ORIGINAL ARTICLE

Pre-Employment Medical Examination of Indonesian Domestic Helpers in a Private Clinic in Johor Bahru - An Eight Year Review

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Summary

On review of 3117 patients' records (all were female Indonesian foreign workers) over the span of eight years (1997 to 2004) in a private clinic in Johor Bahru, 223 cases (7.2%) were found to have various medical problems. These 3117 foreigners were to be employed as domestic helpers in Malaysia. They were examined upon arrival in Johor Bahru even though our government did not require this pre-requisite (before 1st August 2005) as they were examined and certified fit in their country of origin before embarking to Malaysia. The proportion of female Indonesian foreign workers who were afflicted with category 1 conditions was 55.6% (which rendered them unfit for employment) and category 2 conditions was 44.4%. The medical problem detected most frequently was hypertension. Sixty-one (80.3%) out of 76 workers had stage 2 hypertension (JNC 7 report). Pulmonary tuberculosis ranked second in this review and is a category 1 condition. This paper supports the recent move by the Malaysian Ministry of Health to implement mandatory medical examinations for all foreign workers arriving in Malaysia within one month of arrival regardless of whether or not they are certified fit in their countries of origin.

Key Words: Female, Indonesian, Domestic helpers, Foreign workers, Category 1 conditions, Category 2 conditions, Mandatory medical examination

Introduction

Foreign workers are essential in building and sustaining our economy. They are mainly from Indonesia, Bangladesh, Vietnam and Nepal. They are needed to work in our construction industry, plantations, factories and as domestic helpers. Statistics from the Malaysian Immigration Department showed that there is a steady influx of Indonesian foreign workers to Peninsular Malaysia as shown in Figure 1[1]. About one-quarter of them, practically all females, work as domestic helpers (Table I)[1].

A percentage of foreign workers who come to our country to work do have medical problems even though they were certified fit in their countries of origin. Some of these foreign workers bring with them communicable diseases such as pulmonary tuberculosis, malaria and hepatitis B. From 1983 to 1992, 44 (32.8%) out of 134 malaria cases admitted to University Hospital, Kuala Lumpur were foreigners[2]. Half of them were Indonesians [2]. Fifteen of these foreigners had chloroquine-resistant strains of malaria parasites [2]. In Selangor, the incidence of tuberculosis among foreigners is 126.7/100,000 population[3].

Foreign workers must be certified fit in their countries of origin before they can enter Malaysia for employment. Therefore, no medical examination was done in Malaysia upon arrival. Medical examination in

This article was accepted: 25 November 2006
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Malaysia for foreign workers was only conducted from the second year onwards of working. The government has appointed Foreign Workers' Medical Examination Monitoring Agency (FOMEMA) Sdn Bhd to monitor and supervise foreign workers medical examinations.

Below is a list of category 1 conditions (as determined by the Malaysian Ministry of Health)

1. Human immunodeficiency virus (HIV) infection / acquired immunodeficiency disease syndrome (AIDS)
2. Tuberculosis (old and recent)
3. Leprosy
4. Viral hepatitis B
5. Psychiatry illness
6. Epilepsy
7. Cancer
8. Sexually transmitted disease (syphilis)
9. Drugs addiction (opiate and cannabinoids)
10. Pregnancy (which is during term of employment)

In this category, the foreign worker is considered unfit to work in Malaysia.

Below is a list of category 2 conditions (as determined by the Malaysian Ministry of Health)

1. Malaria
2. Hypertension
3. Bronchial asthma
4. Diabetes mellitus
5. Peptic ulcer
6. Kidney diseases
7. Hearing problems
8. Heart diseases
9. Others

In this category, the medical practitioner will assess the seriousness of the diseases in the foreign workers. Whether the worker is fit for work in Malaysia is up to the discretion of the medical practitioner, subject to the final approval of the medical directorate of FOMEMA Sdn Bhd. Foreign workers found with incurable or chronic diseases or conditions in which they need prolonged and extensive treatment may also be found unfit for employment.

The aim of this review was to show that there is a disparity in the medical examination of female Indonesian foreign workers conducted in their country of origin and the medical examination in a private clinic in Johor Bahru, Johor, Malaysia.

Materials and Methods

This is a retrospective review covering the period from 1st January 1997 to 31st December 2004. Medical examination of foreign workers was conducted by the author in a private clinic in Johor Bahru, Johor. Four foreign domestic helpers agencies had sent their foreign workers to this clinic for examination. All these foreign workers were females from Indonesia. They were to be employed as domestic helpers.

