Inequitable distribution of human resources for health:

Perceptions among Thai health care professionals

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Abstract

Background: Effective delivery of health care is dependent on health manpower. In Thailand, insufficient human resources relates to an inequitable distribution of health care professionals rather than insufficiencies. Both internal and external factors are influencing health care professionals' choice of where to work, although perceptions rather than actual circumstances are more influential in their decision making process. This inequitable distribution of health care professionals in Thailand affects rural areas and the provision of primary health care.

Objectives: To understand the subjective perceptions, attitudes, and dynamics among health care professionals regarding where they seek employment and the impact on the provision of primary care.

Design: Questionnaire survey among Thai health care students and professionals and semi-structured interviews with health care professionals investigating attitudes and perceptions.

Setting: Thai rural, urban and metropolitan areas.

Results: An interesting mix of factors influence health care professionals with regards to where they seek employment, or continue their employment. Family and community commitments, social status, and a sense of belong were associated with health care professionals seeking employment in their province of origin. Tensions are also emerging between preventative and curative health. These tensions, together with financial remuneration and professional development opportunities and promotions, as perceived by

health care professionals themselves, have implications for current and future health care policy.

Conclusion: The scaling up of human resources for health in Thailand, based on past experiences and attitudes outlined in this research will not ensure an equitable distribution of these professionals. Further consideration to health care professionals' expectations of being able to work in areas close to their family; and sufficient financial remuneration are required. It is likely that rural regions and the delivery of primary care will be negatively affected by continued inequities. It was also indicated that current health care policies are creating new tensions.

Key words: Attitude of Health Personnel; Thailand; Health Manpower; Health Policy;

How this fits in with quality in primary care

This research paper presents original research from Thailand outlining how current health care policy may impact primary health care delivery, particularly in rural settings.

What do we know?

A number of factors influence health care professionals regarding where they seek employment although the decisions are ultimately based on perceived circumstances and opportunities.

What does this paper add?

This paper presents attitudes among health care students and professionals regarding where they seek employment, working conditions and impact of current health care reform. It addresses the specific challenges caused by health care reform.

Introduction

Thailand has a good fundamental health care infrastructure with hospitals in all of the country's 76 provinces;[1] between 1,200 and 1,300 hospitals in total[2,3] and 70 institutions training and educating health care professionals including 17 medical schools.[3] While there have been historic internal inequities in the distribution of health care professionals[4-6] and significant exodus of physicians during the 1960s and 1970s,[5-9] measures including the introduction of compulsory public service for physicians ensured a more equitable distribution of physicians, particularly during the following decades.[5-7] This enabled the development of the rural health care sector and a focus on primary care in the decades that followed. Primary care refers to the point of entry into the health care system and will ideally combine "the preventative and curative".[10] In many health care systems this takes place outside the hospital system. In Thailand, primary care is often administered by the local hospital although outreach services by health care teams are common, particularly in rural areas. There were only 300 physicians in the rural sector in 1976. This number increased fourfold by 1985 when 1,162 physicians were working at rural hospitals.[5] However, Thailand's economic development, which in 1995 had doubled in a decade,[11] saw the growth of the private health care sector, leading to the re-emergence of inequities of human resources for health.[5,6,9,12,13] Prior to the Asian financial crisis in 1997, 21 rural district hospitals did not have a single full-time physician among their staff[9] and it was estimated that only 1,874 physicians were working at rural district hospitals in May 1998 in contrast to the 3,161 required physicians.[7]

