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UTILIZATION OF HEALTH CARE SERVICES AMONG MIGRANT WORKERS IN MALAYSIA

Md. Sayed Uddin[1]
Rulia Akhtar[2+]
Muhammad Mehedi Masud[3]
Qazi Muhammad Adnan Hye[4]

[1]*Sociology and Social Anthropology, Faculty of Humanities, Arts and Heritage, Universiti Malaysia Sabah (UMS), Sabah, Malaysia.*
Email: sayed@ums.edu.my
[2]*Ungku Aziz Centre for Development Studies, Faculty of Economics and Administration, University of Malaya, Kuala Lumpur, Malaysia.*
Email: rulia@um.edu.my
[3]*Department of Development Studies, Faculty of Economics and Administration, University of Malaya, Kuala Lumpur, Malaysia.*
Email: mehedi@um.edu.my
[4]*Adjunct Faculty, Mohammad Ali Jinnah University, Karachi City, Pakistan.*

(+ Corresponding author)

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ABSTRACT

The underutilization of formal health services is a common scenario among migrants that leads to the development of serious medical conditions. This study aims to examine the influence of socio-demographic factors on the use of health services among Bangladeshi migrant workers in Malaysia. It employed Andersen's 'population characteristics framework' behavioral model, which is based on a quantitative method. A questionnaire was developed to collect relevant information through face-to-face interviews from respondents involved in the construction, manufacturing, and service sectors. The results revealed that the majority of Bangladeshi workers were not consistent in visiting doctors, hospitals, or clinics when they experienced illness in the past year. The theoretical implication of Andersen's behavioral model comprising predisposing and need factors was found to be significantly and positively associated with the use of health services. The findings indicated that predisposing factors including marital status and education, and need factors, including self-rated health status, sickness, and chronic illness in the previous year, had the greatest impact on healthcare utilization. However, there was no significant relationship between respondents' ages and their utilization of healthcare services during their stay in Malaysia. Finally, the study suggests that adequate measures should be taken to provide pre-departure training related to the existing healthcare system in Malaysia, including health insurance cover and extension of services to future migrant workers.

Contribution/Originality: This study contributes to the existing literature on the utilization of healthcare services among Bangladeshi migrant workers in Malaysia. This study reveals that marital status and educational level have greater influence and a positive impact on the use of services at various healthcare providers in Malaysia.

1. INTRODUCTION

Malaysia has a history of being both a labor destination and origin country (Dannecker, 2005). Due to its rapid economic growth and industrialization since the 1980s, there has been a huge influx of foreign workers into Malaysia through various bilateral agreements between its neighboring countries and those in South Asia. Besides its history with Indonesia and the Philippines, Malaysia has a history of importing workers from South Asian countries with a surplus, such as Bangladesh. A recent statistic published by the Bureau of Manpower, Employment

and Training (BMET) indicates that there are approximately 1056684 temporary Bangladeshi migrant workers in Malaysia. These foreign workers' health conditions and their limited access to and use of healthcare services have attracted the attention of many social scientists (Kanapathy, 2006; Karim & Diah, 2015).

In developing countries, accessibility to healthcare centers poses a serious concern. Although Malaysia has good coverage of health services that are accessible to a large majority of the population (Krishnaswamy et al., 2009) there remains people, including foreign workers, with needs who do not seek help for their medical problems (Kanapathy, 2006). The Malaysian government remains concerned about foreign workers' health and provisions for seeking care, urging employers to address workers' health issues. It enacted a law in 2011 stipulating that all registered foreign workers are entitled to the Foreign Worker Hospitalization and Surgical Insurance Scheme, which is also a condition for the renewal of work permits. The insurance provides medical coverage up to RM10,000 yearly for an annual premium of RM120 paid by the workers themselves or employers, and up to the end of 2011, a total of 1.4 million foreign workers have been covered (Chua & Cheah, 2012). However, Karim and Diah (2015) highlighted the plight of around 87% Bangladeshi of workers who do not receive any medical support and are not protected by any insurance when needed. Many Bangladeshi workers work in construction, factories, and other hazardous working conditions and are very much prone to accidents, sickness, and temporary disability. They are often sick due to laborious work and extra physical pressure. Different fees exist for local and foreign workers in the healthcare system in Malaysia in both public and private hospitals and clinics, and foreign workers have to pay more than the locals. According to Kanapathy (2006) the fee hike could deny healthcare access to some migrant workers with no legal status, who are more at risk, are in the lowest paying jobs and are without any medical benefits provided by employers. This paper investigates the impacts of socio-demographic factors on the utilization of healthcare services in Malaysia. Studies demonstrate that individuals' health status and their use of healthcare services have been influenced by socio-demographic, economic, and non-economic factors, demonstrating a correlation between demographic profiles and use of healthcare services (Andersen, 1995; Young, 2004). Their study emphasized the impact and association of demographic attributes on health status and associated behavior. Demographics and other compositional attributes, such as age, sex, race, income, education, marital status, religion, and socio-economic status are correlated with both health and health behavior (Pol & Thomas, 2000). This is in accordance with Andersen (1995) behavioral model, according to which population characteristics play a vital role in a person's seeking care and utilization of health services. The present study is guided by Andersen's behavior model to assess Bangladeshi migrant workers' utilization of healthcare services.