Medical examination was not compulsory for foreign workers on arrival in Malaysia (before 1st August 2005) as they claimed that they had undergone medical examinations by physicians in their countries of origin and had been certified fit for employment. However, some Malaysian employment agents proceeded with the examination as they needed to ensure that their female Indonesian foreign workers were not harboring any diseases, especially communicable diseases. As domestic helpers, these foreign workers would come in daily contact with their employers and their children. They would stay in the same housing facilities with their employers and their families.

These female Indonesian foreign workers, who had been certified fit in their country of origin, were examined within the first week of arrival in Johor Bahru.

A detailed history on the foreign worker's health status was taken by the general practitioner. Physical examination involved taking the worker's height, weight, blood pressure, pulse rate and visual acuity. Height was taken by asking the patient to lean straight (without any foot wear) with her back against a flat wall with a measuring tape, vertically taped, starting from zero centimeter from the floor. Weight was taken using a weighing scale (in kilogram). Blood pressure was taken using Accoson blood pressure set (UK). The first Korotkoffs sound was noted as the systolic reading (mmHg) and diminishing of the Korotkoffs sound was taken as the diastolic reading (mmHg). Pulse rate was taken by palpating the radial pulse and the pulse was counted for 60 seconds. Visual acuity was taken by asking the patients to stand 6 meters away from the Snellen chart and they were asked to read the alphabets in each line. These were done by the nursing aides. Any discrepancies were re-examined and confirmed by the general practitioner. For those with blood pressure more than 140/90mmHg, three repeated measurements of blood pressure at rest when seated were taken in intervals of 15 to 30 minutes.

Examination of the respiratory, cardiovascular, abdomen, skin (specifically for leprosy), genitourinary, endocrine, musculoskeletal and central nervous systems were conducted by the general practitioner.

Blood tests done were to detect malaria parasites, hepatitis B infection, HIV infection and syphilis and for blood grouping. Urine tests were done to detect opiates and cannabinoids other than testing for pregnancy and full examination and microscopic examination.

Chest radiograph (x-ray) was done to detect tuberculosis. Any doubtful chest radiographs were sent to a local radiologist for a second opinion. The majority of chest radiographs suggestive of pulmonary tuberculosis were sent to the radiologist for confirmation.

Slit skin smear and sputum for acid fast bacilli were tested if indicated only. Rectal swab for salmonella was done only for those working in the food industry. All these tests were carried out at a local laboratory and x-ray center. The notes which had been kept according to years by the nursing staff were retrieved and were analysed by the author.

Results

This analysis showed that 4.1% to 12.5% of female Indonesian foreign workers from 1997 to 2004, who were pronounced fit in their country of origin were afflicted with medical problems. 55.6% (124 cases) were afflicted with category 1 conditions and 44.4% (99 cases) were afflicted with category 2 conditions.

The highest percentage (12.5%) was in 2002 but the number examined was only 40. As such, this is not significant. In this year, three agencies decided to send their foreign workers to another clinic for examination due to cost.

The most common medical problem was hypertension (34.1%) followed by pulmonary tuberculosis (22.4%). Data from FOMEMA Sdn Bhd in 1998 and 1999 (Appendix I) showed that the most common medical problem was hepatitis B and no foreign workers were found to have hypertension.

Seventy-six female Indonesian foreign workers had hypertension which is listed as a category 2 condition.

It is rather interesting that hypertension was found to be the most common disease in this study. Hypertension is considered a disease of the first world rather than of the third world. One would expect that infectious diseases, for example tuberculosis would be the most common disease in a third world country. A large proportion of them (61 cases) had stage 2 hypertension. All of them claimed that they were normotensive. This is a non-communicable disease but needs long term follow-up and compliance in treatment. However, none of these workers had end organ failure clinically. More than half of them were not overweight. In stage 1 hypertension, 60% had a body mass index of 24.9 and below. In stage 2 hypertension, 68.9% had a body mass index of 24.9 and below. The majority of them were 35 years old and below. Only 13.3% were in the age group of 36 years and above in stage 1 hypertension and 9.8% were in the age group of 36 years and above in stage 2 hypertension.

All 50 Indonesian foreign workers with radiological evidence of pulmonary tuberculosis (recent and old) were rendered unfit for employment. Pulmonary tuberculosis ranked second in this study. Data from FOMEMA Sdn Bhd showed that pulmonary tuberculosis ranked third in 1998 and 1999 (Appendix I)[4].

All the foreign workers who had hepatitis B (36 cases), syphilis (19 cases) and HIV infection (6 cases) were rendered unfit for employment.

Out of 12 of the foreign workers who had rheumatic heart diseases, 11 had mitral valve diseases and one had pulmonary valve abnormality. All 12 of them were not considered fit for employment here, as they needed further follow-up and treatment if there are any complications even though this disease is in category 2 conditions and even though all were in New York Heart Association Class 1.

