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## BARRIERS IN OBTAINING PRIMARY HEALTH CARE SERVICES FROM PUBLIC CLINICS BY NON-CITIZEN LABORS IN MALAYSIA

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#### ABSTRACT

Non-citizen labors in the country have been found to face difficulties in accessing healthcare services. The study seeks to investigate the existence of barriers in accessing primary healthcare services by non-citizen labors in Malaysia. This study was conducted on 323 non-citizen labors residing in the urban areas of Malaysia, particularly of Johor Bahru and Klang Valley from May to September 2017. Relevant information regarding the personal barriers (language, preference for physician's gender, difficulty taking leave from work), structural barriers (availability of public clinic in residential area, travel time to the public clinic, physician's knowledge and skill) and financial barriers (insurance coverage, fear of losing daily income, transportation costs) on using primary healthcare services at public clinic in the result of the analysis revealed that the barriers cited by non-citizens to seek primary healthcare in Malaysia were lack of medical insurance protection (75.1%), non-availability of a public clinic in the residential area (38.7%), not receiving the needed or wanted services (21.3%), long travel time to the nearest public clinic (17.3%), language (10.2% of respondents), negative perception about the doctors' knowledge and skills (9.9%), difficulty taking leave (7.8%), fear of losing daily income (7.7%), high transportation cost (3.7%) and different doctor gender preference (2.5%). Therefore, barriers to access healthcare services among non-citizens exist in Malaysia.

Keywords: Healthcare, Barriers, Public clinic, Non-citizen labors, Malaysia

#### INTRODUCTION

Working and living in a foreign country can be stressful for non-citizens who have to face cultural differences, language problems, loneliness and homesickness which could lead to an adverse impact on health (Berdan, 2010). Due to the immigration of a large number of foreigners, it is of utmost importance to be healthy to avert undesirable conditions towards the public's health (Pursell, 2007).

Regardless, both citizens and non-citizens are exposed to a variety of infectious diseases and health hazards on a daily basis. Some of these diseases have long term persistence and are lethal. Moreover, they could be easily transmitted to the community upon interaction. The overall health of migrants has a direct impact on health care services and public health in a host country (Khin, 2002). During the past two decades, Malaysia received considerable attention as far as the health aspects of migrants is concerned (De Maio, 2010). Some of the migrants, however, come from very poor socio economic backgrounds and have less quality resources (Dawood, 2012).

Migrants, however, do not necessarily take advantage of health care services even in countries in which access is granted (Dias, Severo & Barros et al., 2008). Countries of lower income tend to have poorer health conditions compared to countries of higher income (Wagstaff, 2002). There are 1.8 million registered immigrant workers in Malaysia (MOHR, 2013). The total number of immigrant workers therefore is much more considering the number illegal immigrants as well. This huge number of immigrants could bring in different types of communicable diseases into the country as available data shows that even most of those who enter legally, have fake and unreliable medical certificates issued in their country of origin (Irsyad, 2014). Therefore, seeking care and treatment is important for their health as well as the public as a whole. In addition,

some immigrants tend to take temporary jobs in poor environments with lack of safety (Carballo and Nerukar, 2001). Past research associate work organization and employment conditions with health risks towards immigrant workers (Benach *et al.*, 2010). Little is known regarding the utilization of these healthcare services (Hooi & Hooi, 2003) and therefore, the health of the non-citizens as well as, citizens are at stake (Zimmerman, Kiss & Hossain, 2011).

The objective of this study is to investigate the existence of barriers in utilizing the primary healthcare services among non-citizens in the country. Generally, noncitizens face political, administrative, economic, cultural and personal barriers when using healthcare services (Dias, Severo & Barros, 2008). Non-citizens are the most defenseless group in the population (Aday, 2002) and it has been repetitively documented that they lack access to healthcare services as well as health insurance coverage (Hargraves & Hadley, 2003; Choe et al., 2006; Sanz et al., 2011; Solé-Auró et al., 2012; Siddigi et al., 2009). Therefore, they tend to underutilize and delay seeking professional healthcare services when compared to citizens (Nelson et al., 2002). Country of origin, tenure of working and citizenship also lead to a variety of healthcare experiences (Choi, 2009). Individual barriers such as linguistics (Choe et al., 2006; Aroian, WU & Tran, 2005), income differences (Hargraves and Hadley, 2003), as well as sociocultural barriers (Asanin and Wilson, 2008) are the key reasons for the imbalance in healthcare utilization among noncitizens (Ma, 1999). On the other hand, factors associated with structural barriers such as availability of health professionals (De Heer et al., 2013, Sanmartin & Ross, 2006), quality of healthcare services (Shrestha and Ittiravivongs, 1994), lack of transportation (Garces, Scarinci & Harrison., 2006; Aroian et al., 2005; Cristancho et al., 2008) and long waiting time are known to be among the obstacles towards getting healthcare services (Choe et al., 2006). Therefore, underutilization of health care services is a multifactorial issue (Shrestha & Ittiravivongs, 1994).

