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Physical Activity: Motivating & Barrier Factors of Condominium Residents in Dengkil, Sepang, Selangor, Malaysia

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ABSTRACT

Physical activity may prevent the non-communicable diseases. However, the industrialization and urbanization has leading to a more sedentary lifestyle among Malaysians. Therefore, this study aims to determine the associating factors related to physical activity in a condominium community in Dengkil area, Sepang, Selangor.

A cross sectional study was done by using stratified, systematic and simple random sampling. The respondents that fulfilled the inclusion and exclusion criteria were interviewed face to face, with a structured questionnaire. The data was analysed using SPSS.

Majority (87%) of the respondents were physically active. Improve health and increases the fitness level were among the motivating factors to be active. Whereas, do not have enough energy and not enough time were the barrier factors among the physically inactive respondents.

It is important to increase awareness on the importance of physically active and also promote variety of methods to be active especially for those claims that no time as the barrier factor.

Keyword: physical activity, IPAQ, motivating factors, barrier factors

INTRODUCTION

Physical activity is any body movement produced by the skeletal muscles that result in a substantial increase over the resting energy expenditure. [1] Physical inactivity has been found to cause 6% of burden of the coronary heart disease, 7% of type 2 diabetes, 10% of breast cancer, and 10% of colon cancer. [2] In a study relating physical activity and waist circumference, with waist circumference being the indicator of fitness, 43.3% of the participants were categorized into the unacceptable fitness group, 47.1% were considered marginally acceptable, and 9.6% were acceptable. The study shows that waist circumference was the strongest and significant predictor for fitness. [3]

In Malaysia, the pace of industrialization and urbanization has been increasing rapidly in the past several decades leading to a more sedentary lifestyle among Malaysians. [4] The NHMS 2015 shows that the national prevalence of overweight, obesity and abdominal obesity had increased by 0.6%, 2.6% and 2.0% respectively as compared to the previous findings of NHMS 2011. [5] As the number of people with obesity increases, the nation now is facing an upward surge of non-communicable diseases such as diabetes and cardiovascular diseases.

Thus, this study will measure the prevalence of physical activity and identify the motivating factors & barriers towards physical activity among the respondents of a condominium in Dengkil.

MATERIALS AND METHODS

A cross-sectional study was conducted in a housing area in Kota Warisan, Sepang, Selangor, which

comprises of terrace and Semi-D houses. This area has multi-racial residents and was easily accessible.

Stratified random sampling has been used to classify the houses. Systematic random sampling was then used to pick the houses in each stratum accordingly and simple random sampling using drawing lots to choose the respondents in the house. Only Malaysian women aged 18 years old and above, had been the residents for at least three months were used as samples. Residents with mental disable, deaf and mute were excluded in this survey. Written informed consents were obtained from condominium authorities and the respondents before collecting data.

The International Physical Activity Questionnaire short version (IPAQ) using Bahasa Malaysia [6] was used to collect data through face to face interview session. The IPAQ short version is a seven-item questionnaire. The study provided separate scores on walking, moderate-intensity and vigorous-intensity activity. Motivating and barriers factors were measured using Motivating factors towards physical activity Questionnaires [7] and Barriers towards physical activities Questionnaires, [8] respectively.

RESULT

A total of 167 respondents participated in this study giving a response rate of 94%.

Table 1: Prevalence of physical activity among respondents

Physical activity status	n	%
Active	146	87.0
Inactive	21	13.0
TOTAL	167	100

Majority (87%) of the respondents are physically active.

Table 2 shows that the prevalence of physically active are higher among the age group 40-49 years (100%), male (89.5%), Chinese (96.7%), housewife (100%) and widowed / divorced (100%).

Table 2: Physical activity status by sociodemographic characteristics (N=167)

Socio-demography	Physical activity status		
	Active n (%)	Inactive n (%)	Total n (%)
Age			
< 20	29 (90.6)	3(9.4)	32 (100.0)
20 - 29	67 (90.5)	7 (9.5)	74 (100.0)
30 - 39	28 (75.7)	9 (24.3)	37 (100.0)
40 - 49	13 (100.0)	0 (0.0)	13 (100.0)
50 - 59	5 (83.3)	1 (16.7)	6 (100.0)
> 59	4 (80.0)	1 (20.0)	5 (100.0)
Gender			
Male	85 (89.5)	10 (10.5)	95 (100.0)
Female	61 (84.7)	11 (15.3)	72 (100.0)
Ethnicity			
Malay	78 83.9)	15 (16.1)	93 (100.0)
Chinese	29 (96.7)	1 (3.3)	30 (100.0)
Indian	36 (87.8)	5 (12.2)	41 (100.0)
Others	3 (100.0)	0 (0.0)	3 (100.0)
Education			
No formal	1 (100.0)	0 (0.0)	1 (100.0)
Primary	10 (100.0)	0 (0.0)	10 (100.0)
Secondary	41 (85.4)	7 (14.6)	48 (100.0)
Tertiary	94 (87.0)	14 (13)	108 (100.0)
Occupation			
Unemployed	8 (88.9)	1 (11.1)	9 (100.0)
Government	27 (90.0)	3 (10.0)	30 (100.0)
Private	69 (92.0)	6 (8.0)	75 (100.0)
Pensioner	4 (80.0)	1 (20.0)	5 (100.0)
Self employed	11 (61.1)	7 (38.9)	18 (100.0)
Housewife	11 (100.0)	0 (0.0)	11 (100.0)
Students	16 (84.2)	3 (15.8)	19 (100.0)
Marital status			
Single	46 (92.0)	4 (8.0)	50 (100)
Married	94 (93.1)	7 (6.9)	101 (100)
Widowed / divorced	6 (100.0)	0 (0.0)	6 (100)

