


FIGURE 14: YEARS OF INJECTING BY SELF REPORTED HEPATITIS C POSITIVITY FOR THOSE WHO STATED THEY HAD BEEN TESTED FOR HEPATITIS C, FITPACK v ASHIDU

4.4 GENERAL INFORMATION REGARDING FITPACKS

Where usually get needles

Subjects were asked to indicate where they usually obtained their needles from. It can be seen in Table 20 that the vast majority (92.5%, n=471) obtained their needles through pharmacies.

TABLE 20: WHERE RESPONDENTS USUALLY GET NEEDLES FROM

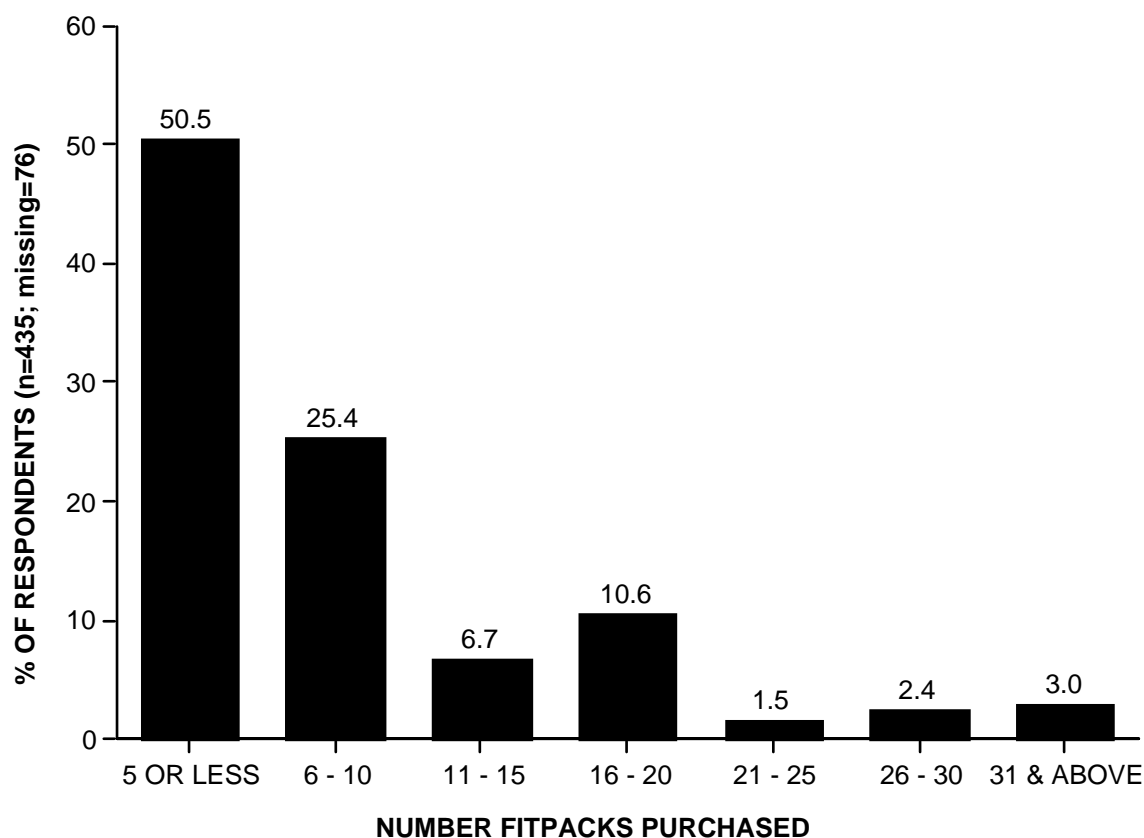
| NEEDLE PROVIDER | f | % RESPONSES | % RESPONDENTS |
|--------------------------------|-----|----------------|------------------|
| Pharmacies | 471 | 75.7 | 92.5 |
| Central Drug Unit (detox unit) | 37 | 5.9 | 7.2 |
| Mobile needle exchange van | 35 | 5.6 | 6.8 |
| Gay Sauna | 26 | 4.2 | 5.1 |
| Hospitals | 17 | 2.8 | 3.4 |
| Other drug users | 15 | 2.4 | 2.9 |
| Drug dealers | 15 | 2.5 | 3.0 |
| Other | 6 | 1.0 | 1.2 |
| Total | 622 | 100.0 | 122.1 |

There was 1 missing case

Some respondents chose more than one response.

Number of Fitpacks purchased in past month

Subjects were asked to indicate how many Fitpacks they had purchased in the past month. It can be seen in Figure 15 that approximately half (50.5%) of the sample had purchased no more than five Fitpacks in the past month, with only 24.1% purchasing more than ten Fitpacks over the same period.

**FIGURE 15: FITPACKS PURCHASED BY RESPONDENT IN THE PAST MONTH**

Characteristics of those having purchased more than Five Fitpacks in past month

Table 21 (see Appendix H) presents the results of the bivariate comparisons of whether the respondents reported that they purchased more than five Fitpacks in the past month.

The results of the logistic regression analysis summarised in Table 22 indicate that those respondents who stated that they had purchased more than five Fitpacks in the past month were over twice as likely to be 26 years of age or older, were almost 5 times as likely to inject daily or more frequently over the past month and were over 1.5 times as likely to have shared needles in the past month.

TABLE 22: VARIABLES PREDICTING PURCHASING MORE THAN FIVE FITPACKS IN THE PAST MONTH

| VALUE LABEL | LOG. REG. COEFF. (b) | WALD | df | Sig. (p) | R | ODDS RATIO |
|---------------------------------------|----------------------|---------|----|----------|-------|------------|
| 26 years of age or over | .9370 | 16.0948 | 1 | .0001 | .1611 | 2.48 |
| Injected at least daily in past month | 1.5734 | 47.5725 | 1 | .0000 | .2843 | 4.82 |
| Shared needles in past month | .5221 | 5.4026 | 1 | .0201 | .0777 | 1.69 |
| constant | -.2672 | 1.7080 | 1 | .1913 | | |

*This analysis included only variables significant on bivariate comparisons
Due to missing data 400 cases were included in the analysis.*

Other equipment like to see sold with Fitpacks

Subjects were asked to indicate what other equipment they would like to see sold with Fitpacks. Table 23 shows that many respondents wanted to see sterile water (75.7%) and swabs (65.6%) sold with Fitpacks.

TABLE 23: WHAT ELSE LIKE TO SEE SOLD WITH FITPACKS

| EQUIPMENT | f | % RESPONSES | % RESPONDENTS |
|--------------------------------------|-----|----------------|------------------|
| Sterile water | 380 | 44.4 | 75.7 |
| Swabs | 329 | 38.5 | 65.6 |
| 2ml syringes | 71 | 8.3 | 14.2 |
| Other gear (eg. spoons, filters) (1) | 59 | 6.9 | 11.8 |
| Other | 16 | 1.9 | 3.2 |
| Total | 855 | 100.0 | 170.5 |

There were 9 missing cases

Respondents were invited to choose more than one response

(1) This response did not appear on questionnaire but was extracted from 'other' responses

Fitpacks in vending machines

Subjects were asked 'Would you like to see Fitpacks sold in vending machine? Approximately out of ten (79.7%, n=367, missing=50) of the sample said they would.

Characteristics of those who would like to see Fitpacks sold in vending machines

Table 24 (see Appendix H) presents the results of the bivariate comparisons of whether the respondents reported that they would like to see Fitpacks available in vending machines in WA. The results of the logistic regression analysis summarised in Table 25 indicate that those respondents who stated that they would like to see Fitpacks available in vending machines were over twice as likely to be less than 18 years of age when they first injected, were over twice as likely to have said depressants were injected with the needles in the Fitpack, and were almost twice as likely to have injected at least daily in the past month.

TABLE 25: VARIABLES PREDICTING WANTING FITPACKS AVAILABLE IN VENDING MACHINES

| VALUE LABEL | LOG. REG. COEFF. (b) | WALD | df | Sig. (p) | R | ODDS RATIO |
|--|----------------------|---------|----|----------|-------|------------|
| Less than 18 when first injected | .7373 | 7.5726 | 1 | .0059 | .1136 | 2.09 |
| Depressants injected with this Fitpack | .7689 | 7.8229 | 1 | .0052 | .1161 | 2.16 |
| Injected at least daily in past month | .6259 | 4.6647 | 1 | .0308 | .0785 | 1.87 |
| Shared needles in past month | .4910 | 3.3009 | 1 | .0692 | .0549 | 1.63 |
| constant | 1.1230 | 17.4141 | 1 | .0000 | | |

*This analysis included only variables significant on bivariate comparisons
Due to missing data 447 cases were included in the analysis.*

Sizes of Fitpack like to see in WA

Subjects were asked 'In other states Fitpacks containing three or ten needles are also sold. Which of the SIZES of Fitpacks would you like to see available in WA?' Figure 16 shows that three quarters (75.0%) of respondents supported the availability of the larger ten needle packs in this state.

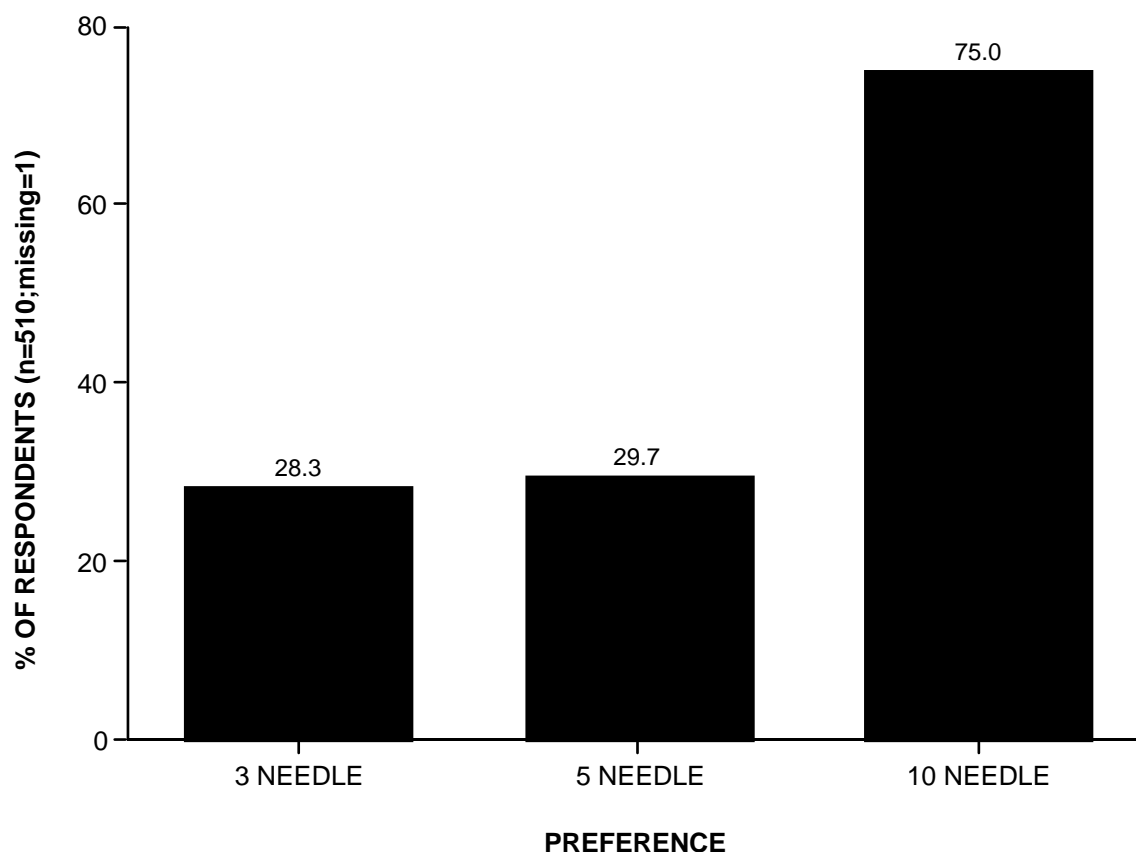


FIGURE 16: SIZES OF FITPACKS RESPONDENTS WOULD LIKE TO SEE AVAILABLE IN WA

Characteristics of those who would like three needle Fitpacks available in WA

Table 26 (see Appendix H) presents the results of the bivariate comparisons of whether the respondents reported that they would like to see three needle Fitpacks available in WA.

The results of the logistic regression analysis summarised in Table 27 indicate that those respondents who stated that they would like to see three needle Fitpacks available in WA, as opposed to those who did not, were almost twice as likely to be females, almost twice as likely to be have said depressants were injected with needles in the Fitpack, and were more than twice as likely to have had contact with a drug treatment agency.

TABLE 27: VARIABLES PREDICTING WANTING THREE NEEDLE FITPACKS AVAILABLE IN WA

| VALUE LABEL | LOG. REG. COEFF. (b) | WALD | df | Sig. (p) | R | ODDS RATIO |
|---|----------------------|---------|----|----------|-------|------------|
| Females | .6143 | 8.0718 | 1 | .0045 | .1057 | 1.85 |
| Depressants injected with this Fitpack | .5746 | 6.5640 | 1 | .0104 | .0917 | 1.78 |
| Prior contact with specialist drug agency | .8538 | 14.7159 | 1 | .0001 | .1530 | 2.34 |
| constant | -1.8058 | 64.4479 | 1 | .0000 | | |

This analysis included only variables significant on bivariate comparisons

Due to missing data 448 cases were included in the analysis.

Characteristics of those who would like ten needle Fitpacks available in WA

Table 28 (see Appendix H) presents the results of the bivariate comparisons of whether the respondents reported that they would like to see ten needle Fitpacks available in WA. The variable income was added to this comparison, dichotomised at \$10,000 (see section 3.5). The only bivariate comparison which was significant with the Bonferroni adjustment was whether the respondent was single or married or living with their sexual partner. Those who wanted to see ten needle packs available in WA were 1.5 times more likely than those who did not to be married or living with their sexual partner.

4.5 PROBLEMS WITH FITPACKS, NEEDLES AND BUYING THEM

How often have problems buying Fitpacks

Subjects were asked 'When you try to buy a Fitpack from pharmacies, how often do you have problems with the purchase?' Figure 17 shows that while 36.2% reported that they never experienced problems buying Fitpacks and 29.0% had problems 'only rarely', 34.7% experienced problems at least 'sometimes'.

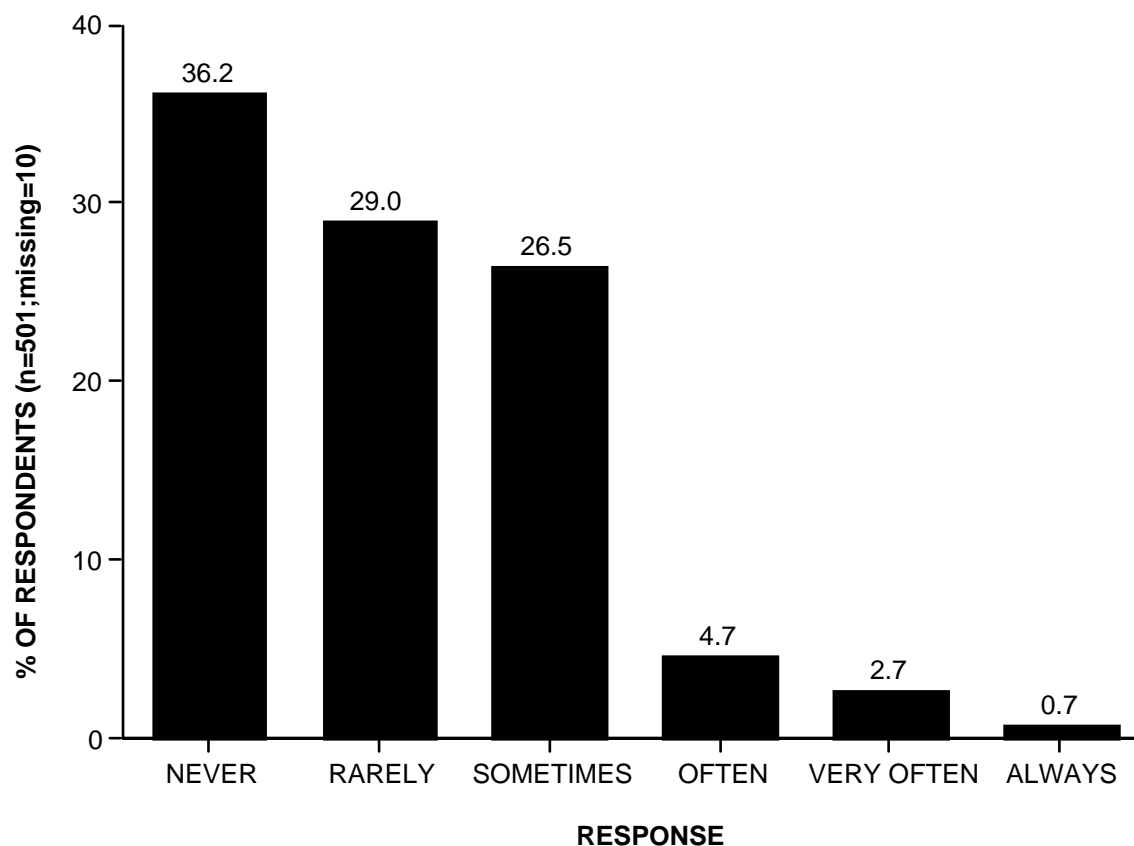


FIGURE 17: HOW OFTEN RESPONDENT HAVE PROBLEMS WHEN PURCHASING FITPACKS FROM PHARMACIES

Characteristics of those who have problems buying Fitpacks at least 'sometimes'

Table 29 (Appendix H) presents the results of the bivariate comparisons of whether the respondents reported they had problems buying Fitpacks at least 'sometimes'. The variable income was included in this comparison, dichotomised at \$10,000 (see Section 3.6). The only bivariate comparison which was significant with the Bonferroni adjustment was whether the respondent injected at least daily over the past month. Those had problems buying Fitpacks at least 'sometimes' were over 1.5 times more likely than those who did to have injected at least daily over the past month.

Nature of problems when buying Fitpacks

Subjects were asked to specify the problems that they had when buying Fitpacks. Up to four of these open ended responses were coded for each respondent. Of the 175 respondents who experienced problems at least 'sometimes', 110 specified problems which are shown in Table 30. Of these, 64.1% identified problems which were coded 'negative attitude of pharmacy staff' and 41.0% cited problems which fitted under the heading of 'unavailability'.

TABLE 30: TYPE OF PROBLEMS WHEN BUYING FITPACKS

| PROBLEMS | f | % RESPONSES | % RESPONDENTS |
|--|-----|----------------|------------------|
| Negative attitude of Pharmacy staff (eg. indiscretion, contempt, rudeness, avoiding physical contact) | 71 | 54.8 | 64.1 |
| Unavailability (eg. after hours, of single syringes, for non-diabetics) | 45 | 35.0 | 41.0 |
| Price | 7 | 5.3 | 6.2 |
| Other (eg. embarrassment, having relatives, friends in the pharmacy) | 6 | 4.9 | 5.8 |
| Total | 129 | 100.0 | 117.1 |

There were 64 missing cases

How often have problems with Fitpacks themselves

Subjects were asked 'How often do you have problems with the FITPACKS themselves or the NEEDLES in them? Figure 18 shows that only 24.5% (n=123) reported that they never had problems with the Fitpacks or the needles. Just under a third (29.1%, n=149) reported they had problems 'rarely', but 46.4% stated that they had such problems at least 'sometimes'.

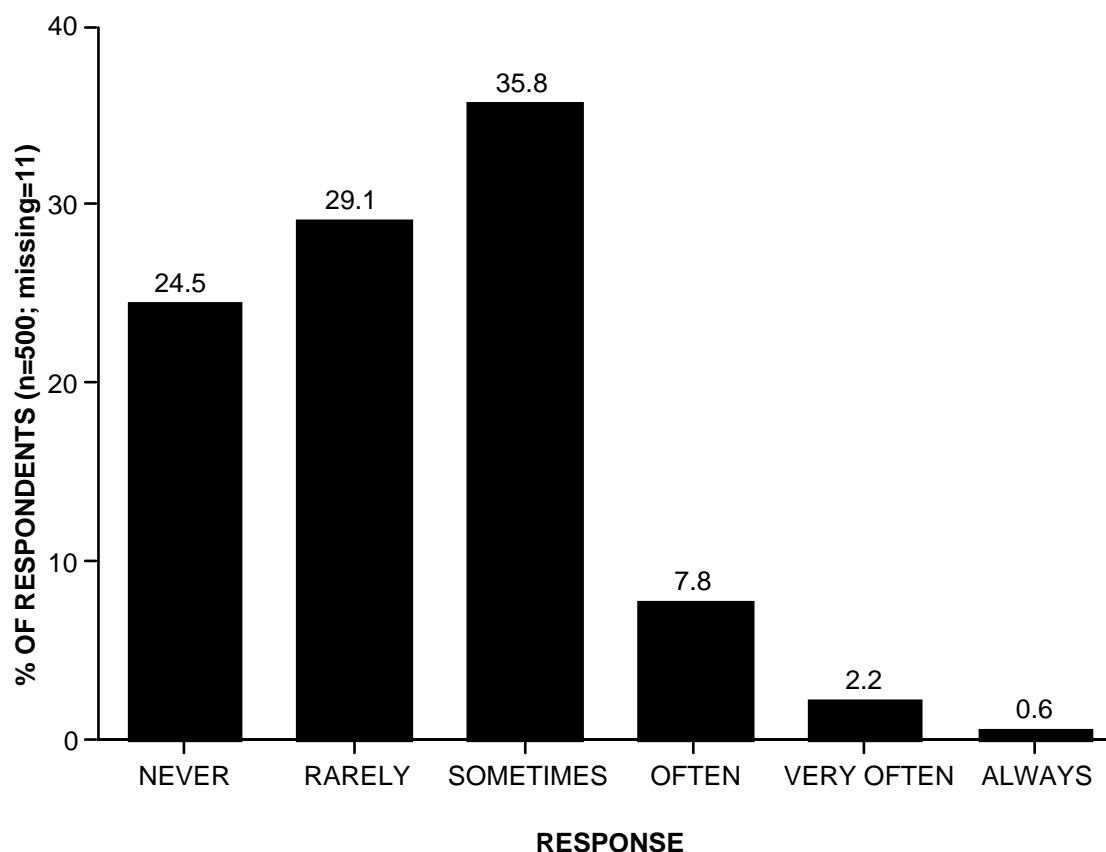


FIGURE 18: HOW OFTEN RESPONDENT HAVE PROBLEMS WITH FITPACKS THEMSELVES OR NEEDLES IN THEM

Characteristics of those who have problems with Fitpacks or needles in them at least 'sometimes'

Table 31 (see Appendix H) presents the results of the bivariate comparisons of whether the respondents reported that they had problems with the 'Fitpacks themselves or the needles in them' at least 'sometimes'. The only bivariate comparison which was significant with the Bonferroni adjustment was whether the respondent was employed or not. Those had problems with the Fitpacks or the needles in them at least 'sometimes' were 1.3 times more likely than those who did to not have a job.

Nature of problems with Fitpacks and needles

Subjects were asked to specify the problems that they had with the Fitpacks themselves or the needles in them. Up to seven of these open ended responses were coded for each respondent. Of the 242 respondents who experienced problems at least 'sometimes', 164 specified problems. Problems with needles comprised 73.2% of all responses to this question, the most numerous problem listed being needles that were loose, bent, broken or blunt. The problem with the Fitpacks that was listed most often was when (new) needles and syringes were already locked into the pack. Responses to this question are presented in Table 32.

TABLE 32: PROBLEMS WITH FITPACKS THEMSELVES OR NEEDLES IN THEM

| PROBLEMS | f | % RESPONSES | % RESPONDENTS |
|--------------------------------------|-----|----------------|------------------|
| PROBLEMS WITH NEEDLES | | | |
| Needles loose, bent, broken or blunt | 69 | 33.3 | 42.2 |
| Stiff plunger | 31 | 14.8 | 18.7 |
| Syringes blocked | 15 | 7.5 | 9.4 |
| Syringes poor suction | 5 | 2.3 | 2.9 |
| PROBLEMS WITH FITPACKS | | | |
| Fits (N&S) locked into pack | 52 | 25.2 | 31.9 |
| Missing Fits (N&S) | 17 | 8.2 | 10.4 |
| OTHER PROBLEMS (1) | | | |
| Total | 207 | 100.0 | 126.5 |

There were 68 missing cases

(1) Includes dirty looking Fits; broken, unsterile wrapping; used Fits in new pack.

4.6 ABOUT THIS FITPACK

Subjects were asked a number of questions regarding the purchase and use of the Fitpack they purchased when they were given the questionnaire. The results for these questions are presented here.

Cost of this Fitpack

Subjects were asked 'How much did you pay for the Fitpack that you got with this questionnaire?' The self reported mean price paid was \$4.70 (sd=0.50) with the minimum price being \$3.00 and the maximum being \$10.00. The modal price was \$5.00, which was paid by 47.7% of the sample and the next most frequent price was \$4.50 paid by 34.6% of respondents. Responses to this question are summarised in Figure 19. The vast majority (85.5%, n=424) of respondents paid between \$4.05 and \$5.00 for the Fitpack. At the time of data collection the recommended retail price for a Fitpack was \$3.60.