#### The Public Health Care System in Malaysia

In Malaysia, the Ministry of Health centrally administers the public sector of healthcare services through its district, state, and central offices. Different healthcare services have been provided by the government for specific sections of the population. Legislation governing health professionals requires them to register with the statutory professional bodies. The number of public primary healthcare facilities which currently accounts for 802 centers, and over 2000 small community clinics, and dental clinics, were expanded steadily in the earlier decades, particularly to reach people in under–served rural areas. Generally, primary healthcare services were delivered across the country through public clinics (Jaafar *et al.*, 2013).

#### Healthcare Policy over Non-Citizens

According to a report provided by the Ministry of Human Resource (MOHR) of Malaysia in 1997, the Government of Malaysia awarded the concession to Foreign Workers Medical Examination Monitoring Agency (FOMEMA) to implement, manage and supervise a nationwide mandatory health-screening program for all legal foreign workers in Malaysia. The objectives of the concession are to ensure that foreign workers are free from an identified list of communicable diseases (TB and Hepatitis B) and to ensure that Malaysian public health facilities are not burdened by foreign workers with medical conditions or diseases that require prolonged and extensive treatment (MOHR, 2013). There is an alarming fact that a large number of foreign workers who were brought in legally have failed medical screening for tuberculosis (Irsyad, 2014). In 2013, FOMEMA announced that 45% of total workers who entered Malaysia have been diagnosed with tuberculosis, 14% had Hepatitis B, and 1.4% cases had sexually transmitted diseases (Yahaya, 2014).

As of January 2011, the Malaysian Government made it compulsory for migrant workers to have medical insurance coverage. The objective of this policy was to improve the healthcare coverage and benefits for migrant workers apart from overcoming the problem of increasing unpaid hospital bills incurred by publicfunded hospitals (MOHR, 2013).

#### **RESEARCH METHODS**

In order to achieve the objective of the study, data collection through surveys was conducted by targeting non-citizen labors regardless of their legal status in urban areas in Malaysia, particularly in Johor Bahru and Klang Valley from May to September 2017. Data was collected through convenience sampling, where majority of the respondents were approached by trained enumerators in clinics, around housing areas as well as working places. Out of 350 set of questionnaires distributed, 323 samples were collected (92.28% response rate). The questionnaire was prepared in both English and Malay languages. Enumerators were also tasked to provide explanations on the questions being asked.

The classification of barriers used in this research is based on the Institute of Medicine (IOM) model that is divided into three categories: namely; personal, structural and financial barriers. After respondents completed the section on socio-demographic background of the questionnaire, they answered more questions which were related to the three barriers. Questions under the personal barriers category include; "Does the doctor speak with you in the language you prefer?", "During the last 12 months, have you ever avoided seeking primary medical care in public clinic because there was no same gender doctor?", "Have you delayed seeking primary medical care due to difficulty of taking leave?". They responded to the questions by choosing one out of the five given options from "never" to "always".

The respondents were then asked to answer the following questions related to structural barriers. The first question asked was; "Does your residential area have public clinic?", and the answer options were "Yes" or "No". The second question was "How long does it take you to travel to the nearest public clinic during normal time?" They were required to answer the second question by choosing one out of the three given options; "Less than 1 hour", "one to two hours", and "more than two hours". Since the doctors' knowledge and skill is a barrier at provider level (Scheppers et al., 2006), we considered it as part of structural barriers. Therefore, the third question asked was about the respondents' opinion on doctors' skills and knowledge. The last question in the structural barrier section asked on whether or not the respondents received the services that they needed or wanted in public clinics. They answered these questions by stating whether they strongly disagree, disagree, neutral, agree or strongly agree with the given statement.