2. LITERATURE REVIEW

Studies have documented that both underutilization and delayed use of formal health services among migrants are common, and delayed access to healthcare in Singapore has been documented as a major problem among Bangladeshi, Indian and Myanmar migrant workers (Lee et al., 2014). Also, migrants' health expenditure is much lower compared to the non-migrant population (Liem, 2004). This is due to the migrants' remittance and the high medical costs in the destination countries (Lu, 2008).

Existing literature highlights a serious problem in Malaysia faced by migrants through injury and accidents in the workplace (Hill, 2012). A survey of foreign workers' perceptions of working in Malaysia (Abdul-Aziz, 2001) revealed their dissatisfaction in various areas, such as accident compensation (26%), health services (24.8%), work safety (13.4%), wage levels (16.9%), and insurance (46.4%). On many occasions, when the workers become injured in the workplace, the company has been found to be reluctant to provide adequate health services after the accident. This is evidenced by Hill (2012) who conducted a study on migrants' vulnerability in Port Klang, Malaysia, the respondents being unskilled dock-workers from Bangladesh, Nepal and Myanmar. According to Hill (2012), these workers "frequently lack effective representation, live in cramped and challenging conditions, experience accidents as part of dangerous work (for which there is insufficient compensatory action taken by the employers), and are

frequently paid far less than their local counterparts". Many factors influence the health conditions of migrants and their utilization levels. For instance, studies found that age, gender, marital status, higher education, insurance status, language, religion, income, provision of quality services, and the need for care are influential factors for health service utilization. A study by Kasper (2000) found that the most influential factors that determine migrants' utilization of the health service are income level and insurance status (Kasper, 2000). For instance, it was found that lack of health insurance among migrants resulted in the lowest rate of utilization of healthcare services in many communities, such as in the United States (Lee & Choi, 2009) Nepal (Joshi, Simkhada, & Prescott, 2011) China (Mou et al., 2009) Thailand (Hu, 2010) and in other communities (Hoerster, Beddawi, Peddecord, & Ayala, 2010; Mou et al., 2009; Shibusawa & Mui, 2010). Krishnaswamy et al. (2009) studied the utilization of healthcare services, particularly among Malaysian citizens in public and private services. The results showed significant relations between demographic characteristics and service use. Age is a major factor that increased the rate of use of health services by respondents aged 50 and above, with the highest rate being observed among those aged 60 and above. Also, respondents of Chinese ethnicity exhibited a lower usage rate of health services in comparison to Malays and Indians. Mostly non-Chinese ethnic groups and having a disability were associated with high usage rates of health services. It was also found that poverty and educational qualifications of the respondents failed to show an impact on service use behavior. Hu (2010) investigated the role of health insurance in influencing the use of healthcare among three different groups in Thailand between 2000 and 2004: Thai, Thai ethnic minority, and ethnic minority migrants. Hu (2010) research found several factors like insurance coverage, ability to speak Thai, and religion important and influential to healthcare use. Use of healthcare had significantly increased within each ethnic group between 2000 and 2004, particularly among the Thai ethnic minorities, in line with the increase in health insurance coverage. It was evident that the higher the health insurance coverage, the higher the level of usage of healthcare services by each ethnic group in this period. The author notes that ethnic minority migrants encountered cultural and linguistic barriers in using health services at the Thailand–Myanmar border. More than half of the ethnic minority migrant respondents could not speak the Thai language. Furthermore, the statistically significant differences between ethnic minority migrants and Thais still existed in 2004, meaning that healthcare use was not equal between the ethnic minority migrants and Thais. A similar study was conducted by Peng, Chang, Zhou, Hu, and Liang (2010) in Beijing, China on 2,478 migrant workers. It was observed that the high cost of the health service was a significant obstacle to healthcare access. Their study assessed the influence of socio-demographic characteristics on the migrant workers' decisions to seek healthcare services. Joshi et al. (2011) investigated the health problems and accidents experienced by a sample of 408 Nepalese migrants in three Gulf countries: Qatar, Saudi Arabia, and the United Arab Emirates (UAE). Only one-third of the respondents were provided with health insurance by their employers. Lack of sick leave, cost, and fear of losing their jobs were the barriers to accessing healthcare services. Also, their study found that construction and agricultural workers were more likely to experience health problems and accidents at their place of work than other types of workers. A study by Mou et al. (2009) supplemented the findings of the research conducted by Joshi et al. (2011) in China.

