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# PERCEIVED BARRIERS OF PHYSICAL ACTIVITY AMONG KOSPEN COMMUNITY IN PUTRAJAYA

Mohd Tariq M.N.[1,2], Hayati K.S [2]

[1]Candidates of Master of Public Health
[2]Department of Community Health, Faculty of Medicine, University Putra Malaysia

**Corresponding author: Dr Hayati Kadir Shahar. , Department of Community Health, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia. Email : hayatik@upm.edu.my*

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## ABSTRACT

**Background:** In Federal Territory of Putrajaya, the prevalence of physical inactivity in 2015 was 32.5% compared to 2011 with 56.5%, as reported in National Health Morbidity Survey. Although various facilities have been provided in Putrajaya and was selected as a garden city concept town, the public do not use the facilities as much as they should. Only a few studies were conducted on perceived barriers of physical activity, especially in Malaysia.

**Materials and Methods:** A cross sectional study was conducted among *Komuniti Sihat Pembina Negara* (KOSPEN) community in Putrajaya. A self-administered questionnaire was used in this study. Barriers was categorized into personal, physical and social environment barriers. Statistical test such as parametric test and non-parametric test were used to test the association between independent variables and perceived barriers of physical activity. Multiple Linear Regression test was used to determine the predictors.

**Result:** Descriptive analysis showed that majority of the respondent were married (84.5%), had degree and above (59.2%), unemployed (74.9%), had household income between RM 4000 and RM 8500 (70.7%). The perception that 'other recreational activities with family were more fun' was the most frequently reported barrier. Low knowledge about health and been married status were shown as predictors.

**Conclusion:** The results of this study can be used to design a health programme using the appropriate domain. For future studies, it is proposed to study predictors on each perceived barrier domain and to propagate independent variables to obtain much more information in the future

**Keywords:** Perceived barriers, physical activity, KOSPEN community

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## 1.0 Introduction

Non-communicable diseases (NCDs) are a major burden worldwide due to the poor health behaviours and paying less attention to the importance of active lifestyle for disease prevention. Physical inactivity, which contributes to 6% of deaths (World Health Organisation, 2016), is one of the factors contributing to the risk factors of global mortality. Globally, around 23% of adults aged 18 and over were not active enough in 2010 (men 20% and women 27%) (WHO, 2016). In Malaysia, the National Health and Morbidity Survey 2015 (NHMS) reported that 33.5% of adults aged 16 years and above were physically inactive (Institute for Public Health, 2015). The decreasing trend of physical activity worldwide will continually occur year by year if the contribution factors for physical inactivity do not 'subside'.

Physical inactivity remains a public health concern despite various efforts done in promoting physical activity (WHO, 2016). To achieve successful scaling-up, such interventions must be embedded within multiple sectors of community to sustain its health effects. On top of that physical inactivity is defined as failure to the meet minimum physical activity (PA) recommended by World Health Organization (WHO, 2016). Adults aged 18 to 64 years should do at least 150 minutes of moderate-intensity physical activity throughout the week or do at least 75 minutes of vigorous-intensity physical activity throughout the week, or an equivalent combination of moderate- and vigorous-intensity activity (WHO, 2016). For additional health benefits, adults should increase their moderate-intensity physical activity to 300 minutes per week or equivalent and perform muscle-strengthening activities involving major muscle groups on two or more days a week.

Furthermore, to promote regular activity, one must understand the factors that affect participation in physical activity. These include demographic variables, knowledge, environmental factor (Humpel, Owen, Iverson, Leslie, & Bauman, 2004) and the perceived barriers. Perceived barriers are classified into personal, social and physical environment barriers (Ibrahim, Karim, Oon, & Ngah, 2013; Justine, Azizan, Hassan, Salleh, & Manaf, 2013). On the other hand understanding the causes of barriers of PA will depend on our insight and in order to help the community to participate in PA in the future.

The concept of perceived barriers has been used in behavioural medicine for a long time in one form or another. Webster's dictionary defines a barrier as "something that impedes or separates". Interestingly, the concept of barriers to accomplishment of a goal or a specified health behaviour is assumed to be straightforward that it is often left undefined. In summary, perceived barrier is defined as "a person's estimation of the level of challenge of social, personal, environmental, and economic obstacles to a specified behaviour or their desired goal status on that behaviour" (Glasgow, 2008).