The third part of the questionnaire was dedicated to ask questions related to financial barriers which consist of three questions. The questions are, "Do you have any insurance coverage for medical care?", "Have you ever delayed seeking primary medical care because of worrying about losing your daily income?", and "During last 12 months, was there any time you needed to buy medications but could not get them due to the high cost of medication?". In this case, they answered the question by stating whether they had never, rarely, sometimes, often or always experience the given problem.

One might argue on the relevance of including analysis on subscription to medical insurance in this study as most of the medical insurance policies only cover for hospitalization cost. However, it is needed to be stressed that many medical insurance policies also covers the cost of out-patient treatment for prehospitalization and post-hospitalization periods and certain treatments such as cancer treatment, kidney dialysis treatment, day surgery and emergency treatment for accidental injury, which can be considered as primary healthcare services.

As it was difficult to get cooperation from the respondents to determine the legality of their immigration, it can be assumed that most of the respondents were illegal immigrants, as most of them do not have a medical insurance, which is one of the requirements for legal immigrants in the country.

#### **RESULTS AND DISCUSSION**

Table 1 gives the details on the profile of 323 respondents of this study. The descriptive analysis reveals that most of the respondents were Indonesian (59.8%) and Bangladeshi (26.6%). The remaining 44% of the respondents were from the other ethnics. The majority of the respondents were males (66.3%). In terms of age, about 48.3% of them were less than 30 years old, 33.7% between 31 and 40 years old, 13.0% between 41 and 50 years old and 5.0% were greater than 50 years old. By looking at their occupation, 65% of them worked in the private sector, 27.2% were selfemployed and the rest worked in other sectors. As table 1 show, 4.6% of respondents reported their total household income to be below RM1001, 57.6% in the range of MYR1001-MYR3000 and 37.8% made more than MYR3000 per month. In terms of the duration of stay in Malaysia, the majority of the respondents had been residing in Malaysia for less than 5 years (76.2%) while the remaining 23.9% have been residing in Malaysia for more than 5 years. The results also show that in total, 92.8% of the respondents had academic qualifications of either primary, secondary or certificate/diploma level. Only 4.6% of the respondents had academic qualifications of Bachelor, Master or

Gender	Frequency	Percentage (%)
Male	214	66.3
Female	109	33.7
Age	Frequency	Percentage (%)
$\leq$ 30 years old	156	48.3
31-40 years old	109	33.7
41-50 years old	42	13.0
> 50 years old	16	5.0
Country of Origin	Frequency	Percentage (%)
Indonesian	193	59.8
Bangladeshi	86	26.6
Others	44	13.6
Education	Frequency	Percentage (%)
Primary	94	29.1
Secondary	119	36.8
Certificate/Diploma	87	26.9
Bachelor Degree	10	3.1
Master degree	3	0.9
Doctorate degree	2	0.6
Others	8	2.5
Occupation	Frequency	Percentage (%)
Unemployed/ housewife	3	0.9
Self employed	88	27.2
Government employed	2	0.6
Private employed	211	65.3
Part time employee	9	2.8
Others	10	3.1
Total household income	Frequency	Percentage (%)
≤ RM1000	15	4.6
RM1001-RM3000	186	57.6
≥RM3001	122	37.8
Duration of residency	Frequency	Percentage (%)
$\leq$ 5 years	246	76.2
6-10 years	60	18.6
$\geq 11$ years	17	5.3

#### Table 1: Respondents' demographic characteristics

Table 2 shows the personal barriers among non-citizens in Malaysia regarding public health services. The results indicate that all the three groups of foreigners in Malaysia (Indonesian, Bangladeshi and other ethnics) did not face major barriers in language when communicating with doctors in public clinics. When asked whether the doctors speak with them in the language they prefer, 65.3% of the total respondents answered either often or always, 24.5% answered sometimes and the remaining 10.2% answered either never or rare. Therefore, findings suggest that most of the respondents do not have much problem to communicate with doctors. Despite language barrier although exist among a small percentage of the noncitizens, it is not as serious as in some other countries like Canada (Bowen, 2001), the United States (Dubard & Gizlice, 2008; Wilson et al., 2005), Netherlands (Boateng et al., 2012), Australia (Murray and Skull, 2005) and Denmark (Michaelsen et al., 2004).