Concern about the stock and distribution of human resources for health is worldwide.[7,14] It is not limited to physicians, and concern about nurses has been noted. Around the peak of the exodus of Thai physicians during the 1960s and 1970s it was noted that Thai nurses also emigrated, although it was indicated that these nurses returned to Thailand after working overseas in contrast to the physicians.[8] The turn of the century saw a renewed increase in the emigration of nurses from Thailand.[15] Projections of the future stock of various health care professionals in Thailand has taken place during the last decades[16,17] and the latest estimates indicate that the health care system will have sufficient numbers of health care professionals with regards to physicians;[18] nurses;[19] dental personnel[20] and dentists;[21] pharmacists and pharmaceutical technicians;[22] and mobile emergency technicians,[23] as a result of increases in the education and training of health personnel. However, these estimates cannot ensure an equitable distribution of these professionals. Increases in the training of Thai medical doctors introduced in 2004 are estimated to decrease the population to physician rate from 15-30 percent to 3 percent by 2020 according to Sirikanokwilai et al.[18] Although they recognised that the improved population to physician rate would not necessarily rectify the inequitable distribution of physicians, this projection has not incorporated the increased strains on the public health care sector as a result of the newly introduced universal health care system and the subsequent increased demand for health care services.[4] These internal inequities are of concern, where rural district hospitals have historically suffered from a lack of physicians. Furthermore, as appears to be the case for professional nurses in Thailand, many qualified health care professionals do not continue to work in their field; figures for 2002 suggest that only

between two-thirds and four-fifths of qualified nurses are actually working within their profession.[4]

Method

This paper draws on one aspect of a larger research project[4] which used a mixed methods approach to highlight attitudes and perceptions among health care professionals. It is proposed that attitudes are more influential than actual circumstances when individuals contemplate migration, and the decision to migrate may not be completely rational.[24] Working with key informants and snowball sampling ninety-three health care students and professionals, working or studying in the Bangkok metropolitan area as well as the Northern provinces completed a questionnaire for the first phase of the research project in late 2005. Participants were asked to rank thirty-nine statements on a five-point Likert scale. The questionnaire also included one open question and sought demographic data. The second phase of the research project, from late 2005 to early 2007, consisted of semi-structured interviews with thirty-three health care professionals with questions including attitudes towards working in rural and urban areas; the public and private sector; as well as attitudes towards international migration. The interviewees were approached through key informants and through snow-ball sampling. The quantitative responses from the questionnaires was analysed utilising SPSS and the interviews were analyses thematically. Participants for the semi-structured interviews in particular, were sought as key informants to represent as diverse as possible background, including their professional background and geographical location. Demographic and professional characteristics of the research participants are outlined in Table 1 and 2. This paper presents the attitudes of these

participants with regards to the interrelated variables influencing their decisions to work in rural or urban areas. These attitudes should be taken into consideration when evaluating the effects of recent health care reform.

Results and Discussion

The questionnaire survey indicated an overall desire to migrate among these health care students and professionals based on social, political, security and governance factors. Financial remuneration and working in the private sector were of lower significance, as outlined in Table 3. There appeared to be a pull towards urban areas but no significant push from rural areas, in this sample. The dichotomies related to working in rural and urban areas are interrelated with other factors. The level of patriotism reflected among the questionnaire participants should be noted, and their strong sense of civic obligation to serve the health care needs of the general population, which could be interpreted to triumph over their individual right to emigrate, in their perception. This attitude can be linked to an underlying social contract between health care professionals and the general population in Thailand, where these professionals, through their professional contributions and personal sacrifices obtain high social status, independent of professional status, within their communities and this mitigates sentiments of dissatisfaction over their working conditions, workloads, and financial remuneration.[4]