Socio-economic status such as employment status, education level and monthly household income were found to contribute significantly to personal barriers score (Bragg, Tucker, Kaye, & Desmond, 2009). Marital status is closely related to the barriers of physical activity, marriage gives a positive factor for individual doing physical activity. Especially, the motivation in marriage, which has proven that it has links to physical activity (Trost &

Brown, 2016). Some others factors such as age and ethnicity from previous study showed no significance influence to the perceived barriers of physical activity (Ibrahim et al., 2013).

In Malaysia, an initiative to promote and empowering community to do physical activity is throughout program name as *Komuniti Sihat Pembina Negara* (KOSPEN). This is a blue ocean strategy initiative between the Ministry of Health Malaysia (MOH) and other relevant agencies. This initiative is a transformation of the public health service in ensuring community participation in public health programs. KOSPEN aims to reduce the occurrence of NCDs as well as related risk factors and to promote healthy behaviours including non-smoking, healthy nutrition and physically active lifestyles. This is in line with the National Non-Communicable Disease which is the National Strategic Planning initiative (MOH, 2013).

The main goal of the programme is to improve population-wide behaviour, to prevent and control common risk factors for NCDs and to delay the onset, reduce disability, and postpone deaths due to NCDs. This programme targets the community and will be supported by changes in the vicinity to promote behavioural modification. The main functioning units for KOSPEN are the health volunteers who are trained community members. These health volunteers act as health agent to promote positive behavioural changes among the community members (MOH, 2013).

## 2.0 Materials and Methods

### *2.1 Study design*

A cross-sectional study was conducted in in KOSPEN community in Putrajaya. There are nine (9) KOSPEN communities in Putrajaya with a total of 8920 residing the area. The location of KOSPEN community were one locality at Presint 5, one locality at Presint 8, two localities at Presint 9, two localities at Presint 11, two localities at Presint 14, one locality Presint 16 and one locality at Presint 17. The study population consists of KOSPEN community who lived in Federal Territory of Putrajaya and meet the inclusion criteria. A total of 174 eligible respondents were recruited into this study. The questionnaire on barriers to physical activity consisted of 24 items, derived from several questionnaires from previous studies (Ibrahim et al., 2013) . All questions were presented in both English language and Bahasa Malaysia. Face validity, content validity and a pre-test were already done by previous study (Ibrahim et al., 2013). This study was approved by the Ethical Committee of Universiti Putra Malaysia (JKEUPM).

### *2.2 Measurements*

These items are divided into three main domains, namely personal and psychological, physical environment, and social environment. This classification of 15 items were categorized under the personal and psychological domain, 5 items under the physical environment domain, and 4 items under the domain of the social environment (Ibrahim et al., 2013). The personal domain included 15 items, the physical environment domain included five items, and the social environment domain included four items. Each item was scored on a

Likert scale ranging from 1 to 5, indicating 'strongly disagree', 'disagree', 'neutral', 'agree' and 'strongly agree'. All items were positive statements, which meant that the higher the score, the higher the likelihood that the item was a barrier.

### *2.3 Statistical analysis*

Perceived Barriers scores were analysed using the IBM SPSS Statistics for Windows, Version 23.0. Bivariate analysis such as Independent T-test or Mann-Whitney test were computed to determine the association between Socio-demographic, Socio-economic, Personal characteristics with perceived barriers of physical activity.

## 3.0 Results

### *3.1 Characteristics of the respondents*

A total of 174 respondents participated in this study with response rate of 87%. Among 174 respondents, 84.5% of respondents were married and 15.5 % were unmarried and divorcee. Majority of the respondents were Malays (99.4 %) followed by Chinese (0.6%) as displayed in table 3.1. In term of respondents education level, most of them had secondary school status which were 59.2%. Majority of the respondents were unemployed (75.9%) and their majority monthly had income between RM4000-RM8500 per month (70.7%). In Table 4.3, the majority of respondents owned a home (85.1%). Those who worked in the office were 26%. For those with knowledge about health were 85.1% and at the same time those who past had past experience of physical activity occupied 82.2% respondents as displayed in Table 3.2.
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**Table 3.1:** Sociodemographic characteristics of respondents (N=174)