Of the 11 female Indonesian foreign workers who were pregnant, 7 were in the first trimester and 4 were in the second trimester. They were all rendered unfit for employment at that time.

The foreign workers with thyrotoxicosis (5 cases), asthma (1 case) and psoriasis (1 case) had to be on regular treatment to be qualified to work in Malaysia.

All three patients with ovarian mass had to be treated before being considered for employment. The sizes of

the ovarian mass in these three workers were 24 by 25cm, 17 by 16cm and 5cm by 5cm.

The foreign worker with splenomegaly had to undergo further investigations to ascertain its cause (malaria parasites were not found) before being considered for employment. Both the foreign workers with mediastinal tumour and erythema nodosum were considered unfit due to the nature of the diseases. Both conditions were classified under category 1 conditions.

Discussion

Though all the foreign workers in this study were examined before they left their country for employment in Malaysia, there were a proportion of them who were found to have diseases (especially category 1 conditions) which rendered them unfit to work in Malaysia. This shows that there is a deficiency in the system which ensured that the foreign workers were healthy (as specified by the Malaysian Ministry of Health) before arrival in Malaysia to work.

This poses several problems to our healthcare system, the employers and the foreign workers themselves.

These foreign workers with diseases need to be treated. This drains our healthcare resources especially in treating chronic diseases like hypertension and pulmonary tuberculosis. It is inexpensive to receive treatment from our government health establishments as the Malaysian government subsidizes healthcare heavily. A foreigner needs to pay only consultation fees of RM30.00 for the first visit and subsequently RM5.00 when receiving treatment from a government institution. Medication cost is free or very minimal.

There is also a risk that these foreign workers may spread their diseases, especially pulmonary tuberculosis, to their employers and dependants. A foreign worker may harbor pulmonary tuberculosis which was not detected during first year of employment as foreign workers arriving in Malaysia before 1st August 2005 did not need to undergo medical examination in Malaysia. During her second year of employment, the foreign worker is required to

Table I: Indonesian foreign workers employed as domestic helpers in Peninsular Malaysia from 1997 to 2004[1]

Year	Number of Indonesian foreign workers	Number of female Indonesian foreign workers employed as domestic helpers	Percentage
1997	71555	9826	13.7
1998	61960	14333	23.1
1999	65278	17509	26.8
2000	77427	19933	25.7
2001	88573	22337	25.2
2002	106987	26242	24.5
2003	154257	28831	18.7
2004	145277	28211	19.4

Table II: Total female Indonesian foreign workers examined and number of those with medical problems from 1997 to 2004

	1997	1998	1999	2000	2001	2002	2003	2004	TOTAL
Total female Indonesian foreign workers examined	244	664	761	517	281	40	240	370	3117
Number of female Indonesian foreign workers with medical problems	30	49	40	21	16	5	27	35	223
(%)	(12.3)	(7.4)	(5.3)	(4.1)	(5.7)	(12.5)	(11.3)	(9.5)	(7.2)

Table III: The number of female Indonesian foreign workers afflicted with various medical problems from 1997 to 2004

No	Medical Problems	1997	1998	1999	2000	2001	2002	2003	2004	Total
1	Hypertension*									
	-stage 1	2	9	0	1	2	0	1	0	15
	-stage 2	7	14	12	4	7	1	7	9	61
2	Pulmonary tuberculosis	5	7	11	4	5	1	7	10	50
3	Hepatitis B	6	7**	8	2	1	1	3	8	36
4	Syphilis	7	3	1	4	0	0	3	1	19
5	Valvular heart disease	0	4	4	1	0	0	1	2	12
6	Pregnancy	3	4	1	1	0	0	1	1	11
7	HIV infection	0	0	0	0	1	2	2	1	6
8	Thyrotoxicosis	0	1	2	0	0	0	1	1	5
9	Ovarian mass	0	0	0	0	0	0	1	2	3
10	Others	0	0	1	4	0	0	0	0	5

NOTE

1. Hypertension* (adopted from the Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure – JNC 7)

	Systolic(mmHg)		Diastolic(mmHg)
Normal	<120	and	<80
Prehypertension	120 – 139	or	80 – 89
Hypertension Stage 1	140 – 159	or	90 – 99
Hypertension Stage 2	160 & >160	or	100 & >100

2. **One foreign worker in this group had stage 2 hypertension and another had serological evidence of syphilis

Table IV: Body mass index distribution of female Indonesian foreign workers with hypertension

	Body mass index				Total no of female Indonesian foreign workers with hypertension
	18.9 and below	19 to 24.9	25 to 29.9	30 and above	
Number of female Indonesian foreign workers with stage 1 hypertension	3	6	4	2	15
Number of female Indonesian foreign workers with stage 2 hypertension	3	39	16	3	61
Total	6	45	20	5	76

Note :