Attitudes Towards Health Care Consumption

The semi-structured interviews revealed that a proportion of the participants working in the public sector felt resentment towards the government and the general population regarding

inappropriate health care consumption. Health care professionals in the public sector, independent of working in rural, urban, or metropolitan areas, indicated significant increases in patients and workloads. A common characteristic by the interviewees was a 50-100 percent increase of out-patients following the introduction of a universal health care scheme in 2001. This policy was introduced to redress the increased un-affordability and deficiencies, and was referred to as the 30 bath health cover, as it initially required a flat co-payment of 30 bath (equivalent to US$0.70-0.80), which was later abolished.[17,25-28] This universal health care cover was introduced on a populist platform, but also based on a real need for new health policies. Prior to this policy, 30 percent of the population did not have any health cover while the remaining 70 percent did not necessarily have full cover.[17,26] While interviewees from the rural district hospitals to the central urban, metropolitan, and university hospitals reported increases in workloads and number of patients, it is unclear whether the impact on the public hospitals is uniform. The interviewees indicated that the rural district hospitals experienced up to a doubling of out-patients, while other reports suggest that university hospitals providing tertiary health care, or "highly specialised services,"[10] exceeded their budgets due to the disproportionate increases in patients requiring complex treatments and costly procedures.[29]

Workloads

Staff at a rural district hospital in Northern Thailand disclosed that they currently had two physicians. There had been a third physician employed previously, but he resigned and opened a private clinic as a result of the increased workload following the introduction of the universal health care scheme. They indicated that this policy had led to an increase in

the number of daily out-patients from 150-200 to 250-300. These increases place incredible strains on health care professionals and inhibit the development of the preventative aspect of primary health care. Pongsupap and Van Lerberghe[30] found that doctors' consultation times with patients in Thailand averaged 3.8 minutes at public hospitals, 5.7 minutes at private hospitals, 5.9 minutes at private clinics, and 6.2 minutes at family practices. These increases in out-patients at this particular hospital would increase workloads based on the average consultation time of 3.8 minutes from between 4.75 – 6.33 hours to between 8 – 9.5 hours. These workloads exclude the additional administration tasks; looking after patients in the hospital's wards; and divert attention and resources from the preventative aspects of primary health care. The physician who recently resigned from this hospital was disillusioned with the new health care policy; exclaiming that "it sucks". While the other interviewees were more restrained, most health care professionals working in the public sector, particularly in rural areas, were concerned, and experienced increased workloads. Prior to the universal health care scheme, fulltime staff would work 20 days a month, and could expect an additional 4-5 shifts. The increased workloads required staff to work 10 or even 15 additional shifts a month; requiring them to do double shifts and leaving them very few, if any, days off.

Strengthening Primary Health Care

It was reported that patients were seeking medical treatment with the onset of any symptoms; a slight cough; the common cold; and even what the nursing staff believed to be fatigue and tired muscles from manual labour, requiring rest and not medical treatment. It was also noted by a nurse working at a rural district hospital that patients requested

medications, prior to the doctors' consultations, or even asked for additional medical tests, like x-rays, ultrasounds, or computed tomography scans (CT or CAT scans). While such requests may be reasonable and reflect diligence, several of the interviewed health care professionals believed that patients were capitalising on the free health care policy rather than seeking medical advice and tests when appropriate. It was suggested that these additional services were in some cases demanded as a result of watching popular television shows, without any understanding of what the tests were. The interviewed health care professionals indicated that there appeared to be a shift away from primary and preventive health care, both regarding health policy and among the general population. When asked what health care challenges she believed Thailand was facing, a nurse working at a public urban hospital replied that the general public did not have a good general understanding or education regarding their health: "What needs to be done is to make everyone understand primary health care and avoid things that will harm their health."

Impact of Health Policies

Numerous policies are in place to encourage health care professionals to work in the rural areas of Thailand and ensure a minimum number of health care professionals in the rural district hospitals. These include the three year mandatory public service for newly graduated physicians[5-7] and mandatory public sector employment for two to four years for nurses and midwifes.[7] However, increasing numbers of newly graduated medical doctors have been exiting the public service and payed the exit fee. There also appear to be increased opportunities for nurses to migrate overseas.[4] Furthermore, the expanding private health care sector has created opportunities for health care professionals which in turn has

created fears of new internal brain drain, particularly of physicians.[5,6,9] In response to this, new and more generous allowances were introduced for health care professionals working in rural areas, improving the attractiveness of employment in these regions.