| **Characteristics** | **n** | **(%)** |
|---|---|---|
| Age (Years) | 174 | (100) |
| **Sociodemographic** | | |
| **Gender** | | |
| Male | 100 | (57.5) |
| Female | 74 | (42.5) |
| **Marital Status** | | |
| Married | 147 | (84.5) |
| Single | 22 | (12.6) |
| Divorcee | 5 | ( 2.9) |
| **Ethnicity** | | |
| Malay | 173 | (99.4) |
| Chinese | 1 | ( 0.6) |
| **Education** | | |
| Not formal education | 1 | ( 0.6) |
| Primary | 2 | ( 1.1) |
| Secondary | 103 | (59.2) |
| Degree and above | 68 | (39.1) |

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**Table 3.2.** Socioeconomic and personal characteristics of the respondents (n=174)

| Characteristics | Median (IQR) | n | (%) |
|---|---|---|---|
| **House Tenure** | | | |
| Owner Occupier | | 148 | (85.1) |
| Council tenant | | 26 | (14.9) |
| **Employment Status** | | | |
| Unemployed | | 132 | (75.9) |
| Employed | | 42 | (24.1) |
| **Household Income** | | | |
| < RM 4000 | | 51 | (29.3) |
| RM 4000 – RM 8500 | | 123 | (70.7) |
| > RM 8500 | | 0 | ( 0.0) |
| **Social Class** | | | |
| Non Office worker | | 148 | (85.1) |
| Office Worker | | 26 | (14.9) |
| **Car ownership** | | | |
| Yes | | 90 | (51.7) |
| No | | 84 | (48.3) |
| **Knowledge about health** | | | |
| Yes | | 148 | (85.1) |
| No | | 26 | (14.9) |
| **Past PA participation** | | | |
| Yes | | 143 | (32.2) |
| No | | 31 | (17.8) |

Table 3.3 showed the domain and percentage of respondents who agreed to the statement. The personal domain included 15 items, the physical environment domain included 5 items and the social domain items included 4 items. All items were positive statements, which meant that the higher the score, the higher the likelihood that the item was a barrier. In the personal domain the statement of 'I think other recreational activities with friends or family members are more fun than exercise or physical activities' received the highest barrier score of 40.2% followed by the barrier of 'I'm lack of self-discipline/initiative in performing physical activities' (27.6%) and the third highest barrier in personal domain was of 'intensity of exercise required to get health benefits are too high for me (21.8%).

While for physical environment barrier majority of respondents derived the financial barrier was the most common reason they did not perform physical activity the highest compare to social environment barrier to take care of my children or family members was the most common barrier that they did not perform physical activity as showed in table 3.4

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**Table 3.3.** Personal barrier items for each domain and percentage of respondents who agreed or strongly agreed to the statements (n=174)

| Items | Agreed/strongly agreed | |
|---|---|---|
| | n | (%) |
| **Personal** | | |
| I don't have extra energy to do physical activity after finishing my work. | 0 | 0 |
| I feel sick and uncomfortable physically while exercising. | 46 | 27.0 |
| I have health problems which prevent me from being physically active. | 23 | 13.2 |
| Physical activity is difficult and tiring. | 19 | 10.9 |
| I look funny and feel ashamed when doing physical activities. | 19 | 10.9 |
| I'm not interested in doing exercise or physical activities. | 14 | 8.0 |
| I don't get pleasure from physical activities or exercise. | 12 | 6.9 |
| I think other recreational activities with friends or family members are more fun than exercise or physical activities. | 69 | 40.2 |
| I think physical activity is not beneficial to my health. | 4 | 2.3 |
| I'm afraid of injury and fear for my safety when exercising. | 24 | 13.8 |
| I'm too lazy to do physical activities. | 20 | 11.5 |
| Intensity of exercise required to get health benefits are too high for me. | 37 | 21.8 |
| I think I'm not talented in doing physical activities. | 20 | 11.5 |
| I'm lack of self-discipline/initiative in performing physical activities. | 48 | 27.6 |
| My body shape doesn't allow me to do physical activities. | 6 | 3.4 |