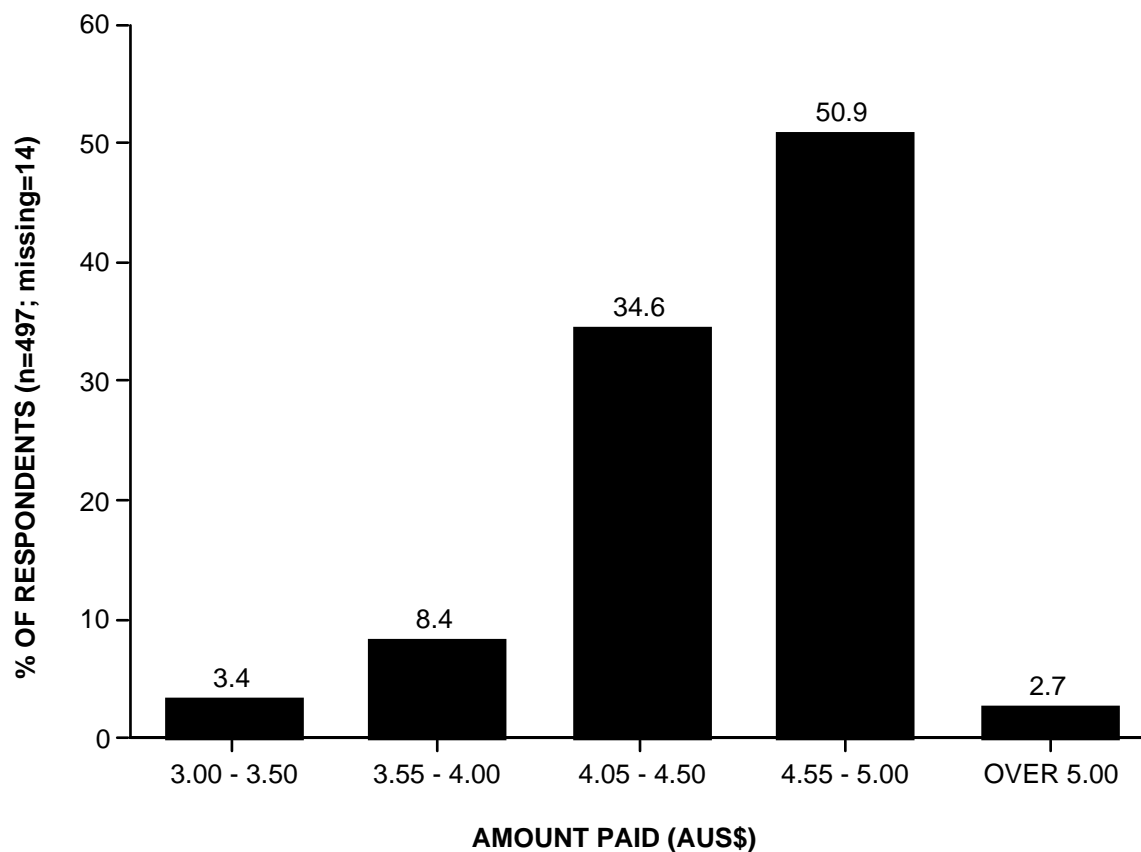


FIGURE 19: AMOUNT RESPONDENT PAID FOR THIS FITPACK

Is this a fair price?

Subjects were asked whether they thought the price they paid for the Fitpack was a fair price. Three quarters (75.7%, n=366, missing=27) thought that it was not. There was a significant relationship between the price paid for the Fitpack and whether respondents thought it was fair. For those who paid up to \$4.50 for the Fitpack, 34.8% thought it was a fair price, yet only 15.3% of those who paid over \$4.50 thought it was fair (Chi Square_{continuity} = 23.5235, df=1, p=.0000). These results are presented in Figure 20. The average price paid by those who thought the price was fair was \$4.49 (sd=62.01), whilst that for those who thought the price was not fair was \$4.76 (sd=44.9), the difference between these groups being significant (F=25.523, df=1, p=.000).

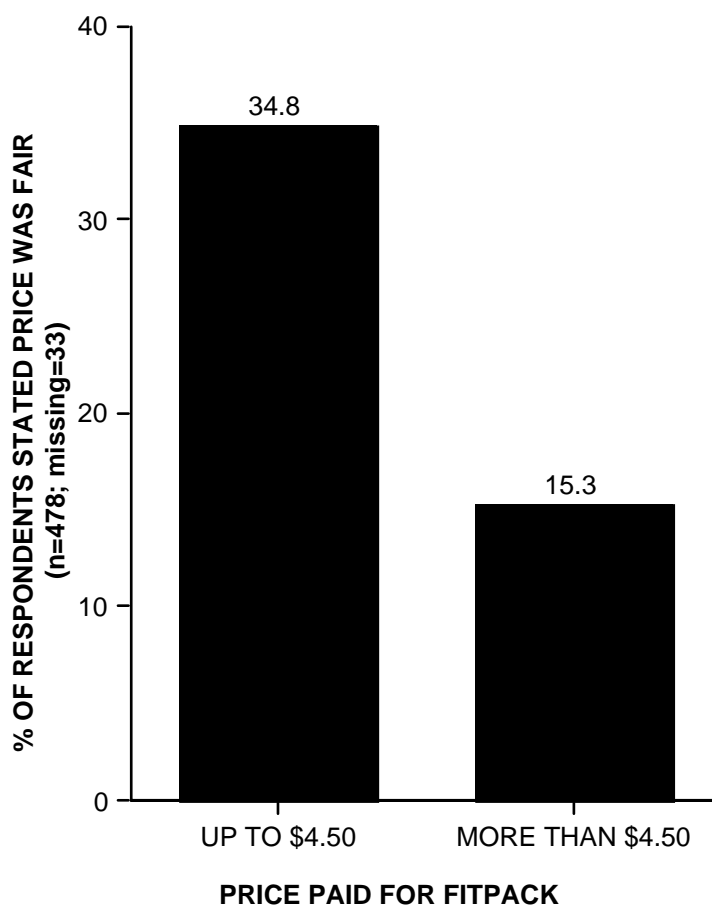


FIGURE 20: WHETHER RESPONDENTS THOUGHT PRICE OF FITPACK WAS FAIR BY PRICE PAID

Time after purchase Fitpack used for the first time

Respondents were asked 'How soon after purchase was the Fitpack used for the FIRST TIME?' Table 33 shows that approximately a third (33.0%) of the respondents stated the Fitpack was used for the first time less than 10 minutes after it was purchased whilst almost half (48.8%) stated it was first used between 10 minutes and one hour after purchase.

TABLE 33: TIME AFTER PURCHASE FITPACK USED FOR THE FIRST TIME

| RESPONSE | f | % RESPONDENTS | CUMULATIVE % |
|----------------------------|-----|------------------|-----------------|
| Less than 10 Minutes Later | 166 | 33.0 | 33.0 |
| 10 Minutes to 1 Hour Later | 246 | 48.8 | 81.9 |
| Later That Day | 76 | 15.1 | 97.0 |
| The Next Day or Later | 15 | 3.0 | 100.0 |
| Total | 503 | 100.0 | - |

There were 8 missing cases

Characteristics of those who used Fitpack less than 10 minutes after purchase

Table 34 (see Appendix H) presents the results of the bivariate comparisons of whether the respondents reported that they used the Fitpack for the first time less than 10 minutes after purchasing it.

The results of the logistic regression analysis summarised in Table 35 indicate that those respondents who stated that they used the needles in the Fitpack for the first time less than ten minutes after purchase were almost twice as likely to be under 26 years of age, were over twice as likely as those who did not to have first injected at under 18 years of age. They were also almost twice as likely to have injected depressants in the past month, were 2.5 times as likely to have injected at least daily over the past month and were almost twice as likely to have shared needles in the past month.

TABLE 35: VARIABLES PREDICTING USE OF FITPACK LESS THAN 10 MINUTES AFTER PURCHASE

| VALUE LABEL | LOG. REG. COEFF. (b) | WALD | df | Sig. (p) | R | ODDS RATIO |
|--|----------------------|---------|----|----------|-------|------------|
| Under 26 years of age | .6083 | 6.4720 | 1 | .0110 | .0857 | 1.84 |
| First injected at under 18 years | .7799 | 22.3928 | 1 | .0005 | .1291 | 2.18 |
| Injected depressants in the past month | .5917 | 6.2996 | 1 | .0121 | .0840 | 1.81 |
| Injected at least daily in past month | .9280 | 17.1232 | 1 | .0000 | .1575 | 2.53 |
| Shared needles in the past month | .6177 | 8.3641 | 1 | .0038 | .1022 | 1.85 |
| constant | -1.1155 | 21.8842 | 1 | .0000 | | |

*This analysis included only variables significant on bivariate comparisons
Due to missing data 473 cases were included in the analysis.*

Drugs injected with the needles in this Fitpack

The drugs respondents said were injected with the needles in this Fitpack are presented in Table 36. Note that it is unclear whether the drugs were injected by one or more than one person. Speed (amphetamines) was identified by 63.7% of respondents as having been injected with the needles in the Fitpack which comprised about half (49.0%) of all responses to this question. The next most commonly injected drug with the needles in this Fitpack was heroin, noted by 42.7%, and followed by 'other opiates' noted by 10.3% of respondents.

TABLE 36: DRUGS INJECTED WITH THE NEEDLES IN THIS FITPACK

| DRUGS | f | % RESPONSES | % RESPONDENTS |
|------------------------------|-----|----------------|------------------|
| Speed | 321 | 49.0 | 63.7 |
| Heroin | 215 | 32.8 | 42.7 |
| Other opiates (eg. morphine) | 52 | 7.9 | 10.3 |
| Homebake | 21 | 3.1 | 4.1 |
| Tranquillisers | 15 | 2.3 | 3.0 |
| Methadone | 10 | 1.5 | 2.0 |
| LSD (1) | 4 | 0.5 | 0.7 |
| Cocaine (1) | 2 | 0.3 | 0.3 |
| Alcohol | 2 | 0.3 | 0.3 |
| Other (2) | 14 | 2.2 | 2.9 |
| Total | 656 | 100.0 | 130.0 |

There were 5 missing cases

Respondents were invited to choose more than one response

(1) These responses did not appear on questionnaire but were extracted from 'other' responses

(2) Includes 1x 'steroids' 1 x 'Vitamin B12'. The remainder were not specified

These data were reorganised into those respondents who with the needles in this Fitpack had injected stimulants only, those who said both injected both stimulants and depressants had been injected and those who had injected depressants only. Drugs specified as 'other' were recoded where possible into the stimulant or depressant category. As described above, 'depressants' included: heroin, homebake, methadone, other opiates (eg morphine), tranquillisers (including benzodiazepines) and alcohol. Amphetamine and cocaine were the only stimulant drugs injected. Almost half (47.6%, n=237) nominated only stimulants, and just over a third (35.5%, n=177) nominated only depressant drugs. Approximately a sixth (16.9%, n=84) of respondents stated that drugs from both the stimulant and depressant classes were used with the needles in the Fitpack.

Number of people using the needles in this Fitpack

Respondents were asked 'HOW MANY PEOPLE used the needles in this Fitpack?' Responses to this question are presented in Figure 21. Almost half (46.6%, n=234) stated that two people, and 38.0% (n=197) stated between three and five people, used the needles in the Fitpack. In 86.9% of cases the Fitpack was used by more than one person.

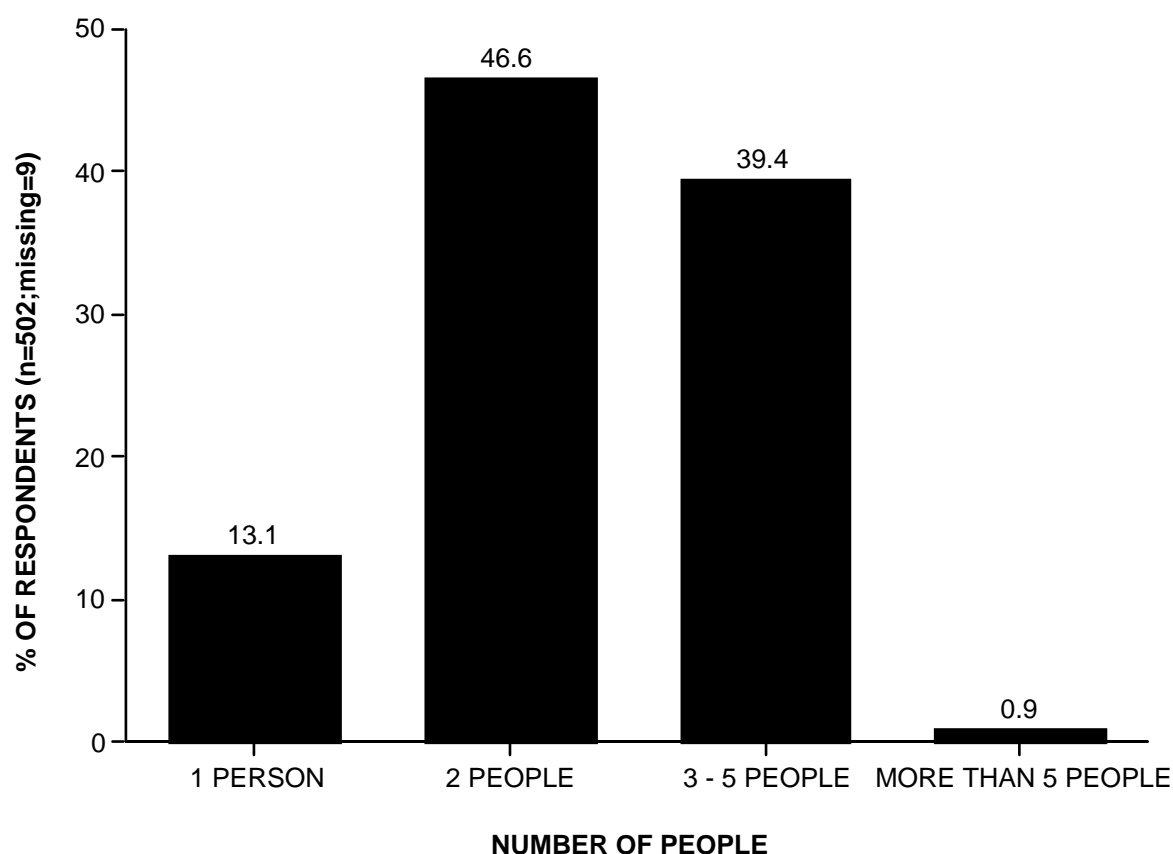


FIGURE 21: NUMBER OF PEOPLE USING THE NEEDLES IN THIS FITPACK

Characteristics of those who said 3 or more people used the needles in the Fitpack

Table 37 (see Appendix I) presents the results of the bivariate comparisons of whether the respondents reported that three or more people used the needles in the Fitpack.

The results of the logistic regression analysis summarised in Table 38 indicate that those respondents who stated that three or more people used the needles in the Fitpack were almost twice as likely as those who did not to have first injected at less than 18 years of age.

TABLE 38: VARIABLES PREDICTING 3 OR MORE PEOPLE HAVING USED THE NEEDLES IN THE FITPACK

| VALUE LABEL | LOG. REG. COEFF. (b) | WALD | df | Sig. (p) | R | ODDS RATIO |
|---------------------------------------|----------------------|---------|----|----------|-------|------------|
| First injected at under 18 years | .6004 | 10.2042 | 1 | .0014 | .1123 | 1.82 |
| Injected stimulants in the past month | .3528 | 2.8001 | 1 | .0943 | .0351 | 1.43 |
| constant | -.2831 | 1.9457 | 1 | .1631 | | |

This analysis included only variables significant on bivariate comparisons

Due to missing data 479 cases were included in the analysis.

Number of injecting sessions this Fitpack was used

Respondents were asked about the number of injecting sessions in which the Fitpack was used. These results are shown in Figure 22. Only a minority (27.6%, n=139) of respondents said that the Fitpack was only used on one injecting session.

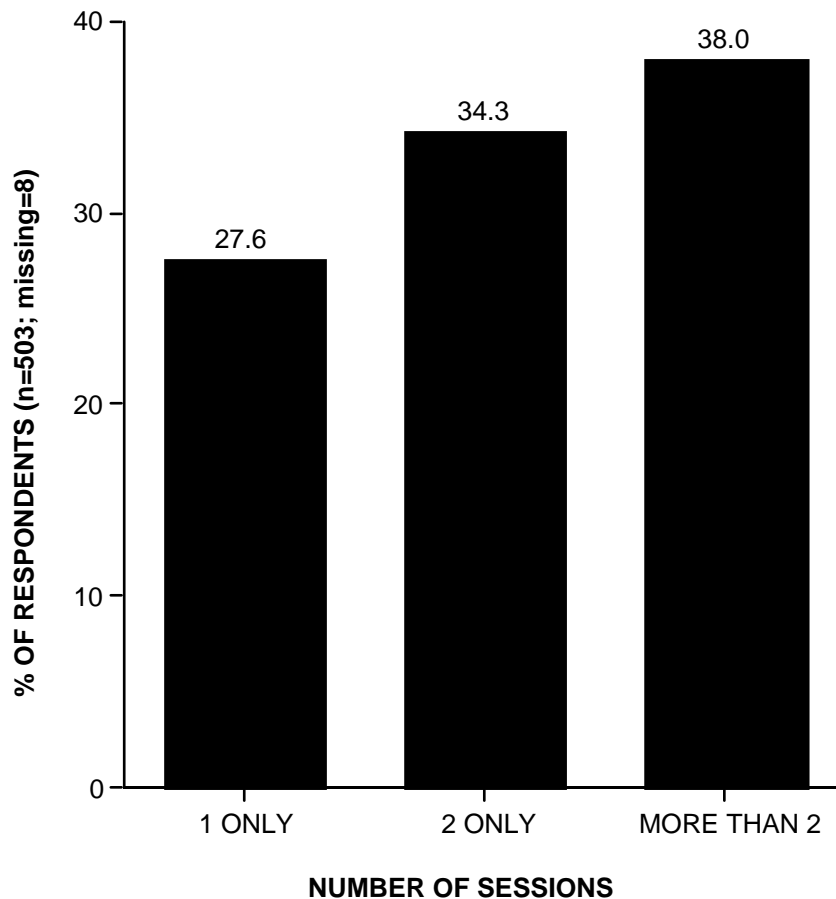


FIGURE 22: NUMBER OF INJECTING SESSIONS THIS FITPACK WAS USED

Characteristics of those who said Fitpack used over 3 or more sessions

Table 39 (see Appendix H) presents the results of the bivariate comparisons of whether the respondents reported that three or more people used the needles in the Fitpack.

The results of the logistic regression analysis summarised in Table 41 indicate that those respondents who stated that the Fitpack had been used over three or more injecting sessions were twice as likely as those who did not to be under 26 years of age. Note that years of injecting was excluded from this analysis due to high correlations with the age variable.

TABLE 40: VARIABLES PREDICTING THIS FITPACK BEING USED OVER 3 OR MORE INJECTING SESSIONS

| VALUE LABEL | LOG. REG. COEFF. (b) | WALD | df | Sig. (p) | R | ODDS RATIO |
|---------------------------------------|----------------------|---------|----|----------|-------|------------|
| Under 26 years of age | .6083 | 12.8317 | 1 | .0003 | .1294 | 1.99 |
| Injected at least daily in past month | .3748 | 3.7978 | 1 | .0513 | .0527 | 1.45 |
| constant | -1.0283 | 42.8971 | 1 | .0000 | | |

This analysis included only variables significant on bivariate comparisons

The variable which indicated the number of positive hepatitis C tests was not included in the analysis to minimise the number of missing cases. This resulted in 490 cases being included in the analysis

Re-use of needles in this Fitpack

Respondents were asked 'Did YOU RE-USE any of the needles in this Fitpack after YOU had used them for the first time?' Two fifths (39.1%, n=199) of the sample stated that they had re-used some of the needles. Those who did were asked to give reasons why. These results are given in Table 41. The most common reasons, were 'economy of re-use / too expensive' given by 26.6% of respondents, and that they did 'not have enough fits for the number of injecting sessions or people' who were using given by 26.5% of those who re-used.

TABLE 41: RESPONDENTS REASONS FOR RE-USING NEEDLES THAT THEY HAD ALREADY USED BEFORE

| REASON | f | % RESPONSES | % RESPONDENTS |
|---------------------------------------|-----|-------------|---------------|
| Economy of re-use / too expensive | 49 | 24.1 | 26.6 |
| Not enough fits for sessions / people | 48 | 24.0 | 26.5 |
| No money for new ones | 26 | 12.9 | 14.3 |
| Twice use is OK | 24 | 11.7 | 12.9 |
| Access problems (eg. after hours) | 23 | 11.4 | 12.6 |
| Convenience / handy | 16 | 7.9 | 8.7 |
| Other | 16 | 7.9 | 8.7 |
| Total | 202 | 100.0 | 110.3 |

There were 16 missing cases. Respondents were invited to choose more than one response

Characteristics of those who said they had reused needles in the Fitpack

Table 42 (see Appendix H) presents the results of the bivariate comparisons of whether or not respondents reported reusing needles in the Fitpack after they had used them for the first time. The variable income was added to this comparison, dichotomised at \$10,000 (see Section 3.6).

The result of the logistic regression analysis summarised in Table 43 indicates that those respondents who reused their own needles in the Fitpack, were more than twice as likely as those who did not to be married or living with their sexual partner, were over 1.5 times as likely to have shared needles in the past month, and were almost twice as likely to have shared other injecting equipment in the past month.

TABLE 43: VARIABLES PREDICTING REUSE OF OWN NEEDLES IN THE FITPACK

| VALUE LABEL | LOG. REG. COEFF. (b) | WALD | df | Sig. (p) | R | ODDS RATIO |
|---|----------------------|---------|----|----------|-------|------------|
| Female | .3650 | 2.8893 | 1 | .0892 | .0380 | 1.44 |
| Married or living with sex partner | .8542 | 17.1829 | 1 | .0000 | .1570 | 2.34 |
| Inject at least daily in the past month | .3879 | 3.4367 | 1 | .0638 | .0483 | 1.47 |
| Shared needles in the past month | .4520 | 4.1824 | 1 | .0408 | .0595 | 1.57 |
| Shared other equip. in the past month | .5580 | 5.9680 | 1 | .0146 | .0803 | 1.75 |
| Been charged with drug offence | .4077 | 3.6370 | 1 | .0565 | .0516 | 1.50 |
| constant | -1.7048 | 46.1899 | 1 | .0000 | | |

This analysis included only variables significant on bivariate comparisons

The variable which indicated the number of positive hepatitis C tests was not included in the analysis to minimise the number of missing cases. This resulted in 447 cases being included in the analysis

Sharing of needles in this Fitpack

Respondents were asked 'Were ANY of the needles in this Fitpack used by MORE THAN ONE PERSON?' One in eight (12.6%, n=64, missing=4) of the sample stated that some of the needles in the Fitpack had been shared. Those who did were asked to give reasons why. Only 46 of the 64 who said that needles had been shared gave a response to this question. These results are given in Table 44. The most common reason, given by 46.6% of this group was that there were not enough fits for the number of injecting sessions or people using.

TABLE 44: REASONS WHY NEEDLES IN THE FITPACK WERE SHARED

| REASON | f | % RESPONSES | % RESPONDENTS |
|---------------------------------------|----|-------------|---------------|
| Not enough fits for sessions / people | 23 | 46.6 | 50.1 |
| Shared with partner | 9 | 17.9 | 19.2 |
| Economy of re-use / too expensive | 4 | 9.0 | 9.7 |
| Access problems (eg. after hours) | 3 | 5.5 | 5.9 |
| Faulty needles | 3 | 5.5 | 5.9 |
| No money for new ones | 3 | 5.5 | 5.9 |
| Other | 5 | 10.1 | 10.8 |
| Total | 50 | 100.0 | 107.5 |

There were 18 missing cases

Respondents were invited to choose more than one response

Characteristics of those who said that needles in the Fitpack had been shared

Table 45 (see Appendix H) presents the results of the bivariate comparisons of whether the respondents reported any of the needles in the Fitpack had been used by more than one person. The variable income was added to this comparison, dichotomised at \$10,000 (see Section 3.6).

The results of the logistic regression analysis summarised in Table 46 indicate that those respondents who stated that at least some of the needles in the Fitpack had been used by more than one person were almost three times as likely to have injected depressants in the past month, and were more than seven times as likely to have shared needles in the past month. No other variables predicted scores on this variable.

TABLE 46: VARIABLES PREDICTING NEEDLES IN THE FITPACK SHARED

| VALUE LABEL | LOG. REG. COEFF. (b) | WALD | df | Sig. (p) | R | ODDS RATIO |
|--|----------------------|----------|----|----------|-------|------------|
| Injected depressants in the past month | 1.0692 | 9.5615 | 1 | .0020 | .1414 | 2.91 |
| Shared needles in past month | 2.0354 | 31.7968 | 1 | .0000 | .2806 | 7.66 |
| constant | -3.2771 | 103.4922 | 1 | .0000 | | |

*This analysis included only variables significant on bivariate comparisons
Due to missing data 499 cases were included in the analysis*

4.7 DRUG INJECTING BEHAVIOUR

Age at first injection

Subjects were asked how old they were, in years, when they first injected a drug. The mean age at which respondents first injected a drug was 19.0 years (sd=5.18, range = 8 to 45 years). Figure 23. shows the age breakdown of the sample. Just over half (52.0%) the sample were between the ages of 16 and 20 when they commenced injecting, a fifth (20.0%) were between 11 and 15 years and a slightly smaller proportion (18.5%) were between 21 and 25 years of age.