Table 3: Motivating factors among physically active respondents

Motivating factors	n	%
Improve health	23	15.8
Increase fitness level	22	15.1
Look good	22	15.1
Control weight	21	14.4
Fun	21	14.4
Socialise	21	14.4
Motivation from others	16	10.8
TOTAL	146	100

Majority (15.8%) of the respondents are physically active due to health reason, whereas 15.1% are active because they want to look good and to improve their fitness level, respectively.

Table 4: Barrier factors among physically inactive respondents

Barrier factors	n	%
Not enough energy	5	23.0
Not enough time	4	19.0
Too lazy	4	19.0
Active enough	3	14.3
Alone	3	14.3
Lack of facilities	1	4.8
Do not know how to exercise	1	4.8
TOTAL	21	100

Table 4 shows majority of the respondents are physically inactive due to not enough energy, not enough time and too lazy (23%, 19%, 19%, respectively).

DISCUSSION

Our study showed that the prevalence of physically active among the respondents in the condominium was 87 %. Cheah and Poh reported, from the total of 30,992 respondents in Malaysian community, 56.5% were physically active. [9] This indicates that the respondents prefer being physically active mainly due to various motivating factors.

Most respondents have agreed that they indulged in physical activity because they want to improve their health (15.8%). This finding is consistent with the research done by Firth et. al in 2016 in which 91% of the community concurred with 'improving health' as a reason to participate in physical activity. [10] This clearly denotes that community has a firm understanding that involving in physical activity gives benefits to health. This statement is further supported by another study which takes place in Klang, Malaysia where the motivation for involvement in physical activity is to ameliorate their health (M=3.76). [11] The community also has agreed with factors involving physical appearance such as looking good which comprises of 15.1%. It is very apparent that the community prioritizes looks as well apart from health. This matches with the study done in 2010, whereby 58% of the respondents reported that they participated in physical activity to look good. [12]

On top of that, the least agreed factor in a study among adults in Shah Alam, Selangor also similar to the result in this study, which is motivation by others (41.2%). [13] This can be concluded that the internal drive towards behaviour or intrinsic motivators that come from an individual itself can motivate better than extrinsic factors such as motivation by others as extrinsic factors are not able to instigate the community and do not give much impact on them to do physical exercise, as shown by a study in Ondo State, Nigeria where 96.5% and 88% teaching and non-teaching staff respectively claimed they participated in physical activities because of personal motivation or interest. [14] The study also corroborated the point further when 32.5% of teaching and 34 % of non-teaching staff did not believe that the support of the family to participate in physical activities was a motivational factor.

The prevalence of physically active respondents in our study is higher might be due to 63% of the respondents are working (45% private workers, 18% government workers) and they are known to have more daily tasks to do, as unemployed individuals possess fewer work commitments, and therefore, they often live a laid-back lifestyle and consequently would be less physically active. [15]

It has been apparent that “not enough time” is an important impediment to physical activity participation in physically inactive group of respondents and this could be associated with employment as the prevalence for physically inactive respondents are high among self-employed (38.9%). This finding was consistent with few studies, which reported the self-employed respondents showed a greater prevalence of physical inactivity and most of the working respondents of the supporting group were not being physically active enough. [16][17]

Our study also showed that adult respondents aged 35-44 were the most physically inactive (24.3%) and this might be due to the fact that they do not have energy (23%). The physically inactivity among adults is associated with tiredness [18] and the tiredness might be due to long hours of working, where among subjects aged 20 years and older it has been found out that 21.6% do not have the energy to do physical activity after working. [19]

The transition from being single to married gave a positive effect to physical activity compared to individuals who single. The present of the other half might

influence and motivate the individual to engage in physical activity. [20] This was consistent with our finding where 93% of married respondents were physically active and 14% of physically active respondents agreed that they need an accompany to exercise with for socialization and fun.

CONCLUSION

The respondents of the condominium in Dengkil were physically active and majority of them at the age of 40-49 years old, male and housewives. Not enough time and energy were the common barriers to be physically active although health factor is the main motivating factor to exercise.

Therefore, it is important to increase awareness on the importance of physically active and also promote variety of methods to be active especially for those claims that no time as the barrier factor.

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