

ILLNESS PATTERNS, UTILISATION OF HEALTH SERVICES AND THE USE OF HEALTH SUPPLEMENTS AMONG THE FOREIGN WORKERS IN SELECTED AREAS OF PENINSULAR MALAYSIA

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*One who is ill has not only the right but also the duty to seek medical aid.
Maimonides (1135-1204)*

ABSTRACT: This paper examines the results of a section on recent illness of the health survey among 799 foreign workers from three selected study locations. The main objective was to study illness/injury patterns and the utilisation of available health care services. It also attempts to examine the use of health supplements as an indicator of self-care. Findings indicate that the illness/injury rate was 46.6%. The illness/injury rate increased with age and was highest in the 45-54 age group (65.0%) and among the Thai workers (69.6%). The main illnesses reported were injuries and accidents (19.6%), musculoskeletal problems (18.0%) and gastrointestinal complaints (16.7%), and it varied with gender, age and nationality. Almost 90 percent of the foreign workers sought treatment at modern health care facilities, with a third utilising government health care services. The employers contributed towards 60% of all the treatment costs. Nearly a third of the foreign workers took health supplements, and the rates were higher among the younger age group (40.0%) and among the Indonesian workers (52.0%). Majority had obtained the health supplements from the pharmacies or retail shops (43.3%) and private health care facilities (35.4%), and about 70 percent paid out of their own pocket. Some of the implications and limitations of these findings are discussed. (JUMMEC 2002; 1:28-39)

KEYWORDS: Musculoskeletal, Gastrointestinal, Asthmatic, Hypertension, Epilepsy, Diabetes mellitus, Migraine.

Introduction

The practice by some countries including developed nations of taking in foreign workers to overcome acute labour shortages is well documented (1,2). The influx of migrant workers was accompanied by social, economic, political and health implications imposed on the recipient country. There had been many published reports debating on these various issues (3,4).

In Malaysia, the presence of immigrant workers dated back to the time when the British Administration imported the Indian and Chinese workers in large numbers to work in their plantations, mining and communication sectors (5). In more recent times especially during the economic boom of the 1990s, there was a tremendous influx of foreign workers of different nationalities especially from the neighbouring countries to meet the country's rapid development in the various economic sectors.

There have been several reports regarding the social, economic and political impact of their presence locally

(6). But little is known about their health and well being, including health practices and the utilisation of available health services. There could be several reasons for the lack of such information. One is that it would be logistically difficult to carry out a survey involving a large number of subjects without the concerted effort by several related parties to plan and execute such a field study. The other possibility is the difficulty in defining the actual study population, as many are illegal immigrants. Nevertheless, their large presence could have an impact on the health scenario of the nation. It would be difficult for the health-related agencies to start tackling the health issues pertaining to the foreign workers without hard data to rely on in order to initiate any appropriate course of action in dealing with such problems.

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In this section of the report we attempt to measure is on the observed prevalence, pattern of illness and the utilisation of available health care facilities among the foreign workers of various nationalities. Also we wish to investigate the use of health supplements as an indicator of self-care. It must be stated that in the context of this study the term illness would also include disease as being reported by the person (e.g. diabetes mellitus), besides its true connotation of being unwell. (e.g. abdominal pain).

Objectives

Overall objective

The aim of this section is to examine some aspects of non-work related illness/injury and the use of health supplements during the 4-week period preceding the survey among the foreign workers from the three selected study locations.

Specific objectives

- 1) To establish the prevalence of non-work related illness/injury.
- 2) To describe in relation (where indicated) to gender, age, educational level, nationality and place of work;
 - a) patterns, types and severity of illness
 - b) utilisation of health facilities and methods of payment for the medical treatment
- 3) To describe in relation (where indicated) to gender, age, educational level, nationality and place of work the use of health supplements in terms of :
 - a) extent of usage
 - b) source
 - c) method of payment

Methods

A survey instrument in the form of a structured questionnaire was used to obtain information on the socio-demographic, migration patterns, environment, life-style habits, women's health, recent illness, dental, occupational, psychological, and sexual health. Also urine, stool and blood samples were taken to establish the presence of microbiological and parasitological agents. Physical parameters including chest radiography were also performed. A total of 885 questionnaire forms were completed during the survey period from 6 January 1998 to 14 January 1999 at various work locations in the Klang Valley and Kelantan. All except for 18 records, were analysed.

Results

Respondents

Seven hundred and ninety-nine (98.8%) out of 809 foreign workers responded to the questions pertaining to the non-work related illness or injury in the last 4

weeks prior to the survey. The eligible 799 workers were recruited from Putrajaya/KLIA project site (n=170) and the plantation site in Kelantan (n=109). The remainder were from the Department of Primary Care clinic (RUKA, n=393) and the Accident and Emergency Department (n=127) of the University Malaya Medical Centre, Petaling Jaya.

Morbidity patterns

Three hundred and seventy-two workers (46.6%) reported to have suffered non-related illnesses or to have sustained injuries. The illness/injury is classified into 14 broad categories as listed in **Appendix A**.

Female workers tend to have marginally higher morbidity compared to the males (50.0% versus 46.1%). It was highest in the 45 - 54 age group (60.0%), while those less than 25 years old were the least afflicted (37.3%) (Figures 1, 2). The Thais had a very high prevalence (69.6%) of being ill or injured in contrast to the Pakistanis (26%) and the Indonesians (31%) (Figure 3).

The prevalence was high among those working in the plantations (70.5%) and manufacturing sectors (52.4%) (Figure 4). All the workers in the plantation were Thais. This explains the high prevalence of illness/injury reporting.

The three leading complaints were injuries including 21 cases of accidents of undetermined nature (19.6%), followed by musculoskeletal (18.0%) and gastro-intestinal complaints (16.7%) and fever (14.5%). (Table 1) Majority (40.3%) of the musculoskeletal complaints were described as *back ache* or *back pain*, while 85.5% of the gastrointestinal complaints were *stomach*, *abdominal*, or *gastric pain*.