3. CONCEPTUAL FRAMEWORK

This study is guided by Andersen's behavioral model of health service utilization (Andersen, 1995), which consists of predisposing, enabling, and need factors (see Figure 1). It was developed in the 1960s by Ronald Andersen to explain why people and family use health services. Andersen's behavioral model consisted of factors such as individual demographic characteristics, attitudes, social structure, and health beliefs that predispose service use. This model is one of the most influential and reliable frameworks to assess health status and health service utilization patterns in diverse socio-cultural settings, as it draws upon a sociological perspective (Kasper, 2000).

Andersen's behavioral model has guided numerous studies in developed countries (Hoerster et al., 2010; Shibusawa & Mui, 2010), and the model has also been used by many researchers in developing countries to evaluate

health service utilization in many communities. For instance, it was used to study ethnic minorities, migrants and Thais in Thailand (Hu, 2010) and to study families and children's health status and health care utilization in Bangladesh (Young, 2004). According to Andersen, socio-demographic characteristics, resources, and self-rated health/perceived health predisposes a person to seek healthcare services. This indicates that these factors have a direct impact on health service utilization. The predisposing factors include demographic characteristics (age, gender, and marital status), social structural characteristics (education, social class, race, ethnicity, and employment status), and health beliefs (attitudes, values and knowledge of health and health services). In this study, we employed the widely used traditional predisposing factors such as age, marital status, and education in the context of Bangladeshi migrant workers. These demographic variables of predisposing factors are essential because they explain the subsequent use of services, maintenance of health, physical needs or diseases patterns (Andersen & Newman, 2005). Age is a crucial demographic factor and one of the major sub-components of predisposing domains in Andersen's behavior model of health service utilization.

Cockerham (2004) emphasizes this factor, stating that age is a key factor that affects an individual's health status. The enabling domain, which includes employment, health insurance, income, access to familial or personal resources, represents the factors that influence individuals to access the healthcare system. Andersen (1995) indicates that individuals with more enabling resources are more likely to acquire the necessary and desired health care. In addition, enabling factors like duration of stay, possession of health insurance, language proficiency and income are found to have a greater influence on the use of hospital services (Akresh, 2009). Kasper (2000) believes that the influence of enabling characteristics, such as insurance coverage and income, are in the empirical analysis of health service usage, which has been the major focus of studies that employ the behavioral model. Need factors are the driving force of the utilization model (Andersen, 1995). A person's view of his or her health status (self-reported health status) is most important in the decision to use health services; health beliefs, health knowledge and social networks only mold these views (Andersen, 1995). The health need domain included in this study are respondents' self-reported health status, whether they felt unwell within the past year and whether they experienced chronic illness because they represent the perception of the type of health services one may require. Self-reported health status is based on a standard question that asks the respondent to rate his or her health as excellent, very good, good, fair, or poor.