**Table 3.4.** Social and physical environment barrier items for each domain and percentage of respondents who agreed or strongly agreed to the statements (n=174)

| Items | Agreed/strongly agreed | |
|---|---|---|
| | n | (%) |
| **Social Environment** | | |
| My family members or friends don't encourage me to do physical activities. | 15 | 8.6 |
| I don't have friends to do physical activities together. | 24 | 13.8 |
| I don't have free time to exercise or do physical activities because of my work. | 20 | 11.5 |
| I have to take care of my children or family members. | 35 | 20.1 |
| **Physical Environment** | | |
| There are no facilities or places to do physical activities in my residential area. | 24 | 13.8 |
| Facilities or sports area are too far and I don't have any transportation. | 12 | 6.9 |
| I don't know how to use sports equipment's or specialties in doing physical activities. | 13 | 7.5 |
| The hot weather or rainy days prevent me to do physical activities. | 45 | 25.9 |
| I don't have extra money to go to the sports facilities such as gymnasium or to buy sports equipment and clothes. | 69 | 39.7 |

### *3.2 Association between sociodemographic and socioeconomic characteristic and personal characteristic with personal and total perceived barriers*

In this study, associations between sociodemographic, socioeconomic and personal characteristic with personal barrier using non-parametric test since the data were not normally distributed. However, associations between sociodemographic, socioeconomic and personal

characteristic with total barrier were analyzed using t test as the data was normally distributed.

Table 3.5 describe association between personal barriers and sociodemographic, socioeconomic, and personal characteristic. Marital status was the only significant sociodemographic factor which is associated with personal barrier (p= 0.005). Meanwhile for socioeconomic factors only household income was significantly associated with personal barrier (p=0.039). Knowledge about health was also significantly associated with personal barrier (p < 0.001). Table 3.6 describe the association between total barriers score and sociodemographic, socioeconomic, and personal characteristic. Marital status, house tenure and knowledge about health are significantly associated with total barrier score (p= 0.035. 0.035 and <0.001 respectively).

**Table 3.5.** Association between sociodemographic, socioeconomic, personal characteristic and personal barriers

| Variable | Median (IQR) | Man Whitney Test (Z score) | p value |
|---|---|---|---|
| **Gender** | | -0.838 | 0.402 |
| Male | 32.0(10.75) | | |
| Female | 32.0( 8.25) | | |
| **Marital Status** | | | |
| Married | 32.0(11.00) | -2.828 | 0.005* |
| Single/divorced | 29.0 ( 9.00) | | |
| **Education** | | | |
| No formal education/ Primary | 32.0(10.00) | -0.376 | -0.376 |
| Secondary/ Degree and above | 32.0(10.00) | | |
| **House Tenure** | | | |
| Owner Occupier | 32.0( 9.75) | -0.273 | 0.707 |
| Council tenant | 31.5( 9.70) | | |
| **Employment Status** | | | |
| Unemployed | 32.0( 9.75) | -0.519 | 0.603 |
| Employed | 31.0( 9.75) | | |
| **Household Income** | | | |
| Low | 32.0(14.00) | -2.068 | 0.039* |
| Moderate and aboved | 32.0( 9.00) | | |
| **Social class** | | | |
| Non Office worker | 32.0( 9.75) | -0.273 | 0.0785 |
| Office Worker | 31.5( 9.75) | | |
| **Car ownership** | | | |
| Yes | 32(10.25) | -1.224 | 0.221 |
| No | 31( 9.50) | | |
| **Knowledge about health and physical activity** | | | |
| Yes | 31(9.00) | -3.866 | < 0.001* |
| No | 41(15.70) | | |
| **Past PA participation** | | | |
| Yes | 32(9.00) | -0.671 | 0.502 |
| No | 33(14.00) | | |