The common complaints by male workers were injury and accident (21.7%), musculoskeletal (19.5%), and gastrointestinal (18.3%). In contrast, female workers suffered more from headache (30.6%) and fever (20.4%) (Table 2). Musculoskeletal complaints tend to be more common in the 34-44, and 45-54 years age group, while the younger age groups (< 25 and 25-34 years) had higher occurrence of injuries and accidents. Gastrointestinal complaints were more common in the 55 years and over (Table 3). Injury and accident were much more common among the Indonesian workers (50.0%) compared to the rest. The Pakistanis seemed to suffer more from musculoskeletal complaints (28.6%) and least among the Indonesian workers (2.8%). The gastrointestinal complaints was relatively rare among the workers except for the Burmese (28.3%) and the Bangladeshis (19.9%) (Table 4).

Non-work related injuries and accidents seemed to be more frequent among the workers in the construction, manufacturing and service sectors compared to the plantation workers. Musculoskeletal complaints were

more common among the manufacturing workers (22.0%) compared to the others. Construction and to a lesser extent service workers seemed to suffer more of gastrointestinal complaints (25.0% and 18.6% respectively) compared to the workers in other work sectors. Fever and headache were the most prevalent complaints among the plantation workers (29.1%) in comparison to others (Table 5).

Utilisation of Health Care Facilities

Almost 90 percent of the 372 foreign workers sought treatment for their illness, injury or accidents from the western medical care sources. The remainder either received treatment from either the traditional sources (6.5%) or resort to self-medication (4.8%). It is worth noting that a third obtained treatment from the government health facilities (Figure 5).

A slightly higher proportion of female workers (61.2%) sought treatment at private health facilities compared to the males (53.6%) and vice versa for the government health facilities (Male : Female; 36.2% : 20.4%). The proportion that sought traditional treatment was also higher among females (12.2%) compared to 5.6% in males.

The younger workers (less than 35 years) showed higher utilisation of government health facilities compared to workers in the older age group (Figure 6). However, the utilisation of government facilities did not show marked variation among the different educational status (Figure 7).

A higher proportion of Bangladeshis (49.2%) sought care in government health care facilities compared to others, especially the Thais (6.4%) and Pakistanis (5%) (Figure 8). The proportions of workers that utilised government health care facilities were much higher among those working in the service, manufacturing and construction sectors compared to those working in the plantations (Figure 9). This difference is due to the fact that the foreign workforce in the plantation sector was entirely made up of Thais who preferred to seek care at private health facilities instead. (Note: no comment could be made on domestic sector, as the number was too small)

In order to assess whether severity of illness would influence the choice of place of care, the illness is categorised into four categories namely: *Acute* illness (defined as any pain of gastrointestinal origin, asthmatics, back pain/ache, joint pain, chest pain, migraine, and tooth pain.); *Injury/Accident*; *Non-Acute* illness (defined as fever, headache, medical condition such as hypertension, diabetes mellitus, epilepsy, skin diseases, surgical operation) ; *Others* (defined as unspecified condition). *Injury/Accident and Non-Acute illness* resulted in higher proportions

(54.8% and 61.4% respectively) of workers choosing private health care compared to the government health care. However, the difference between the choice of private and government health care facilities is not large (48.6% and 41.9% respectively) for *Acute* illness (Tables 10 – 13) (Note: No comment could be made of *Other* conditions since the number is too small to make such comparison).

It is shown that the employers paid about 60 percent of the workers medical treatment cost, while the rest were paid out of workers' own pocket. Figure 14 shows the percentage of treatment cost paid by the employers for various industries. With the exception of domestic sector where the employers paid fully for their employees medical treatment cost, the rest of the employers' contribution range from 31.1% among the service workers to 70.5% among the plantation workers.

The Use of Health Supplements

Practices pertaining to the use of health supplements were also elicited from the workers in order to assess their health behaviour. There were 254 (31.8%) out of 799 workers who reported to have taken health supplements.

There was not much difference in the use of health supplements between the male (31.7%) and female (32.7%) workers (Table 15). The use was high among the workers aged less than 25 years old (40.0%) compared to the other age groups. There is however a decreasing trend in use with age, but it shows a rise among those aged 55 years and over (Figure 16). There is a very small increase in the use of health supplements with increasing level of education (Figure 17).

The use was highest among the Indonesians (51.7%), compared to the other nationalities (Figure 18). As shown earlier, the Indonesians were the least to report illness or injuries/accidents compared to the other nationalities. On the other hand, the Thais who took far much less health supplements (23.2%) compared to the others had the highest proportion of reporting ill or injuries/accidents. Those working as maids had relatively higher usage (47.4%) compared to workers in the other sectors (Table 19).

The main source for obtaining these health supplements was from pharmacies including retail shops (43.3%) and private hospitals/clinics (35.4%) (Table 20). Only a few (9.4%) obtained their supplements from the government health facilities. The traditional source for these health supplements was only about 11 percent. The majority (70.8%) paid out of their own pocket for health supplements, while the employers paid for the rest (Figure 21).

Discussion

In this study, foreign workers showed high rates of non-work related illness and injuries/accidents requiring curative treatment. Even though the majority of these illnesses was minor and acute in nature, it has certain health policy implications (see later). Of the non-injury illnesses, the musculoskeletal, fever and gastrointestinal ailments were the leading complaints. It is worth noting that about 20 percent of the workers sustained injuries including 21 cases of accidents of undetermined nature. Whether some of these cases were actually related to their work environment could not be totally ruled out, despite efforts at clarifying to the respondents during the interview the exact information that was required.

The illness patterns that emerged from this survey suggest that some of these illnesses were related to gender, age, and nationality. Male workers were more prone to injuries/accidents, musculoskeletal and gastrointestinal complaints compared to females the majority of whom complained of headaches and fever. It is only tentative to suggest that the type of physical activity one performs could explain this. With respect to musculoskeletal complaints and in particular backache it could be argued that the male workers performed activities that demand carrying and lifting heavy objects. In this respect it would be difficult to separate from the non-work and work related nature of the complaints. Carrying out such tasks may also entail certain risks of getting oneself injured or be involved in an accident.