Challenges Regarding Delivering Primary Health Care in Rural Areas

Acknowledging that many health care professionals, particularly nurses, prefer to work in the province in which their family reside, rural recruitment has also been attempted, with good results for nurses, midwifes, and paramedics, but with mixed results for physicians.[5,7] The entry exams, particularly for medical doctors, favoured those applying from rural areas, leading to an influx of aspiring physicians to move to rural areas prior to the entry examinations, while they themselves still considered themselves as urban dwellers and would probably return to work in the cities. This attitude, particularly regarding being a "Bangkokian" was reflected among the interviewees. Several health care professionals, even if working in other regions, still viewed themselves as metropolitans, and would move back when given the opportunity.

While the extra allowances for health care professionals working in rural areas have had some effect, they also created further imbalances in the distribution of health care professionals. These extra allowances are based on the classification of the respective hospitals, which created a five to ten-fold difference in allowances between hospitals which may only be separated by ten or twenty kilometres.[5] It has even been argued that these allowances are creating further tensions as they differ for different health care professions and as new graduates are earning more, it may enable them to exit the public service

sooner.[4] While these extra allowances can be attractive for new graduates, it was indicated by one interviewee that the opportunity for professional development and promotions are limited at the most rural hospitals. As such, these measures can temporarily alleviate shortages in health manpower at rural institutions, but may have limited long term effect in facilitating the retention of these professionals in rural areas. Despite the mixed results and inadequacies of these policies, measures can be introduced to maximise the desired effects. For example by only accepting students who can document attachment to the local rural areas with shortages of health care professionals for a minimum number of years in the rural recruitment pools. It is also necessary to ensure that these health care students will be employed within their local communities upon graduation. Adjustment to the allowances at rural hospitals may also be warranted, as may further increase in the exit fees among those opting out of the compulsory public service.

Tensions between Rights and Responsibilities

Table 3 indicated that there is a strong sense of obligation among these participants to serve the health needs of their fellow citizens. This attitude can be characterised as a social contract placing high levels of obligations on health care professionals who, in return, obtain high social status. This is independent of where the health care professional is employed or even his or her professional status. Low level community health workers and nurses working directly with the general public in rural areas often obtain high social status, despite their relatively low professional status, by working actively for the public good. Some of the interviews, however, indicated that this dynamic may be fading due to the increased emphasis on health care consumers' rights and the introduction of universal

health care. While the interviewees recognised the general public's right to health care, and did not object to the principle of the universal health care policy, many were disillusioned with the implementation and ripple effects of the policy. This relates to the attitude towards health care consumption and the general public seeking medical treatments, indiscriminately, as perceived by the interviewees, in an apparent breach of the social contract. This may create resentment among some health care professionals, such as the physician who left the rural district hospital cited above, and push professionals away from the public sector. The policy's emphasis on treatment and consumers' rights can also undermine efforts in preventive and primary health care. As narrated by a nurse working at a rural district hospital, she would regularly visit small rural communities as part of a primary health care team, talk with the villagers and promote primary health care, exercise, and good diet. While they at some times had distributed vitamin supplements, she noted that the villagers would now come and request medications while they were visiting to promote healthy lifestyles.

Consequences of Under-Resourcing Primary Health Care

As behaviour and attitude changes in the general population, combined with limited resources, appears to undermine primary health care efforts, and a shift to health care consumption, this also has a negative impact on tertiary and more comprehensive care. To be eligible for the universal health care scheme patients have to register at a public hospital. While those living in rural areas often only have one hospital at which they can register, there is potential for a disproportionate distribution of patients requiring extensive tertiary care at the urban and metropolitan hospitals. The tertiary university hospitals, in particular,

have registered increased numbers of patients requiring extensive care, as they register with hospitals they know provide these services, and this has led to some of these hospitals becoming significantly indebted.[29] Hence, the universal health care policy appears to have created a significant influx in health care consumption, often inappropriate according to some interviewees, at the expense of both primary and tertiary health care.