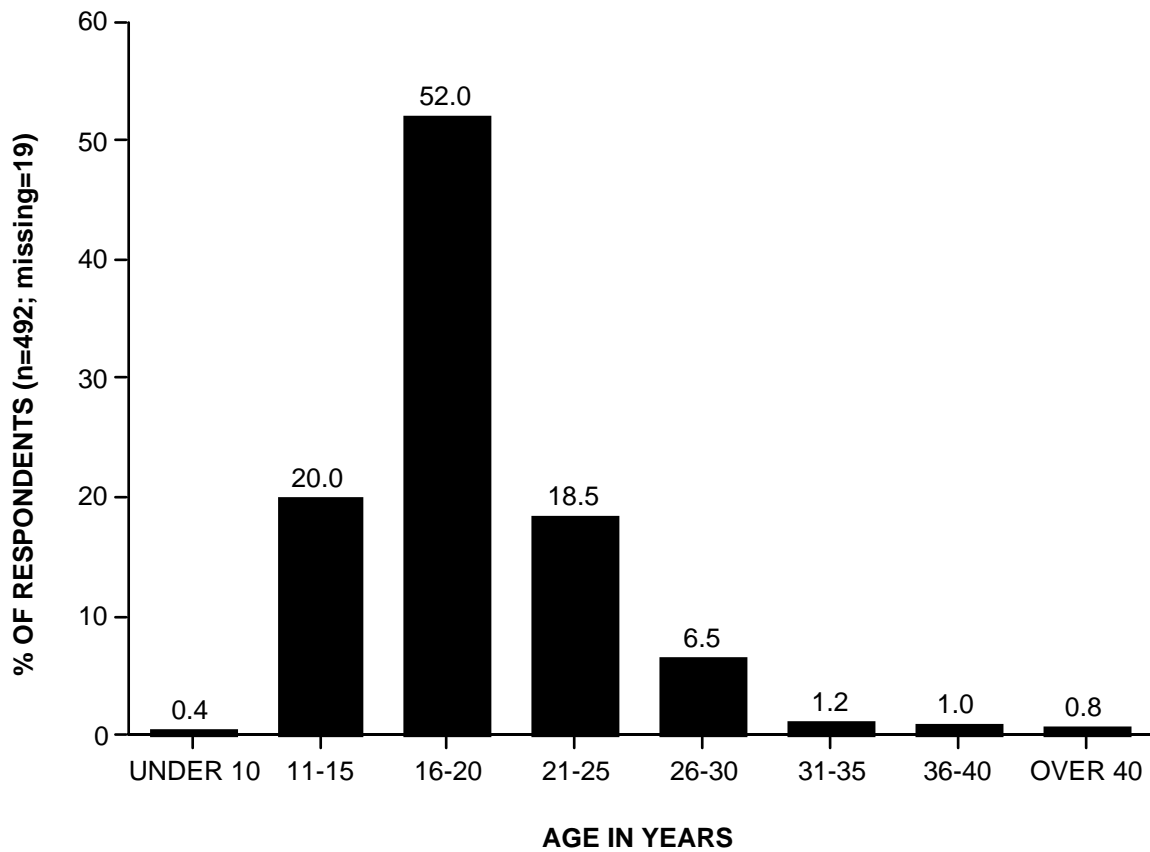


FIGURE 23: AGE AT FIRST INJECTION

Years of injecting

The number of years each respondent had been injecting was calculated by subtracting their age at first injection from their current age. The mean number of years the sample had been injecting was 7.1 years (sd=5.96, range = 0 to 29 years). Years of injecting in the present study was compared with the Perth ASHIDU (Bevan, Loxley and Carruthers, 1996) sample in Figure 24. This comparison was significant (Chi Square=71.1145, df =3, p=.0000). The number of years respondents in the present study had been injecting was less than that in the ASHIDU sample.

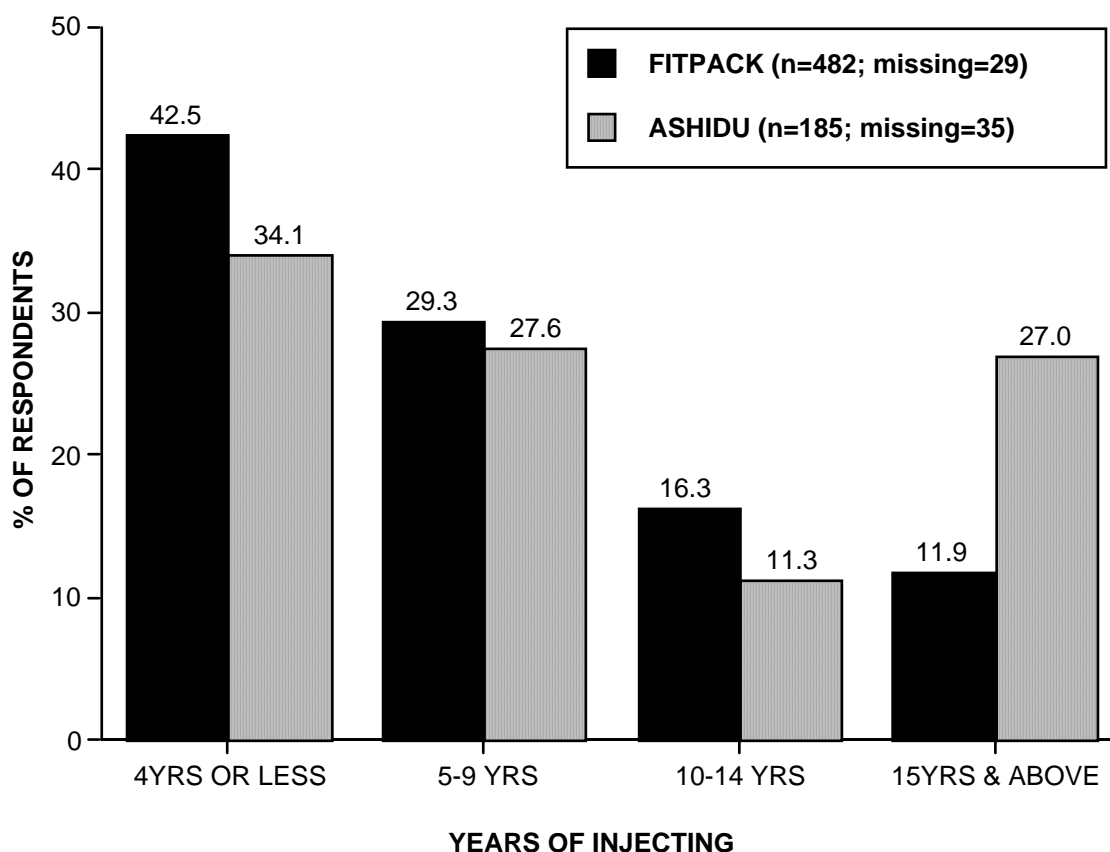


FIGURE 24: YEARS OF INJECTING FITPACK v PERTH ASHIDU SAMPLE

Frequency of injecting

Respondents were asked how often that they had injected a drug in the past month. Responses are given in Table 47. These show that the majority (61.2%) of respondents had injected less frequently than daily over the previous month.

TABLE 47: FREQUENCY OF INJECTING IN THE PAST MONTH

| REASON | f | % RESPONDENTS | CUMULATIVE % |
|---------------------------------|-----|------------------|-----------------|
| Have not injected in past month | 16 | 3.1 | 3.1 |
| Less than once a week | 51 | 10.0 | 13.1 |
| Once a week | 56 | 11.1 | 24.2 |
| More than weekly but not daily | 188 | 37.1 | 61.2 |
| Once a day | 75 | 14.8 | 76.0 |
| 2 - 3 times a day | 85 | 16.7 | 92.7 |
| More than 3 times a day | 37 | 7.3 | 100.0 |
| Total | 509 | 100.0 | - |

There were 3 missing cases

Characteristics of those who injected at least daily over the past month

Table 48 (see Appendix H) presents the results of the bivariate comparisons of whether the respondents injected at least once per day over the past month. The variable income was added to this comparison, dichotomised at \$10,000 (see Section 3.6).

The results of the logistic regression analysis summarised in Table 49 indicate that those respondents who injected at least daily over the past month were more than twice as likely as those who did not to be unemployed and were more than 2.5 times as likely to have said that depressants were injected with the needles in the Fitpack, were more than 1.5 times as likely to have shared needles in the past month, and were twice as likely to have had prior contact with a specialist drug treatment agency.

TABLE 49: VARIABLES PREDICTING INJECTING AT LEAST DAILY OVER THE PAST MONTH

| VALUE LABEL | LOG. REG. COEFF. (b) | WALD | df | Sig. (p) | R | ODDS RATIO |
|---|----------------------|---------|----|----------|--------|------------|
| Under 26 years of age | .3811 | 3.1710 | 1 | .0750 | .0425 | 1.46 |
| Are unemployed | .7959 | 14.4125 | 1 | .0001 | .1386 | 2.22 |
| Stimulants injected with this Fitpack | -.4871 | 3.4072 | 1 | .0649 | -.0466 | .61 |
| Depressants injected with this Fitpack | .9559 | 13.3399 | 1 | .0003 | .1322 | 2.60 |
| Shared needles in past month | .5210 | 6.0299 | 1 | .0141 | .0788 | 1.68 |
| Prior contact with specialist drug agency | .6935 | 9.3346 | 1 | .0022 | .1063 | 2.00 |
| constant | -.7180 | 4.2440 | 1 | .0394 | | |

*This analysis included only variables significant on bivariate comparisons
Due to missing data 472 cases were included in the analysis*

Drugs injected in past month

Subjects indicated what drugs they had injected in the past month. Table 50 shows that the drug that was injected by most respondents (72.9%) was speed (methamphetamine) followed by heroin (50.8%) and other opiates (excluding heroin, methadone, homebake) (12.8%).

TABLE 50: DRUGS INJECTED IN THE PAST MONTH

| DRUGS | f | % | |
|------------------------------|------------|--------------|--------------|
| | | RESPONSES | RESPONDENTS |
| Speed | 369 | 45.8 | 72.9 |
| Heroin | 257 | 31.9 | 50.8 |
| Other opiates (eg. morphine) | 65 | 8.1 | 12.8 |
| Homebake | 40 | 5.0 | 7.9 |
| Tranquillisers | 27 | 3.4 | 5.4 |
| Ecstasy (1) | 19 | 2.3 | 3.7 |
| Methadone | 15 | 1.9 | 3.0 |
| LSD (1) | 4 | 0.4 | 0.7 |
| Cocaine (1) | 3 | 0.3 | 0.5 |
| Alcohol | 1 | 0.1 | 0.2 |
| Other (2) | 6 | 0.8 | 1.3 |
| Total | 806 | 100.0 | 159.2 |

There were 3 missing cases

Respondents were invited to choose more than one response

(1) These responses did not appear on questionnaire but were extracted from 'other' responses

(2) Includes 1x 'ketamine 1 x 'Vitamin B12'. The remainder were not specified

These data were reorganised into those respondents who over the past month had injected stimulants only, those who had injected both stimulants and depressants and those who had injected depressants only. Drugs specified as 'other' were recoded where possible into the stimulant or depressant category. As described above, 'depressants' included: heroin, homebake, methadone, other opiates (eg morphine), tranquillisers (including benzodiazepines) and alcohol. Over two fifths (42.6%, n=215) of respondents nominated only stimulants, and just under a third (30.7%, n=154) injected drugs from both the stimulant and depressant classes. Just over a quarter (26.7%, n=135) of respondents stated that over the past month they had only injected depressant drugs.

Characteristics of those who injected different drug types over the past month

Table 51 (see Appendix H) presents the results of the 3 way comparisons of the type of drugs (stimulants only, depressants only, or both stimulants and depressants) injected over the past month. The variable income was added to this comparison, dichotomised at \$10,000 (see Section 3.6). Note the variables injected stimulants or depressants 'with the needles from the Fitpack' or 'over the last month' have not been included as predictors in this analysis.

insert figure 25 here.

Table 51 suggests that the three groups, injected stimulants only, injected both stimulants and depressants, and injected depressants only in the past month, significantly differed on seven of the key variables. These differences are presented in Figure 25.

Respondents who only injected stimulants in the past month were more likely than depressant only users to be under 26 years of age but were no more likely to be under 26 than those who used both stimulants and depressants. Both stimulant only and depressant only injectors were less likely to be under 18 years of age when they first injected than those who had injected both drugs in the past month. Stimulant only injectors were more likely to have been injecting less than 10 years. Stimulant only injectors were less likely to have been tested hepatitis C positive, had prior contact with a specialist drug treatment agency, injected at least daily, or have a prior drug charge.

Respondents who only injected depressants in the past month were less likely than the other two groups to be under 26 years of age or to have been injecting for less than 10 years but were more likely to be hepatitis C positive. They were no more likely than those who injected both stimulants and depressants in the past month to have had prior contact with a specialist drug treatment agency, to have injected at least daily in the past month or to have had a prior drug charge.

Where usually injected

Respondents were asked 'Where do you USUALLY inject?' Although they were prompted to only give one response, a number gave more than one. The results are presented in Table 52. The vast majority (80.7%) of respondents reported that they usually injected in their own home, just over a quarter (29.4%) in a friend's home and just over one in five (22.1%) identified a car as one place where they usually injected.

TABLE 52: WHERE USUALLY INJECT DRUGS

| WHERE INJECT | f | % RESPONSES | % RESPONDENTS |
|-----------------------|-----|----------------|------------------|
| Own home | 410 | 51.7 | 80.7 |
| Friend's home | 150 | 18.9 | 29.4 |
| Car | 112 | 14.2 | 22.1 |
| Park / beach / street | 41 | 5.1 | 8.0 |
| Public toilet | 29 | 3.6 | 5.7 |
| Pub / club | 21 | 2.7 | 4.1 |
| Can't say | 18 | 2.3 | 3.6 |
| Other | 12 | 1.5 | 2.4 |
| Total | 793 | 100.0 | 156.0 |

There were 2 missing cases

Some respondents chose more than one response

Characteristics of those who responded that they injected 'outside'

Responses to the previous question were recoded such that those who responded with either car, park / beach / street, or pub / club were coded as injecting 'outside' of a residence, whilst those

who did not were coded as 'inside'. Table 53 (see Appendix H) presents the results of the bivariate comparisons of whether the respondents nominated places outside a residence when they were asked where they usually inject. The variable income was added to this comparison, dichotomised at \$10,000 (see Section 3.6).

The results of the logistic regression analysis summarised in Table 54 indicates that those respondents who injected 'outside' were more than 3.5 times as likely as those who did not to have said that depressants were injected with needles in the Fitpack, and were more than 2.5 times as likely to have shared needles in the past month.

TABLE 54: VARIABLES PREDICTING INJECTING 'OUTSIDE'

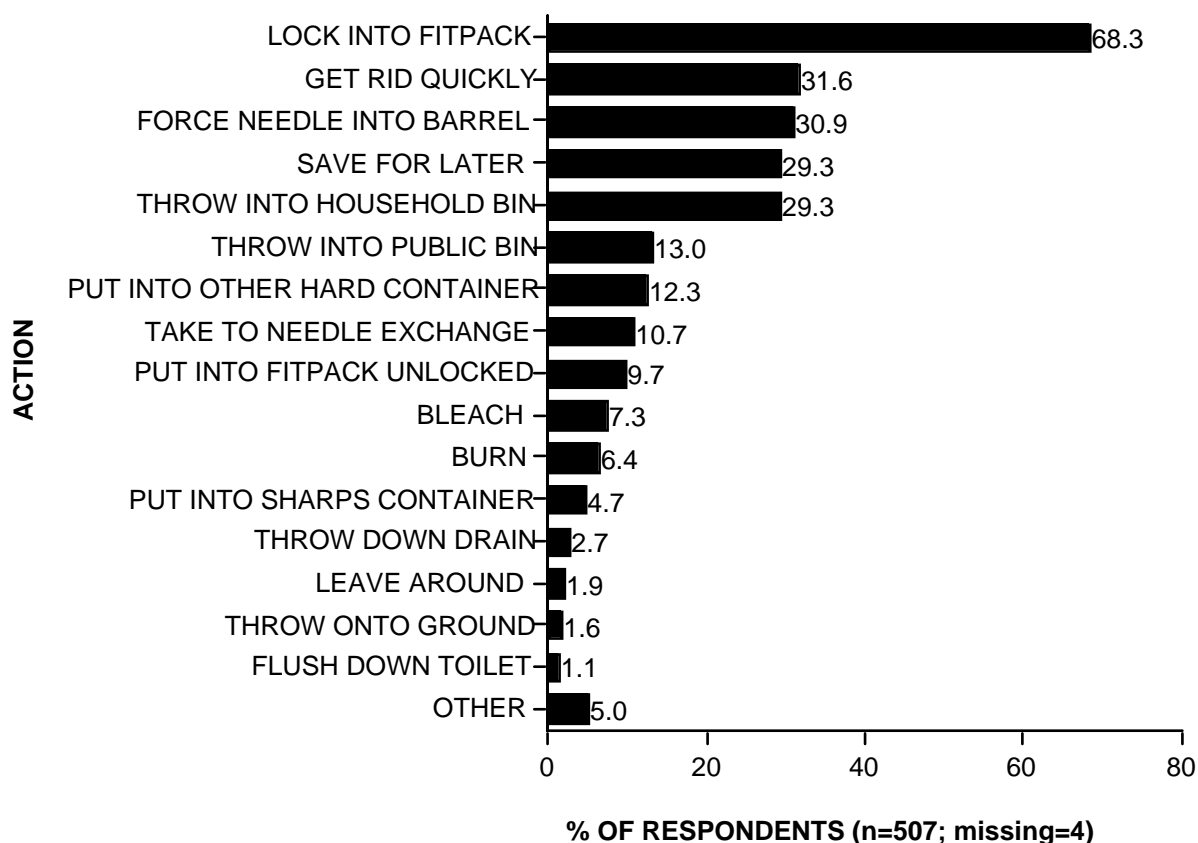
| VALUE LABEL | LOG. REG. COEFF. (b) | WALD | df | Sig. (p) | R | ODDS RATIO |
|--|----------------------|----------|----|----------|-------|------------|
| Depressants injected with this Fitpack | 1.2593 | 29.2957 | 1 | .0000 | .2173 | 3.52 |
| Shared needles in past month | .9905 | 20.8188 | 1 | .0000 | .1804 | 2.69 |
| constant | -2.3273 | 102.2226 | 1 | .0000 | | |

This analysis included only variables significant on bivariate comparisons

There was no missing data so 505 cases were included in the analysis

What is done with needles after use

Subjects were asked 'What do you usually do with the fits that you buy in a Fitpack after you have had a hit?' Figure 26 shows that most respondents disposed of their used fits by locking them into the Fitpack (68.3%, n=346). Just under a third got rid of the used fits quickly (31.6%, n=160), forced the needle into the barrel (30.9%, n=156), saved their used fits for reuse later (29.3%, n=149) or threw them into the household rubbish bin (29.3%, n=149). It was difficult to determine the effectiveness of needle disposal practices as respondents were able to choose a number of responses (eg. 'force needle into barrel'; 'put into hard container'; 'throw into household bin') which produced a large number of possible combinations in answer to the question as to how they usually disposed of their needles.



Respondents were asked to tick ALL options which applied

FIGURE 26: WHAT IS DONE WITH NEEDLES AFTER USE

Times in past month used needle after someone else

Respondents were asked "How many times IN THE PAST MONTH have YOU used a needle AFTER SOMEONE ELSE (including your lover) has already used it?" In Table 55 it can be seen that just under three-quarters (72.3%) of respondents reported that over the previous month they did not inject with a needle already used by someone else.

TABLE 55: TIMES IN PAST MONTH USED NEEDLE AFTER SOMEONE ELSE

| NUMBER TIMES | f | % RESPONDENTS |
|--------------------|-----|------------------|
| Never | 367 | 72.3 |
| Once | 55 | 10.9 |
| Two times | 35 | 7.0 |
| 3 - 5 times | 27 | 5.4 |
| 6 - 10 times | 7 | 1.3 |
| More than 10 times | 16 | 3.1 |
| Total | 507 | 100.0 |

There were 4 missing cases

Number of people who used needle before respondent in past month

Respondents were asked 'What is the total number of people (including your lover) who have used a needle before you IN THE PAST MONTH?' These responses were transformed into the response categories shown in Table 56. Just under three-quarters (72.9%) of respondents reported that over the previous month no-one used a needle before them, with 15.6% saying that only one person did so.

TABLE 56: NUMBER OF PEOPLE WHO USED NEEDLE BEFORE RESPONDENT IN PAST MONTH

| NUMBER PEOPLE | f | % RESPONDENTS |
|---------------------|-----|------------------|
| None | 332 | 72.9 |
| One person | 71 | 15.6 |
| Two people | 23 | 5.0 |
| 3 - 5 people | 17 | 3.7 |
| 6 - 10 people | 8 | 1.9 |
| More than 10 people | 6 | 1.0 |
| Total | 457 | 100.0 |

There were 55 missing cases

Due to data weighting sum of frequencies does not equal total value listed

Number of times in past month bleach used

Respondents were asked "How many times IN THE PAST MONTH has bleach been used to try to clean needles that other people (including your lover) have used BEFORE YOU re-used them?". Unfortunately because of the way that the question was laid out, response categories may have been misinterpreted by some respondents [¹]. Consequently some of the figures in the second and third columns of Table 57 are estimated and are presented in brackets. Based on these figures the estimated percentage of those who did re-use a needle who fell into each of the response categories are also given in Table 58. This suggests that over 60% of those who did use a needle after someone else in the past month used bleach to try to clean the needle 'rarely' or 'never'.

[¹] The response 'haven't re-used needle' was the last on the list. According to Table 55, 367 respondents stated that in the past month they never used a needle after someone else, yet in this item only 155 (30.9%) stated that they 'hadn't re-used a needle'. On the contrary, 236 respondents answered 'never' to this question which suggests that a number of these were answering that they 'never' used a needle after someone else over this period. In order to account for this problem we have conservatively assumed that the 5 additional missing cases (to the 4 listed in Table 56) were to be found in the 'hadn't re-used a needle' category, producing a frequency here of 367 - 5 = 362 (72.2%) which leaves 29 (5.7%) in the 'never (used bleach to clean when shared)' category.

TABLE 57: NUMBER TIMES IN PAST MONTH BLEACH USED TO TRY TO CLEAN NEEDLES BEFORE RE-USE

| NUMBER TIMES | f | % RESPONDENTS | % SHARERS WHO BLEACHED |
|------------------------|-----------|------------------|---------------------------|
| Every time | 34 | 6.8 | (24.5%) |
| Often | 9 | 1.7 | (6.4%) |
| Sometimes | 26 | 5.3 | (18.7%) |
| Rarely | 41 | 8.1 | (29.5%) |
| Never | 236 (29) | 47.1 (5.7) | (20.9%) |
| Haven't re-used needle | 155 (362) | 30.9 (72.2) | N/A |
| Total | 501 | 100.0 | 100.0 |

There were 9 missing cases

Figures in brackets are estimated. See footnote text for explanation.

Times in past month someone else used needle after respondent

Respondents were asked "How many times IN THE PAST MONTH has SOMEONE ELSE (including your lover) used a needle AFTER YOU have used it?" In Table 58 it can be seen that just over two-thirds (68.4%) of respondents reported that over the previous month it was never the case that someone else used a needle after the respondent had already used it.

TABLE 58: TIMES IN PAST MONTH SOMEONE ELSE USED NEEDLE AFTER RESPONDENT

| NUMBER TIMES | f | % RESPONDENTS |
|--------------------|-----|------------------|
| Never | 341 | 68.4 |
| Once | 51 | 10.2 |
| Two times | 39 | 7.8 |
| 3 - 5 times | 40 | 8.0 |
| 6 - 10 times | 10 | 1.9 |
| More than 10 times | 19 | 3.8 |
| Total | 499 | 100.0 |

There were 12 missing cases

Less than two thirds (60.0%) of those who passed a needle on in the last month had received a used needle from someone else, yet over two thirds (67.5%) of those who had received a needle in the past month reported that they had also passed a needle that they had used on to someone else for use. This difference was significant ($\text{Chi-square}_{\text{continuity}} = 119.01072$, $\text{df}=1$, $p=.0000$).

Characteristics of those who shared a needle in the past month

The majority (60.1%, $n=307$) of respondents indicated that they neither passed on, nor received, a needle in the past month. Table 59 (see Appendix H) presents the results of the bivariate comparisons of whether the respondents either shared a needle (passed on or received) or did not

(neither passed on nor received) a needle in the past month. The variable income was added to this comparison, dichotomised at \$10,000 (see Section 3.6).

The results of the logistic regression analysis summarised in Table 60. indicates that those respondents who shared needles in the past month, were almost twice as likely as those who did not to be under 26 years of age, were almost twice as likely to injected at least daily over the past month, and were almost six times as likely to have shared other equipment such as swabs, spoons, water, etc.

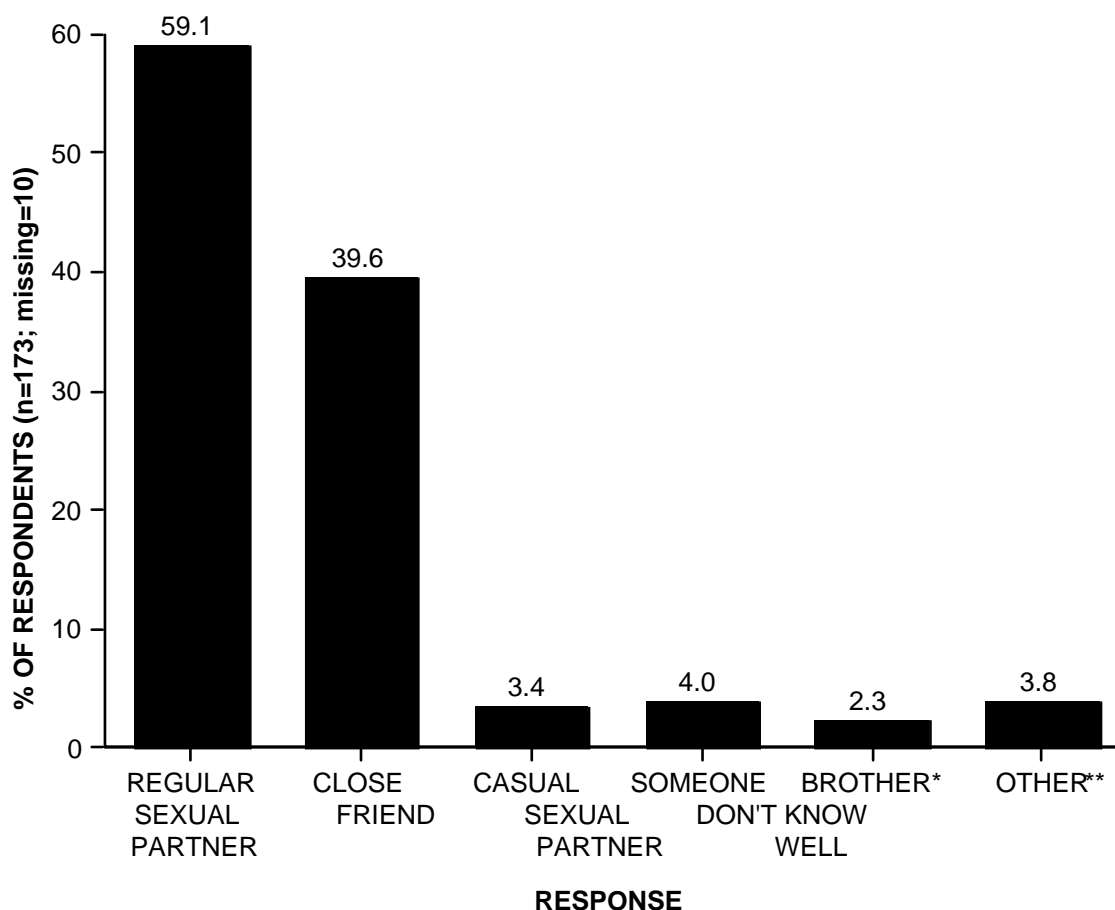
TABLE 60: VARIABLES PREDICTING HAVING SHARED A NEEDLE IN PAST MONTH

| VALUE LABEL | LOG. REG. COEFF. (b) | WALD | df | Sig. (p) | R | ODDS RATIO |
|-------------------------------------|----------------------|---------|----|----------|-------|------------|
| Under 26 years of age | .6788 | 9.7626 | 1 | .0018 | .1121 | 1.97 |
| Inject at least daily in past month | .6239 | 8.2327 | 1 | .0041 | .1004 | 1.87 |
| Shared other equip. in past month | 1.7836 | 58.6467 | 1 | .0000 | .3028 | 5.95 |
| constant | .4420 | 6.4105 | 1 | .0113 | | |

*This analysis included only variables significant on bivariate comparisons
Due to missing data 449 cases were included in the analysis.*

People shared a needle with in the past month

Respondents were asked to indicate which of a list of people they had shared a needle with in the past month. The majority (62.0%, n=317) of respondents stated that they did not share with anyone in the past month. The results for the 173 respondents who stated they did share with someone are presented in Figure 27. Just under six in ten (59.1%, n=102) of those who had shared did so with their regular sexual partner, and approximately two in five (39.6%, n=69) did so with a close friend.