The illness rate increases with age, i.e. those over the age of 45 years old (9.4% of the foreign workers) had in excess between 19 to 28 percent more of falling ill compared to those below that age.

There were large differences in the prevalence rates among the nationalities. The Thais were far more prone to illness, while the Indonesian and the Pakistani workers seem to be much 'healthier' lots. The high prevalence among the Thais may be partly due to the fact that about 23 percent of them were 45 years and older, whereas the Indonesian, Bangladeshi, Burmese and Pakistani workers were much younger. It is not surprising to observe that the workers in the plantation sector had the highest prevalence since all of them were Thais. The observation that these Thai workers had higher fever rate could be seasonally related, since they were located in Kelantan, while the rest of the workers were in the Klang Valley.

The high demand for the health care services by the foreign workers is clearly shown in this study. As high as 89 percent seek modern medical care. This clearly indicates the accessibility of the health care provisions in this country to migrant workers. Nevertheless, it is of great concern that a little over a third utilised gov-

ernment health facilities. Their access to the government health care facilities would add to the health manpower constraints apart from the financial implications. As shown, age, nationality and industry are potentially important predisposing traits influencing the use of government health facilities.

The choice of utilisation may to some extent be influenced by the type of illness, as shown in this survey. However the reasons for such observations are not clear-cut, as in this instance the preference for private care is overwhelming for *Non-Acute* illness compared to the *Acute* illness.

With the exception of domestic workers, the payment for their medical fees is only partially paid by their employers. This raises an important policy question – who should be responsible for the health needs and cost of medical care? Should the government be absorbing the cost or should there be some health insurance scheme instituted to ensure that the interest of the workers, employers and the government are safeguarded.

The observation that 1 in 3 foreign workers took health supplements provides some indications of their perception about health. Even though the reasons for taking health supplements were not elicited, it is widely perceived that they use it because it would bring some good to their individual health. In this study one finds that this assumed perception varies according to age, nationality and to a lesser extent the educational level of the workers.

The fact that this survey shows some obvious differences among different nationals indicates the inter-racial and inter-cultural complexities with respect to choice of health care access and health belief. Malaysia receives foreign workers from diverse groups of different ethnicities and geographical locations of the ASEAN region, Indian sub-continent regions and beyond. This must surely be borne in mind by the policy makers in setting up a health care scheme for these foreign workers.

It must be mentioned that this study has several limitations. The intention at the planning stage of the survey to select a more representative sample could not be achieved because of several logistical reasons. Some of the firms selected and had agreed to participate initially decided to withdraw at the last minute. This was aggravated when the government decided to repatriate some of the foreign workers because of the sudden downturn of the nation's economy. Even for those firms that had agreed, it was the prospective subjects that made matter worse as they were very unwilling to participate for fear of being sent home, despite the reassurance given. As such some of the subjects had to be replaced by the foreign workers attending the Primary Care clinic and Accident and Emergency Department

of the University Malaya Medical Centre. The eventual constituted sample was therefore non-random.

There were also difficulties in communication and response bias. The similar type of questions asked either in English or Malay language were not always fully understood by the different nationals. With the exception of one Burmese, the others were local interviewers who found some difficulties in understanding what the respondents said.

The number of foreign workers with regard to some of the characteristics (e.g. employment in domestic sector) were too small to be examined beyond the simple frequency description. As such it was rather difficult to make cross-tabulation comparison with the other groups with respect to the variation observed.

Summary findings

A total of 885 questionnaire forms were completed during the survey period from 6 January 1998 to 14 January 1999 at various locations in Klang Valley and Kelantan. All except for 18 records, were analysed.

About 46 percent of the respondents were Bangladeshis. The rest (48.7%) were from Indonesia, Thailand and Myanmar. The ratio of male to female respondents were 5.1:1. With the exception of 10 respondents who were below the age of 18 years, their age ranged between 18 to 69 years old (mean \pm sd.: 30.5 \pm 7.3 for males; 32.6 \pm 9.9 for females). Slightly less than half were single. On the average, their educational attainment in terms of number of years attending formal education was 7.9 \pm 4.6 years for males and 5.5 \pm 4.8 for females.

Majority had arrived in Malaysia between the period 1995-1997, and most of them came directly from their home country. A large proportion stayed at employer provided dwellings, including *Kongsi* quarters. However, about 5 percent lived in squatter areas, and these were largely from those working in the construction and service sectors. Many shared living quarters, and the median number sharing rooms with other persons was 4 for males and 2 for females. Generally the basic sanitation - water, toilet, and solid waste disposal were found to be 'adequate'. However, the majority received their shared water supply through public stand-pipes, and therefore had to store water using plastic containers for their water consumption.

About a quarter smoked cigarettes, and nearly all were males, with the exception of 5.4% females who were from Thailand. Almost all (4.7%) of the respondents who consumed alcohol were male Bangladeshis. Only a few (0.8%) admitted that they were taking illicit drugs.

Majority of the females were Thais and Indonesians, and 74.6% of the females were married. About 28 percent

of the married females practised family planning, majority of whom were using contraceptive pills. These pills were obtained mainly from proper establishments, i.e. at government, private health care facilities or pharmacies, and were paid mainly by the workers themselves.

About 46 percent of the respondents reported to have suffered from non-work related illnesses or injuries in the last 4 weeks of the survey period, with a slightly higher proportion among the females. The Thais (both gender) seem to be having the highest reported non-work related illnesses or injuries compared to other nationalities, i.e. 66.2% and 75% respectively. Almost all in the plantation were the Thais workers, hence it was not surprising to find that this sector had the highest record of illnesses and injuries. Majority (56.0%) sought private care for their ailments, and majority were paid by their employers. Nearly a third of the respondents reported taking health supplements, majority of whom were the Indonesians. By far, the majority (77.9%) obtained the health supplements from either pharmacies or private clinics. Among those who procured at private or government clinics, half were being paid by their employers.