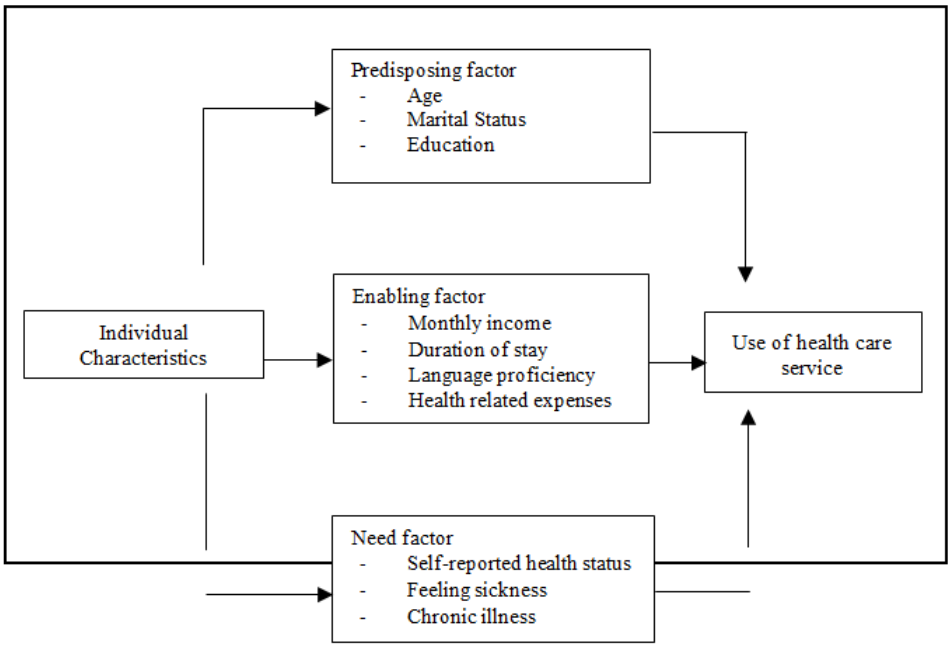

Figure-1. Theoretical framework of utilization of health care services.

4. METHODS AND MATERIALS

The population of this study comprised temporary Bangladeshi migrant workers in various sectors in Kuala Lumpur (KL), Malaysia. The population sample were legal Bangladeshi unskilled and semi-skilled male workers involved in the construction, manufacturing, and service sectors. The study used a stratified random sampling technique. We divided our study area into eight strata based on geographic locations: Port Klang, North Port, West Port, Pangsapuri, Gombak, the Bangladesh High Commission, Batu Caves, and Nilai. Respondents were chosen randomly from each stratum. Data were collected using a face-to-face survey method, and an interview schedule was prepared to question the respondents over two days. Each interview took between one hour and twenty-five minutes to one hour and 40 minutes. To obtain an appropriate sample size from this population, the following formula was used (Lind & Van den Bos, 2002):

$$n= \pi (1-\pi) (Z/E)^2 \quad (1),$$

where n is the size of the sample, Π (0.50) is the population proportion, Z is the standard normal value corresponding to the desired level of confidence, and E is the maximum allowable error. Based on the formula for sample size, Z = 1.96 (95% confidence level), Π = 0.5, and E = 5%. It gives us a sample of 387. However, a total of 300 respondents were interviewed to assess the answers to the research question. The study applied a logistic regression model to show the probability level of Bangladeshi workers' utilization of health services in Malaysia under the influence of certain independent variables. The utilization of health services was measured using an indicator calculated from Bangladeshi workers' visits to any physicians in hospitals or clinics. A set of independent variables were also used: age, marital status, and education as predisposing factors; income, language proficiency, medical expenses provided by employers, and duration of stay in Malaysia as enabling factors; self-rated health status, suffering chronic illness, and sickness in the last 12 months as need factors.

5. RESULTS AND DISCUSSIONS

5.1. Predisposing Factors of the Respondents

Among the present sample of 300 Bangladeshi migrant workers, there were three different working groups: construction, manufacturing, and service workers. According to the data, the majority of the respondents were in the 31-35 age group. Next was the 26-30 age group that accounted for 26% of the respondents. None of them was in the 46-50 age group, and only 0.3% were in the 51 and above age group. Additionally, 7%, 11.7% and 3.7% fell into the age groups of 25 years, 36-40 years, and 41-45 years, respectively.

The data relating to the marital status of the respondents are presented in Table 1, where it was found that the majority of Bangladeshi migrant workers were married (79.3%), and 20.7% of the respondents were unmarried. Marital status has an implication on health status and use of health services, and this is also one of the vital traditional sub-components of the predisposing variable of health service utilization.

Table-1. Demographic profile of the respondents.

