

HEALTH STATUS AND LIFESTYLE RELATED RISK FACTORS AMONG MIGRANT WORKERS IN SHAH ALAM, MALAYSIA

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Abstract

Introduction: In Malaysia, it's about 4-5 million of the migrant's workers that involve in occupation that seriously give and effect to their health, which is in construction, manufacturing, agriculture, services, and domestic work. Thus, study is conducted to identify the non- communicable disease (NCDs) risk factor among the migrant workers in migrant workers in Shah Alam of both genders. **Methods:** A cross- sectional study was conducted among 50 migrant workers in Shah Alam using convenience sampling method. Both questionnaires and measurement were used in data collection. The questionnaire included sociodemographic data, behavioral and lifestyle data and medical history. **Results:** A total of 32% of migrant workers either oversight or obese. 56% of them are involve in vigorous activity. most of them are not a smoker person which is about 86%. 20(40%) of them have history of hypertension only 6(12%) of them have diabetes **Conclusion:** The main findings of our study that, 32% of the migrant workers either overweight or obese. More health promotion and regular screening are required especially, for people with high risk or having hypertension and diabetes history.

Keywords: Migrant Workers , Non-Communicable disease , Obesity, Health

Introduction

Non communicable disease is one of the highest challenges in all of the countries. Especially in high income countries community where it ethnically and culturally diverse due the migration of international group (Agyemang & van den Born,2018). In Malaysia, it's about 4-5 million of the migrant's workers that involve in occupation that seriously give and effect to their health, which is in construction, manufacturing, agriculture, services, and domestic work. Most of the risk factor of the non-communicable disease (NCD) are strongly related with their changes in unhealthy lifestyle, ageing and the changes in the urbanization. Besides that, the increasing of the blood glucose, abnormal serum cholesterol, overweight and obesity are the risk factor of the NCDs in Malaysia and this cause the increasing number of deaths among the migrant every year (Misra et al., 2014).

The World Health Organization (WHO) introduce the STEPS to make a survey which is to control the risk factor of the NCDs in the countries and handling a correct interfere. The STEPS is a simple, standardized method for collecting, analysing and disseminating the data used to make a survey of the risk factor of NCDs (Misra et al., 2014). Cardiovascular disease (CVDs), chronic respiratory disease, 8 cancers and diabetes mellitus are known as the major NCDs that trouble in the region (McLennan & Jayaweera, 2014). Chronic conditions such as oral diseases (oral cancers, periodontal diseases and dental caries), thalassaemia, renal, endocrine, mental, neurological, haematological, gastroenterological, hepatic musculoskeletal, skin and genetic disorders also are fully devoted to the trouble of the NCDs. The NCDs will be highly increased according to the morbidity and increasing of the mortality (McLennan & Jayaweera, 2014). Socioeconomic or household income level are also one of the reasons that linked to with the NCDs to be attributed among the migrants workers. In the high-income countries, people at younger age are in high risk to get the NCDs, around 7.9 million deaths annually attributed to NCDs, 34% happens to people at age of 60 years old mortality (McLennan & Jayaweera, 2014). This shows that the socioeconomic is one of the causes that contribute to the health change due to the macroeconomic level. The drop of the economic with rising cost for the health-care will lead to increase of the NCDs mortality.

The aim of current study was to identify non-communicable disease (NCDs) risk factor among the migrant workers in Shah Alam.

Methods

A cross-sectional study was conducted among 50 migrant workers in Shah Alam using convenience sampling method. This study was carried out at the public area around Shah Alam, Selangor, Malaysia which is among the migration workers. The study was conducted over a period from January 2019 to March 2019. Medical health interview also has been asked at the migrant workers for health data. Questionnaire was distributed to them, the questionnaire is divided into few parts which is demographics data, behavioral measurement, physical activity, travel to and from places, sports, history of high blood pressure, history of diabetes, and lastly the physical measurement. Both questionnaires and measurement were used in data collection. The questionnaire included sociodemographic data, behavioural and lifestyle data and medical history. Data analysis was done using SPSS software version 24.0. All respondents sign the consent form prior to data collection and ethics approval was obtain form management and science university ethics committee.

Results

A total of 50 respondents participated in our results. Majority were from Indonesia (52.0%) followed by Bangladesh (36.0%) Table 1 shows that 7(14%) of them are underweight, 27(54%) of them have normal weight, 12(24%) of them are overweight and 4(8%) are obese.