*Significant at p<0.05

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**Table 3.6.** Association between sociodemographic, socioeconomic, and personal characteristic and total barriers score

| Variable | Mean ± SD | t test ( T statistic) | df | 95% CI | p value |
|---|---|---|---|---|---|
| **Gender** | 54.90±1.26 | -0.387 | 172 | -4.72, 3.17 | 0.699 |
| Male | 55.68±1.58 | | | | |
| Female | | | | | |
| **Marital Status** | | | | | |
| Married | 50.3±2.07 | -2.130 | 172 | -11.08, -0.44 | 0.035* |
| Single/divorced | 56.1±1.09 | | | | |
| **Education** | | | | | |
| Not go to school/ Primary | 55.00±5.50 | -0.031 | 172 | -15.25,-22.92 | 0.976 |
| Secondary/ degree and above | 55.23±1.0 | | | | |
| **House Tenure** | | | | | |
| Owner Occupier | 55.29±1.08 | 0.162 | 172 | -11.08, -0.42 | 0.035* |
| Council tenant | 54.84±2.33 | | | | |
| **Employment Status** | | | | | |
| Unemployed | 55.43±2.17 | 0.113 | 172 | -4.30, 4.83 | 0.910 |
| Employed | 55.17±1.11 | | | | |
| **Household Income** | | | | | |
| Low | 57.63±1.81 | | | | |
| Moderate and above | 54.23±1.17 | | | | |
| **Social Class** | | | | | |
| Non Office worker | 55.30±1.08 | 0.179 | 172 | -4.98, 5.97 | 0.858 |
| Office Worker | 54.80±.2.33 | | | | |
| **Car ownership** | | | | | |
| Yes | 55.956±1.39 | 0.76 | 172 | -2.40, 5.40 | 0.448 |
| No | 54.45±1.40 | | | | |
| **Knowledge about health** | | | | | |
| Yes | 53.45±1.03 | -4.548 | 172 | -17.12, -6.75 | <0.001* |
| No | 65.38±2.16 | | | | |
| **Past PA participation** | | | | | |
| Yes | 55.03±1.08 | -0.438 | 172 | -6.24, 3.97 | 0.662 |
| No | 56.16±2.44 | | | | |

*Significant at p<0.05

### *3.3 Predictors for personal barrier and total barrier score*

All the significant factors identified by bivariate analysis were further analyzed using multiple linear regression to determine the predictors for personal barrier and total barrier score. Those variable with p value <0.05 were chosen to be included in the multivariate analysis. Variables which have more than two categories were computed into dichotomous value such as household income and marital status. The reference groups for each variable were determined accordingly to ensure correct interpretation of predictors of perceived barriers. The reference group were no knowledge about health and physical activity, has been married and low monthly household income.

Preliminary analysis was done includes the inspection of multicollinearity, normality and homogeneity of variance were done to ensure fulfilment of assumptions. All selected

variables were analysed using "STEPWISE" method in SPSS v24 for each significance variable in bivariate analysis.

### *3.3.1 Predictors for personal perceived barriers*

From table 3.7 predictors for perceived personal barrier were identified as low knowledge about health, been married and low household income with p value less then 0.001 and 0.005 respectively. Test for goodness of fit is explain by adjusted R2 which result in 0.169. The variables explained 16.9% of the variance in the model. The final model is illustrated as below:

**Personal Perceived Barrier = 21.19 + 6.97(low knowledge to the health) + 5.88(been married)**

From the regression equation above it is significance direct linear relationship between personal perceived barrier with knowledge and marital status. It means that ten points increase of knowledge and 10 years of married will increase the personal perceived barriers by 150 barriers score.

**Table 3.7.** Result of multiple linear regression analysis to identify predictors of personal barrier (n=174)

| Personal perceived barrier | Unstandardized Coefficients | | Standardized Coefficient | 95% Confident interval | | p value |
|---|---|---|---|---|---|---|
| | β | Standard Error | β | Lower Bound | Upper Bound | |
| FINAL MODEL | | | | | | |
| Constant | 21.19 | 4.03 | | 13.232 | 29.146 | <0.001* |
| **Knowledge about health** | | | | | | |
| [NO] | | | | | | |
| Yes | 6.97 | 1.66 | 0.29 | 3.700 | 10.245 | <0.001* |
| **Marital Status** | | | | | | |
| [Married] | | | | | | |
| Single/Divorce | 5.88 | 1.66 | 0.25 | 2.610 | 9.157 | <0.001* |

[] Reference group
Adjusted $R^2$ 0.169
*significant difference at p<0.05

### *3.3.2 Predictors for total barriers score*

From table 4.12 predictors for high total barrier score were identified as low knowledge about health and been married (p <0.001 and 0.026 respectively). Test for goodness of fit is explain by adjusted R2 which result in 0.123 therefore. The variables explained 12.3% of the variance in the model. The final model is illustrated as below :

**Total barrier score = 30.939 + 11.93(low knowledge to the health) + 5.734(been married)**

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From the regression equation above it is significance direct linear relationship between total barrier with knowledge and marital status. It means that ten points increase of knowledge and ten years of marriage will increase the total barriers by 208 barriers score.