# Table 2: Respondents' responses to questions under theaspect of personal barriers (%)

2			Indonesian	Bangladeshi	Others	Total
	Does the doctor speak with you in the language you prefer?	Never	1.6	8.1	2.3	3.4
		Rare	9.3	0.0	9.1	6.8
		Sometimes	32.6	12.8	11.4	24.5
		Often	34.7	33.7	43.2	35.6
		Always	21.8	45.3	34.1	29.7
	During last 12 months, have you ever avoided seeking primary health care in public clinics because there was no same gender doctor?	Never	59.1	55.8	40.9	55.7
		Rare	28.5	33.7	22.7	29.1
		Sometimes	9.8	10.5	29.5	12.7
		Often	2.6	0.0	6.8	2.5
		Always	0.0	0.0	0.0	0.0
	Have you delayed seeking	Never	30.6	72.1	59.1	45.5
	primary medical care due to difficulty of taking leave?	Rare	33.7	10.5	27.3	26.6
		Sometimes	24.9	12.8	13.6	20.1
		Often	7.3	2.3	0.0	5.0
		Always	3.6	2.3	0.0	2.8

The results also suggest that the doctor's gender is not a main hindrance for non-citizens to seek primary healthcare in public clinics. In responding to the question as to whether or not they have avoided seeking primary healthcare in public clinics because there was no same gender doctor, 84.8% of the total respondents answered either never or rare, 12.7% answered sometimes and 2.5% answered often. Most of the respondents had never avoided seeking primary healthcare in public clinics due the doctor's different gender. However, the results also showed that there is a small percentage of Indonesian and other ethnic groups that had difficulties in regards to this. Almost all of the Bangladeshi respondents were male and male noncitizens do not really mind about the doctor's gender when getting primary healthcare services in clinics

The last question as part of the personal barriers asked the respondents whether they have delayed seeking primary healthcare due to difficulty of taking leave. In their response to this question, 72.1% of the total respondents answered either never or rare, 20.1% answered sometimes and 7.8% answered either often or always. This finding suggests that in general, noncitizens in Malaysia do not really face problem in taking leave for the purpose of getting primary healthcare services in public clinics. When evaluated across different groups of ethnicity, there is a large difference in the pattern of responses between Indonesian and Bangladeshi. Data shows that 72% of Bangladeshis never had problem for this issue while only 30.6% of Indonesians reported that they had never delayed seeking primary medical care due to difficulty of taking leave. Therefore, the issue whether difficulty of taking leaves is one of the personal barriers for noncitizens to get healthcare services, the outcomes of the analysis indicates that it is not a great problem for noncitizens in Malaysia to get treatment in public clinics. There is only slightly greater than ten percent of Indonesian respondents who agreed that it is a problem for them, while less than five percent of the Bangladeshis answered in the same way.

Table 3 presents the analysis of structural barriers among non-citizens in Malaysia. The result shows that

the majority of other ethnic groups (90.9%) and Bangladeshi respondents (75.6%) resided in an area where public clinic was available. However, around half of the Indonesian participants reported that there was no public clinic around their residential area. By looking at the time taken to travel to the nearest public clinic, 82.7% of respondents (the entire other ethnic groups and 93% of Bangladeshi group) had to spend less than 2 hours to go to the nearest public clinic during normal time. There are 17.3% of respondents who had to spend more than 2 hours to reach the nearest public clinic with the majority of them being Indonesian. Furthermore, it was found that most of the respondents are able to reach the nearest public clinic during normal time in less than 2 hours.

Table 3: Respondents	' responses to	questions	under the
aspect of structural ba	ırriers (%)		

		Indonesian	Bangladeshi	Others	Total
Does your	Yes	48.2	75.6	90.9	61.3
residential area has public clinic	No	51.8	24.4	9.1	38.7
How long does it take	Less than 1 hour	31.6	31.4	77.3	37.8
you to travel to the nearest public clinic	1-2 hours	42.5	61.6	22.7	44.9
during normal time?	More than 2 hours	25.9	7.0	0.0	17.3
Doctors have enough knowledge and skill	Strongly Disagree Disagree Neutral Agree Strongly Agree	0.5 7.3 21.8 62.2	7.0 10.5 37.2 31.4	0.0 4.5 31.8 614	2.2 7.7 27.2 53.9
		8.3	14.0	2.3	9.0
You received the	Strongly Disagree	3.6	7.0	0.0	4.0
services you needed or wanted	Disagree	23.8	8.1	6.8	17.3
	Neutral	23.3	34.9	40.9	28.8
	Agree	41.5	36.0	50.0	41.2
	Strongly Agree	7.8	14.0	2.3	8.7