About 28 percent of the respondents reported having some kind of dental problems, two-third of whom were females. The Thais (of both gender) in comparison to other nationalities had the highest reporting dental problems. Regardless of nationality and gender, majority had toothache (76.7%), and lesser proportion complained of sensitive tooth (33.2%) and bleeding gums (23.2%). About half consulted the dentists or doctors for their complaints, but in comparison 42.9% of Thais did not take any action for their dental problems. Majority (84.4%) had never visited a dentist in Malaysia, particularly the Thais. For those who had, the main reasons for seeing the dentists were for extraction and toothache. While those who did not, the main reason was "there was no need".

In all sectors, except for those in plantations the median working duration was 48 hours per week. It is noted that a high proportion of those in the construction (89.3%) and manufacturing (81.2%) sectors had been given a briefing on health safety related to their jobs compared to the plantation sector (20.5%). About 70 percent of the respondents had been given some kind of personal protective equipment, but the proportion was only 46.5% in the plantation sector. The proportion of respondents covered by insurance for diseases or injuries varies from industry to industry. It was low in the plantation sector, but they had a high percentage of private insurance. About a fifth had suffered some kind of work related diseases over the past one year, and it was higher among females (31.2%) compared to the males (19.1%). The most prevalent work

related diseases was skin problems (42.3%), and was most common in the manufacturing sector. Fractures and dislocations were not very common, but contributed to the highest proportion of hospitalisation. Majority (71.2%) of the bills were paid by 'others', while employers contributed to only 21.1% of the respondents bills. Plantation sectors had the highest proportion of days lost (4.1%) compared to other industries.

Among those who responded to having sexual intercourse, over 90 percent had only one sexual partner in the last one year and 97.5% and they said that they did it with their own spouses. However, among the males, it was found that 9.6% had 2 or more casual partners, and only a few had exposed themselves to the commercial sex workers (1.7%). The proportion of condom use was much higher among single males (60.0%) compared to the married males (12.4%).

Conclusions

Considering the study limitations, the following conclusions are reached:

- 1) The prevalence of non-work related illnesses/injuries was 46.6%. The three most common complaints that accounted for about 54 percent of all illnesses were injuries including accidents, musculoskeletal and gastrointestinal problems.
- 2) The potential predisposing traits for the illness prevalence were:
 - a) Age - older workers were more prone to illness.
 - b) Nationality - Thais had the highest prevalence.
 - c) Industry - Plantation workers reported to have the highest prevalence (all Thai workers)
- 3) Gender, age, nationality and industry potentially influenced the type of illness:
 - a) The predominant complaints among male workers were injuries/accidents, musculoskeletal and gastrointestinal problems, whereas for female workers were headache, fever and musculoskeletal complaints.
 - b) Injuries/accidents and musculoskeletal complaints were the most common in the younger age groups, whereas in the older age groups were fever and gastrointestinal problems.
 - c) Injuries/accidents was most common among the Indonesian and Bangladeshi workers, while fever and headache among the Thais and gastrointestinal problems among the Burmese.
- 4) High rate of utilisation of modern medical care by foreign workers:
 - a) About 55 percent sought private care, while another third utilised government health facilities,
 - b) Slightly higher proportion of females utilised private health care, while more males used government health facilities.
 - c) Higher rate of younger workers utilised government health facilities.
 - d) Bangladeshi workers used more of government health facilities.
 - e) Service, manufacturing and construction sector workers utilised more of government health facilities.
 - f) Injuries/accidents and Non-Acute illnesses among the workers resulted in higher proportions utilising private health care.
- 5) Sixty percent of the workers medical treatment costs were borne by their employers while the rest from the workers out of own pocket.
- 6) Nearly a third took health supplements
 - a) There was no difference in use of health supplements between males and female.
 - b) Use was highest among workers below 25 years old. There was a decreasing trend in use till 55 years when its use rose again.
 - c) Use was highest among the Indonesian workers and coincidentally they were the least prone to suffer illnesses, while the Thais used the least and had the highest rate of illness.
 - d) Nearly 79 percent of the workers purchased the products from pharmacies or retail shops and private health care facilities, and about 70 percent paid from out of their own pocket.

References

1. Desclotres, R. *Foreign Workers*. 1967. Paris: OECD.
2. Thomas, B. *Migration: Economic Aspects* in David L. Sills, ed. *International Encyclopedia of Social Sciences* Voice. Vol. 10: 292-300.
3. Weiner, M. *Immigration: Perspective from receiving countries in Third World*. Quarterly. 1990; 12(1): 140-165.
4. Piore, J.M. *Birds of Passage: Migrant Labour and Industrial Society, United Kingdom*. 1979. Cambridge University Press.
5. Parmer. *Colonial Labour Policy and Administration: A History of Labour in the Rubber Plantation Industry in Malaya. 1910-1949*. 1960. New York, J.J. Augustine.
6. Azizah Kassim. *Immigrant workers in Malaysia: Issues, problems and prospect*, in Lee B.H. and Oorjitham, S. (eds), *Malaysia and Singapore: Experiences in Industrialisation and Urban Development*. 1993. Faculty of Arts and Social Sciences

A. ILLNESS PATTERNS

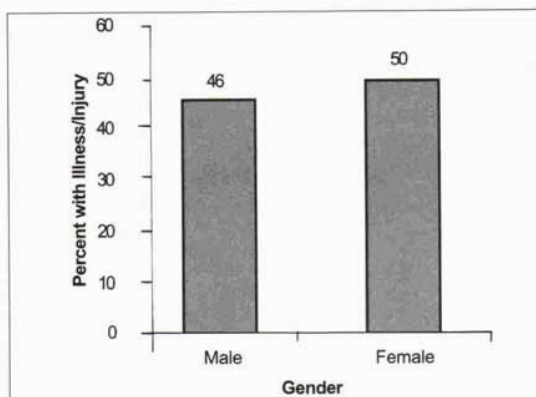


Fig 1. Percentage distribution of foreign workers with illness/injury by gender. (n = 799)