Demographic Characteristics	Frequency (n)	Percent (%)
Gender		
Male	300	100
Age:		
Below 25 years	21	7.0
26 – 30 years	78	26.0
31 – 35 years	154	51.3
36 – 40 years	35	11.7
41 – 45 years	11	3.7
46 – 50 years	0	0.00
51 years and above	1	0.3
Marital Status:		
Married	238	79.3
Unmarried	62	20.7

Like other demographic attributes, education also affects health status, health behavior and healthcare utilization (Pol & Thomas, 2000). Having higher education positively affects migrants, providing a better self-reported health status and more positive health service utilization (Liem, 2004). This is an independent variable in the predisposition factor in the study. Figure 2 shows that 47.3% of the respondents completed secondary school education, followed by 28% who completed primary school. Those who completed higher secondary school constitute 19%. Only 4.3% of the respondents graduated with a bachelor's or honors degree. The interesting feature is that 3% had also completed a master's degree. Overall, the majority of the respondents have had some form of education up to secondary school level, as shown in Figure 2.

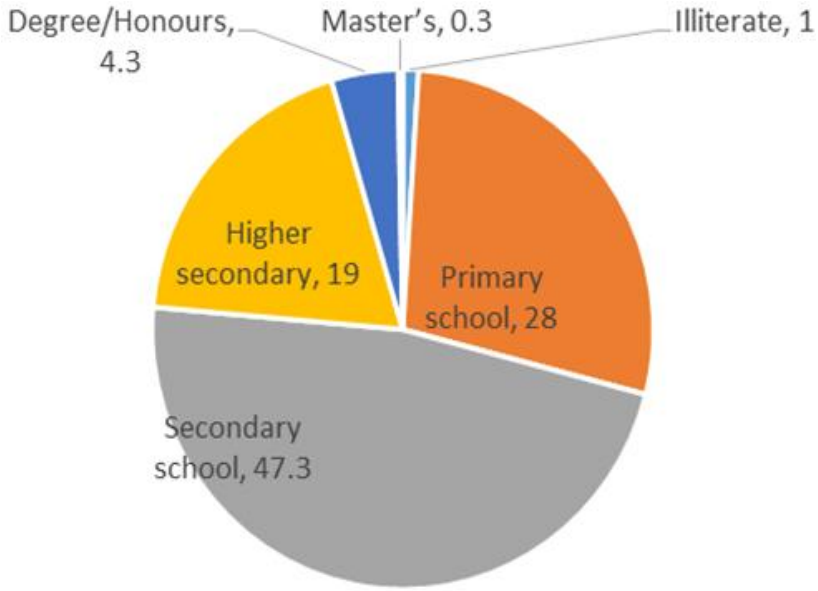

Figure-2. Level of education of the respondents.

5.2. Enabling Factors of the Respondents

5.2.1. Income

Monthly income is found to be a strong determinant of health and access to services (Lee et al., 2014). Lee et al. (2014) also found a strong association between higher salary and visits to a doctor within three months. Differences in income level affect the degree of utilization. Figure 3 deals with the overall level of monthly income of Bangladeshi migrant workers in Malaysia. Though the government of Malaysia has fixed foreign workers' minimum salary at RM900 per month, construction, manufacturing and service sector migrants receive a different amount based on the type of job and hours of overtime (Ullah, 2011). The present study identifies seven categories of monthly income ranging from RM900 to RM2001, which respondents under study usually earn. Figure 3 indicates that the majority (30.7%) earn RM1401-1600, 22.3% of the respondents earn RM1601-1800, 19% earn RM1001-1200, and 7.3% earn RM900-1000. It is noteworthy that 9.3% of migrant workers earn RM1201-1400 and a similar percentage earn from RM1801-2000, with only 2% earning RM2000 and above.

5.2.2. Length of Stay

Duration of stay is one of the enabling variables used in health service utilization studies as it has an impact on the health status of migrant workers (Akresh, 2009). Liem (2004) found that longer durations of stay in destination countries is associated with a higher likelihood of getting ill and longer suffering from illnesses. In other words, immigrants' health deteriorates faster as their durations of stay increases (Huang, 2008). Table 2 shows that the majority of respondents (54.7%, n=164) have been working in Malaysia for 7-8 years. This is followed by 44.7% who have been working for 9-10 years, and only 0.7% of workers have been in this country for 3-4 years.