In responding to the question if the doctors in public clinics had adequate knowledge and skill, 62.9% of the total respondents answered either strongly agree or disagree, 27.2% answered neutral, and 9.9% answered either disagree or strongly disagree. Only a small percentage of the respondents had negative perception while more than half of the remaining respondents had neutral perception. The last question from the structural

barriers section asked respondents if they have received the needed or wanted services in public clinics. Results show that 49.9% of total respondents agreed or strongly agreed that they received the needed or wanted services in public clinics, 28.8% answered neutral while 21.3% answered either disagree or strongly disagree. Quite a large percentage of Indonesians (27.4%) disagreed or strongly disagreed to this question, while only 15.1% of Bangladeshi and 6.8% of the other ethnic groups gave the same response. Hence, about fifty percent of the respondents also agreed that they received the services they needed or wanted from public clinics.

Table 4 shows the financial barriers among non-citizens in Malaysia. The results show that the majority of respondents (70.7%) never had any insurance coverage for medical care. By looking across different ethnicities, around 25.6% of Indonesian respondents always or often had insurance coverage in the past, while only 4.7% of Bangladeshi respondents always or often had medical insurance in the past. Finally, 34.1% of the respondents of other ethnic groups always or often had insurance coverage in the past. This is one of the most important findings in this study is related to the medical insurance protection among the surveyed noncitizens. While it is mandatory for employers to insure all foreign workers under an approved insurance scheme, and shall be guilty of an offence and liable on conviction to a fine or imprisonment for a term (MEF, 2014) if they fail to comply, the majority of the respondents never had medical insurance protection.

 

 Table 4: Respondents' responses to questions under the aspect of financial barriers (%)

		Indonesian	Bangladeshi	Others	Total
Do you have	Never	65.4	90.7	54.5	70.7
any insurance for medical	Rare	3.7	4.7	6.8	4.4
care?	Sometimes	5.2	0.0	4.5	3.7
	Often	4.7	1.2	6.8	4.0
	Always	20.9	3.5	27.3	17.1
Have you	Never	25.4	53.5	52.3	36.5
delayed seeking	Rare	30.6	18.6	29.5	27.2
primary medical care because of	Sometimes	37.8	15.1	13.6	28.5
worrying about losing	Often	4.7	3.5	2.3	4.0
your daily income?	Always	1.6	9.3	2.3	3.7

Have you delayed	Never	24.4	55.3	54.5	36.6
seeking primary	Rare	28.0	24.7	34.1	28.0
medical care because of	Sometimes	43.0	16.5	11.4	31.7
worrying about	Often	4.7	1.2	0.0	3.1
transportation cost?	Always	0.0	2.4	0.0	0.6

When asked whether they delayed seeking primary medical care because of worrying about losing their daily income, 63.7% of the total respondents answered never or rare, 28.5% answered sometimes, and 7.7% answered often or always. It seems that Bangladeshis were more worried about losing their daily income (12.8% responded either often or always) compared to Indonesians (6.3%), and respondents of other ethnic groups (4.6%). Around two thirds of the sampled non-citizen labors had experienced delaying primary medical care due to the worry of losing daily income.

The last question as part of the financial barriers asked whether the respondents had delayed seeking primary medical care because of transportation costs. In their response to this question, 52.4% of Indonesians, 80% of Bangladeshis and 88.6% of other ethnic groups answered either never or rare, and 31.7% of the respondents answered sometimes (43% of Indonesian, 16.5% of Bangladeshi, and 11.4% of other ethnic groups). Only 3.7% of the total respondents answered either often or always (4.7% of Indonesian and 3.6% of Bangladeshis). Therefore around two-third of respondents delayed seeking primary healthcare due to the worry of transportation cost.

#### CONCLUSION

In this study, exploratory data analysis was conducted to determine the existence of personal, structural and financial barriers in getting primary healthcare services in public clinics among non-citizen labors in Malaysia. To sum up, it can be concluded that the major barrier for non-citizens in Malaysia that prevents them from getting primary healthcare services in public clinics is financial barriers like the lack of medical insurance protection losing daily income and transportation costs. Since this study is not focusing on legal workers, it is possible that the majority of the respondents are illegal; hence, they do not have health insurance protection. Therefore, it is important to legalize as many noncitizen labors in the country as possible to ensure their general health. Other barrier that discouraged noncitizen labors from getting primary healthcare services includes difficulty of taking leave. Even though the scope of this study only covers the use of public clinics by non-citizens in Malaysia, it is believed that these barriers also play similar roles in preventing noncitizens from getting primary healthcare services from private clinics.