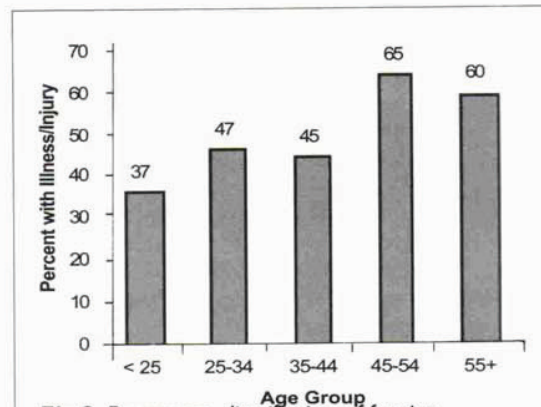


Fig 2. Percentage distribution of foreign workers with illness/injury by age group. (n = 799)

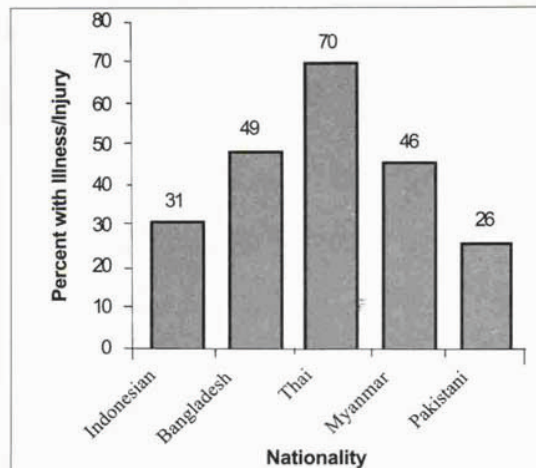


Fig 3. Percentage distribution of foreign workers with illness/injury by nationality. (n = 799)

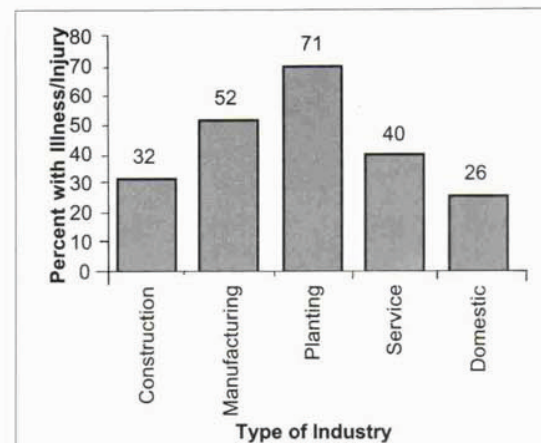


Fig 4. Percentage distribution of foreign workers with illness/injury by industry. (n = 799)

Table 1. Number (%) of different types of illness reported by the 372 foreign workers during 4 weeks preceding the survey

Complaint	Frequency	Percent
Gastrointestinal (GT)	62	16.7
Respiratory	21	5.6
Cardiovascular	23	6.2
Musculoskeletal	67	18
Neurological	3	0.8
Skin	9	2.4
Dental	6	1.6
Ear, Nose and Throat (ENT)	7	1.9
Endocrine	2	0.5
Genito-urinary tract (GU)	4	1.1
Fever	54	14.5
Headache	30	8.1
Injury/Accident	73	19.6
Other (non-specified)	11	3.0
Total	372	100

Table 2. Number (%) of illness according to its "acuteness" reported by the 372 foreign workers during 4 weeks preceding the survey

	Frequency	Percent
Acute illness	148	39.8
Injury/Accident	73	19.6
Non-acute illness	140	37.6
Others	11	3
Total	372	100

B. UTILISATION OF HEALTH CARE SERVICES

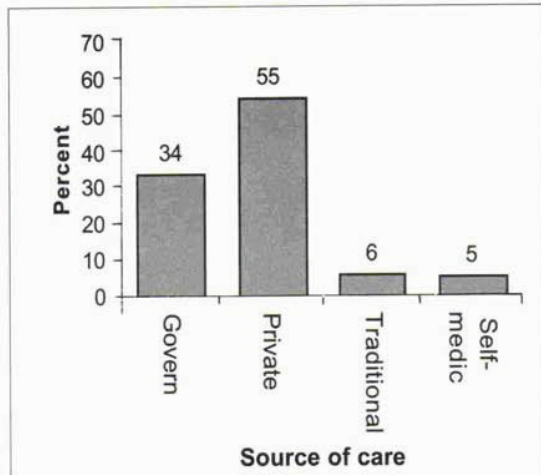


Fig 5. Percentage distribution of foreign workers with illness/injury seeking treatment at different sources of care. (n = 372)

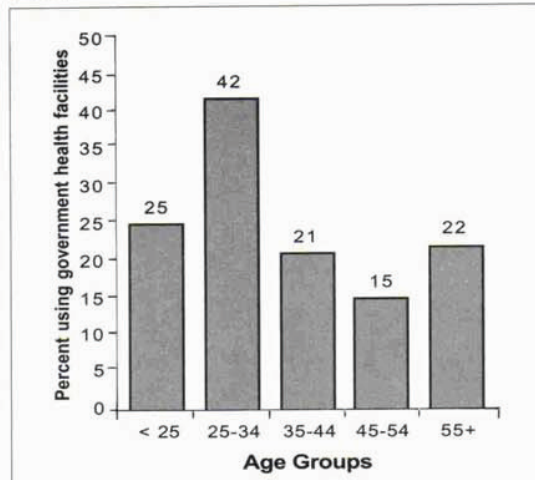


Fig 6. Percentage distribution of foreign workers seeking care at government health facilities by age group. (n = 372)