* This response did not appear on questionnaire but was extracted from 'other' responses. 'Brother' is a term used by some people of Aboriginal or Torres Strait Islander decent to refer to males of their ethnic group. Of the six respondents who gave this response to this question only one identified themselves as being an Aboriginal or Torres Strait Islander.

** Includes 1x 'associate' 1x 'someone I trust'. The remainder were not specified

FIGURE 27: WHO SHARED NEEDLES OVER THE PAST MONTH (IF SHARED)

Times shared other equipment in the past month

Respondents were asked 'How many times IN THE PAST MONTH have you shared other injecting equipment (eg spoons, filters, water, tourniquet) with SOMEONE ELSE (including your lover)?' Table 61 shows that over half (58.5%) the sample reported that they did this over the past month, with just under a quarter (23.9%) saying that they did it more than 10 times over this period.

TABLE 61: TIMES IN PAST MONTH RESPONDENT SHARED OTHER INJECTING EQUIPMENT

| NUMBER TIMES | f | % RESPONDENTS |
|--------------------|-----|------------------|
| Never | 212 | 41.5 |
| Once | 30 | 5.8 |
| Two times | 33 | 6.6 |
| 3 - 5 times | 79 | 15.5 |
| 6 - 10 times | 34 | 6.8 |
| More than 10 times | 122 | 23.9 |
| Total | 510 | 100.0 |

There was 1 missing case

Characteristics of those who shared other injecting equipment in the past month

Table 62 (see Appendix H) presents the results of the bivariate comparisons of whether the respondents shared other injecting equipment in the past month. The variable income was added to this comparison, dichotomised at \$10,000 (see Section 3.6).

The results of the logistic regression analysis summarised in Table 63 indicates that those respondents who shared other injecting equipment in the past month, were more than four times as likely to have an income of under \$10,000 in the previous year, and were over four times as likely to have shared needles in the past month.

TABLE 63: VARIABLES PREDICTING HAVING SHARED OTHER EQUIPMENT IN PAST MONTH

| VALUE LABEL | LOG. REG. COEFF. (b) | WALD | df | Sig. (p) | R | ODDS RATIO |
|--------------------------------------|-------------------------|---------|----|----------|-------|---------------|
| Past years income less than \$10,000 | 1.5157 | 17.9832 | 1 | .0000 | .1881 | 4.55 |
| Shared needles in past month | 1.4367 | 29.2224 | 1 | .0000 | .2455 | 4.21 |
| constant | 1.2655 | 13.6320 | 1 | .0002 | | |

*This analysis included only variables significant on bivariate comparisons
Due to missing data 345 cases were included in the analysis.*

Comparison of HRBS scores Fitpack V Perth ASHIDU

As described above, individual item comparisons with the Perth data from the ASHIDU study (Bevan, Loxley and Carruthers, 1996) are presented in Table 64 for the five HRBS Drug Use Sub Scale questions which were modified for self administration. Non parametric Chi Square

was used and where expected frequencies of less than 5 cells were encountered cells were collapsed so as not to violate the assumptions of the test (Siegel & Castellan, 1988).

TABLE 64: COMPARISON OF HRBS SCORES FITPACK V PERTH ASHIDU

| | % RESPONDENTS | | |
|---|---------------|-----------|-------------|
| | Fitpack | ASHIDU(1) | Sig. (p)(2) |
| Number of times injected in past month | | | |
| Have not injected in past month | 3.1 | 11.8 | .0000 |
| Once a week or less (3) | 21.1 | 31.8 | |
| More than weekly but not daily | 37.1 | 41.4 | |
| Once a day | 14.8 | 7.7 | |
| 2 - 3 times a day | 16.7 | 5.9 | |
| More than 3 times a day | 7.3 | 1.4 | |
| Number of times respondent used needle after someone else in the past month | | | |
| Never | 72.3 | 84.8 | .0000 |
| Once | 10.9 | 6.4 | |
| Two times | 7.0 | 2.3 | |
| 3 - 5 times | 5.4 | 4.1 | |
| 6 - 10 times | 1.3 | 0.9 | |
| More than 10 times | 3.1 | 1.4 | |
| Number of people who used a needle before respondent in the past month | | | |
| None | 72.9 | 84.5 | .0000 |
| One person | 15.6 | 14.2 | |
| Two people | 5.0 | 1.4 | |
| 3 - 5 people | 3.7 | 0.0 | |
| 6 - 10 people | 1.9 | 0.0 | |
| More than 10 people | 1.0 | 0.0 | |
| How often, in the past month, cleaned needles with bleach before re-using them | | | |
| Haven't re-used needle (4) | 72.2 | 84.1 | .0000 |
| Every time | 6.8 | 6.8 | |
| Often | 1.7 | 0.5 | |
| Sometimes | 5.3 | 0.5 | |
| Rarely | 8.1 | 0.0 | |
| Never (4) | 5.7 | 8.2 | |
| Number of times, in the past month, someone used a needle after respondent | | | |
| Never | 68.4 | 85.7 | .0000 |
| Once | 10.2 | 5.5 | |
| Two times | 7.8 | 4.1 | |
| 3 - 5 times | 8.0 | 4.1 | |
| 6 - 10 times | 1.9 | 0.5 | |
| More than 10 times | 3.8 | 0.0 | |

1 ASHIDU data is in 'valid percent' (excludes missing data)

2 Test is non parametric Chi Square. Where expected frequency less than 5 cells were collapsed.

3 Collapses two response categories in Fitpack

4 Estimated values as described above .

Subjects in the present study reported that they had injected, received a used needle, passed on a used needle, more frequently than those in the ASHIDU study (Bevan, Loxley and Carruthers, 1996). They were also more likely to report that they used a needle after a greater number of people in the past month.

Times shared needles in past year as no money for new Fitpack

Respondents were asked 'How many times IN THE PAST 12 MONTHS have you SHARED a needle because you did NOT have ENOUGH MONEY to buy a Fitpack?' Table 65 shows that just over a third (35.6%) of the sample stated that at least once in the previous 12 months they had shared a needle because they did not have enough money to buy a new Fitpack.

TABLE 65: TIMES IN PAST 12 MONTHS RESPONDENT HAS SHARED A NEEDLE BECAUSE THEY DIDN'T HAVE ENOUGH MONEY TO BUY A FITPACK

| NUMBER TIMES | f | % RESPONDENTS |
|--------------------|-----|------------------|
| Never | 325 | 64.4 |
| Once | 39 | 7.7 |
| Two times | 38 | 7.5 |
| 3 - 5 times | 58 | 11.6 |
| 6 - 10 times | 13 | 2.6 |
| More than 10 times | 31 | 6.2 |
| Total | 505 | 100.0 |

There were 6 missing cases

Characteristics of those who shared needles in past year as no money for new Fitpack

Table 66 (see Appendix H) presents the results of the bivariate comparisons of whether the respondents reported had shared needles at least once in the past year because they didn't have enough money to buy a new Fitpack. The variable income was added to this comparison, dichotomised at \$10,000 (see Section 3.6).

The results of the logistic regression analysis summarised in Table 67 indicate that those respondents who stated that at least once in the past 12 months they had shared a needle because they did not have enough money to buy a new Fitpack were more than eight times as likely to have shared needles in the past month, and were approximately three times as likely to have shared other injecting equipment in the past month.

TABLE 67: VARIABLES PREDICTING SHARED NEEDLES AT LEAST ONCE IN PAST 12 MONTH AS NO MONEY FOR NEW FITPACK

| VALUE LABEL | LOG. REG. COEFF. (b) | WALD | df | Sig. (p) | R | ODDS RATIO |
|--------------------------------------|-------------------------|---------|----|----------|-------|---------------|
| Shared needles in past month | 2.1602 | 83.9608 | 1 | .0000 | .3584 | 8.67 |
| Shared other equip. in past month | 1.0907 | 17.0247 | 1 | .0000 | .1535 | 2.98 |

| | | | | |
|----------|---------|---------|---|-------|
| constant | -1.2995 | 41.1815 | 1 | .0000 |
|----------|---------|---------|---|-------|

*This analysis included only variables significant on bivariate comparisons
Due to missing data 483 cases were included in the analysis.*

4.8 KNOWLEDGE REGARDING BLOOD-BORNE VIRAL INFECTIONS

What it means to be positive on a HIV test

Subjects were asked 'What do you think it means if you show up POSITIVE on a HIV test?' Results are shown in Table 68. Whilst the question did not specify that it referred to an antibody test, this is the most common test procedure for HIV. The majority of respondents (65.3%) understood a positive result to mean that 'you have HIV', whilst 15.3% believed it meant that 'you have been exposed to HIV but may not have it'. Only 8.5% of respondents stated that a positive HIV test result meant that 'you had AIDS'.

TABLE 68: RESPONDENT'S UNDERSTANDING OF WHAT IT MEANS TO BE POSITIVE ON A HIV TEST

| MEANING | f | % RESPONDENTS |
|--|-----|------------------|
| You have HIV | 323 | 65.3 |
| You have been exposed to HIV but may not have it | 76 | 15.3 |
| You have AIDS | 42 | 8.5 |
| You don't have HIV | 17 | 3.5 |
| Don't know | 30 | 6.1 |
| Other (1) | 6 | 1.2 |
| Total | 494 | 100.0 |

There were 16 missing cases

(1) Included statements which indicated that a HIV positive test result was a death sentence

Characteristics of those who understood the meaning of a positive HIV test

The above results were dichotomised such that the first response listed in Table 68 was rated as correct and all others were rated as incorrect. Table 69 (see Appendix H) presents the results of the bivariate comparisons of whether the respondents correct or incorrect in their understanding of the meaning of a positive HIV test result. None of these variables were significant on bivariate comparisons.

Beliefs re effectiveness of bleach at killing the hepatitis C virus

Subjects were asked 'How effective do you think bleach is at killing the hepatitis C virus when needles are shared?' Results are shown in Figure 28. The most frequent (36.9%, n=185) response was that it was 'probably better than nothing', 30.9% (n=155) stated they 'did not know' and 14.5% (n=72) believed that it was 'not effective at all'.

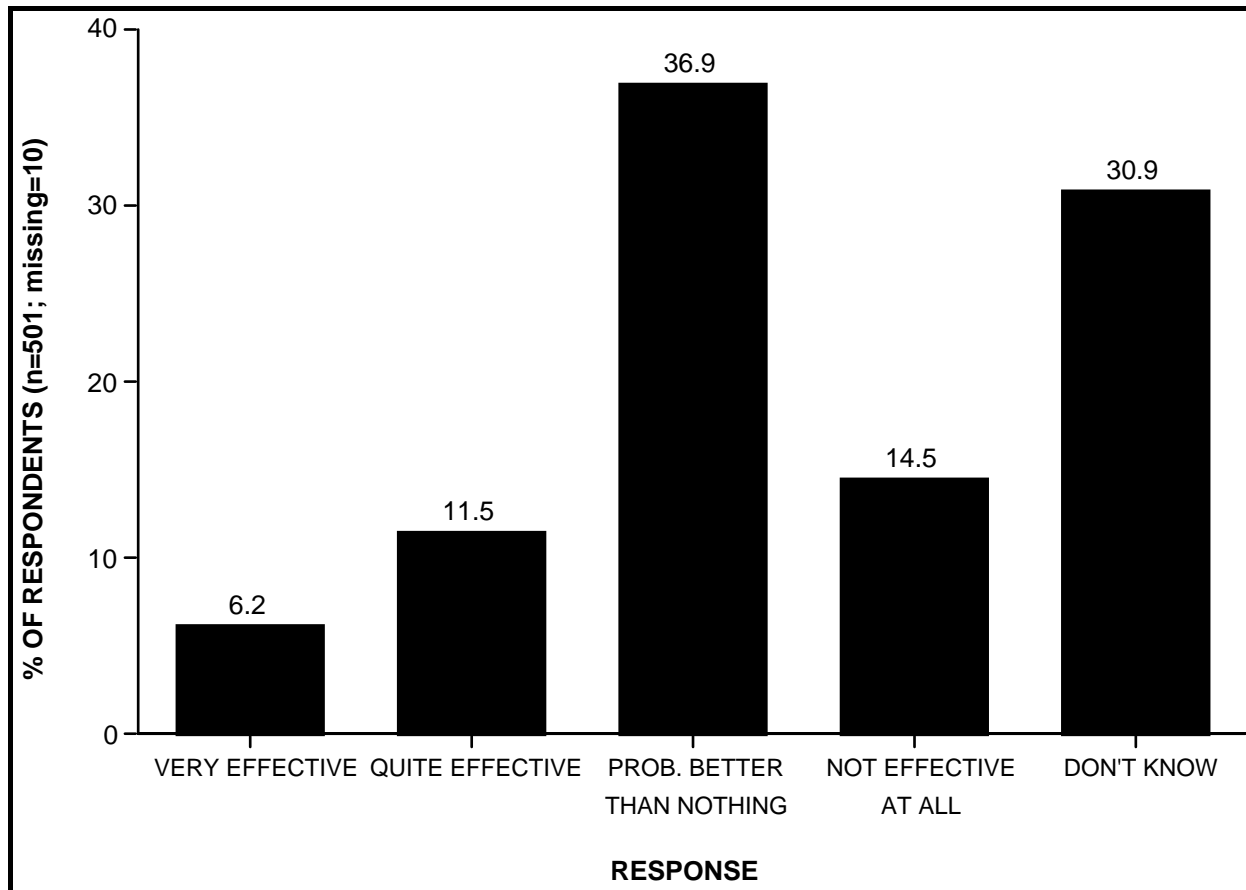


FIGURE 28: BELIEFS REGARDING EFFECTIVENESS OF BLEACH AT KILLING THE HEPATITIS C VIRUS

Characteristics of those who understood the effectiveness of bleach at killing the hepatitis C virus

Given the state of scientific knowledge on this issue the above results were dichotomised such that 'probably better than nothing' and 'not effective at all' were rated as correct and others were rated as incorrect. Table 70 (see Appendix H) presents the results of the bivariate comparisons of whether the respondents correct or incorrect on this issue.

The results of the logistic regression analysis summarised in Table 71 indicates that those respondents who gave a 'correct' response as described above, were over 1.5 as likely as those who gave an 'incorrect' response to have been injecting for 10 or more years, to have injected depressants in the past month, and to have injected at least daily in the past month.

TABLE 71: VARIABLES PREDICTING 'CORRECT' ANSWERS TO THE EFFECTIVENESS OF BLEACH AT KILLING THE HEPATITIS C VIRUS

| VALUE LABEL | LOG. REG. COEFF. (b) | WALD | df | Sig. (p) | R | ODDS RATIO |
|---------------------------------------|----------------------|--------|----|----------|-------|------------|
| Injecting for 10 or more years | .4817 | 4.5853 | 1 | .0322 | .0628 | 1.62 |
| Injected depressants in past month | .4280 | 4.3398 | 1 | .0372 | .0597 | 1.53 |
| Injected at least daily in past month | .4429 | 4.9074 | 1 | .0267 | .0666 | 1.56 |
| constant | -.4863 | 9.0538 | 1 | .0026 | | |

*This analysis included only variables significant on bivariate comparisons
Due to missing data 474 cases were included in the analysis.*

4.9 SEXUAL BEHAVIOUR

Number of people had vaginal / anal intercourse with IN THE PAST MONTH

Respondents were asked "How many people have you had vaginal or anal intercourse with IN THE PAST MONTH?" Figure 29 indicates that a large majority of respondents (58.1%) had sexual intercourse with only one person in the past month. About a quarter of respondents (24.7%) had not engaged in vaginal / anal sexual intercourse in that period of time.

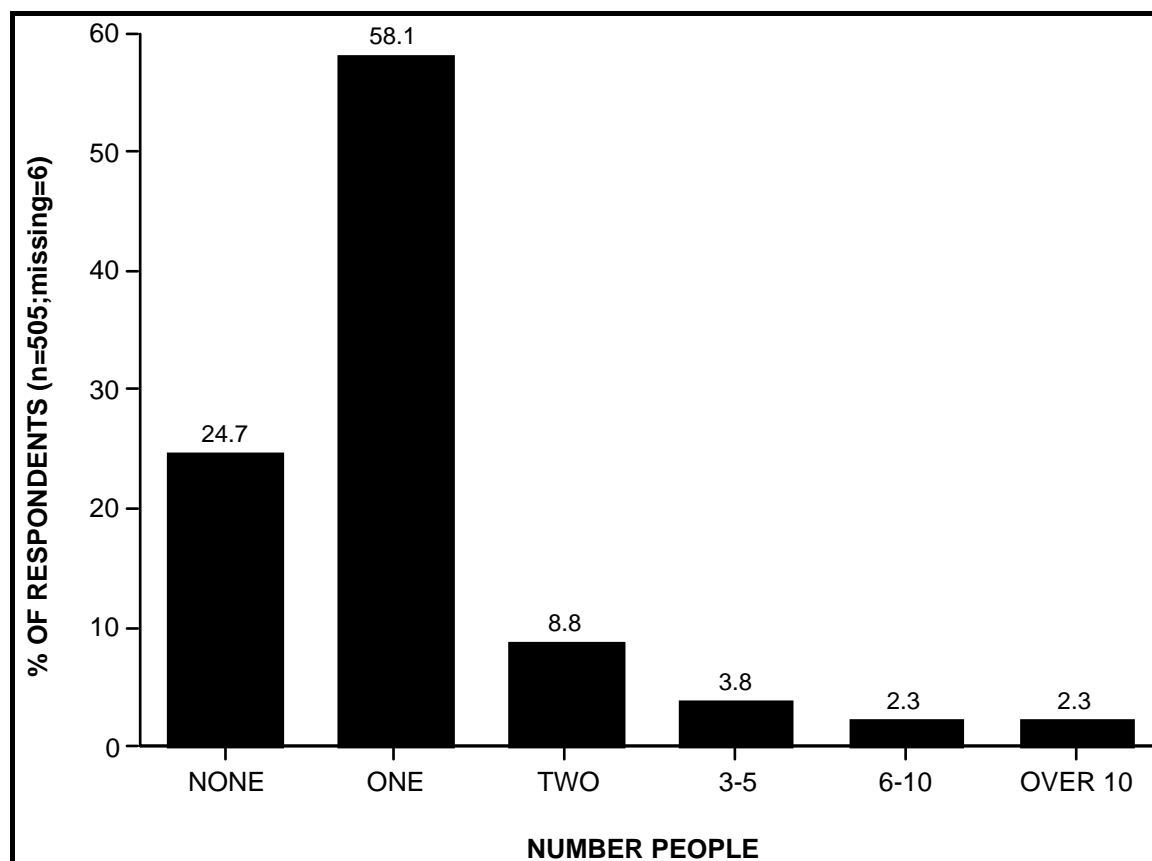


FIGURE 29: NUMBER OF PEOPLE RESPONDENT HAD VAGINAL / ANAL INTERCOURSE WITH IN THE PAST MONTH

Frequency of condom use during sexual intercourse IN THE PAST MONTH

Subjects were asked "If you have had intercourse IN THE PAST MONTH, how often did you or the person you had sex with use condoms?" Responses are illustrated in Figure 30. The majority of respondents (64.1%) did not use condoms during sexual intercourse over the past month. By contrast, just over a tenth of respondents (12.6%) had used condoms on every occasion of sexual intercourse in the past month, compared to 21.2% in the Perth ASHIDU sample (Bevan, Loxley and Carruthers, 1996) (Chi Square=12.3825, df=1, p=.0004).

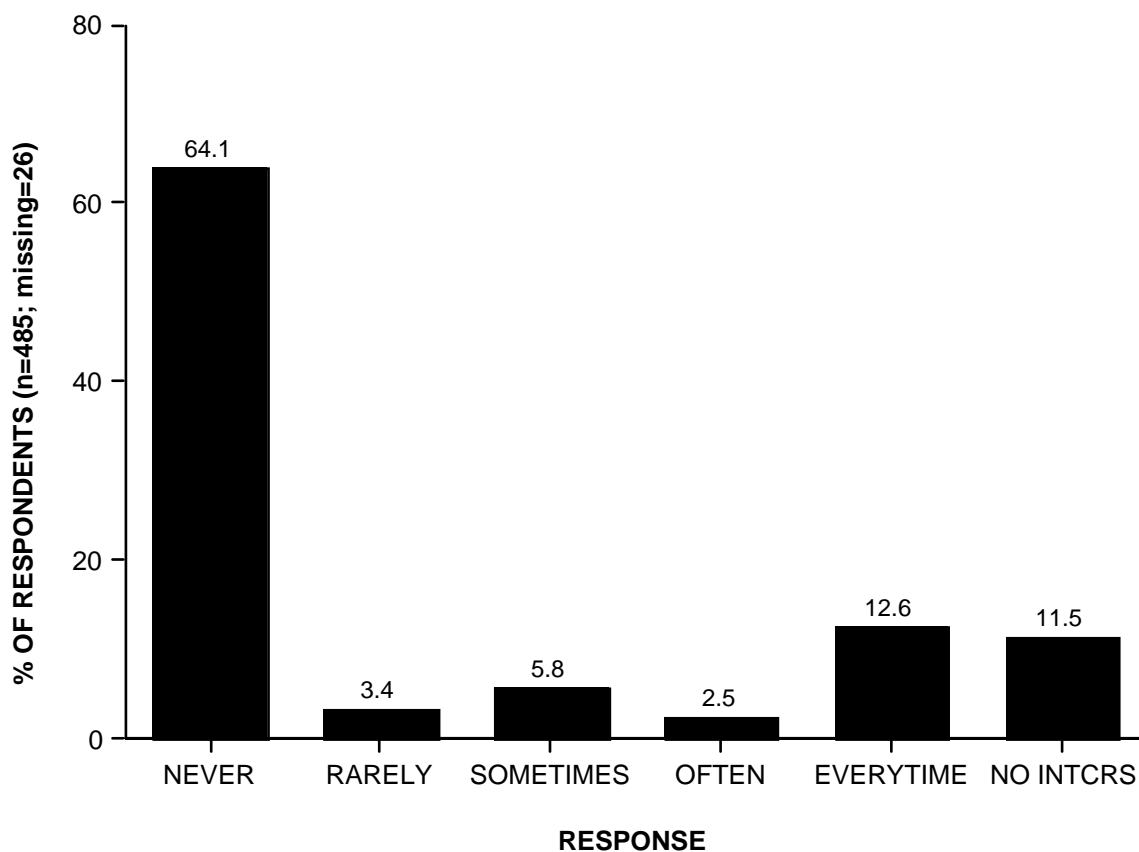


FIGURE 30: HOW OFTEN CONDOMS WERE USED BY RESPONDENT DURING SEXUAL INTERCOURSE IN THE PAST MONTH

5.0 SUMMARY OF RESULTS AND DISCUSSION

5.1 METHODOLOGY AND PROCEDURAL ISSUES

Involvement of key stakeholders

Effort was made in this research to involve both drug injectors and pharmacists in its design and implementation. The acceptability of the questionnaire to IDUs was tested and enhanced by preliminary interviews and focus groups. This resulted in inclusion of more questions than had been previously planned and in the exclusion of questions about sensitive issues which may have been objectionable to many users and resulted in a poorer response rate had they been included. The success of the questionnaire also depended to a large extent on its endorsement by the pharmacy profession and in a procedure being used which was workable in retail pharmacy. The support of the Pharmaceutical Council of Western Australia and the Pharmacy Guild of Australia (WA Branch) was of great importance. Especially useful was the Pharmacy Consultation Group which included office bearers of these organisations as well as representatives of community pharmacy who did not have a formal role beyond being members of the peak pharmacy bodies.

Pharmacy participation

The pharmacies which agreed to participate in the study accounted for 60% of Fitpack sales across the state. One of the main difficulties in recruiting pharmacies was to get them to open and respond to the initial letter which outlined the study. This was despite endorsement by both the Australian Pharmacy Guild (WA Branch) and The Pharmaceutical Council of WA and 'promotions' of the study through seminars and the profession's newsletters. Overall 60% of pharmacies who were invited did respond but for many this was after being reminded by phone. Pharmacies are busy retail outlets and are often invited to participate in research. It was particularly difficult to recruit pharmacies in the central business district. Future research would benefit from a longer lead time to recruit pharmacies to participate. Owners of pharmacies may not have a role in day to day management and it proved difficult in such cases to get a prompt response to the invitation to participate in the study. Feedback indicated that many pharmacies that did agree to participate appreciated the payment to them for each questionnaire they distributed rather than to be asked to 'do something for nothing' in a competitive commercial environment .