Conclusion

The Thai health infrastructure has a sound foundation, but internal inequities are of concern. According to the participants in this research project, rural areas do not have sufficient human resources for health and recent health care reform is creating significant additional pressure on the health care professionals working in these areas. While the initial attitudes and perceptions outlined by the research participants did not indicate a significant pull towards the private sector or a push from rural areas, the new universal health care scheme has created marked changes in the consumption of health care services. This shift can have a negative impact on the particular traits among Thai health care professionals, including attitudes of self-sacrifice and servitude to the general population's health care needs. The increase in heath care consumption also appears to deplete health care resources available for the preventative aspect of primary health care. While it is important to address the universal right to health care, these efforts can have adverse ripple-effects if efforts are one-sided, do not take into account the needs of all stake-holders, and are based on political populism rather than sound health policy.

Ethical Approval

This research project was approved by Curtin University of Technology's Human Research Ethics Committee.

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Conflict of Interest

N/A

Table 1 Questionnaire participants

Gender			Male			Female	
Freq.			30			63	
Age	21-25	26-30	31-35	36-40	41-50	51-60	61+
Freq.	38	40	4	9	1	1	-
Region of residence	Bangkok and Metro		Central	East	Northeast	North	West	South
Freq.	53		8	2	-	20	-	-
Region of origin	Bangkok and Metro	Central	East	Northeast	North	West	South	Missing
Freq.	28	15	2	9	24	-	7	8
Profession and/or professional stream	Medical Science[a]		Nursing	Dentist		Pharmacy	Other	Missing
Freq.	29		32	1		3	3	25

[a]Includes physicians, medical students and dental students as the first years of medicine and dentistry are the same

Table 2 Interview participants

Gender	Male	Female
Freq.	8	25

Age	21-25	26-30	31-35	36-40	41-50	51-60	61+	Missing
Freq.	1	9	8	2	9	-	1	3

Region of residence	Bangkok and Metro	Central	East	Northeast	North	West	South	Missing
Freq.	9	1	-	8	10	1	-	4

Region of origin	Bangkok and Metro	Central	East	Northeast	North	West	South	Missing
Freq.	6	3	-	8	8	-	2	6

Professional stream	Medicine	Dentistry	Nursing	Radiology	Pharmacy
Freq.	8	3	19	2	1

Table 3 Attitudes among health care students and professionals

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Attitudes regarding Migration and Governance; Security; and Crime Factors					
I would like to migrate to a place with more political stability	-	3.3	35.6	33.3	27.8
I would like to migrate to a place with less corruption	1.1	3.3	18.7	45.1	31.9
I would like to migrate to a place with higher security	-	1.1	18.7	38.5	41.8
I would like to migrate to a place with lower crime levels	-	1.1	14.3	36.3	48.4
Impact of Financial Remuneration					
Receiving a high salary is a key factor when I choose where to work	3.3	12.1	36.2	37.4	11.0
I would like to migrate to a place where I can earn more money	6.6	12.2	36.3	29.7	14.3
Attitudes regarding working in Public; Private; Urban; and Rural Settings					
I would like to work in the private sector	4.4	13.2	51.6	24.2	6.6
I would not like to work in the public sector	14.3	25.3	47.3	11.0	2.2
I would like to work in an urban area	2.2	6.6	33.0	40.7	17.6
I would not like to work in a rural area	9.9	28.6	42.9	15.4	3.3
Perceptions of Patriotism; Rights; and Obligations					
I am proud to call myself Thai	-	-	7.6	31.5	60.9
I have an obligation of service to my country as a health care student/professional	-	-	13.0	38.0	48.9
I have the right to migrate independently on my country's need of my (future) professional services	6.6	9.9	37.4	28.6	17.6

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