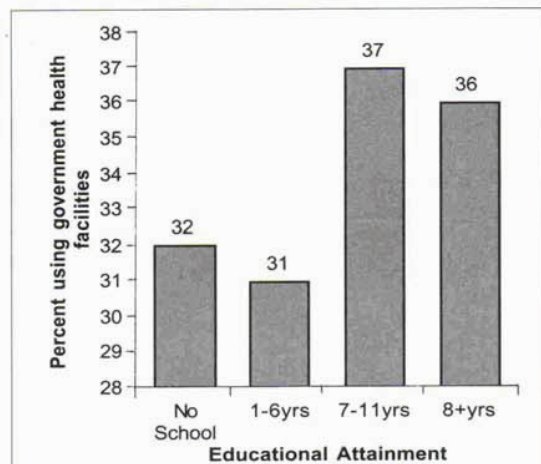


Fig 7. Percentage distribution of foreign workers seeking care at government health facilities by educational level. (n = 372)

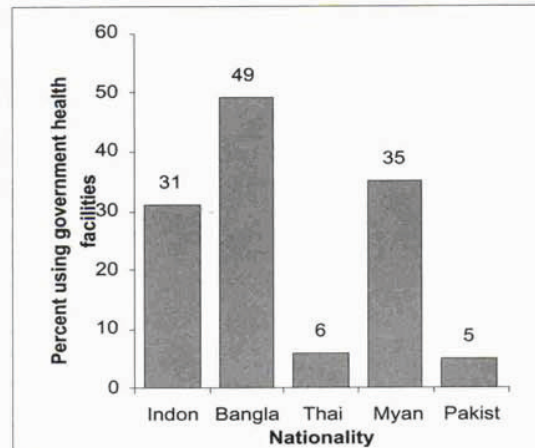


Fig 8. Percentage distribution of foreign workers seeking care at government health facilities by nationality. (n = 372)

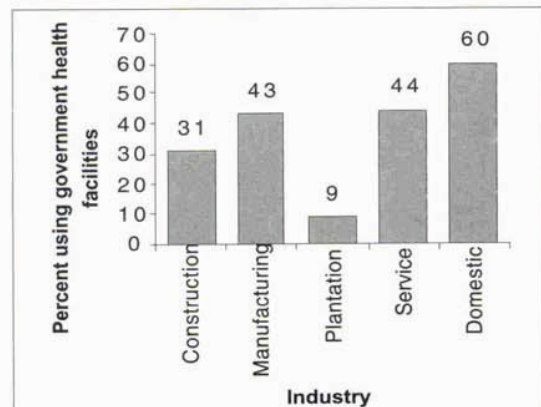


Fig 9. Percentage distribution of foreign workers seeking care at government health facilities by industry. (n = 372)