Response rate

The response rate in the study was 20%. This may be an underestimate as it assumes that all of the questionnaires pharmacists stated that they gave out actually went to Fitpack clients who had not previously been given one. Pharmacies were asked (see Appendix D) to only give out one questionnaire per Fitpack buyer, but that they should take the least disruptive route which may have resulted on occasion in some Fitpack customers being given more than one questionnaire during the data collection period. Whilst 'double returns' were identified and excluded by the methods already described, it may be that the number of questionnaires given to clients for the first time was well below the reported figure of 2558 which would make the response rate above 20.0%. It is worth noting that the conservative figure of 20.0% is well above that estimated by us (7.6%) for the only known comparable research (Anglia and Oxford Regional Health Authority, 1995) which did not employ an inducement for return.

Representativeness of the sample

It is not possible to say that the resulting sample in this study is representative of the sample of all drug injectors. Indeed the study seems to have under-sampled younger drug injectors. The proportion (22.3%) of subjects aged 20 years or under in the sample appears to be less than that which would be expected on the basis that 72.4% said they first started injecting at 20 years of age or less. The proportion of subjects aged 20 years or under was also lower than that found in the Perth ASHIDU study (Bevan, Loxley and Carruthers, 1996). The reasons for this are unclear. It may be due to pharmacy policies which discourage the sale of Fitpacks to those under the age of 18 years, the information dense nature of the questionnaire, or other factors. As such the sample is possibly more representative of drug users who buy their needles through pharmacy than it is of drug injectors as a whole. In as much as the bulk of needle provision to IDUs are through pharmacy sales rather than other sources (eg needle exchange), this group is an important one to study. It is unlikely that any research methodology will adequately reach all IDUs. The data collected in the current study is an addition to the body of knowledge which is based on studies using other recruitment methodologies such as agency and peer based methods. Its particular contribution is that it has reached a large number injectors who have had little drug treatment history.

The purpose of the comparisons with the agency and peer recruited sample of (Bevan, Loxley, & Carruthers (1996) is not to show that any one sample is more representative than the other, nor that together these samples will represent the total population of drug injectors. Different recruitment strategies would be expected to result in different sub-populations being sampled. While the differences between the samples may largely reflect the means employed to recruit them, they serve to emphasise the need to employ a variety of such means if a more representative picture of drug injectors is to be obtained.

Different methodologies have their advantages and disadvantages. The face to face interview possible with agency and peer recruited samples allows a level of detail about drug using to be studied in a way that is not possible in a self completion 'mail back' survey such as the one described here. However, the present study aimed to collect information on a group rarely reached by agency and peer recruitment methods.

Effectiveness of strategies to deal with multiple responders

The strategies employed to prevent and identify multiple responders proved effective. Overall, the number of corrupted returns was small, (10.9%) of all questionnaires returned, and these were easily identified, thus maximising the integrity of the data, a critical issue for the users of the data. In part this would have been due to the response of the users to the request not to 'fake' data and the effect that this would have on the usefulness of the results. Furthermore, giving those wishing to 'port the system' the option of returning a blank questionnaire (n=46) to get a free Fitpack, prevented these respondents from 'faking' responses which could corrupt the data base. The unique identifiers used located a further 19 questionnaires where this was attempted. Less than 1.0% of returned questionnaires were substantially incomplete, which was gratifying as respondents were asked to complete all questions.

Reaching 'hidden' drug injectors

One of the aims of the study was to reach the 'hidden' population of drug injectors with no or little drug treatment experience. This group is one which has been anecdotally 'known about', as long as research on drug injecting has been carried out, yet it is a group about which there has been little data. Clearly the present study has succeeded at accessing a large number of respondents from this group. The proportion of respondents having had contact with a specialist

drug treatment agency was far less in this study (28.7%) than it was in the agency and peer recruited sample (63.5%) of Bevan, Loxley and Carruthers (1996). See also 'Drug Treatment History' below.

Effectiveness of the Fitpack 'exchange' incentive

That 94.4% of returned questionnaires came back through the Fitpack exchange route suggests that this was attractive to drug injectors and should be considered by future researchers working in this area. It has long been standard practice to pay IDUs for their time and travel expenses for face to face interviews. In research done at this Centre and elsewhere the standard rate has been \$A20-00 for a 60 to 90 minute interview. The provision of a free Fitpack at an average retail price of \$4-50 seems to have been adequate incentive for completion of the questionnaire in addition to other perceived benefits such as 'having a say' and challenging the stereotype of drug injectors in the wider community. This system was also administratively workable. While it has been suggested by some colleagues that increasing the inducement may increase the response rate in future, this is to be tested. Perhaps the provision of more than one Fitpack, and/or other equipment (spoon, swabs, water ampoules, etc.) could be attempted, but this would have to be workable from the pharmacies point of view as well as being attractive to the Fitpack buyers. The mailback option appeared more attractive to non-metropolitan IDUs, which could be for practical reasons such as not being near a participating pharmacy, or could have been seen as more confidential in small population centres where 'everybody knows everybody'. For this reason this option should be retained in future research employing this methodology.

5.2 DEMOGRAPHICS

Many of the demographic characteristics of this sample are inconsistent with the stereotype of the drug injector held by many in the wider non-injecting community.

Age and gender

The mean age of 26.2 years was very similar to that found in other studies of drug injectors recruited through agency and peer recruitment methods (Bevan, Loxley and Carruthers, 1996; Loxley, Marsh and McDonald, 1992). It has been noted above (Section 5.1) that there were fewer subjects under 18 years of age than other studies and one reason for this may be the reluctance of many pharmacies to sell syringes to those under 18 years of age. Over two fifths (43.4%) of the sample were women.

Marital status and children

Over two fifths (44.3%) of the sample were married or living with their sexual partner and 41.7% had at least one child, 33.6% having a child in their care. All of these proportions were greater than those found in the Perth ASHIDU sample (Bevan, Loxley and Carruthers, 1996).

Ethnicity and language of origin

Most respondents (88.1%) were Australian born, non-Aboriginal (or Torres Strait Islanders) (96.9%) and stated that English was spoken in the home in which they grew up (97.5%).

Education, employment, income and accommodation

Just under a quarter (23.8%) listed senior high school as their highest level of education completed, 22.4% listed trade or technical school and 6.8% had completed a university or college course. Only 30.3% of the sample were unemployed. A larger number of the current respondents were employed (46.4%) than in the ASHIDU study and the majority (66.4%) of these were in full time employment. The trades and labouring were the most common occupations. Just over half (53.0%) the sample earned \$20,000 or less in the last financial year

while just under a third (29.4%) earned over \$30,000 in the same period. Those in the higher income brackets were more likely to be trades persons than those in the lower income levels. Whilst the majority (59.6%) of the sample lived in rental accommodation, just over one in six (16.8%) owned or were buying their place of residence, and just under one in six (15.4%) lived in their parent's home.

5.3 DRUG TREATMENT HISTORY

Only 51.0% of the sample had any prior drug treatment, with two fifths of these (19.6%) having only had treatment from a general practitioner or hospital, and only 28.7% having had contact with a specialist drug treatment agency. Those who had previous contact with a specialist drug agency, were more likely to have been hepatitis C tested, more likely to have injected at least daily over the past month, and were more likely to have been charged with a drug offence.

5.4 DRUG CHARGES

Almost half (48.6%) the sample had been charged with a drug offence. As neither the nature of these charges nor the drug type was specified, it is possible that a number of them were for non-injectable drugs, principally simple cannabis offences which comprise the vast majority of drug charges in Western Australia (Lenton, Ferrante and Loh, 1996). Respondents with prior drug charges were more likely to be males, to have been injecting for at least 10 years, to have injected at least daily in the past month, to have been hepatitis C tested, and had contact with a specialist drug agency. Among respondents who had been hepatitis C tested, those with a previous drug charge were more likely to report a positive result than those who had not been so charged.

5.5 HEPATITIS C TESTING AND SELF REPORTED RESULTS

The majority (64.9%) of the sample stated that they had been tested for hepatitis C. Those tested were more likely to have children, to have been charged with a drug offence, and to have had contact with a specialist drug treatment agency. A quarter (25.2%) of those tested (who knew their result) reported that they had a positive result. This was substantially less than the 42.3% in the Perth ASHIDU sample (Bevan, Loxley and Carruthers, 1996) which may be because the average length of lifetime injecting was shorter in the current study. A positive result was associated with having injected for 10 or more years, injecting depressants with the Fitpack, and having had contact with a specialist drug treatment agency. The importance of length of drug injecting career in predicting hepatitis C positivity was consistent with earlier research (Bevan, Loxley and Carruthers, 1996; Crofts, Hopper, Bowden, et al., 1993), however, the rates of self reported hepatitis C were less than in these other studies in certain duration of injecting groups. In the current study among those respondents injecting for under 10 years had a self reported hepatitis C positivity rate of 6.9% while for those injecting for 10 or more years the rate was 52.5%.

5.6 GENERAL INFORMATION REGARDING FITPACKS

What Fitpack buyers want

Most respondents wanted to see sterile water (75.7%) and swabs (65.6%) sold with Fitpacks, and 79.7% wanted Fitpacks available in vending machines. Those who would like to see Fitpacks available in vending machines were more likely to be under 18 years of age when they first injected, to have said depressants were injected with the needles in the Fitpack, and to have injected at least daily in the past month. Whilst over a quarter (28.3%) of respondents wanted to see three needle Fitpacks available in WA, 75.0% wanted to see ten needle packs available. This is particularly relevant given reasons for sharing and re-using needles described below. Those who wanted the smaller packs available were more likely to be females, to have said depressants were injected with needles in the Fitpack, and to have had contact with a drug treatment agency.

Those who wanted to see ten needle packs available were more likely to be married or living with their sexual partner.

Problems buying Fitpacks

Thirty six percent of the sample reported that they never had problems buying Fitpacks, 29.0% had problems rarely and 34.7% had problems at least sometimes. The most common problems specified by those in the latter group being negative attitude of pharmacy staff (64.1%) and unavailability (41.0%), eg. after hours, while only 6.2% identified price as an issue. Those who had problems buying Fitpacks at least 'sometimes' were more likely to have injected daily over the past month. These data point to the need for after hours availability of needles, such as in vending machines and for ongoing training and values clarification of pharmacy staff.

Problems with Fitpacks themselves, and needles in them

Three quarters (75.5%) of the sample said they had problems with the Fitpacks themselves or the needles in them. Over two fifths (42.2%) of this group identified needles that were loose, bent, blunt or broken, and 31.9% said that needles had been locked into the Fitpack prior to purchase. This information will be of interest to needle and Fitpack suppliers, as well as those who pack the Fitpacks, pharmacists and public health officials.

Numbers of Fitpacks used

Half (49.5%) of the sample purchased more than five Fitpacks in the previous month. These respondents tended to be over 26 years of age, have injected at least once per day over the previous month, and to have shared needles over the previous month. In many respects these respondents were a high risk group.

5.7 ABOUT USE OF THIS FITPACK

Subjects were asked a number of questions regarding the purchase and use of the Fitpack they purchased when they were given the Fitpack questionnaire.

Cost

The vast majority (85.5%) of respondents paid between \$4.05 and \$5.00 for the Fitpack with a range from \$3-00 to \$10-00. At the time of data collection the recommended retail price for a Fitpack was \$3.60. Three quarters (75.7%) thought that the price they paid for it was not fair, with those who paid \$4-50 or less being more likely to see the price as fair than those who paid more than this figure.

When used

The majority (81.9%) of respondents used the Fitpack for the first time within an hour of buying it. A third (33.0%) of the sample had used the Fitpack less than 10 minutes after purchase. This group were more likely to be under 26 years of age, to have first injected at under 18 years of age, to have injected depressants in the past month, to have injected at least daily over the past month and to have shared needles in the past month.

Drugs used

Amphetamine was identified by 63.7% of respondents as having been injected with the needles in the Fitpack, heroin was noted by 42.7%, and 'other opiates' by 10.3% of respondents. Almost half (47.6%) reported that stimulants were the only drugs injected with the needles in the Fitpack and 35.5% nominated only depressant drugs. Approximately one sixth (16.9%) of respondents

identified drugs from both the stimulant and depressant classes as having been used with the needles in the Fitpack.

People and sessions

In 86.9% of cases the Fitpack was used by more than one person and 40.3% said that it was used by more than three people, those who did this being more likely to have first injected at less than 18 years of age. Only a minority (27.6%) of respondents said that the Fitpack was only used on one injecting session, and 34.3% use it on only two sessions.

Re-using and sharing needles

Approximately forty percent (39.1%) of the sample re-used their own needles from the Fitpack. Those who re-used their needles were more likely to be married or living with their sexual partner, to have shared needles in the past month, and to have shared other injecting equipment in the past month. The most common reasons for re-use were concern with expense and economy of re-use (26.7%), that they did not have enough fits for the number of injecting sessions or people who were using (26.5%). Other reasons included not having enough money for new needles (14.3%), the belief that twice use was 'OK' (12.9%), and access problems (eg. after hours) (12.6%).

One in eight (12.6%) of the sample stated that some of the needles in the Fitpack had been shared, the most common reason given was again, that were not enough N&S for the number of injecting sessions or people using (50.1%). Other reasons were that they shared with their partner (19.2%) and economy of re-use or expense (9.7%) although the numbers here were small. Those respondents who stated that at least some of the needles in the Fitpack had been shared were more likely to have injected depressants in the past month, and to have shared needles in the past month.

The cost of needles and the numbers sold per pack appear to lead to needle re-use and sharing by some injectors. These findings have implications for the pricing of Fitpacks, the sizes of Fitpack available (as described above), as well as such things as what is included in Fitpacks and whether there are things which could be done to assist IDUs to minimise likelihood of accidental needle sharing. These findings also suggest that drug injectors may need education about the risks of re-use of own equipment. The message 'new fit for every hit' does not seem to be having the desired impact with a large minority of respondents.

5.8 DRUG INJECTING BEHAVIOUR

Injecting history

The mean age at which respondents first injected a drug was 19.0 years. The mean number of years the sample had been injecting was 7.1 years less than that in the 9.2 years for subjects in the ASHIDU sample (Bevan, Loxley and Carruthers, 1996).

Injecting frequency

While the majority (61.2%) had injected less frequently than daily over the previous month, this was less than the 85.0% for subjects in the Perth ASHIDU sample. This is not surprising given the different treatment rates in the two studies.

Those respondents who injected at least daily over the past month were more likely to be unemployed, to have said that depressants were injected with the needles in the Fitpack, to have shared needles in the past month, and to have had prior contact with a specialist drug treatment agency.

Drugs injected in past month

The drug that was injected by most respondents in the past month was amphetamine (72.9%), followed by heroin (50.8%) and other opiates (excluding heroin, methadone, homebake) (12.8%). Over the past month two fifths (42.6%) of respondents only injected stimulants, and just under a third (30.7%) injected drugs from both the stimulant and depressant classes. Just over a quarter (26.7%) of respondents stated that over the past month they had only injected depressant drugs. The group who injected both stimulants and depressants in the past month should be further studied to understand the dynamic and functional aspects of this pattern of use.

Place of injecting

The vast majority (80.7%) of respondents reported that they usually injected in their own home, just over a quarter (29.4%) in a friend's home and just over one in five (22.1%) identified a car as a place where they usually inject.

Those respondents who injected 'outside' (either car, park / beach / street, or pub / club) were more likely to have said that depressants were injected with the needles in the Fitpack and to have shared needles in the past month.

Disposal

Data on disposal was difficult to interpret. Most respondents reported that they disposed of their used fits by locking them into the Fitpack (68.3%). Just under a third got rid of the used fits quickly (31.6%), forced the needle into the barrel (30.9%), saved their used fits for reuse later (29.3%) or threw them into the household rubbish bin (29.3%).

Sharing

In the past month 27.7% had used a needle after someone else, compared to 15.9% for subjects in the Perth ASHIDU sample (Bevan, Loxley and Carruthers, 1996) and over 60% of those who did use after someone else used bleach to try to clean the needle 'rarely' or 'never' in the past month. Just under a third (31.6%) of the sample had passed a needle on to someone else compared to 15.5% for subjects in the ASHIDU study.

Overall, 39.9% of the sample shared (either passed on and/or received) a needle in the past month. Those who shared were more likely to be under 26 years of age. They were also more likely to have injected at least daily and to have shared other equipment (eg. spoon, filter, water, tourniquet) over the past month. Most of those who shared needles in the past month did so with their sexual partner (59.1%) or a close friend (39.6%).

Over half the sample 58.5% reported that they shared other injecting equipment (eg. spoon, filter, water, tourniquet) in the past month. Those respondents who shared other injecting equipment in the past month, were more likely to have an income of under \$10,000 in the previous year and to have shared needles in the past month.

On at least one occasion in the previous 12 months over a third (35.6%) of the sample had shared a needle because they didn't have enough money to buy a Fitpack. Those who had done this were more likely to have shared needles and other injecting equipment in the past month. Once again there is evidence that the cost of needles appears to lead to needle sharing by some injectors.

The higher rates of injecting and N&S sharing found in this study compared to those using more traditional agency and peer recruited methods supports similar findings from overseas studies (Lampinen et al, 1991; Donoghoe et al., 1993) and suggests that there may be a higher level of risk behaviour among 'hidden' injectors with little contact with drug treatment agencies. This risk behaviour appears to be occurring below our current epidemiological radar and points to a need for ongoing monitoring of this population which is not reached by agency and peer based research. It may also be that the anonymity provided by the current methodology minimises the impact of any social desirability in response styles which is more likely to be evident in face-to-face interviews, particularly on items concerning frequency of injecting and needle sharing.

5.9 KNOWLEDGE REGARDING BLOOD BORNE VIRAL INFECTIONS

The majority of respondents (65.3%) understood a positive result to mean that 'you have HIV', whilst 15.3% believed it meant that 'you have been exposed to HIV but may not have it'. Only 8.5% of respondents stated that a positive HIV test result meant that 'you had AIDS'. When asked how effective they thought bleach was at killing the hepatitis C virus when needles are shared 36.9% of the sample thought it was 'probably better than nothing', 30.9% 'did not know' and 14.5% believed that it was 'not effective at all'. Those who gave a 'correct' response were more likely to have been injecting for 10 or more years, and to have injected depressants and injected at least daily in the past month.

5.10 SEXUAL BEHAVIOUR

A majority (58.1%) of respondents had sexual intercourse with only one person in the past month. About a quarter of respondents (24.7%) had not engaged in vaginal / anal sexual intercourse in that period of time. The majority (64.1%) of those who had intercourse in the past month did not use condoms at all. Only 12.6% of the sample stated that they had used condoms every time they had sexual intercourse in the past month, compared to 21.2% in the Perth ASHIDU sample (Bevan, Loxley and Carruthers, 1996). This difference may be explained by the larger number of subjects married or living with their sexual partner in the current study.

5.11 CONCLUDING COMMENTS

This study demonstrates that there are many drug injectors who do not fit the negative stereotype held by some in the community who do not inject drugs. The data presented here challenge the 'them and us' view which marginalises and stigmatises drug injectors. Challenging stereotypes and stigma is likely to be important in further supporting efforts to prevent the spread of blood borne viruses such as HIV, hepatitis B and hepatitis C.

There needs to be more sophistication and refinement in prevention efforts in this area. Strategies need to be implemented which involve drug injectors and address their wide diversity. These contrast with strategies which stereotype injectors and respond as if all injectors were the same. While some are affluent others are financially poor. While many can afford the price of a five needle Fitpack, at times others may not and as a result may share. Whilst most will inject at home, others will in a car or a public toilet without access to swabs or sterile water. While some may not have problems accessing clean equipment, others may be less likely to share if Fitpacks are available in vending machines. Providing better blood-borne virus protection for the public, be they injectors, their children, or sexual partners, means providing a range of alternatives and choices which reflect the variety of life situations and needs of this varied community group of people who happen to inject drugs.

It is of concern that the 'hidden' IDUs whom this study has reached reported higher rates of injecting and needle sharing than has been found in studies using agency and peer recruited sampling techniques with higher ever in treatment rates. Thus far we may have prevented the 'second wave' of HIV infection among drug injectors and through them to people who do not inject. However, while there is evidence that rates of needle sharing have reduced among well researched populations of injectors these data suggest that needle sharing and unprotected sex occurs more often among this under researched group. These data warn against complacency in prevention of HIV, hepatitis and other, perhaps yet to be discovered, blood-borne viral infections among and from drug injectors.

The purchasers and users of Fitpacks who were the respondents in this study are consumers of a product. This study gave them an opportunity to provide feedback to the manufacturers and retailers of this product and the public health officials who have responsibility for developing and maintaining effective strategies to prevent the spread of blood-borne viral infections such as HIV, hepatitis B and hepatitis C. It has shown that this group of consumers is very interested in having a say about issues that affect them and they possess information which is valuable and important to be considered by policy makers, health bureaucrats, pharmacists, researchers and others.

Recommendations

- That there is acknowledgement that people who inject drugs constitute a widely diverse group which emphasises the inaccuracy of negative stereotypes about drug injectors.
- That those who aim to reduce the spread of blood borne viral infections among drug injectors recognise that this is a very heterogeneous group and that a range of strategies will need to be available for drug injectors across the demographic spectrum.
- That acknowledgement is given to those pharmacies which, with the support of The Pharmaceutical Council of WA, The Australian Pharmacy Guild (WA Branch) and The Health Department of WA, sell needles to drug injectors. The data presented suggest that pharmacies are reaching a group of injectors who have had little or no contact with drug treatment agencies. In undertaking this sometimes challenging role, pharmacies have made a major contribution in preventing the spread of blood borne viruses among drug injectors and the wider non-injecting community.
- That further efforts are made to study the large number of drug injectors who do not come into contact with specialist drug treatment agencies. This research provides a methodology which could be applied across Australia in all states which sell Fitpacks. It is also able to reach rural drug injectors who have often been neglected in research which has recruited injectors in large population centres. Future applications of this methodology will need to involve local drug injectors, pharmacists and their professional organisations in study design and implementation to make the research relevant and workable.
- That the study, prevention and treatment of hepatitis C is continues to be a priority in this country. The data presented in this report provide support for the importance of this work and suggest that ongoing efforts will be needed to make testing accessible and attractive for current, as well as past, injectors who have not been tested.
- That Fitpacks of each of the three sizes (ie. three, five, and ten needles), and particularly ten needle packs, should be made available in Western Australia and other states where Fitpacks are sold, as there is evidence that some injectors had re-used and shared needles as there were not enough in the pack (of five needles) for the number of sessions or people injecting.

- That other equipment, notably sterile water and swabs should be made available to drug injectors who buy their needles in pharmacies. This is particularly relevant given the use of Fitpacks by many respondents within ten minutes of purchase, and the use in cars, and other places outside of a home where other equipment is less likely to be available.

- That further efforts should be made to inform drug injectors about the risks associated with sharing other injecting equipment (including spoons, water, swabs, filters, tourniquet). It should be noted that behaviour change requires, at the very least, both information and access to the means (in this case to other equipment).
- That barriers to drug injectors buying needles should be rapidly addressed. The availability of Fitpacks in vending machines, especially after hours, should be expedited.
- That companies involved in the supply of needles and packing of Fitpacks attend to quality control issues given that a majority of the sample reported having problems with the Fitpacks or the needles in them.
- That, as a part of ongoing professional education, all members of the pharmacy profession should be given the opportunity to consider drug use issues, their attitudes to the sale of needles, and the scientific evidence for needle provision as a way of reducing the spread of blood-borne viral infections.
- That the retail price of Fitpacks be considered by community pharmacists and the professional bodies, as there is evidence that the price of Fitpacks has contributed to needle sharing by some injectors at various times.
- That consideration be given to strategies to reduce the risk of needle sharing by those who may be injecting with others, and may inadvertently share needles when they think that they are re-using their own needle. The advice and involvement of current injectors needs to be sought on many issues including this one.
- That the role of general practitioners in providing drug treatment to drug injectors be acknowledged and further studied. Ways of supporting and further developing the role of general practice in servicing drug injectors should be explored.
- That education about the risks of re-using one's own equipment and the message 'new fit for every hit' be reviewed in the light of evidence of needle re-use and sharing among this sample.
- That education about the less than ideal effectiveness of bleach as a decontamination procedure be continued and the recommended guidelines for decontamination be clarified.
- That programs which promote adoption of safer sexual practices include strategies which aim to reach those drug injectors with little or no contact with drug treatment agencies.

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APPENDIX A

KEY INFORMANT PARTICIPANT INFORMATION SHEET

FITPACK STUDY PARTICIPANT INFORMATION SHEET

You have been invited to contribute to a study concerning FITPACKS and the people who use them. This is an important study because past research was based on people with long histories of drug treatment who are only a small proportion of all those who use FITPACKS. This study also looks into two other issues: Firstly, many people in the community have a very unrealistic view of people who inject drugs. This study will challenge those views. Secondly, we believe that people who inject drugs rarely get a chance to have a say about things that affect them and their drug use. This study will give them an opportunity to have their say.

If you agree to contribute to this study, you will be interviewed in a few minutes. During this time, I will be asking you for your opinions on general issues concerning injecting drug use, Hepatitis, HIV/AIDS & ways of reducing the likelihood of catching these viruses. I will also ask you some specific questions relating to the actual FITPACK project. Please feel free to say anything you like - I'm here to listen to your views, not to judge them as being right or wrong. This part of the interview will be recorded on an audiotape only because it is difficult otherwise to remember everything that is said. Someone who works with me will then listen to this recording to type out what you say so that we don't miss out on what you've got to tell us about these issues. After this, you will be asked to fill in a short questionnaire to give us some idea of your background. In both the interview and the questionnaire, you can refuse to answer any question you are not comfortable with.

In a couple of minutes you will be paid \$20-00 for attending this interview. If you wish you can leave right after I pay you or at any time during the interview, although I'd like you to stay till the end. It will be less than 2 hours long.

On the issue of confidentiality, we would like to assure you that no information identifying you (eg. full name & address) will be recorded during the interview. If you wish, you may use a false name. You are also advised not to use the full name of anyone you may refer to in the interview. Once completed, all records of the interview (eg. tapes, questionnaires, data) will be kept securely, and locked to unauthorised access. We will refer to your data with a subject number that cannot be traced back to you. We will also change any names you mention as a further protection.

At our research centre, a part of Curtin University of Technology we have been doing drug research for a number of years and we have been given assurance from the police that they will respect the confidentiality of all research material collected and will not attempt to get access to any of it. This research is approved by the Curtin University Ethics Committee.