#### ACKNOWLEDGEMENT

The researchers would like to render their heartily gratitude to the University of Malaya research grant for offering the financial support for the study under the Equitable Society Research Cluster (Grant Number: RP018D-14SBS) and Centre for Poverty and

#### REFERENCES

- Aday, L. A. 2002. At risk in America: *The health and health care needs of vulnerable populations in the United States*, John Wiley & Sons.
- Aroian, K. J., WU, B. & Tran, T. V. 2005. Health care and social service use among Chinese immigrant elders. *Research in Nursing & Health*, 28, pp 95-105.
- Asanin, J. & Wilson, K. 2008. "I spent nine years looking for a doctor": exploring access to health care among immigrants in Mississauga, Ontario, Canada. *Social science & medicine*, 66, pp 1271-1283.
- Berdan, S. 2010. Living Abroad Has Its Challenges [Online]. Available: http://stacieberdan.com/2010/11/17/helloworld/.
- Benach J, Solar O, Vergara M, Vanroelen C, Santana V, Castedo A, Ramos J, Muntaner C; EMCONET Network.2010. Six employment conditions and health inequalities: a descriptive overview. *Int J Health Serv.* (2), pp 269-80.
- Boateng, L., Nicolaou, M., Dijkshoorn, H., Stronks, K.
  & Agyemang, C. 2012. An exploration of the enablers and barriers in access to the Dutch healthcare system among Ghanaians in Amsterdam. *BMC health services research*, 12, pp 75.

- Bowen, S. 2001. Language barriers in access to health care, Health Canada Ottawa.
- Carballo, M. & Nerukar, A. 2001. Migration, refugees, and health risks. *Emerging infectious diseases*, 7, pp 556.
- Choe, J. H., Taylor, V. M., Yasui, Y., Burke, N., Nguyen, T., Acorda, E. & Jackson, J. C. 2006. Health care access and sociodemographic factors associated with hepatitis B testing in Vietnamese American men. *Journal of Immigrant and Minority Health*, 8, pp 193-201.
- Choi, J. Y. 2009. Contextual effects on health care access among immigrants: lessons from three ethnic communities in Hawaii. *Social Science & Medicine*, 69, pp1261-1271.
- Cristancho, S., Garces, D. M., Peters, K. E. & M Working and living in a foreign country can be stressful for non-citizens who have to face cultural differences, language problems, loneliness and homesickness which could lead to an adverse impact on health (Berdan, 2010). Due to the immigration of a large number of foreigners, it is of utmost importance to be healthy to avert undesirable conditions towards the public's health (Pursell, 2007).
- ueller, B. C. 2008. Listening to rural Hispanic immigrants in the Midwest: a community-based participatory assessment of major barriers to health care access and use. Qualitative Health Research, 18, pp 633-646.
- Dawood, R. 2012. *Travellers' health: how to stay healthy abroad*, Oxford University Press.
- De Heer, H. D., Balcázar, H. G., Morera, O. F., Lapeyrouse, L., Heyman, J. M., Salinas, J. & Zambrana, R. E. 2013. Barriers to care and comorbidities along the US-Mexico Border. *Public Health Reports*, 128, pp 480.
- DE Maio, F. G. 2010. Immigration as pathogenic: a systematic review of the health of immigrants to Canada. *International Journal Equity Health*, 9, pp 1-20.