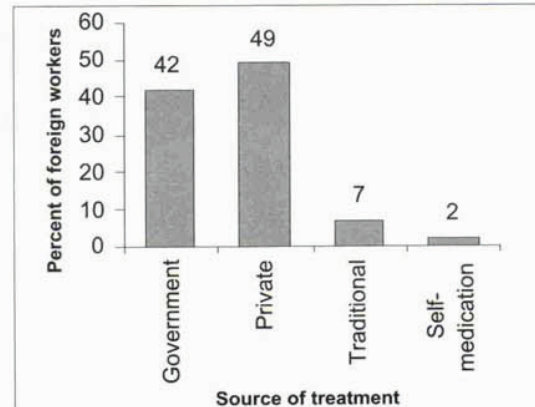
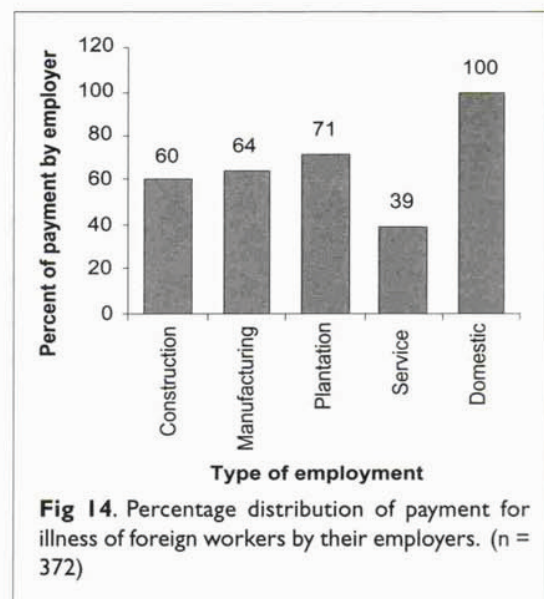
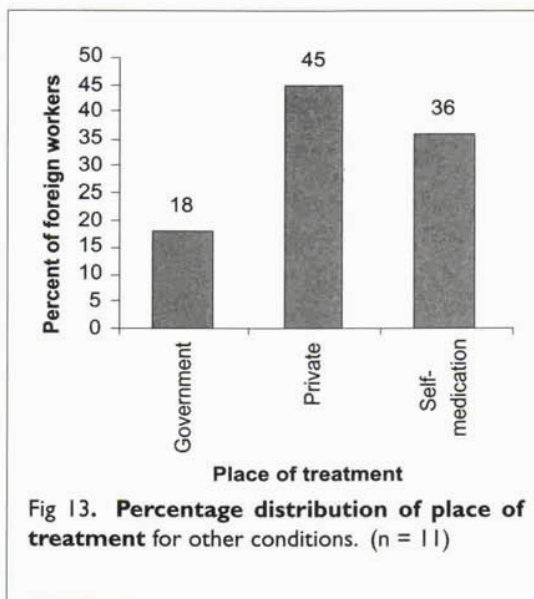
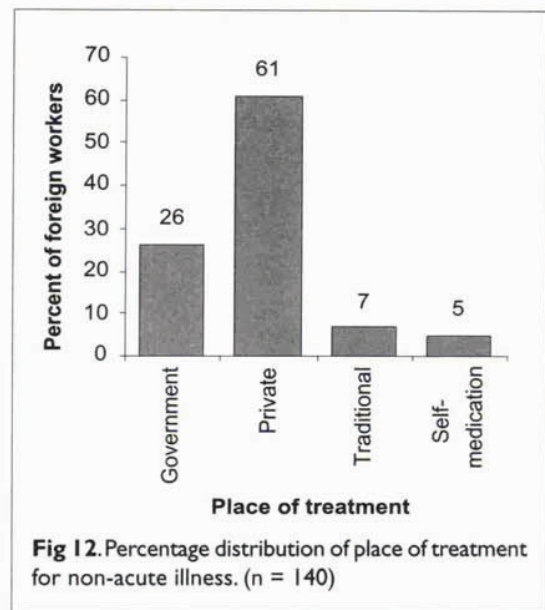
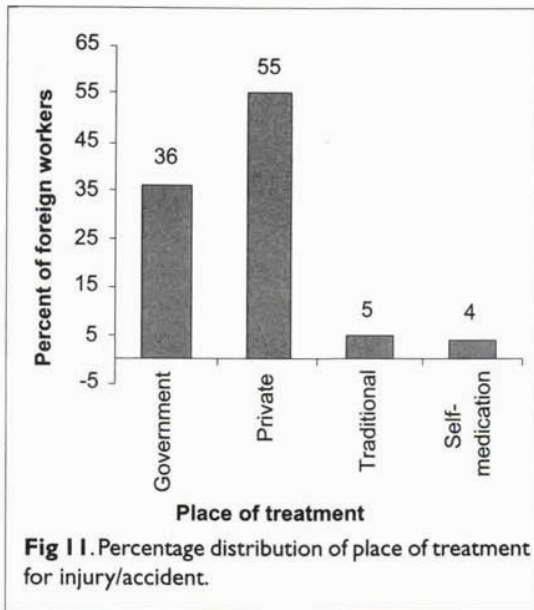
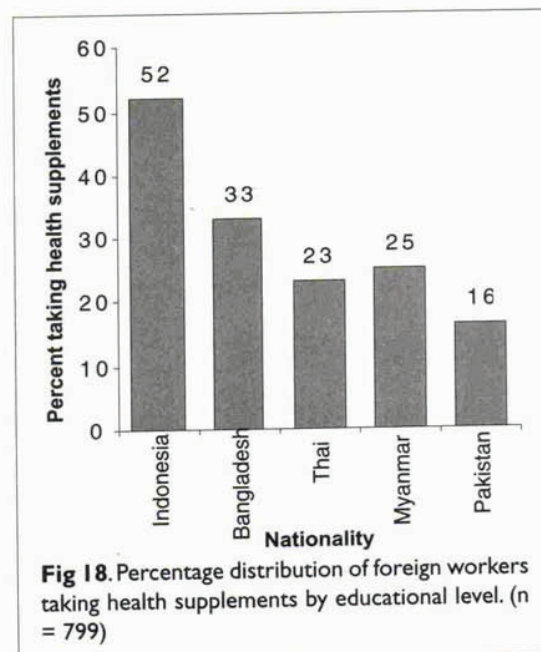
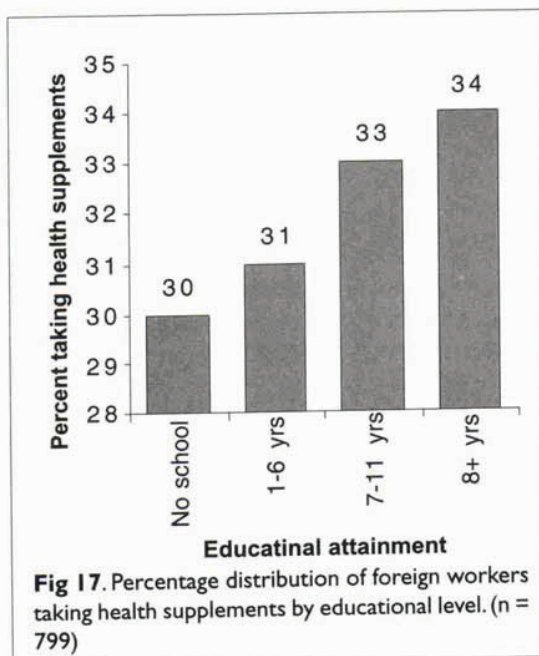
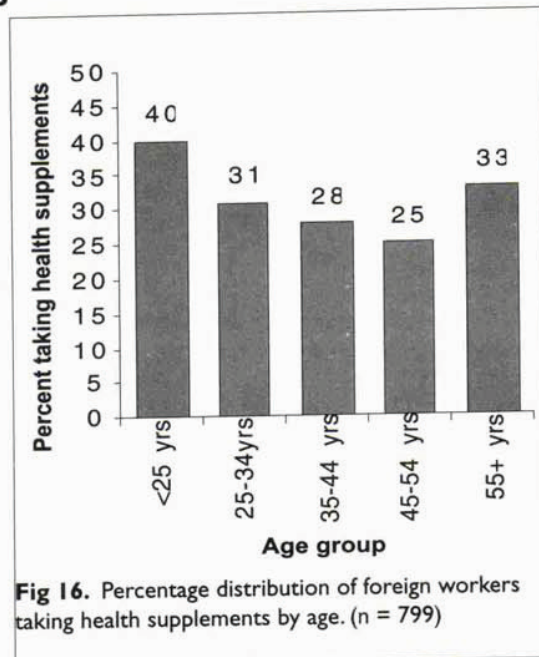
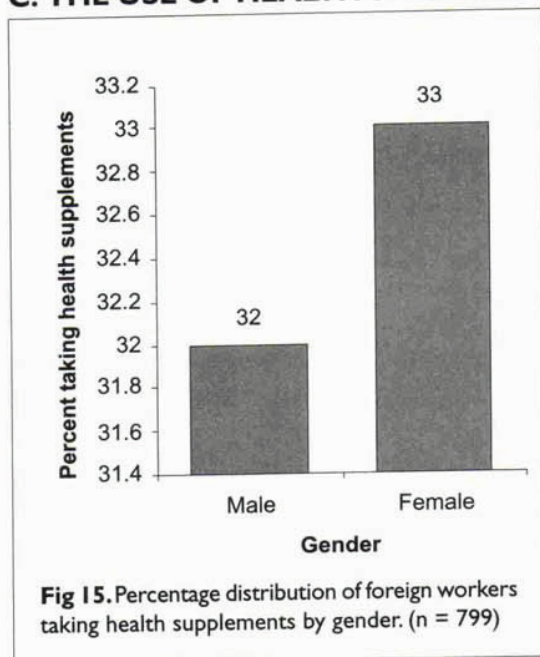
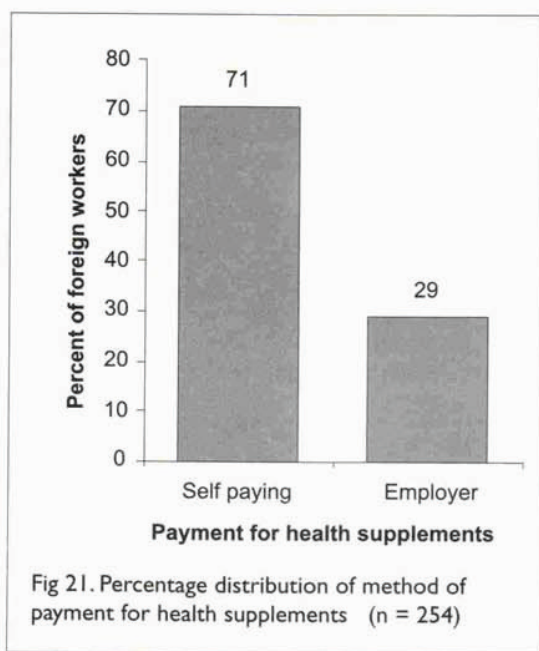
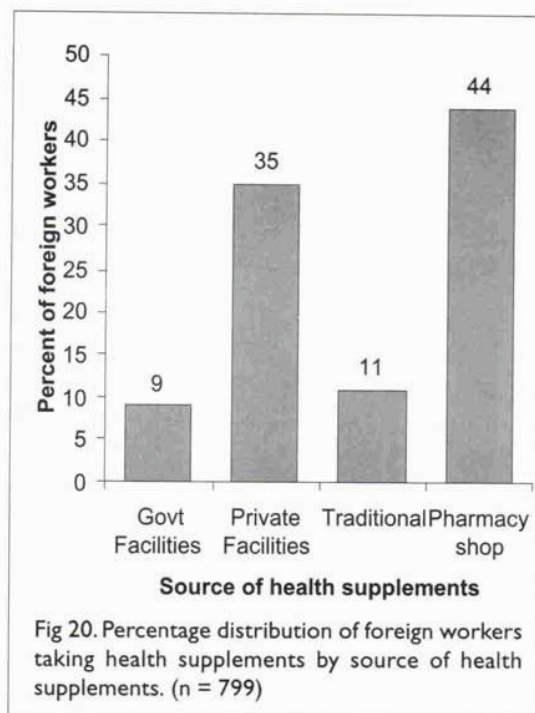
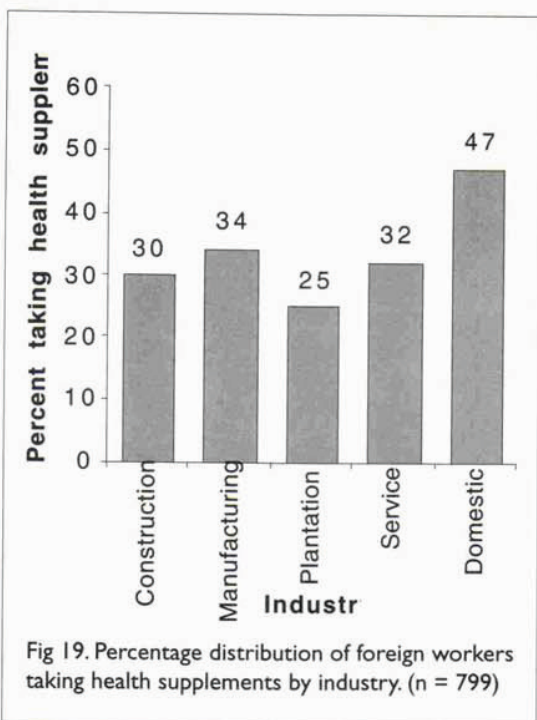