Body mass index (adopted from the American Academy of Family Physicians 2006)

18.9 and below - underweight
19 to 24.9 - normal
25 to 29.9 - overweight
30 and above - obese

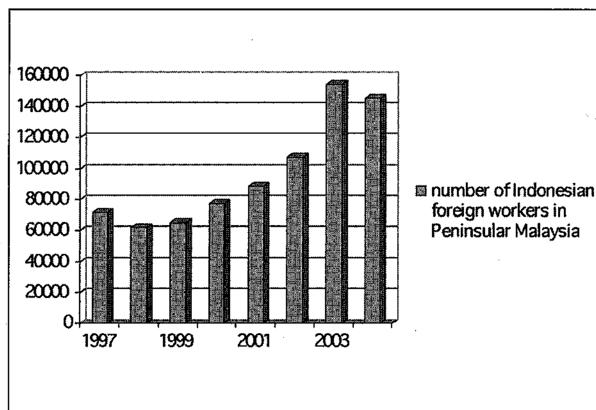

Fig 1: Number of Indonesian foreign workers in Peninsular Malaysia from 1997 to 2004[1]

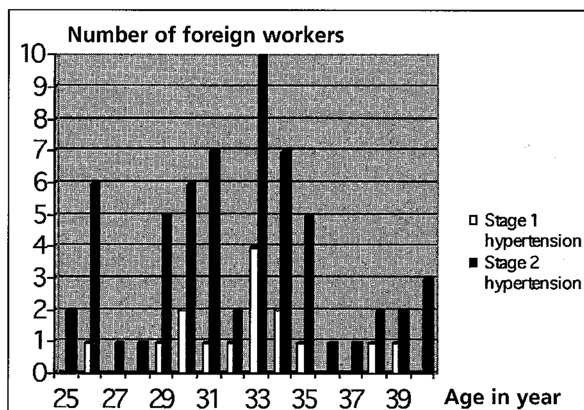

Fig 2: Age distribution of female Indonesian foreign workers with hypertension

undergo medical examination to renew her work permit. When her pulmonary tuberculosis was discovered by then, she could have infected several individuals, especially her employers and their family members. This causes undue stress in the family.

Disruption in the employers' daily work routine is inevitable. They need to apply for a new foreign worker and need to spend more time away from their work to organize and care for their dependants and to train a new maid. The process of applying for a new foreign domestic helper may take about one month. Therefore, there is loss of productivity in the workforce due to the longer time taken away from work. This translates into loss of productivity in our economy.

Most of these foreign workers are in the lower economic group, earning meager wages in their countries. In hoping that they may earn more in Malaysia, they usually mortgage their possessions (house, land, cattle, etc) or borrow money enabling them to pay for their expenses incurred while applying for work permit and for transport to Malaysia to work. These foreigners, who were rendered unfit for employment in Malaysia, had to return home to their own countries with heavier financial difficulties.

Data in this review was obtained from a single clinic in a city. Therefore, the results may not reflect the whole of Malaysia.

Conclusion

We need female Indonesian foreign workers in Malaysia to work as domestic helpers but they should not burden our economy and our healthcare system. This paper shows that there were female foreign workers who had diseases (which is unacceptable for employment as domestic helpers in Malaysia in accordance with the Malaysian Ministry of Health) but were certified fit in their country of origin. All the foreign workers in this study were registered with the Malaysian Immigration Department. Such discrepancies could be due to the incubation period of the diseases, quality of medical examination or quality of laboratory facilities and accessibility to medical examination centers in Indonesia.

This paper supports the government's decision to impose mandatory medical examination for all foreign workers arriving in Malaysia for employment from 1st August 2005.

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Appendix I: Diseases/Conditions of Foreign Workers Certified Unfit under FOMEMA Sdn Bhd in 1998 and 1999[4]

Diseases	1998 percentage (number of foreign workers)	1999 percentage (number of foreign workers)
HIV infection	1.0% (173)	0.9% (69)
Tuberculosis	8.2% (1467)	11.7% (853)
Malaria	0.05 (1)	0.0% (0)
Leprosy	0.0% (7)	0.0% (3)
Sexually transmitted disease	16.7% (2978)	18.7% (1360)
Hepatitis B	67.4% (12030)	53.7% (3907)
Cancer	0.1% (12)	0.1% (7)
Epilepsy	0.1% (13)	0.1% (4)
Psychiatric illness	0.1% (15)	0.1% (9)
Pregnancy	4.2% (751)	8.3% (601)
Urine opiates	1.4% (255)	4.0% (293)
Urine cannabinoids	0.9% (152)	2.3% (170)
Total	100.0%(17854)	100.0% (7276)

Note: all these foreign workers (males and females) were examined from second year onwards of working in Malaysia