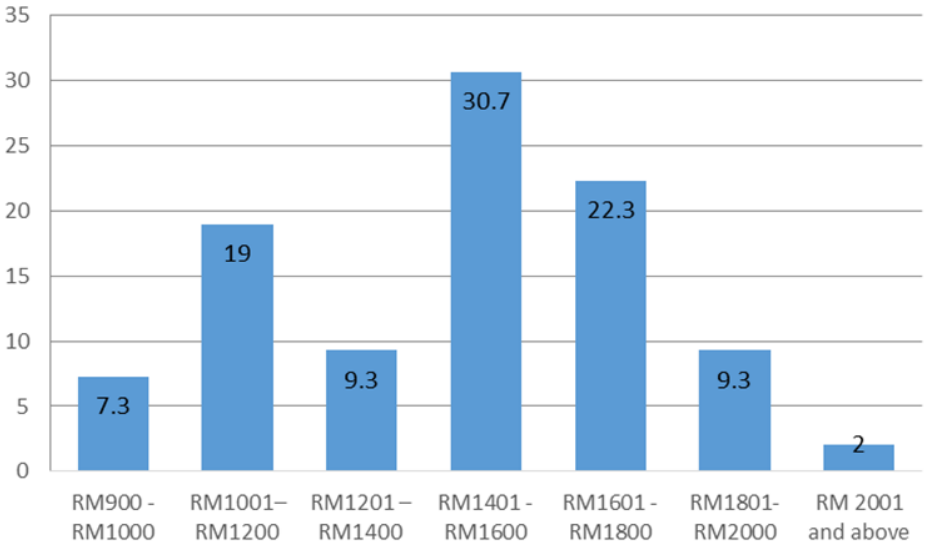

Figure-3. Income level of the respondents.

5.2.3. Medical Coverage

The present study finds that the majority of respondents (60.7%) do not get any medical coverage from their employers, while 39.3% get some medical coverage from their company. It is found that medical coverage varies from employer to employer and from sector to sector. In the manufacturing sector, the majority of employers offer some medical assistance ranging from RM200 to RM600 a year. They provide a card which workers are required to present during their visit to specific clinics listed by the company. In the construction sector, workers only get RM35-RM75 per day as part of their wages and have to meet the remaining medical expenses. Some construction companies offer a Construction Industry Development Board (CIDB) green card to workers to cover their medical expenses.

5.2.4. Language Proficiency

Language proficiency is also a component of enabling factors that allows a person access to health services. According to Akresh (2009) enabling factors, such as duration of stay in the host country, health insurance and language proficiency, are found to be significant in receiving hospital care.

Table-2. Enabling factors of the respondents.

Enabling Factors	Frequency	Percentage (%)
Duration of stay		
3 - 4 years	2	.7
5 - 6 years	0	0
7 - 8 years	164	54.7
9 - 10 years	134	44.7
Health-related expenses	300	100.0
Yes	118	39.3
No	182	60.7
Language proficiency	300	100.0
Melayu	217	72.3
English	83	27.7
Chinese	0	0
Other	0	0
Total	300	100.0

In fact, Bangladeshi workers acquire this skill at their place of work in their host country. Another study suggests that Bangladeshi workers are very interested in learning Bahasa Melayu (Malaysian official language), and eventually speak it fluently, as well as English (Zamir, 2006). Language proficiency is crucial for Bangladeshi

migrant workers to communicate with physicians, doctors, nurses, and officials. The present study shows that the majority of workers, i.e. 72.3%, use Bahasa Melayu when communicating with health professionals, and only 27.7% communicate in English (see Table 2).

5.3. Need Factors

5.3.1. Self-Reported Health Status

Respondents' self-reported health status measure scale is one of the need factors of Andersen's behavior model. Individually perceived health status impacts health service utilization. Considering all 300 samples, the majority of the workers (63.3%) reported that their overall health status is good, 18.7% reported that their health is fair, 12.7% considered their health to be very good, and 4% considered their health excellent. Only 1.3% claimed that their health is poor.

5.3.2. Sickness During the Last 12 Months

The study inquired as to how many respondents felt ill during the last 12 months. The data revealed that the majority (70.7%; n=212) of the workers from all three sectors have been unwell in the last 12 months. Only 29.3% of workers did not fall ill during this time.