APPENDIX B
FITPACK QUESTIONNAIRE

**APPENDIX C
DETAILED DESCRIPTION OF
SAMPLING, QUESTIONNAIRE DISTRIBUTION AND COLLECTION**

SAMPLING AND QUESTIONNAIRE DISTRIBUTION

Recruitment of Pharmacies

Invitations by mail to all 469 retail pharmacies in WA to describe the project and invite them to participate (See Appendix D). Pharmacies were requested to respond within a week by fax or mail using the response sheet included. A sample pilot questionnaire was also appended, and comments invited. Pharmacies declining to participate were requested to furnish reasons for their decision. Follow-up phone calls were then made to the larger volume pharmacies who had not responded to the initial letter to determine whether the pharmacy was to participate in the project.

Pharmacy Sampling

A total of 3,050 Fitpack questionnaires were printed. These were allocated to participating pharmacies based on the estimated number of Fitpacks each had retailed over the previous 4 weeks. This figure was provided by individual pharmacies in their initial consent to participate (See Appendix D). Fitpack sales in participating metropolitan and non-metropolitan pharmacies ranged from 1 per month to 500 per month. To streamline the sampling process, the number of Fitpacks sold per month by individual pharmacies were divided into blocks of 10 from 1-100 and by 25 from 101-500. Numbers were allocated so that there would be sufficient questionnaires to reach a minimum of 19% of each pharmacy's Fitpack clients during the data-collection period. It was planned that a total of 2,837 questionnaires be distributed proportionately to 191 participating pharmacies, with a small number (213) of questionnaires retained by the researchers in the event that during the data collection more were requested by some distributing pharmacies. A breakdown of the questionnaire allocation ratio is provided in Table 72.

TABLE 72: FITPACK QUESTIONNAIRE ALLOCATION RATIO

| NUMBER OF FITPACKS SOLD PER MONTH | NUMBER OF PHARMACIES | NUMBER OF QUEST. GIVEN OUT PER PHARM. | TOTAL NUMBER OF QUEST. GIVEN OUT |
|-----------------------------------|----------------------|---------------------------------------|----------------------------------|
| 1-10 | 40 | 2 | 80 |
| 11-20 | 29 | 4 | 116 |
| 21-30 | 23 | 6 | 138 |
| 31-40 | 17 | 8 | 136 |
| 41-50 | 16 | 10 | 160 |
| 51-60 | 3 | 12 | 36 |
| 61-70 | 6 | 13 | 78 |
| 71-80 | 8 | 15 | 120 |
| 81-90 | 2 | 17 | 34 |
| 91-100 | 12 | 19 | 228 |
| 101-125 | 4 | 24 | 96 |
| 126-150 | 9 | 29 | 261 |
| 151-175 | 4 | 34 | 136 |
| 176-200 | 7 | 38 | 266 |
| 201-225 | 1 | 43 | 43 |
| 226-250 | 2 | 48 | 96 |
| 251-275 | 1 | 53 | 53 |
| 276-300 | 3 | 57 | 171 |
| 301-325 | 0 | 62 | 0 |
| 326-350 | 1 | 67 | 67 |
| 351-375 | 0 | 72 | 0 |
| 376-400 | 2 | 76 | 152 |
| 401-425 | 1 | 82 | 82 |
| 426-450 | 0 | 86 | 0 |
| 451-475 | 0 | 92 | 0 |
| 476-500 | 3 | 96 | 288 |
| TOTAL | 191 | - | 2837 |

QUESTIONNAIRE DISTRIBUTION & COLLECTION PROCEDURE

Pharmacies agreeing to participate in the project were requested to nominate a Fitpack Liaison Officer who would be in charge of co-ordinating the implementation of the study in that pharmacy. Detailed instructions regarding the distribution to and collection of questionnaires from Fitpack clients were communicated to individual pharmacists through their Liaison Officer.

Questionnaires were dispatched to participating pharmacies proportionate to Fitpack sales data as per Table 73 above. Included in this mail out were detailed explanations as to the procedure for pharmacy staff to follow (See Appendix E), A5-size instruction 'reminder' sheets (See Appendix F) which were designed to be displayed discreetly where staff could see them; small (A5-size) envelopes for returning excess questionnaires; and large (A4-size) envelopes for pharmacies with larger Fitpack sales-volume to bulk-mail completed questionnaires.

Questionnaire Distribution to Fitpack Clients

Whilst stocks lasted questionnaires were distributed to customers purchasing Fitpacks over a six-week data collection period from mid September to the end of October 1995. To minimise disruption in the pharmacy staff were advised that any transactions involving completed questionnaires and free Fitpacks made beyond that deadline would be reimbursed.

Pharmacy staff involved in Fitpack sales were requested to observe, where possible, that only one questionnaire be given out to each Fitpack client in order to minimise the number of duplicate responses (from the same individual). However, it was advised that the least disruptive route be taken at all times to avoid staff-client confrontation on the issue (See Appendix E).

Questionnaire Collection & Free Fitpack Exchange

Fitpack Liaison Officers were requested to organise a 'Questionnaire Return Box' to be used for the confidential return and storage of completed questionnaires during the data-collection period. Pharmacy staff were also reminded that some completed questionnaires received for exchange to one pharmacy may have been distributed through another one. The importance of placing their appropriate pharmacy stamp in the 'Receiving Pharmacy' box on the envelope was thus emphasised. The procedure for pharmacy staff to use in receiving returned questionnaires was outlined in (Appendix E).

PAYMENT TO PHARMACIES

Pharmacies were paid \$0.50 for each questionnaire handed out to Fitpack clients and were reimbursed \$2.50 for each free Fitpack given out in exchange for completed questionnaires (See Appendix G). This payment had been set at the wholesale price of Fitpacks which meant that pharmacies retailing Fitpacks for approximately \$3.60 stood to gross an additional return of \$1.40 per exchange (questionnaire distribution and collection/exchange). Pharmacies retailing Fitpacks for approximately \$4.50 stood to gain an additional \$0.50 for their role in each exchange.

In order to facilitate the calculations of reimbursements, pharmacies were requested to keep a record of the number of questionnaires received from researchers, the number distributed to Fitpack clients, the number (if any) destroyed, misplaced etc., and the number of excess questionnaires not distributed after the data collection period. The total number of questionnaires distributed and collected was then be calculated from these figures. Pharmacies with a higher volume of Fitpack sales were provided with several A5 envelopes so that periodic stock-taking could be done to minimise the likelihood of miscalculations in payments. At the conclusion of the data collection period, pharmacies were requested to forward to the researchers remaining questionnaires and details of the numbers distributed. Re-imburements for the number of Fitpacks given out in exchange for completed questionnaires were determined by the number of returned questionnaires with that pharmacy's stamp in the 'return pharmacy' box on the return envelope. Payment to pharmacies was then made by bank cheque through the

University's accounts department. Reimbursements were also made to 12 pharmacies that had initially declined to distribute questionnaires, but had subsequently collected a number of completed and provided the customers with free Fitpacks in exchange. In all cases, reimbursements for making a free Fitpack exchange for questionnaires were made in full regardless of whether or not the questionnaire was usable.

APPENDIX D

PHARMACY INVITATION LETTER

Dear Pharmacist

RE: THE FITPACK STUDY - A Survey of Injecting Drug Users who Purchase Fitpacks from WA Pharmacies

We are writing to introduce the above study and to invite your participation in it. The study will be conducted through community pharmacies throughout WA, and is funded by a Commonwealth AIDS Research Grant. You may have seen a brief description of the project in either the Guild's or the Council's recent newsletter. The study is somewhat unique as we are going some way to reimburse you for your efforts in being involved. It is envisaged that the study will be a useful source of information for policy makers, the pharmacy profession, and others who deal with illicit injecting drug users. As such, it has the support of the Pharmaceutical Council, The Pharmacy Guild and the Health Department of WA. It is hoped that all pharmacies that sell Fitpacks in both the metropolitan and country areas will participate in the study to provide the most representative sample possible.

The Project in a Nut shell

It is planned that, while stocks last, Fitpacks sold to drug users through pharmacies over a 6 week period from mid September 1995 will be accompanied by a brief questionnaire that asks drug users about their demographics, drug use, HIV risk behaviour, and feedback on the Fitpack scheme. Drug users who complete the anonymous questionnaire will be asked to seal it in an attached envelope and either (a) return it directly to us by free-post or, as an inducement, (b) return it to a pharmacy that sells Fitpacks in exchange for a free needle pack, for which we will re-imburse the pharmacy.

Timeline

We plan to mail questionnaires to pharmacies in early September for distribution to Fitpack buyers from Monday, September 18, 1995. Data collection will continue until the end of October, a period of approximately six weeks.

What we will want your staff to do

During the data collection period we would ask that when customers ask for a Fitpack, the staff member handling the sale:

- 1) Ask them whether they have filled out the Fitpack survey;
- 2) If not, place the pharmacy stamp and date on a questionnaire in the appropriate place and put it in the bag with the Fitpack;
- 3) If appropriate, tell the customer "If you fill it out later on, seal it and hand it in to a pharmacy that sells Fitpacks you can exchange it for a free Fitpack".

* Should a customer ask for another questionnaire (eg. for a friend) we understand that your staff may decide to take the least disruptive path and give them another questionnaire.

When customers present a sealed questionnaire in exchange for a free Fitpack we would ask that the person handling the sale:

- 1) Thank them for returning it, and tell them "I will give you a free Fitpack in exchange"
- 2) Stamp the questionnaire with your pharmacy's stamp and the date in the appropriate place and put in a box or mail tray, ideally in view of the customer. Tell them "We will send that on to the University";

3) Give them their Free Fitpack (without a questionnaire this time).

What we will do in return

We will pay a fee of 50c to your pharmacy for each questionnaire that you or your staff give to Fitpack buyers in the above manner. We will take your word on how many questionnaires you give out for us.

To cover for free Fitpacks given out in exchange we will re-imburse you for the cost price (\$2.50) of a Fitpack for each sealed questionnaire received by us through the mail bearing the stamp of your pharmacy in the receiving pharmacy box.

The Questionnaire

The questionnaire has been developed with input from drug injectors and a consultant group of community pharmacists who are also advising on the implementation of the study in community pharmacy. You will see in the attached proof copy of the questionnaire (in the final, the top panel will be an attached envelope) that we are appealing to Fitpack buyers' sense of self responsibility and fair play to not 'rort the system'. Drug users that we have consulted have said that the free Fitpack offer will be appreciated by many as recognition of their input.

What we would like from you NOW

We would be grateful if **by the end of this week** you would respond to this letter in the following manner :

- **FAX / MAIL** us the attached response sheet to let us know whether you are happy for your pharmacy to be involved in the study.
- **Nominate someone** from your pharmacy as Fitpack Project Liaison Officer. It will be helpful for us, particularly in larger pharmacies, if there is one person that we can liaise with who can co-ordinate the implementation of the study in each pharmacy.

Furthermore, should you have any suggestions, comments or concerns about the study, please give us a call. Given that there are no unforeseen difficulties with printing etc., we anticipate mailing questionnaires and brief guidelines for your staff to your pharmacy in early September.

The study has been very well received by both pharmacists and Fitpack buyers. We hope that if your pharmacy sells Fitpacks you will be happy to be involved in this project and we await your reply.

Regards,

Simon Lenton
Research Fellow

Anita Tan-Quigley
Research Officer

FITPACK STUDY PHARMACY RESPONSE SHEET

TO: Anita Tan-Quigley
 Research Officer
 NCRPDA
 Curtin University
 1/14 Stone Street
 South Perth 6151

FROM: _____

POSITION: _____

DATE: ___ / ___ / ___

FAX NO: (09) 367 8141

RE: PARTICIPATION IN FITPACK STUDY

Please answer the following question and indicate your willingness to have your pharmacy involved in the Fitpack Study :

Does this pharmacy sell Fitpacks ? Yes No

If so, approx. how many Fitpacks has this pharmacy sold in the last month ? _____
 (This information will be treated as confidential)

I am happy for this pharmacy to participate in the Fitpack Study

I am not happy for this pharmacy to participate in the Fitpack Study

Reason/s for preferring your pharmacy not to participate : _____

The staff member who will be the Project Liaison Officer for this pharmacy is:

Name : _____ Position : _____

Your Pharmacy Details :

Tel. No : _____ Fax. No : _____

Address : (Please UPDATE where necessary)

ANY COMMENTS / SUGGESTIONS :

THANK YOU FOR YOUR PROMPT RESPONSE

APPENDIX E

LETTER TO PARTICIPATING PHARMACIES

12 September 1995

Dear Fitpack Project Liaison Officer

RE: THE FITPACK STUDY

IMPORTANT INFORMATION ENCLOSED: PLEASE READ CAREFULLY.

SUMMARY OF PROCEDURES ATTACHED.

Thank you for agreeing to participate in this study. We are aware that pharmacy staff are busy and appreciate that despite this you are prepared to help us out. It is encouraging that almost 200 pharmacies state-wide have agreed to participate, which makes it more likely that the sample will be representative and the data most useful.

What follows are some guidelines that we would request you follow in implementing the study in your pharmacy. These have been prepared in consultation with community pharmacists to minimise intrusions to your retail obligations, but we appreciate that you may wish to modify them to suit your situation. It is suggested that **all pharmacy staff read this letter.**

Important Information For All Pharmacy Staff

- Please ensure that you **remember to put the date and your pharmacy's stamp on all sealed questionnaires returned** to your pharmacy in the 'RECEIVING PHARMACY' box on the front of the envelope before you mail them back to us. This is the only way we will be able to arrange re-imbusement for free Fitpacks that you have given out in exchange. Please **DO NOT** stamp this box before the envelope is returned to your pharmacy.
- Please display a copy of the **Fitpack Study Procedure** sheet (enclosed) in an area where staff can refer to it. It is important that the procedures for giving out and receiving questionnaires are as standardised as possible.

Questionnaire Stocks

We have had just under 3000 questionnaires printed and have enclosed with this letter a number proportional to your recent Fitpack sales. It is likely that you may run out of these before the end of the data collection period. Should that happen, you may wish to phone or fax us and, if available from our reserve stock, we will send you out some more. Otherwise, even when you run have out of questionnaires we ask that you continue to give out free Fitpacks in exchange for any completed questionnaires returned to your pharmacy during the data collection period.

Questionnaire Distribution & Collection Period

As discussed in our recent correspondence we are requesting that you distribute the questionnaire to Fitpack buyers **from Monday, September 18, 1995**, while stocks of the questionnaire last. Data collection will continue until the end of October, a period of approximately six weeks. The questionnaire explicitly states that Fitpack buyers will only be able to return a completed one in exchange for a free Fitpack, **BEFORE OCTOBER 31, 1995**.

However, if questionnaires are returned up to a few days after this date, you may wish to do the exchange to minimise any possible disruption in the pharmacy. In such cases we will still reimburse your pharmacy. We suggest that you advise anyone wanting to return questionnaires after this that they deposit it in a mail box, reminding them that postage is pre-paid.

Giving out the Questionnaires

During the data collection period we would ask that when customers ask for a Fitpack, the staff member handling the sale:

- 1) Ask them whether they have filled out and returned the Fitpack survey;
- 2) If not, unfold the top flap of a questionnaire and place the pharmacy stamp on the attached envelope in the box marked 'DISTRIBUTING PHARMACY STAMP HERE' and write the date in the place marked 'DATE OUT'. Fold the flap down so the section headed 'WANT A FREE FITPACK?' is on top. Put it in the bag with the Fitpack;
- 3) If appropriate, tell the customer "If you fill it out later on, seal it and hand it in to a pharmacy that sells Fitpacks you can exchange it for a free Fitpack".
- 4) If they have already completed a questionnaire explain that you are only giving out one per customer.

* It is intended that Fitpack buyers take the questionnaire away and complete it before their next Fitpack purchase, returning it in exchange for a free one.

* Should a customer ask for another questionnaire (eg. for a friend) we understand that your staff may decide to take the least disruptive path and give them another questionnaire. However, our preference is that one questionnaire only is completed by each Fitpack user over the study period.

Accepting Returned Questionnaires - The Fitpack Exchange

When customers present a sealed questionnaire in exchange for a free Fitpack we would ask that the person handling the sale:

- 1) Thank them for returning it, and tell them "I will give you a free Fitpack in exchange"
- 2) Stamp the envelope with your pharmacy's stamp in the box marked 'RECEIVING PHARMACY STAMP HERE' and write the date in the place marked 'DATE IN'. Put the envelope in a box or mail tray, ideally in view of the customer. Tell them "Thanks, We will send that on to the University";
- 3) Give them their Free Fitpack (without a questionnaire this time).

* If staff are able to, it may be of assistance to make up a 'Questionnaire Return Box' for the collection of completed questionnaires. (This can be made up from an ordinary cardboard box with a slit in the top panel for questionnaires). This box could then be placed where it is visible to customers returning completed questionnaires.

* Remember some of the questionnaires returned for exchange to your pharmacy may have been given out by another pharmacy. As long as your pharmacy's stamp appears in the receiving pharmacy's box on the envelope when it gets to us, your pharmacy will get the re-imburement.

Mailing returned questionnaires to us

All you have to do to get the sealed envelopes back to us is to put them in the mail as they come in. If, however, you have large numbers returned, you may wish to help us cut costs by saving them up and putting them in the large (A4-size) pre-paid envelopes which we have included here if your pharmacy sells a high volume of Fitpacks.

Payment To Your Pharmacy

We will pay a fee of 50c to your pharmacy for each questionnaire that you or your staff give to Fitpack buyers in the above manner and reimburse you \$2-50 for each one received by us through the mail bearing the stamp of your pharmacy in the receiving pharmacy box. We will take your word on how many questionnaires you give out for us.

However, it is possible that not all the questionnaires we send you will be distributed to Fitpack buyers over the study period. In addition, not all of those given to Fitpack buyers will be completed and returned. For us to correctly calculate the response rate, we will need to know the number of questionnaires given out to Fitpack buyers through your pharmacy (throughout the study period), the number of unused 'questionnaires left over after October 31, and the number (if any) destroyed, misplaced etc. These details are to be filled out in the respective spaces on the smaller envelope (A5-size) enclosed for the return of 'leftover' questionnaires. Of course, information about the number of questionnaires distributed and received by your pharmacy will be kept confidential. Once the data is in we will collate this information and send you a cheque for the total number of questionnaires distributed through your pharmacy, and the costs of free Fitpack exchanges incurred.

Thanks again for your involvement. Please contact us should you need to clarify any of the above.

Regards,

Simon Lenton
Research Fellow

Anita Tan-Quigley
Research Officer

Encl:

Questionnaires

Instruction sheet

Return envelope for 'leftover' questionnaires (A5-size)

Return envelopes for completed questionnaires (A4-size) (If required)

APPENDIX F
PHARMACY INSTRUCTION SHEET

FITPACK STUDY

WHEN CUSTOMER ASKS TO BUY A FITPACK:

ASK IF THEY HAVE COMPLETED A FITPACK QUESTIONNAIRE

IF YES, SELL THEM FITPACK AS NORMAL (NO QUESTIONNAIRE)

IF NOT:

- PUT PHARMACY STAMP IN DISTRIBUTING PHARMACY BOX & COMPLETE DATE OUT ON QUESTIONNAIRE
- PUT QUESTIONNAIRE INTO BAG WITH FITPACK
- INFORM CUSTOMER THAT COMPLETED QUESTIONNAIRE MAY BE EXCHANGED FOR ONE FREE FITPACK FROM MOST PHARMACIES SELLING FITPACKS

WHEN CUSTOMER WANTS TO EXCHANGE A COMPLETED QUESTIONNAIRE FOR A FREE FITPACK:

DO NOT OPEN RETURNED ENVELOPES

PUT PHARMACY STAMP ON FACE OF ENVELOPE IN RECEIVING PHARMACY BOX AND COMPLETE DATE IN

PUT ENVELOPE INTO COLLECTION BOX OR MAIL TRAY IN VIEW OF CUSTOMER

GIVE CUSTOMER ONE FREE FITPACK (WITHOUT QUESTIONNAIRE)

DATA COLLECTION RUNS WHILE STOCKS LAST FROM 18 SEPTEMBER TO 31 OCTOBER 1995

APPENDIX G

LETTER OF REIMBURSEMENT TO PHARMACIES

6 December 1995

Dear Pharmacist

RE: REIMBURSEMENT FOR FREE FITPACKS EXCHANGED IN FITPACK STUDY

We are writing to thank you for your help in exchanging 'free Fitpacks' for completed Fitpack questionnaires as part of our study. We gratefully acknowledge that you have made these exchanges in spite of your initial concerns.

Since the close of data-collection, we have received a total of 520 usable completed questionnaires (approximately 20% of questionnaires reaching fitpack clients). The majority of respondents chose to return their questionnaires through pharmacies rather than direct mail. Only a small percentage (less than 10%) of responses were considered 'unusable' (eg. returned blank). Your concession to participate in the project has been helpful in helping us secure these encouraging figures.

We are enclosing a cheque reimbursing you for each Fitpack exchanged by your pharmacy for completed questionnaires. (*The full amount per questionnaire is refunded whether or not the questionnaire is usable). The amount refunded is based on **\$2.50** for each free Fitpack given out over the data-collection period. Please do not hesitate to contact us if the amounts refunded do not match your records.

We are currently in the process of analysing the data received, and expect to publish the results next year. A summary of the results is also being prepared for presentation at an International conference in March 1996. All pharmacies that participated in the study will be sent a summary of the main findings when available. We also intend to hold a seminar on the results of the project for those wanting more detailed feedback. We will let you know where and when this will be held.

Thanking you once again for your involvement.

Regards

Simon Lenton
Research Fellow

Anita Tan-Quigley
Research Officer

Encl:
CHEQUE

APPENDIX H

**TABLES OF BIVARIATE COMPARISONS FOR PREDICTOR
VARIABLES**

TABLE 11: PAST CONTACT DRUG AGENCY BY KEY VARIABLES: PERCENT RESPONDENTS

| | PAST CONTACT DRUG AGENCY | | n(1) | Sig(2). |
|---|-----------------------------|------|------|---------|
| | NO | YES | | |
| Under 26 years of age | 56.6 | 42.1 | 489 | .0052 |
| Females | 43.9 | 42.3 | 451 | .8386 |
| Are married or living with sex partner | 46.0 | 40.9 | 494 | .3570 |
| Have children | 43.2 | 39.6 | 478 | .5409 |
| Are employed | 48.3 | 37.8 | 500 | .0422 |
| Live in the city | 84.1 | 94.7 | 413 | .0061 |
| Had hepatitis C test | 58.0 | 80.9 | 494 | .0000 |
| Self report hepatitis C positive | 16.3 | 37.0 | 316 | .0000 |
| First injected at less than 18 years of age | 54.7 | 51.0 | 481 | .5315 |
| Less than 10 years of injecting | 77.0 | 55.7 | 472 | .0000 |
| Stimulants injected with this Fitpack | 68.4 | 47.3 | 500 | .0000 |
| Depressants injected with this Fitpack | 46.2 | 64.3 | 500 | .0004 |
| Injected stimulants in past month | 77.8 | 57.5 | 500 | .0000 |
| Injected depressants in past month | 49.7 | 71.6 | 500 | .0000 |
| Injected at least daily in past month | 33.4 | 53.2 | 500 | .0000 |
| Shared needles in past month | 41.3 | 43.5 | 500 | .7145 |
| Shared other equipment in past month | 56.9 | 91.7 | 500 | .3777 |
| Have been charged with a drug offence | 41.0 | 68.5 | 500 | .0000 |

(1) Each row represents 2 cells of a 2 x 2 contingency table and n is overall value for all 4 cells of the 2 x 2 table

(2) Chi Square test corrected for continuity. Bonferroni adjustment was employed at an experiment wise error rate of .05 which set alpha for each comparison at .0028.

**TABLE 13: EVER CHARGED WITH DRUG OFFENCE BY KEY VARIABLES:
PERCENT RESPONDENTS**

| | DRUG CHARGE | | n(1) | Sig(2). |
|---|-------------|------|------|---------|
| | NO | YES | | |
| Under 26 years of age | 62.1 | 43.9 | 500 | .0000 |
| Females | 52.3 | 34.1 | 461 | .0001 |
| Are married or living with sex partner | 42.2 | 46.6 | 506 | .3659 |
| Have children | 38.0 | 45.7 | 489 | .1038 |
| Are employed | 51.1 | 39.6 | 511 | .0117 |
| Live in the city | 86.9 | 87.4 | 424 | 1.0000 |
| Had hepatitis C test | 57.4 | 73.0 | 503 | .0003 |
| Self report hepatitis C positive | 12.6 | 31.8 | 324 | .0001 |
| First injected at less than 18 years of age | 43.4 | 49.2 | 492 | .2301 |
| Less than 10 years of injecting | 82.6 | 59.5 | 482 | .0000 |
| Stimulants injected with this Fitpack | 70.7 | 54.1 | 511 | .0002 |
| Depressants injected with this Fitpack | 42.9 | 60.0 | 511 | .0002 |
| Injected stimulants in past month | 77.0 | 67.3 | 511 | .0188 |
| Injected depressants in past month | 48.9 | 64.5 | 511 | .0006 |
| Injected at least daily in past month | 32.1 | 45.5 | 511 | .0026 |
| Shared needles in past month | 38.7 | 45.8 | 511 | .1262 |
| Shared other equipment in past month | 53.4 | 64.2 | 511 | .0174 |
| Prior contact with specialist drug agency | 17.7 | 40.3 | 500 | .0000 |

(1) Each row represents 2 cells of a 2 x 2 contingency table and n is overall value for all 4 cells of the 2 x 2 table

(2) Chi Square test corrected for continuity. Bonferroni adjustment was employed at an experiment wise error rate of .05 which set alpha for each comparison at .0028.