Fig 10. Percentage distribution of place of treatment for acute illness. (n = 148)



C. THE USE OF HEALTH SUPPLEMENTS





APPENDIX A

CLASSIFICATION OF ILLNESS REPORTING

Description of illness / complaints	Classification
<i>Stomach / Abdominal pain, Gastric pain, Diarrhoea, Appendix operation, Gallstone</i>	Gastrointestinal (GIT)
<i>URTI symptoms, Asthma</i>	Respiratory
<i>Chest pain, Hypertension</i>	Cardiovascular
<i>Back pain / Backache, Body pain, Joint / Thigh / Leg / Foot pain, Neck pain</i>	Musculoskeletal
<i>Epilepsy, Insomnia</i>	Neurological
<i>Itch, Skin disease, Skin rash, Ulcer</i>	Skin
<i>Toothache</i>	Dental
<i>Rhinitis, Sore throat, Eye pain, Itchy eye, Eye infection</i>	Ear, Nose and Throat (ENT)
<i>Diabetes</i>	Endocrine
<i>Hematuria, Sexual problem, Discharge</i>	Genitourinary tract (GU tract)
<i>Fever</i>	Fever
<i>Headache</i>	Headache
<i>Cut (knife, zinc, machine, glass, steel blade), Nail prick, Accident</i>	Injury/Accidents
<i>Tumour operation, Unknown disease</i>	Other (non-specific)