5.3.3. Chronic Illness

Chronic illness has enormous implications on a person's visit to health centers. It was found that a high illness level is the major determinant of utilization in all three (dental, physician, hospital) services (Andersen & Newman, 2005). The relationship between individual chronic illness and demographic characteristics is obvious. For instance, married people feel better, function better and have fewer illnesses, less serious illness, better outcomes from illnesses, and lower mortality (Pol & Thomas, 2000). Likewise, older individuals have more illnesses and need more health care (Young, 2004). The present study indicates that 94.3% of the respondents did not experience any chronic illness while working in Malaysia, and only 5.7% suffer from chronic illness (see Table 3). This may be due to the fact that respondents do not go for a medical examination because if they are found to suffer from chronic diseases, they will be deported.

Table-3. Need factors of the respondents.

Factors	Frequency	Percentage (%)
Illness report during the past year		
Yes	212	70.7
No	88	29.3
Suffering from chronic illness	300	100.0
Yes	17	5.7
No	283	94.3
Self-rated health status	300	100.0
Excellent	12	4.0
Very good	38	12.7
Good	190	63.3
Fair	56	18.7
Poor	4	1.3
Total	300	100.0

5.4. Impacts of Socio-Demographic Factors on Health Service Utilization

Table 4 presents the results of logistic regression models for Bangladeshi migrants' health services utilization in the previous year. In the case of doctor, hospital, or clinic visits in the previous year seven variables were found significant at different levels. Age and duration of stay in Malaysia had no significant association with the dependent variable.

Table-4. Impacts of socio-demographic factors on health service utilization.

Variables	B	S.E.	Sig.
Constant	3.948	2.813	0.160
Predisposing factor			
Age	0.221	0.227	0.329
Marital status	0.902	0.509	0.076*
Education	0.816	0.212	0.009***
Enabling factor			
Income	0.325	0.180	0.071*
Language proficiency (Bahasa Melayu)	0.054	0.168	0.748
Provide medical coverage	0.950	0.357	0.008***
Years in Malaysia	0.330	0.318	0.300
Need factor			
Self-rated health status	0.874	0.456	0.056**
Chronic illness	0.544	0.648	0.017**
Illness in last 12 months	0.079	0.620	0.000***
Sector wise	0.004	0.349	0.992

Note: *, ** and *** significant at 10%, 5% and 1%, respectively.

Marital status is significantly and positively related to workers' utilization of the health service. It indicates that married Bangladeshi migrant workers were more likely to visit doctors or use hospitals or clinics in the previous year. These findings supplement the study by Whitworth (2006) who found that marital status is significant to hospital overnight stays. Similarly, having a higher educational level is positively related to utilization of health services. It implies that Bangladeshi temporary laborers who obtained a higher level of educational qualifications were more likely to visit health services in past year.

Income is significant and positively related to visits to doctors, hospitals, or clinics in the previous year. It implies that the higher the monthly incomes of workers, the more likely they were to visit or utilize hospitals or clinics in the previous year. Workers have a lower tendency to use their money for medical purposes; they would rather save their money to send to their home countries. This finding is consistent with previous studies by Akresh (2009); Hagewen (2005); Kasper (2000). The lower-income workers with poorer health conditions utilize fewer medical care services than wealthy and higher income people (Kasper, 2000).

Medical coverage provided by employers is also significantly and positively related to health service utilization. It implies that workers who receive some medical facility provided by the employer were more likely to visit doctors, hospitals, or clinics in the previous year. This finding is consistent with the study by Mou et al. (2009) who found that Shenzhen migrant workers paid more visits to hospitals or doctors if health facilities were provided by their employers.

Self-rated health status is significantly and positively linked to the utilization of health services. The result implies that workers who have reported good self-rated health were more likely to visit doctors, hospitals, or clinics in the previous year. This result is supported by Mou et al. (2009) who also found increased doctor visits associated with better self-rated health. Chronic illness is also significantly and positively linked to utilization of health services through visits to doctors. This indicates that workers who were suffering from a chronic illness, such as diabetes, were more likely to visit doctors, hospitals, or clinics in the previous year. This result is supplemented by Hagewen (2005) who found that need factor, such as a chronic health condition, is associated directly and indirectly with health care utilization.

Finally, illness in the last 12 months is significantly and positively linked to the utilization of health services. This implies that those workers who felt unwell in the previous year were more likely to visit doctors, hospitals or clinics, emergency rooms and have overnight stays in hospitals. This finding is substantial because it indicates that those migrant workers who experience illness, including work-related or occupational illness, paid more visits to doctors and used hospitals or clinics. It also justifies that being sick with work-related or occupational sickness increases the utilization rate of hospital and clinic visits or an overnight stay in hospital. This is one of the strong

predictors of health service usage because being ill increased the odds of visits to a doctor, hospital, or clinic in the previous year, as well as emergency room visits and overnight hospital stays.