TABLE 15: EVER BEEN HEPATITIS C TESTED BY KEY VARIABLES: PERCENT RESPONDENTS

| | HEPATITIS C TESTED | | n(1) | Sig(2). |
|---|-----------------------|------|------|---------|
| | NO | YES | | |
| Under 26 years of age | 61.6 | 48.3 | 493 | .0049 |
| Females | 43.1 | 43.9 | 454 | .9484 |
| Are married or living with sex partner | 40.4 | 47.4 | 498 | .1643 |
| Have children | 32.2 | 46.7 | 483 | .0028 |
| Are employed | 50.4 | 43.6 | 503 | .1716 |
| Live in the city | 86.1 | 88.3 | 420 | .6132 |
| First injected at less than 18 years of age | 50.8 | 43.2 | 486 | .1285 |
| Less than 10 years of injecting | 79.2 | 67.1 | 476 | .0069 |
| Stimulants injected with this Fitpack | 66.7 | 60.1 | 503 | .1688 |
| Depressants injected with this Fitpack | 49.2 | 52.2 | 503 | .5932 |
| Injected stimulants in past month | 76.4 | 70.0 | 503 | .1581 |
| Injected depressants in past month | 53.3 | 58.1 | 503 | .3439 |
| Injected at least daily in past month | 37.3 | 39.8 | 503 | .6416 |
| Shared needles in past month | 43.0 | 41.6 | 503 | .8308 |
| Shared other equipment in past month | 62.2 | 56.2 | 503 | .2342 |
| Prior contact with specialist drug agency | 15.4 | 35.8 | 494 | .0000 |
| Have been charged with a drug offence | 37.3 | 54.5 | 503 | .0003 |

(1) Each row represents 2 cells of a 2 x 2 contingency table and n is overall value for all 4 cells of the 2 x 2 table

(2) Chi Square test corrected for continuity . Bonferroni adjustment was employed at an experiment wise error rate of .05 which set alpha for each comparison at .0029.

TABLE 18: SELF REPORTED POSITIVE HEPATITIS C RESULT BY KEY VARIABLES FOR THOSE HEPATITIS C TESTED: PERCENT RESPONDENTS

| | POSITIVE HEPATITIS C RESULT | | n(1) | Sig(2). |
|---|-----------------------------------|------|------|---------|
| | NO | YES | | |
| Under 26 years of age | 60.5 | 14.9 | 292 | .0000 |
| Females | 46.6 | 38.1 | 275 | .2769 |
| Are married or living with sex partner | 47.0 | 52.0 | 295 | .5417 |
| Have children | 41.4 | 58.8 | 290 | .0143 |
| Are employed | 47.0 | 29.8 | 296 | .0135 |
| Live in the city | 87.8 | 84.6 | 245 | .6983 |
| First injected at less than 18 years of age | 46.1 | 41.7 | 286 | .6128 |
| Less than 10 years of injecting | 79.1 | 21.9 | 281 | .0000 |
| Stimulants injected with this Fitpack | 67.9 | 36.3 | 296 | .0000 |
| Depressants injected with this Fitpack | 43.0 | 82.2 | 296 | .0000 |
| Injected stimulants in past month | 76.8 | 46.1 | 296 | .0000 |
| Injected depressants in past month | 51.3 | 81.7 | 296 | .0000 |
| Injected at least daily in past month | 34.9 | 61.3 | 296 | .0001 |
| Shared needles in past month | 40.9 | 44.2 | 296 | .7246 |
| Shared other equipment in past month | 55.7 | 59.3 | 296 | .6864 |
| Prior contact with specialist drug agency | 55.4 | 29.6 | 289 | .0001 |
| Have been charged with a drug offence | 50.1 | 75.2 | 296 | .0003 |

(1) Each row represents 2 cells of a 2 x 2 contingency table and n is overall value for all 4 cells of the 2 x 2 table

(2) Chi Square test corrected for continuity. Bonferroni adjustment was employed at an experiment wise error rate of .05 which set alpha for each comparison at .0029.

TABLE 21: FITPACKS PURCHASED PER MONTH BY KEY VARIABLES: PERCENT RESPONDENTS

| | FITPACKS PURCHASED PER MONTH | | n(1) | Sig(2). |
|---|------------------------------------|--------------|------|---------|
| | 5 OR LESS | 6 OR MORE | | |
| Under 26 years of age | 47.5 | 59.2 | 427 | .0208 |
| Females | 42.6 | 44.9 | 403 | .7213 |
| Are married or living with sex partner | 38.2 | 54.0 | 429 | .0015 |
| Have children | 45.4 | 37.3 | 418 | .1157 |
| Are employed | 57.5 | 38.4 | 435 | .0001 |
| Live in the city | 87.3 | 88.2 | 367 | .9290 |
| Had hepatitis C test | 69.7 | 64.2 | 430 | .2656 |
| Self report hepatitis C positive | 23.7 | 21.7 | 288 | .7998 |
| First injected at less than 18 years of age | 36.0 | 56.8 | 422 | .0000 |
| Less than 10 years of injecting | 71.6 | 70.6 | 414 | .9105 |
| Stimulants injected with this Fitpack | 63.7 | 61.0 | 435 | .6251 |
| Depressants injected with this Fitpack | 44.4 | 58.9 | 435 | .0034 |
| Injected stimulants in past month | 71.8 | 74.1 | 435 | .6535 |
| Injected depressants in past month | 48.6 | 63.6 | 435 | .0023 |
| Injected at least daily in past month | 20.1 | 56.8 | 435 | .0000 |
| Shared needles in past month | 31.2 | 49.1 | 435 | .0002 |
| Shared other equipment in past month | 56.7 | 63.0 | 435 | .2106 |
| Prior contact with specialist drug agency | 26.1 | 31.8 | 424 | .2371 |
| Have been charged with a drug offence | 46.1 | 51.0 | 435 | .3462 |

(1) Each row represents 2 cells of a 2 x 2 contingency table and n is overall value for all 4 cells of the 2 x 2 table

(2) Chi Square test corrected for continuity. Bonferroni adjustment was employed at an experiment wise error rate of .05 which set alpha for each comparison at .0026.

TABLE 24: WANT TO SEE FITPACKS SOLD IN VENDING MACHINES BY KEY VARIABLES: PERCENT RESPONDENTS

| | WANT VENDING MACHINES | | n(1) | Sig(2). |
|---|--------------------------|------|------|---------|
| | NO | YES | | |
| Under 26 years of age | 44.7 | 56.9 | 455 | .0477 |
| Females | 42.1 | 45.6 | 421 | .6356 |
| Are married or living with sex partner | 41.4 | 46.3 | 456 | .4611 |
| Have children | 46.9 | 37.9 | 443 | .1463 |
| Are employed | 42.5 | 46.9 | 460 | .5168 |
| Live in the city | 81.5 | 88.5 | 381 | .1416 |
| Had hepatitis C test | 70.0 | 63.7 | 455 | .3018 |
| Self report hepatitis C positive | 24.6 | 21.9 | 293 | .7682 |
| First injected at less than 18 years of age | 29.1 | 52.3 | 444 | .0001 |
| Less than 10 years of injecting | 62.2 | 72.8 | 438 | .0616 |
| Stimulants injected with this Fitpack | 68.3 | 60.3 | 460 | .1897 |
| Depressants injected with this Fitpack | 35.6 | 55.9 | 460 | .0006 |
| Injected stimulants in past month | 76.8 | 70.9 | 460 | .3167 |
| Injected depressants in past month | 42.1 | 60.7 | 460 | .0017 |
| Injected at least daily in past month | 23.8 | 42.6 | 460 | .0013 |
| Shared needles in past month | 26.0 | 46.8 | 460 | .0005 |
| Shared other equipment in past month | 56.6 | 60.5 | 460 | .5735 |
| Prior contact with specialist drug agency | 30.3 | 29.1 | 451 | .9221 |
| Have been charged with a drug offence | 49.6 | 48.2 | 460 | .9042 |

(1) Each row represents 2 cells of a 2 x 2 contingency table and n is overall value for all 4 cells of the 2 x 2 table

(2) Chi Square test corrected for continuity. Bonferroni adjustment was employed at an experiment wise error rate of .05 which set alpha for each comparison at .0026.

TABLE 26: WANT TO SEE THREE NEEDLE FITPACKS AVAILABLE IN WA BY KEY VARIABLES: PERCENT RESPONDENTS

| | WANT 3 NEEDLE FITPACKS AVAILABLE | | | |
|---|--|------|------|---------|
| | NO | YES | n(1) | Sig(2). |
| Under 26 years of age | 53.6 | 53.1 | 500 | 1.0000 |
| Females | 38.7 | 54.4 | 461 | .0025 |
| Are married or living with sex partner | 46.1 | 39.7 | 506 | .2324 |
| Have children | 40.0 | 45.9 | 489 | .2771 |
| Are employed | 49.0 | 36.9 | 511 | .0180 |
| Last years income under \$10,000 | 20.0 | 30.3 | 342 | .0526 |
| Live in the city | 85.4 | 91.8 | 424 | .1077 |
| Had hepatitis C test | 63.9 | 67.6 | 503 | .4877 |
| Self report hepatitis C positive | 19.1 | 32.7 | 324 | .0122 |
| First injected at less than 18 years of age | 42.9 | 54.5 | 492 | .0266 |
| Less than 10 years of injecting | 75.0 | 63.3 | 482 | .0138 |
| Stimulants injected with this Fitpack | 69.2 | 46.5 | 511 | .0000 |
| Depressants injected with this Fitpack | 45.6 | 65.0 | 511 | .0001 |
| Injected stimulants in past month | 78.4 | 57.0 | 511 | .0000 |
| Injected depressants in past month | 51.2 | 69.7 | 511 | .0002 |
| Injected at least daily in past month | 38.4 | 38.9 | 511 | .9981 |
| Shared needles in past month | 40.7 | 45.9 | 511 | .3321 |
| Shared other equipment in past month | 59.2 | 56.9 | 511 | .7118 |
| Prior contact with specialist drug agency | 22.7 | 44.0 | 500 | .0000 |
| Have been charged with a drug offence | 47.9 | 48.2 | 511 | 1.0000 |

(1) Each row represents 2 cells of a 2 x 2 contingency table and n is overall value for all 4 cells of the 2 x 2 table

(2) Chi Square test corrected for continuity. Bonferroni adjustment was employed at an experiment wise error rate of .05 which set alpha for each comparison at .0025.

TABLE 28: WANT TEN NEEDLE FITPACKS AVAILABLE IN WA BY KEY VARIABLES: PERCENT RESPONDENTS

| | WANT 10 NEEDLE FITPACKS AVAILABLE | | | |
|---|---|------|------|---------|
| | NO | YES | n(1) | Sig(2). |
| Under 26 years of age | 48.5 | 55.1 | 500 | .2395 |
| Females | 46.9 | 42.2 | 461 | .4413 |
| Are married or living with sex partner | 32.3 | 48.3 | 506 | .0024 |
| Have children | 47.7 | 39.7 | 489 | .1495 |
| Are employed | 23.3 | 46.6 | 511 | .4686 |
| Last years income under \$10,000 | 15.9 | 25.3 | 342 | .1056 |
| Live in the city | 89.3 | 86.5 | 424 | .5720 |
| Had hepatitis C test | 63.1 | 65.6 | 503 | .6890 |
| Self report hepatitis C positive | 25.5 | 22.3 | 324 | .6654 |
| First injected at less than 18 years of age | 44.6 | 46.7 | 492 | .7730 |
| Less than 10 years of injecting | 70.3 | 72.2 | 482 | .7677 |
| Stimulants injected with this Fitpack | 59.3 | 63.9 | 511 | .4008 |
| Depressants injected with this Fitpack | 49.5 | 51.6 | 511 | .7549 |
| Injected stimulants in past month | 63.8 | 75.2 | 511 | .0125 |
| Injected depressants in past month | 52.0 | 57.9 | 511 | .2956 |
| Injected at least daily in past month | 28.7 | 41.8 | 511 | .0111 |
| Shared needles in past month | 41.4 | 42.4 | 511 | .9231 |
| Shared other equipment in past month | 46.1 | 62.7 | 511 | .0015 |
| Prior contact with specialist drug agency | 31.5 | 27.8 | 500 | .5021 |
| Have been charged with a drug offence | 43.1 | 49.6 | 511 | .2458 |

(1) Each row represents 2 cells of a 2 x 2 contingency table and n is overall value for all 4 cells of the 2 x 2 table

(2) Chi Square test corrected for continuity. Bonferroni adjustment was employed at an experiment wise error rate of .05 which set alpha for each comparison at .0025.

TABLE 29: PROBLEMS BUYING FITPACKS AT LEAST 'SOMETIMES' BY KEY VARIABLES: PERCENT RESPONDENTS

| | PROB'S BUYING AT LEAST 'SOMETIMES' | | n(1) | Sig(2). |
|---|--|------|------|---------|
| | NO | YES | | |
| Under 26 years of age | 58.1 | 44.4 | 500 | .0051 |
| Females | 40.2 | 49.5 | 461 | .0689 |
| Are married or living with sex partner | 39.6 | 53.5 | 506 | .0037 |
| Have children | 37.1 | 50.6 | 489 | .0055 |
| Are employed | 47.6 | 41.5 | 511 | .2247 |
| Last years income under \$10,000 | 21.4 | 26.4 | 342 | .3724 |
| Live in the city | 85.2 | 91.0 | 424 | .1336 |
| Had hepatitis C test | 62.0 | 70.6 | 503 | .0700 |
| Self report hepatitis C positive | 22.3 | 24.5 | 324 | .7495 |
| First injected at less than 18 years of age | 49.2 | 40.1 | 492 | .0677 |
| Less than 10 years of injecting | 74.2 | 66.9 | 482 | .1146 |
| Stimulants injected with this Fitpack | 36.6 | 38.4 | 511 | .7769 |
| Depressants injected with this Fitpack | 50.0 | 53.1 | 511 | .5765 |
| Injected stimulants in past month | 72.8 | 71.5 | 511 | .8306 |
| Injected depressants in past month | 55.8 | 57.5 | 511 | .7877 |
| Injected at least daily in past month | 31.6 | 52.0 | 511 | .0000 |
| Shared needles in past month | 37.9 | 50.4 | 511 | .0089 |
| Shared other equipment in past month | 57.9 | 59.9 | 511 | .7247 |
| Prior contact with specialist drug agency | 25.2 | 35.4 | 500 | .0223 |
| Have been charged with a drug offence | 48.7 | 46.5 | 511 | .7165 |

(1) Each row represents 2 cells of a 2 x 2 contingency table and n is overall value for all 4 cells of the 2 x 2 table

(2) Chi Square test corrected for continuity. Bonferroni adjustment produced an experiment wise error rate of .05 which set alpha for each comparison at .0025.

TABLE 31: PROBLEMS WITH FITPACKS OR NEEDLES IN THEM AT LEAST 'SOMETIMES' BY KEY VARIABLES: PERCENT RESPONDENTS

| | PROB'S WITH FITPACKS OR NEEDLES AT LEAST 'SOMETIMES' | | | |
|---|--|------|------|---------|
| | NO | YES | n(1) | Sig(2). |
| Under 26 years of age | 52.1 | 55.1 | 500 | .5650 |
| Females | 38.3 | 49.9 | 461 | .0166 |
| Are married or living with sex partner | 44.3 | 44.3 | 506 | 1.0000 |
| Have children | 37.3 | 46.9 | 489 | .0402 |
| Are employed | 51.8 | 38.0 | 511 | .0024 |
| Live in the city | 87.7 | 86.5 | 424 | .8243 |
| Had hepatitis C test | 66.0 | 63.7 | 503 | .6648 |
| Self report hepatitis C positive | 27.6 | 17.4 | 324 | .0411 |
| First injected at less than 18 years of age | 46.0 | 46.4 | 492 | .9978 |
| Less than 10 years of injecting | 69.2 | 74.8 | 482 | .2115 |
| Stimulants injected with this Fitpack | 59.3 | 66.9 | 511 | .0933 |
| Depressants injected with this Fitpack | 53.2 | 48.5 | 511 | .3499 |
| Injected stimulants in past month | 67.4 | 78.2 | 511 | .0091 |
| Injected depressants in past month | 57.3 | 55.3 | 511 | .7172 |
| Injected at least daily in past month | 35.8 | 41.4 | 511 | .1967 |
| Shared needles in past month | 37.2 | 48.1 | 511 | .0173 |
| Shared other equipment in past month | 55.4 | 62.3 | 511 | .1341 |
| Prior contact with specialist drug agency | 25.9 | 32.2 | 500 | .1446 |
| Have been charged with a drug offence | 51.1 | 44.1 | 511 | .1363 |

(1) Each row represents 2 cells of a 2 x 2 contingency table and n is overall value for all 4 cells of the 2 x 2 table

(2) Chi Square test corrected for continuity. Bonferroni adjustment produced an experiment wise error rate of .05 which set alpha for each comparison at .0026.

TABLE 34: USED FITPACK LESS THAN 10 MINUTES AFTER PURCHASE BY KEY VARIABLES: PERCENT RESPONDENTS

| | USED FITPACK LESS THAN 10 MINS. AFTER PURCHASE | | | |
|---|--|------|------|---------|
| | NO | YES | n(1) | Sig(2). |
| Under 26 years of age | 48.2 | 64.5 | 492 | .0009 |
| Females | 44.1 | 41.3 | 454 | .6510 |
| Are married or living with sex partner | 46.4 | 41.3 | 498 | .3255 |
| Have children | 44.1 | 35.1 | 483 | .0731 |
| Are employed | 50.9 | 35.1 | 503 | .0011 |
| Live in the city | 87.4 | 86.2 | 420 | .8633 |
| Had hepatitis C test | 66.0 | 62.3 | 496 | .4700 |
| Self report hepatitis C positive | 22.5 | 25.7 | 318 | .6244 |
| First injected at less than 18 years of age | 38.0 | 62.5 | 487 | .0000 |
| Less than 10 years of injecting | 70.8 | 72.8 | 477 | .7199 |
| Stimulants injected with this Fitpack | 69.5 | 50.2 | 503 | .0000 |
| Depressants injected with this Fitpack | 43.0 | 68.3 | 503 | .0000 |
| Injected stimulants in past month | 74.4 | 69.0 | 503 | .2432 |
| Injected depressants in past month | 47.5 | 72.8 | 503 | .0000 |
| Injected at least daily in past month | 30.9 | 54.6 | 503 | .0000 |
| Shared needles in past month | 36.0 | 54.5 | 503 | .0001 |
| Shared other equipment in past month | 55.5 | 64.7 | 503 | .0589 |
| Prior contact with specialist drug agency | 25.8 | 33.8 | 492 | .0768 |
| Have been charged with a drug offence | 44.2 | 55.5 | 503 | .0221 |

(1) Each row represents 2 cells of a 2 x 2 contingency table and n is overall value for all 4 cells of the 2 x 2 table

(2) Chi Square test corrected for continuity. Bonferroni adjustment was employed at an experiment wise error rate of .05 which set alpha for each comparison at .0026.

TABLE 37: 3 OR MORE PEOPLE USED THE NEEDLES IN THE FITPACK BY KEY VARIABLES: PERCENT RESPONDENTS

| | 3 OR MORE PEOPLE USED THE NEEDLES IN THE FITPACK | | | |
|---|--|------|------|---------|
| | NO | YES | n(1) | Sig(2). |
| Under 26 years of age | 49.1 | 59.6 | 491 | .0279 |
| Females | 42.3 | 45.4 | 455 | .5834 |
| Are married or living with sex partner | 44.3 | 44.5 | 497 | 1.0000 |
| Have children | 39.9 | 42.7 | 481 | .6026 |
| Are employed | 48.1 | 42.7 | 502 | .2768 |
| Live in the city | 88.0 | 85.4 | 418 | .5396 |
| Had hepatitis C test | 60.3 | 72.1 | 494 | .0096 |
| Self report hepatitis C positive | 25.4 | 21.1 | 318 | .4513 |
| First injected at less than 18 years of age | 40.0 | 55.2 | 484 | .0014 |
| Less than 10 years of injecting | 68.4 | 76.4 | 474 | .0722 |
| Stimulants injected with this Fitpack | 60.3 | 68.0 | 502 | .0958 |
| Depressants injected with this Fitpack | 52.5 | 50.9 | 502 | .8051 |
| Injected stimulants in past month | 67.1 | 80.7 | 502 | .0011 |
| Injected depressants in past month | 57.3 | 55.3 | 502 | .7371 |
| Injected at least daily in past month | 38.0 | 39.3 | 502 | .8328 |
| Shared needles in past month | 37.1 | 49.6 | 502 | .0070 |
| Shared other equipment in past month | 57.3 | 60.7 | 502 | .5074 |
| Prior contact with specialist drug agency | 29.8 | 26.0 | 491 | .4149 |
| Have been charged with a drug offence | 49.1 | 46.0 | 502 | .5516 |

(1) Each row represents 2 cells of a 2 x 2 contingency table and n is overall value for all 4 cells of the 2 x 2 table

(2) Chi Square test corrected for continuity. Bonferroni adjustment was employed at an experiment wise error rate of .05 which set alpha for each comparison at .0026.

TABLE 39: FITPACK USED OVER 3 OR MORE SESSIONS BY KEY VARIABLES: PERCENT RESPONDENTS

| | FITPACK USED OVER 3 OR MORE SESSIONS | | n(1) | Sig(2). |
|---|---|------|------|---------|
| | NO | YES | | |
| Under 26 years of age | 59.2 | 43.8 | 493 | .0012 |
| Females | 43.6 | 43.1 | 455 | .9816 |
| Are married or living with sex partner | 42.1 | 48.7 | 498 | .1769 |
| Have children | 41.3 | 41.5 | 482 | 1.0000 |
| Are employed | 46.0 | 45.5 | 503 | .9796 |
| Live in the city | 87.3 | 86.4 | 419 | .9144 |
| Had hepatitis C test | 68.0 | 60.3 | 496 | .0956 |
| Self report hepatitis C positive | 19.6 | 30.3 | 319 | .0433 |
| First injected at less than 18 years of age | 50.4 | 38.9 | 485 | .0167 |
| Less than 10 years of injecting | 79.9 | 58.3 | 475 | .0000 |
| Stimulants injected with this Fitpack | 69.3 | 54.5 | 503 | .0017 |
| Depressants injected with this Fitpack | 47.0 | 59.4 | 503 | .0092 |
| Injected stimulants in past month | 76.9 | 66.0 | 503 | .0107 |
| Injected depressants in past month | 52.6 | 62.5 | 503 | .0376 |
| Injected at least daily in past month | 32.8 | 47.8 | 503 | .0011 |
| Shared needles in past month | 39.9 | 45.4 | 503 | .2684 |
| Shared other equipment in past month | 56.2 | 63.4 | 503 | .1305 |
| Prior contact with specialist drug agency | 24.9 | 33.8 | 492 | .0442 |
| Have been charged with a drug offence | 44.1 | 53.5 | 503 | .0501 |

(1) Each row represents 2 cells of a 2 x 2 contingency table and n is overall value for all 4 cells of the 2 x 2 table

(2) Chi Square test corrected for continuity. Bonferroni adjustment was employed at an experiment wise error rate of .05 which set alpha for each comparison at .0026.

**TABLE 42: REUSED NEEDLES IN THE FITPACK BY KEY VARIABLES:
PERCENT RESPONDENTS**

| | RE-USEDOWN NEEDLES | | n(1) | Sig(2). |
|---|-----------------------|------|------|---------|
| | NO | YES | | |
| Under 26 years of age | 58.8 | 45.6 | 498 | .0052 |
| Females | 36.2 | 54.2 | 460 | .0022 |
| Are married or living with sex partner | 33.2 | 61.8 | 503 | .0000 |
| Have children | 38.1 | 46.7 | 488 | .0755 |
| Are employed | 48.0 | 41.5 | 508 | .1732 |
| Last years income under \$10,000 | 20.8 | 27.0 | 341 | .2374 |
| Live in the city | 88.5 | 84.8 | 422 | .3382 |
| Had hepatitis C test | 65.3 | 64.2 | 501 | .8858 |
| Self report hepatitis C positive | 19.5 | 29.0 | 322 | .0661 |
| First injected at less than 18 years of age | 49.9 | 39.9 | 490 | .0380 |
| Less than 10 years of injecting | 74.5 | 67.4 | 481 | .1137 |
| Stimulants injected with this Fitpack | 64.0 | 61.5 | 508 | .6424 |
| Depressants injected with this Fitpack | 47.9 | 56.1 | 508 | .0872 |
| Injected stimulants in past month | 72.6 | 72.6 | 508 | 1.0000 |
| Injected depressants in past month | 53.9 | 60.5 | 508 | .1680 |
| Injected at least daily in past month | 32.2 | 48.1 | 508 | .0004 |
| Shared needles in past month | 31.4 | 59.0 | 508 | .0000 |
| Shared other equipment in past month | 49.7 | 72.7 | 508 | .0000 |
| Prior contact with specialist drug agency | 27.8 | 29.2 | 497 | .8263 |
| Have been charged with a drug offence | 41.7 | 57.0 | 508 | .0010 |

(1) Each row represents 2 cells of a 2 x 2 contingency table and n is overall value for all 4 cells of the 2 x 2 table

(2) Chi Square test corrected for continuity. Bonferroni adjustment was employed at an experiment wise error rate of .05 which set alpha for each comparison at .0025.

**TABLE 45: NEEDLES IN THE FITPACK SHARED BY KEY VARIABLES:
PERCENT RESPONDENTS**

| | NEEDLES IN FITPACK SHARED | | n(1) | Sig(2). |
|---|------------------------------|------|------|---------|
| | NO | YES | | |
| Under 26 years of age | 53.7 | 51.6 | 497 | .8592 |
| Females | 42.8 | 45.1 | 458 | .8543 |
| Are married or living with sex partner | 41.9 | 63.4 | 501 | .0023 |
| Have children | 39.6 | 54.2 | 486 | .0413 |
| Are employed | 47.7 | 30.7 | 507 | .0156 |
| Last years income under \$10,000 | 22.3 | 29.7 | 341 | .4357 |
| Live in the city | 87.4 | 84.3 | 420 | .7072 |
| Had hepatitis C test | 64.5 | 69.9 | 499 | .4946 |
| Self report hepatitis C positive | 21.8 | 31.7 | 323 | .2183 |
| First injected at less than 18 years of age | 46.5 | 44.2 | 489 | .8465 |
| Less than 10 years of injecting | 71.7 | 72.2 | 480 | 1.0000 |
| Stimulants injected with this Fitpack | 63.1 | 62.7 | 507 | 1.0000 |
| Depressants injected with this Fitpack | 49.0 | 67.4 | 507 | .0092 |
| Injected stimulants in past month | 73.4 | 66.9 | 507 | .3501 |
| Injected depressants in past month | 53.8 | 75.9 | 507 | .0014 |
| Injected at least daily in past month | 36.4 | 53.9 | 507 | .0105 |
| Shared needles in past month | 36.3 | 82.0 | 507 | .0000 |
| Shared other equipment in past month | 55.9 | 76.5 | 507 | .0028 |
| Prior contact with specialist drug agency | 29.1 | 24.4 | 495 | .5362 |
| Have been charged with a drug offence | 47.7 | 49.4 | 507 | .8967 |

(1) Each row represents 2 cells of a 2 x 2 contingency table and n is overall value for all 4 cells of the 2 x 2 table

(2) Chi Square test corrected for continuity. Bonferroni adjustment was employed at an experiment wise error rate of .05 which set alpha for each comparison at .0025.