- Dias, S. F., Severo, M. & Barros, H. 2008. Determinants of health care utilization by immigrants in Portugal. *BMC Health Services Research*, 8, pp 207.
- Dubard, C. A. & Gizlice, Z. 2008. Language spoken and differences in health status, access to care, and receipt of preventive services among US Hispanics. *American Journal of Public Health*, 98, pp 2021-2028.
- Garcés, I. C., Scarinci, I. C. & Harrison, L. 2006. An examination of sociocultural factors associated with health and health care seeking among Latina immigrants. *Journal of Immigrant and Minority Health*, 8, pp 377-385.
- Hargraves, J. L. & Hadley, J. 2003. The contribution of insurance coverage and community resources to reducing racial/ethnic disparities in access to care. *Health Services Research*, 38, pp 809-829.
- Hooi, S. & Hooi, S. 2003. Utilisation of ophthalmic services by foreign nationals in Johor: a review of 452 patients. *Medical Journal of Malaysia*, 58, pp 579-586.
- Irsyad, A. 2014. Illegal Immigrants: Are They A Threat To Our Healt? [Online]. Available: http://www.malaysiandigest.com/frontpage/282main-tile/528742-illegal-immigrants-are-they-athreat-to-our-health.html.
- Jaafar S., K. M. N., Abdul Muttalib K, Othman N. H., Healy J. 2013. Malaysia Health system Review. Manila : *WHO Regional Office for the Western Pacific*.
- Khin, A.2002. HIV/AIDS problem of migrants from Burma in Thailand. *First Collaborative International Conference of the Burma Studies Group*, Göteborg (Hindenburg) University, Sweden on September. pp 25-28.
- MA, G. 1999. Barriers to the use of health services by Chinese Americans. *Journal of Allied Health*, 29, pp 64-70.
- MEF, 2014. Practical guidelines for Employers on the recruitment, Placement, Employment, and

Repatriation of Foreign Workers in Malaysia.

- Michaelsen, J. J., Krasnik, A., Nielsen, A. S., Norredam, M. & Torres, A. M. 2004. Health professionals' knowledge, attitudes, and experiences in relation to immigrant patients: a questionnaire study at a Danish hospital. *Scandinavian Journal of Public Health*, 32, pp 287-295.
- MOHR. 2013. Immigration in Malaysia: Assessment of its Economic Effects, and a Review of the Policy and System.
- Murray, S. B. & Skull, S. A. 2005. Hurdles to health: immigrant and refugee health care in Australia. *Australian Health Review*, 29, pp 25-29.
- Nelson, A. R., Smedley, B. D. & Stith, A. Y. 2002. Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care (full printed version), *National Academies Press*.
- Pursell, I. 2007. Access to health care among Somali forced migrants in Johannesburg.
- Sanmartin, C. & Ross, N. 2006. Experiencing difficulties accessing first-contact health services in Canada: Canadians without regular doctors and recent immigrants have difficulties accessing firstcontact healthcare services. Reports of difficulties in accessing care vary by age, sex and region. *Healthcare Policy*, 1, pp103.
- Sanz, B., Regidor, E., Galindo, S., Pascual, C., Lostao, L., Díaz, J. M. & Sánchez, E. 2011. Pattern of health services use by immigrants from different regions of the world residing in Spain. *International Journal of Public Health*, 56, pp 567-576.
- Scheppers, E., Van Dongen, E., Dekker, J., Geertzen, J. & Dekker, J. 2006. Potential barriers to the use of health services among ethnic minorities: a review. *Family Practice*, 23, pp 325-348.
- Shrestha, D. R. & Ittiravivongs, A. 1994. Factors affecting utilization of health centers in a rural area of Chon Buri Province, Thailand. Southeast Asian Journal of Tropical Medicine and Public Health, 25, pp 361-7.

- Siddiqi, A., Zuberi, D. & Nguyen, Q. C. 2009. The role of health insurance in explaining immigrant versus non-immigrant disparities in access to health care: Comparing the United States to Canada. *Social Science & Medicine*, 69, pp 1452-1459.
- Solé-auró, A., Guillén, M. & Crimmins, E. M. 2012. Health care usage among immigrants and nativeborn elderly populations in eleven European countries: results from SHARE. *The European Journal of Health Economics*, 13, pp 741-754.
- Wagstaff, A. 2002. Poverty and health sector inequalities. *Bulletin Of The World Health Organization*, 80, pp 97-105.
- Wilson, E., Chen, A. H., Grumbach, K., Wang, F. & Fernandez, A. 2005. Effects of limited English proficiency and physician language on health care comprehension. *Journal of General Internal Medicine*, 20, pp 800-806.
- Yahaya, H. 2014. Dr Hilmi: Tuberculosis the most prevalent disease among foreign workers [Online]. Available: http://www.thestar.com.my/News/ Nation/2014/02/13/TB-higherst-foreign-workers/.
- Zimmerman, C., Kiss, L. & Hossain, M. 2011. Migration and health: a framework for 21<sup>st</sup> century policy-making. *PLoS Medicine*, 8, e1001034.