6. CONCLUSIONS AND RECOMMENDATIONS

This paper assesses Bangladeshi migrant workers' degree and nature of utilization of healthcare services in Malaysia. It was found that some companies provide medical coverage facilities to their foreign workers, while others are reluctant to cover any medical expenses. As far as the utilization of health services is concerned, only one-quarter of the respondents (n=92) have visited doctors, hospitals, or clinics in the last year. The majority of them are from the manufacturing sector (n=48); the next highest are from the construction sector (n=26); and the lowest are from the service sector (n=18). This may be because manufacturing employers provide some medical coverage facility for their workers, unlike employers from other sectors.

The main objective of this paper was to test the fitness of Andersen's behavioral model of health service utilization for Bangladeshi migrant workers in Malaysia, and the study was guided by Andersen's population characteristics framework of health behavioral model (Andersen, 1995). According to Andersen, the predisposing factor (socio-demographic characteristics), enabling factor (resources) and need factor (self-rated health/perceived health) predispose a person to seek health care services. This indicates that these factors have a direct impact on health service utilization. In this research, the predisposing factor comprise three elements: age, marital status, and educational achievement. The enabling factor consists of four elements: income, duration of stay in Malaysia, medical coverage facility provided by employers, and language proficiency. Health service utilization is measured by migrant workers' access to healthcare services in Malaysia – visits to doctors, hospitals, or clinics in one year.

From the logistic regression analysis, this study reveals that the majority components of the predisposing and need factors are significantly and positively related to healthcare service utilization. In the case of predisposing factors, we found that Bangladeshi workers' marital status and educational levels have a greater influence and a positive impact on the use of healthcare services at various providers in Malaysia. It implies that married and better educated Bangladeshi migrant workers are more likely to visit doctors, hospitals, or clinics. This finding supplements Whitworth (2006) and Liang and Guo (2015). Whitworth found that marital status is significant to hospital overnight stays. Overall, marital status and a higher level of education have the greatest impact on healthcare utilization (Andersen & Newman, 2005).

In this study, the enabling factor consists of four elements: workers' monthly income, local language proficiency (Bahasa Melayu), duration of stay in Malaysia, and medical coverage provided by an employer. From the multivariate analysis, we found that workers' higher incomes and medical coverage provided by employers are significantly and positively associated with visits to doctors, hospitals, or clinics. It implied that workers with higher incomes were more likely to visit doctors, hospitals, or clinics in the previous year. This finding has supported the observation of previous studies by Hesketh, Jun, Lu, and Mei (2008); Hoerster et al. (2010). The fact that companies provide medical coverage is significant but positive with visits to doctors, hospitals, or clinics in one year. Overall, in the case of an enabling factor, we find that the components have significant and positive relationships with the utilization of healthcare services. However, in the multivariate logistic regression model, duration of stay in Malaysia and language proficiency were not significantly related to visits to doctors, hospitals, or clinics in one year.

Need factor, or perceived health status, is an influential factor for health service utilization. As Andersen (1995) mentioned, the need factor is the driving force of a person's use of healthcare services. The finding of the present study is consistent with those by Andersen (1995) and Hagewen (2005). We have considered three indicators for need factor: self-rated health status, chronic illness, and sickness in one year. All three factors are significantly and positively related to visits to doctors, hospitals, or clinics in one year. It implies that Bangladeshi workers who have

a good health status, suffer chronic illness, and fall sick in one year are more likely to visit doctors, hospitals, or clinics. This finding is consistent with that of Akresh (2009) and Mou et al. (2009).

This study suggests that there should be a pre-departure orientation programme for migrant workers to familiarize them with the health care system in Malaysia, and how to utilize it. The existing health insurance only covers workers' occupational injuries and compensation for serious accidents. Migrant workers consider this to be a requirement for the renewal of their visa. Many do not know how to use the existing insurance system, even in the case of an emergency when they are severely injured, and in some cases the employer claims the insurance on their behalf. This study suggests universal health insurance coverage should be implemented for foreign workers in Malaysia, including primary healthcare at all hospitals, clinics, and polyclinics.

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