TABLE 48: INJECTED AT LEAST DAILY OVER PAST MONTH BY KEY VARIABLES: PERCENT RESPONDENTS

| | INJECTED AT LEAST DAILY PAST MONTH | | n(1) | Sig(2). |
|---|---------------------------------------|------|------|---------|
| | NO | YES | | |
| Under 26 years of age | 60.1 | 43.0 | 500 | .0003 |
| Females | 40.4 | 48.5 | 461 | .1080 |
| Are married or living with sex partner | 38.0 | 54.2 | 506 | .0005 |
| Have children | 38.7 | 46.4 | 489 | .1127 |
| Are employed | 54.5 | 31.3 | 511 | .0000 |
| Last years income under \$10,000 | 18.9 | 30.1 | 342 | .0242 |
| Live in the city | 88.0 | 85.8 | 424 | .6166 |
| Had hepatitis C test | 64.0 | 66.4 | 503 | .6416 |
| Self report hepatitis C positive | 14.9 | 35.4 | 324 | .0000 |
| First injected at less than 18 years of age | 42.9 | 51.2 | 492 | .0865 |
| Less than 10 years of injecting | 80.9 | 57.5 | 482 | .0000 |
| Stimulants injected with this Fitpack | 72.6 | 47.0 | 511 | .0000 |
| Depressants injected with this Fitpack | 39.8 | 69.0 | 511 | .0000 |
| Injected stimulants in past month | 79.0 | 61.7 | 511 | .0000 |
| Injected depressants in past month | 45.6 | 73.6 | 511 | .0000 |
| Shared needles in past month | 36.5 | 51.2 | 511 | .0015 |
| Shared other equipment in past month | 54.9 | 64.4 | 511 | .0426 |
| Prior contact with specialist drug agency | 22.1 | 39.1 | 500 | .0001 |
| Have been charged with a drug offence | 42.5 | 56.6 | 511 | .0025 |

(1) Each row represents 2 cells of a 2 x 2 contingency table and n is overall value for all 4 cells of the 2 x 2 table

(2) Chi Square test corrected for continuity. Bonferroni adjustment was employed at an experiment wise error rate of .05 which set alpha for each comparison at .0026.

TABLE 51: INJECTED STIMULANTS ONLY, DEPRESSANTS ONLY OR BOTH STIMULANTS AND DEPRESSANTS OVER THE PAST MONTH BY KEY VARIABLES: PERCENT RESPONDENTS

| | DRUG TYPES INJECTED IN PAST | | | n(1) | Sig(2). |
|---|-----------------------------|----------------------------|------------------|------|---------|
| | MONTH | | | | |
| | STIMULANTS ONLY | STIMULANTS AND DEPRESSANTS | DEPRESSANTS ONLY | | |
| Under 26 years of age | 60.2 | 60.7 | 34.3 | 494 | .0000 |
| Females | 48.7 | 34.7 | 45.7 | 458 | .0298 |
| Are married or living with sex partner | 44.0 | 40.1 | 51.3 | 499 | .1617 |
| Have children | 45.9 | 38.5 | 36.7 | 484 | .1853 |
| Are employed | 51.8 | 44.8 | 36.6 | 504 | .0211 |
| Last years income under \$10,000 | 22.6 | 17.0 | 30.0 | 339 | .0912 |
| Live in the city | 89.3 | 85.3 | 85.1 | 419 | .4774 |
| Had hepatitis C test | 62.0 | 64.3 | 69.9 | 496 | .3259 |
| Self report hepatitis C positive | 8.2 | 24.9 | 39.7 | 319 | .0000 |
| First injected at less than 18 years of age | 38.9 | 60.0 | 43.0 | 486 | .0003 |
| Less than 10 years of injecting | 84.8 | 69.5 | 52.8 | 477 | .0000 |
| Injected At Least Daily In Past Month | 23.2 | 46.4 | 54.5 | 504 | .0000 |
| Shared needles in past month | 35.5 | 52.0 | 40.5 | 504 | .0060 |
| Shared other equipment in past month | 56.6 | 63.3 | 56.1 | 504 | .3488 |
| Prior contact with specialist drug agency | 17.5 | 30.8 | 43.1 | 493 | .0000 |
| Have been charged with a drug offence | 38.0 | 53.8 | 55.5 | 504 | .0009 |

(1) Each row represents 3 cells of a 3 x 2 contingency table and n is overall value for all 6 cells of the 3 x 2 table

(2) Chi Square test. Bonferroni adjustment was employed at an experiment wise error rate of .05 which set alpha for each comparison at .0031.

TABLE 53: INJECT 'OUTSIDE' (CAR, PARK, BEACH, STREET, PUBLIC TOILET PUB, CLUB) BY KEY VARIABLES: PERCENT RESPONDENTS

| | INJECT 'OUTSIDE' | | n(1) | Sig(2). |
|---|------------------|------|------|---------|
| | NO | YES | | |
| Under 26 years of age | 54.2 | 51.0 | 500 | .6170 |
| Females | 44.5 | 40.0 | 461 | .4801 |
| Are married or living with sex partner | 40.3 | 7.0 | 506 | .0019 |
| Have children | 40.9 | 44.4 | 489 | .5742 |
| Are employed | 47.9 | 38.1 | 511 | .0760 |
| Last years income under \$10,000 | 20.6 | 30.8 | 342 | .0792 |
| Live in the city | 86.6 | 89.1 | 424 | .6377 |
| Had hepatitis C test | 64.4 | 66.6 | 503 | .7428 |
| Self report hepatitis C positive | 19.9 | 32.8 | 324 | .0253 |
| First injected at less than 18 years of age | 43.0 | 56.3 | 492 | .0159 |
| Less than 10 years of injecting | 73.2 | 66.8 | 482 | .2294 |
| Stimulants injected with this Fitpack | 66.6 | 50.6 | 511 | .0021 |
| Depressants injected with this Fitpack | 44.3 | 72.9 | 511 | .0000 |
| Injected stimulants in past month | 74.5 | 65.5 | 511 | .0680 |
| Injected depressants in past month | 50.1 | 76.5 | 511 | .0000 |
| Injected at least daily in past month | 34.0 | 53.0 | 511 | .0003 |
| Shared needles in past month | 36.5 | 60.1 | 511 | .0000 |
| Shared other equipment in past month | 54.8 | 70.7 | 511 | .0026 |
| Prior contact with specialist drug agency | 27.0 | 34.3 | 500 | .1478 |
| Have been charged with a drug offence | 45.8 | 54.9 | 511 | .0964 |

(1) Each row represents 2 cells of a 2 x 2 contingency table and n is overall value for all 4 cells of the 2 x 2 table

(2) Chi Square test corrected for continuity. Bonferroni adjustment was employed at an experiment wise error rate of .05 which set alpha for each comparison at .0025.

TABLE 59: SHARED A NEEDLE IN PAST MONTH BY KEY VARIABLES: PERCENT RESPONDENTS

| | SHARED NEEDLE IN | | n(1) | Sig(2). |
|---|------------------|------|------|---------|
| | PASTMONTH | | | |
| | NO | YES | | |
| Under 26 years of age | 47.0 | 62.2 | 500 | .0011 |
| Females | 37.0 | 52.6 | 461 | .0012 |
| Are married or living with sex partner | 40.2 | 50.1 | 506 | .0339 |
| Have children | 40.1 | 43.9 | 489 | .4529 |
| Are employed | 50.9 | 38.2 | 511 | .0056 |
| Last years income under \$10,000 | 17.4 | 31.3 | 342 | .0042 |
| Live in the city | 86.7 | 87.7 | 424 | .8864 |
| Had hepatitis C test | 65.5 | 64.2 | 503 | .8307 |
| Self report hepatitis C positive | 22.1 | 24.4 | 324 | .7374 |
| First injected at less than 18 years of age | 40.4 | 54.3 | 492 | .0031 |
| Less than 10 years of injecting | 68.7 | 75.9 | 482 | .1019 |
| Stimulants injected with this Fitpack | 64.1 | 60.9 | 511 | .5177 |
| Depressants injected with this Fitpack | 48.6 | 54.5 | 511 | .2198 |
| Injected stimulants in past month | 72.0 | 72.8 | 511 | .9329 |
| Injected depressants in past month | 52.2 | 62.2 | 511 | .0300 |
| Injected at least daily in past month | 32.5 | 46.8 | 511 | .0015 |
| Shared other equipment in past month | 42.7 | 80.3 | 511 | .0000 |
| Prior contact with specialist drug agency | 27.9 | 29.8 | 500 | .7145 |
| Have been charged with a drug offence | 44.9 | 52.1 | 511 | .1262 |

(1) Each row represents 2 cells of a 2 x 2 contingency table and n is overall value for all 4 cells of the 2 x 2 table

(2) Chi Square test corrected for continuity. Bonferroni adjustment was employed at an experiment wise error rate of .05 which set alpha for each comparison at .0026.

TABLE 62: SHARED OTHER EQUIPMENT IN PAST MONTH BY KEY VARIABLES: PERCENT RESPONDENTS

| | SHARED OTHER EQUIPMENT IN PAST MONTH | | n(1) | Sig(2). |
|---|--|------|------|---------|
| | NO | YES | | |
| Under 26 years of age | 47.5 | 57.7 | 500 | .0312 |
| Females | 33.48 | 46.7 | 461 | .1143 |
| Are married or living with sex partner | 38.7 | 48.3 | 506 | .0408 |
| Have children | 44.2 | 39.9 | 489 | .3881 |
| Are employed | 45.6 | 45.5 | 511 | 1.0000 |
| Last years income under \$10,000 | 8.5 | 32.4 | 342 | .0000 |
| Live in the city | 85.6 | 88.3 | 424 | .5226 |
| Had hepatitis C test | 68.3 | 62.6 | 503 | .2342 |
| Self report hepatitis C positive | 21.7 | 24.1 | 324 | .7012 |
| First injected at less than 18 years of age | 44.1 | 47.5 | 492 | .5188 |
| Less than 10 years of injecting | 70.2 | 72.8 | 482 | .5895 |
| Stimulants injected with this Fitpack | 62.2 | 63.1 | 511 | .9064 |
| Depressants injected with this Fitpack | 50.1 | 51.8 | 511 | .7683 |
| Injected stimulants in past month | 70.9 | 73.4 | 511 | .6002 |
| Injected depressants in past month | 54.7 | 57.6 | 511 | .5637 |
| Injected at least daily in past month | 33.1 | 42.4 | 511 | .0426 |
| Shared needles in past month | 20.0 | 57.8 | 511 | .0000 |
| Prior contact with specialist drug agency | 26.4 | 30.4 | 500 | .3777 |
| Have been charged with a drug offence | 41.5 | 52.5 | 500 | .0174 |

(1) Each row represents 2 cells of a 2 x 2 contingency table and n is overall value for all 4 cells of the 2 x 2 table

(2) Chi Square test corrected for continuity. Bonferroni adjustment was employed at an experiment wise error rate of .05 which set alpha for each comparison at .0026.

TABLE 66: SHARED NEEDLES SHARED NEEDLES AT LEAST ONCE IN PAST YEAR AS NO MONEY FOR NEW FITPACK BY KEY VARIABLES: PERCENT RESPONDENTS

| | SHARED IN PAST YEAR AS NO \$FOR NEW FITPACK | | n(1) | Sig(2). |
|---|---|------|------|---------|
| | NO | YES | | |
| Under 26 years of age | 49.9 | 59.9 | 500 | .0413 |
| Females | 39.1 | 51.5 | 461 | .0142 |
| Are married or living with sex partner | 38.9 | 54.4 | 506 | .0012 |
| Have children | 39.3 | 46.1 | 489 | .1757 |
| Are employed | 47.7 | 41.6 | 511 | .2150 |
| Last years income under \$10,000 | 20.6 | 28.0 | 342 | .1684 |
| Live in the city | 84.5 | 91.6 | 424 | .0500 |
| Had hepatitis C test | 65.6 | 63.7 | 503 | .7288 |
| Self report hepatitis C positive | 23.5 | 22.2 | 324 | .9025 |
| First injected at less than 18 years of age | 41.0 | 55.8 | 492 | .0024 |
| Less than 10 years of injecting | 70.2 | 74.5 | 482 | .3714 |
| Stimulants injected with this Fitpack | 62.8 | 62.8 | 511 | 1.0000 |
| Depressants injected with this Fitpack | 50.2 | 52.6 | 511 | .6760 |
| Injected stimulants in past month | 71.2 | 74.4 | 511 | .5034 |
| Injected depressants in past month | 54.2 | 60.5 | 511 | .1960 |
| Injected at least daily in past month | 36.1 | 43.0 | 511 | .1512 |
| Shared needles in past month | 21.9 | 79.5 | 511 | .0000 |
| Shared other equipment in past month | 44.1 | 85.3 | 511 | .0000 |
| Prior contact with specialist drug agency | 28.2 | 29.6 | 500 | .8255 |
| Have been charged with a drug offence | 43.8 | 55.6 | 511 | .0144 |

(1) Each row represents 2 cells of a 2 x 2 contingency table and n is overall value for all 4 cells of the 2 x 2 table

(2) Chi Square test corrected for continuity. Bonferroni adjustment was employed at an experiment wise error rate of .05 which set alpha for each comparison at .0025.

TABLE 69: UNDERSTAND MEANING OF A POSITIVE HIV TEST RESULT BY KEY VARIABLES: PERCENT RESPONDENTS

| | UNDERSTANDING OF +VE HIV RESULT | | n(1) | Sig(2). |
|---|------------------------------------|---------|------|---------|
| | INCORRECT | CORRECT | | |
| Under 26 years of age | 54.4 | 52.9 | 500 | .7981 |
| Females | 38.7 | 46.0 | 461 | .1532 |
| Are married or living with sex partner | 44.9 | 43.9 | 506 | .8988 |
| Have children | 45.1 | 39.8 | 489 | .2958 |
| Are employed | 44.0 | 46.5 | 511 | .6534 |
| Live in the city | 82.9 | 89.4 | 424 | .0823 |
| Had hepatitis C test | 63.0 | 66.0 | 503 | .5634 |
| Self report hepatitis C positive | 20.6 | 24.4 | 324 | .5201 |
| First injected at less than 18 years of age | 47.2 | 45.6 | 492 | .8038 |
| Less than 10 years of injecting | 71.6 | 71.8 | 482 | 1.0000 |
| Stimulants injected with this Fitpack | 63.6 | 62.3 | 511 | .8500 |
| Depressants injected with this Fitpack | 54.4 | 49.2 | 511 | .2951 |
| Injected stimulants in past month | 73.9 | 71.4 | 511 | .6197 |
| Injected depressants in past month | 59.5 | 54.6 | 511 | .3225 |
| Injected at least daily in past month | 40.4 | 37.5 | 511 | .5799 |
| Shared needles in past month | 42.1 | 42.2 | 511 | 1.0000 |
| Shared other equipment in past month | 54.8 | 60.7 | 511 | .2284 |
| Prior contact with specialist drug agency | 28.1 | 29.1 | 500 | .8982 |
| Have been charged with a drug offence | 49.0 | 47.3 | 511 | .7836 |

(1) Each row represents 2 cells of a 2 x 2 contingency table and n is overall value for all 4 cells of the 2 x 2 table

(2) Chi Square test corrected for continuity. Bonferroni adjustment was employed at an experiment wise error rate of .05 which set alpha for each comparison at .0026.

TABLE 70: UNDERSTAND EFFECTIVENESS OF BLEACH AT KILLING THE HEPATITIS C VIRUS: PERCENT RESPONDENTS

| | 'CORRECT' RE BLEACH | | n(1) | Sig(2). |
|---|------------------------|---------|------|---------|
| | INCORRECT | CORRECT | | |
| Under 26 years of age | 59.5 | 47.7 | 491 | .0118 |
| Females | 46.2 | 41.6 | 452 | .3750 |
| Are married or living with sex partner | 44.1 | 46.1 | 496 | .7234 |
| Have children | 41.9 | 41.1 | 480 | .9265 |
| Are employed | 46.9 | 43.7 | 501 | .5203 |
| Live in the city | 90.2 | 84.9 | 418 | .1344 |
| Had hepatitis C test | 63.7 | 66.2 | 497 | .6314 |
| Self report hepatitis C positive | 18.5 | 25.7 | 320 | .1599 |
| First injected at less than 18 years of age | 45.6 | 46.8 | 483 | .8624 |
| Less than 10 years of injecting | 81.7 | 62.5 | 474 | .0001 |
| Stimulants injected with this Fitpack | 66.7 | 57.9 | 501 | .0535 |
| Depressants injected with this Fitpack | 43.3 | 58.6 | 501 | .0008 |
| Injected stimulants in past month | 76.9 | 67.0 | 501 | .0181 |
| Injected depressants in past month | 47.8 | 64.9 | 501 | .0002 |
| Injected at least daily in past month | 31.0 | 46.9 | 501 | .0004 |
| Shared needles in past month | 46.0 | 39.0 | 501 | .1320 |
| Shared other equipment in past month | 58.1 | 60.1 | 501 | .7125 |
| Prior contact with specialist drug agency | 25.9 | 32.4 | 491 | .1405 |
| Have been charged with a drug offence | 46.9 | 48.9 | 501 | .7264 |

(1) Each row represents 2 cells of a 2 x 2 contingency table and n is overall value for all 4 cells of the 2 x 2 table

(2) Chi Square test corrected for continuity. Bonferroni adjustment was employed at an experiment wise error rate of .05 which set alpha for each comparison at .0026.

APPENDIX I

LOGISTIC REGRESSION CORRELATION MATRICES

CORRELATION MATRIX FOR EVER HAD CONTACT WITH DRUG AGENCY

| | HCVTYES(1) | USEDAILY(1) | DRGOFF(1) |
|-------------|------------|-------------|-----------|
| HCVTYES(1) | 1.00000 | .03544 | -.06098 |
| USEDAILY(1) | | 1.00000 | -.10546 |
| DRGOFF(1) | | | 1.00000 |

CORRELATION MATRIX FOR EVER BEEN CHARGED WITH A DRUG OFFENCE

| | SEX(1) | HCVTYES(1) | YRSINJ2(1) | USEDAILY(1) | DRUGAG(1) |
|-------------|---------|------------|------------|-------------|-----------|
| SEX(1) | 1.00000 | -.11036 | .09300 | -.13280 | -.06982 |
| HCVTYES(1) | | 1.00000 | -.07257 | -.01936 | -.18690 |
| YRSINJ2(1) | | | 1.00000 | -.09834 | -.02742 |
| USEDAILY(1) | | | | 1.00000 | -.12662 |
| DRUGAG(1) | | | | | 1.00000 |

CORRELATION MATRIX FOR EVER HAD A HCV TEST

| | KIDSYES(1) | DRUGAG(1) | DRGOFF(1) |
|------------|------------|-----------|-----------|
| KIDSYES(1) | 1.00000 | -.11517 | .02539 |
| DRUGAG(1) | | 1.00000 | -.15503 |
| DRGOFF(1) | | | 1.00000 |

CORRELATION MATRIX FOR HCV TEST POSITIVE

| | AGE3(1) | YRSINJ2(1) | INJDEFPF(1) | DRUGAG(1) |
|-------------|---------|------------|-------------|-----------|
| AGE3(1) | 1.00000 | -.54456 | -.00286 | .01769 |
| YRSINJ2(1) | | 1.00000 | -.10489 | .04151 |
| INJDEFPF(1) | | | 1.00000 | .01633 |
| DRUGAG(1) | | | | 1.00000 |

CORRELATION MATRIX FOR OVER 5 FITPACKS PER MONTH

| | AGEFINJ2(1) | USEDAILY(1) | SHARYSNO(1) |
|-------------|-------------|-------------|-------------|
| AGEFINJ2(1) | 1.00000 | -.09652 | .08062 |
| USEDAILY(1) | | 1.00000 | -.05468 |
| SHARYSNO(1) | | | 1.00000 |

CORRELATION MATRIX FOR WANT NEEDLES IN VENDING MACHINES

| | AGEFINJ2(1) | INJDEFPF(1) | USEDAILY(1) | SHARYSNO(1) |
|-------------|-------------|-------------|-------------|-------------|
| AGEFINJ2(1) | 1.00000 | .09914 | -.00449 | .09528 |
| INJDEFPF(1) | | 1.00000 | -.28121 | .00396 |
| USEDAILY(1) | | | 1.00000 | -.11106 |
| SHARYSNO(1) | | | | 1.00000 |

CORRELATION MATRIX FOR WANT THREE NEEDLE PACKS AVAILABLE

| | SEX(1) | INJDEFPF(1) | DRUGAG(1) |
|-------------|---------|-------------|-----------|
| SEX(1) | 1.00000 | .09035 | .02626 |
| INJDEFPF(1) | | 1.00000 | -.11419 |
| DRUGAG(1) | | | 1.00000 |

CORRELATION MATRIX FOR LESS THAN 10 MINS AFTER PURCHASE

| | AGE3(1) | AGEFINJ2(1) | INJDEPPM(1) | USEDAILY(1) | SHARYSNO(1) |
|-------------|---------|-------------|-------------|-------------|-------------|
| AGE3(1) | 1.00000 | -.30054 | -.24384 | -.19432 | .12046 |
| AGEFINJ2(1) | | 1.00000 | .12059 | .01929 | .01298 |
| INJDEPPM(1) | | | 1.00000 | -.20882 | -.04934 |
| USEDAILY(1) | | | | 1.00000 | -.08639 |
| SHARYSNO(1) | | | | | 1.00000 |

CORRELATION MATRIX FOR 3 OR MORE PEOPLE HAVING USED THE FITPACK

| | | |
|-------------|-------------|------------|
| | AGEFINJ2(1) | INJSTPM(1) |
| AGEFINJ2(1) | 1.00000 | .00986 |
| INJSTPM(1) | | 1.00000 |

CORRELATION MATRIX FOR FITPACK USED OVER 3 OR MORE SESSIONS

| | | |
|-------------|---------|-------------|
| | AGE3(1) | USEDAILY(1) |
| AGE3(1) | 1.00000 | -1.0612 |
| USEDAILY(1) | | 1.00000 |

CORRELATION MATRIX FOR REUSED NEEDLES IN THIS FITPACK

| | | | | | | |
|-------------|---------|------------|-------------|-------------|-------------|-----------|
| | SEX(1) | MARITAL(1) | USEDAILY(1) | SHARYSNO(1) | NOSHEQUP(1) | DRGOFF(1) |
| SEX(1) | 1.00000 | -.15113 | -.01340 | -.06750 | -.06202 | .25656 |
| MARITAL(1) | | 1.00000 | -.03922 | -.01165 | .01173 | -.05720 |
| USEDAILY(1) | | | 1.00000 | -.09015 | -.00743 | -.17055 |
| SHARYSNO(1) | | | | 1.00000 | -.36087 | -.02767 |
| NOSHEQUP(1) | | | | | 1.00000 | .00238 |
| DRGOFF(1) | | | | | | 1.00000 |

CORRELATION MATRIX FOR INJECT AT LEAST DAILY IN PAST MONTH

| | | | | | | |
|-------------|---------|-----------|------------|------------|-------------|-----------|
| | AGE3(1) | GOTJOB(1) | INJSTFP(1) | INJDEFP(1) | SHARYSNO(1) | DRUGAG(1) |
| AGE3(1) | 1.00000 | -.01959 | .07051 | -.09040 | .18109 | -.04137 |
| GOTJOB(1) | | 1.00000 | -.00222 | -.04029 | .11222 | .03303 |
| INJSTFP(1) | | | 1.00000 | .58863 | -.02014 | .08927 |
| INJDEFP(1) | | | | 1.00000 | -.04078 | .04549 |
| SHARYSNO(1) | | | | | 1.00000 | -.03214 |
| DRUGAG(1) | | | | | | 1.00000 |

CORRELATION MATRIX FOR SHARED NEEDLES IN PAST MONTH

| | | | |
|-------------|---------|-------------|-------------|
| | AGE3(1) | USEDAILY(1) | NOSHEQUP(1) |
| AGE3(1) | 1.00000 | -.20640 | -.02558 |
| USEDAILY(1) | | 1.00000 | .01378 |
| NOSHEQUP(1) | | | 1.00000 |

CORRELATION MATRIX FOR SHARED OTHER EQUIPMENT IN PAST MONTH

| | | |
|-------------|---------|-------------|
| | INC2(1) | SHARYSNO(1) |
| INC2(1) | .00000 | .00940 |
| SHARYSNO(1) | | 1.00000 |

CORRELATION MATRIX FOR INJECT 'OUTSIDE'

| | | |
|-------------|---------|-------------|
| | INC2(1) | SHARYSNO(1) |
| INC2(1) | 1.00000 | .00940 |
| SHARYSNO(1) | | 1.00000 |

CORRELATION MATRIX FOR SHARED NEEDLES AT LEAST ONCE IN LAST YEAR AS NO \$ FOR NEW FITPACK

| | | |
|-------------|-------------|-------------|
| | SHARYSNO(1) | NOSHEQUP(1) |
| SHARYSNO(1) | 1.00000 | .19848 |
| NOSHEQUP(1) | | 1.00000 |

CORRELATION MATRIX FOR UNDERSTAND EFFECTIVENESS OF BLEACH AT KILLING HCV

| | | | |
|-------------|------------|-------------|-------------|
| | YRSINJ2(1) | INJDEPPM(1) | USEDAILY(1) |
| YRSINJ2(1) | 1.00000 | -.22894 | -.07308 |
| INJDEPPM(1) | | 1.00000 | -.27466 |
| USEDAILY(1) | | | 1.00000 |