Table 1: Body Mass Index (BMI) among migrant workers in Shah Alam

	N	%
Underweight	7	14.0
Normal	27	54.0
Overweight	12	24.0
Obese	4	8.0

Table 2 shows that migrant workers have different lifestyle and medical health history. 56% of them are involve in vigorous activity but 44% did not involve with vigorous activity. While for the moderate activity, 88% of them are involve with it but 12% did not involve. But most of them are not a smoker person which is about 86% of them and 14% of them are smoked. Alcohol consumption among the migrant workers is actually are common, but base on the data collected only 16% of them are in alcohol use and the rest did not consume any alcohol which is 84% of them. Moreover, they also have a history of their medical health which is hypertension and diabetes. From the 50 participants, only 20(40%) of them have history of hypertension and another 30(60%) of them did not have hypertension. Besides that, for the diabetes only 6(12%) of them have diabetes and 44(88%) of them did not have diabetes. In their life, majority of them in one week almost every day they have a fruit in their diet, same with the vegetables intake. But basically, they not prefer to have an outside meal. Maximum in one week only 3 times they have an outside meal.

Table 2: Lifestyle characteristics among migrant workers in Shah Alam

		N	%	
Vigorous Activity				
	Yes	28	56.0	
	No	22	44.0	
Moderate Activity				
	Yes	44	88.0	
	No	6	12.0	
Smoking				
	Yes	7	14.0	
	No	43	86.0	
Alcohol Consumption				
	Yes	8	16.0	
	No	42	84.0	

History of hypertension				
	Yes	20	40.0	
	No	30	60.0	
History of diabetes				
	Yes	6	12.0	
	No	44	88.0	
	Min	Max	Mean	SD
Intake of fruits	0	7	2.20	2.44
Intake of vegetables	0	7	4.60	2.29
Outside meals per day	0	3	1.94	0.86

For the systolic blood pressure reading, 174 are the maximum reading among them but minimum is 93. For the diastolic blood pressure, maximum reading is 100 and minimum reading is 63. Most of them have high heart rate at 103 per minute but some of them have reading of heart rate at 50 per minute. Highest reading for glucose reading among them is 66.1 mmol/l while the minimum is 3.6 mmol/l. Next is regarding maximum waist measurement among them is 118 centimetre but minimum in 30 centimetre. Maximum hip circumference measurements is 126 centimetre but minimum at 29 centimetre. The height for them which is migrant workers is maximum at 180.10 centimetre and minimum at 139.40 centimetre. Maximum weight among the migrantworkers is 89 kilogram and minimum is 45 kilogram. Between all of them, 14(28%) are in blood group A+, 4(8%) blood group AB+, 13(26%) blood group B+, and 21(42%) of them are blood group O+ as shown in table 3.

Table 3: Medical health data of the migrant workers in Shah Alam

	Min	Max	Mean	SD
Systolic BP	93	174.0	122.04	15.52
Diastolic BP	63	100	80.12	8.30
Glucose (mmol/l)	3.6	66.1	6.64	8.6
Heart Rate	50.0	103.0	78.90	11.84
Weight	45.0	89.0	64.31	12.20
Height	139.40	180.10	158.34	8.77
Waist circumference	30.0	118.0	83.51	17.64
Hip circumference	29.0	126.0	93.53	18.68
Blood Group		N	%	
	A+	14	28.00	
	AB+	2	4.00	
	B+	13	26.00	
	O+	21	42.00	
Visual acuity Right				
	6/6	42	84.0	
	6/15	4	8.0	
	6/60	2	4.0	
	6/9	1	2.0	
Visual acuity Left				
	6/6	40	80.0	
	6/15	3	6.0	
	6/60	1	2.0	
	6/9	4	8.0	
	6/30	1	2.0	
	6/20	1	2.0	

Color vision	Normal	50	100.00	
Pupil Reflex (RAPD)				
	Negative	46	92.0	
	Positive left eye	1	2.0	
	Positive Right eye	3	6.0	
Red Reflex Right				
	Present	49.0	98.0	
	Reduced	1.0	2.0	
Red Reflex left				
	Present	49.0	98.0	
	Reduced	1.0	2.0	

Discussion

The main findings of our study that, 32% of the migrant workers either overweight or obese. Based on the previous study in 2011, the migration represents the higher risk of having overweight and obesity. Migrant workers who migrate from low income country to high income country are tend to have high risk of obesity rather than those who from the origin country Kilaf, & Kirchengast (2011). Unhealthy weight gain also will represent in the huge level of overweight fleshiness rates among migrant appear mostly in the period of 10 to fifteen years after migration. Besides that, nutrient availability, income, beliefs relating to food, religious belief and "food laws", and the generation and historic period of immigrants are one of the feeding habit among the migrant workers that effect their daily dietary (Goulão, et al. ,2015). In particular, people from first gear - to spiritualist -income body politic who have migrated to reside in high-income countries, appear to be more susceptible to overweight and obesity than their local anaesthetic counterparts (Delavari, et al. 2013). Diabetes rates among migrant workers are triple higher rather indigenous universe (Montesi et al. 2016). In Europeans, around 90% of males group and are higher more in female group which is 120%, this is equally

same with the survey that have been done in Asian country.

Conclusion

The main findings of our study that, 32% of the migrant workers either overweight or obese. More health promotion and regular screening are required especially, for people with high risk or having hypertension and diabetes history.

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