**Table 4.12.** Result of multiple linear regression analysis to identify predictors of high total barrier score (n=174)

| Personal perceived barrier | Unstandardized Coefficients | | Standardized Coefficient | 95% Confident interval | | p value |
|---|---|---|---|---|---|---|
| | β | Standard Error | β | Lower Bound | Upper Bound | |
| FINAL MODEL | | | | | | |
| Constant | 30.939 | 5.650 | | 19.787 | 42.091 | <0.001* |
| **Knowledge about health** | | | | | | |
| [No] | 11.930 | 2.595 | 0.327 | 6.808 | 17.051 | <0.001* |
| Yes | | | | | | |
| **Marital Status** | | | | | | |
| [Married] | 5.734 | 2.555 | 0.160 | 0.691 | 10.777 | <0.026* |
| Single/Divorce | | | | | | |

[] Reference group
Adjusted $R^2$ 0.123
*significant difference at p<0.05

## 4.0 Discussion

### *4.1 Association between sociodemographic, socioeconomic, personal characteristic with personal barriers and total barriers*

Socio-economics status such as employment status, education level and monthly household income were found to contribute significantly to personal barriers score. Respondents who had occupation had more personal barriers than respondents who did not. Some of the barriers reported were, they felt that other recreational activity with family or friends were more enjoyable compared to performing physical activity, they had lack of discipline. Other commitments such as family had been reported as barriers in previous studies (Bragg et al., 2009)

The hustle and bustle of work could cause them to prefer spending their free time with friends and family instead of performing physical activity such as exercising in their free time. It also made it difficult for them to adhere to fixed physical activity routine, thus cause them to assume that lack of discipline was the main barriers to become active. Respondents who had job that involves intense physical activity, feeling tired after work was reported as barriers to perform physical activity in their free time. This demonstrated that type of job could influence the barriers to become active, thus affecting the overall physical activity (Cook & Gazmararian, 2018)

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Education level also was found to contribute significantly towards personal barriers. Lower educational level contributed to an increase in barriers score. One of the main barriers was that the respondents felt that the intensity of exercise or physical activity in order to gain health benefit was too high. Perhaps, the respondents had wrong assumption about the actual meaning of physical activity, which they assumed that only exercise constitutes physical activity. Perhaps, this is due to lack of knowledge regarding physical activity and lack of awareness pertaining the importance of physical activity (McNeill, Kreuter, & Subramanian, 2006). Intervention programme to increase physical activity level need to emphasize on the meaning and type of physical activity as a method to overcome this misconception.

Furthermore, a lower household income was associated with a higher personal barriers' score. Respondent who had a low educational level chose 'no additional energy' to perform activity physical after work as one of the main personal barriers. Previous studies had found that low academic level and income groups usually had a high intensity workload and choose an active mode of transport, thus they are more active compared to high educational level and income groups (Hallal et al., 2012). Respondents involved in high intensity physical workload and had low educational level as well and low income monthly became disinterested in performing physical activity in their free time (Cheah & Poh, 2014).

Employment and marital status were found to contribute significantly towards respondent's personal and total barriers. The employment and marital factors contributed to an increase in barriers' score. The main barriers were the lack of free time to perform exercise or physical activity due to hustle and bustle of work. The long work hour might deter them to perform physical activity after work. The study has discovered that employment status was associated with the lack of time to perform physical activity in free time

Similar barriers among married respondents showed family factor has a huge influence in performing physical activity to the respondents in both groups. Marital status and social norm were reported to correlate with physical activity but not as determinant (Bellew, Bauman, Martin, Bull, & Matsudo, 2011). The hustle and bustle of work caused them to be more inclined to spend time with family members or friends in their free time than to perform physical activity. Responsibility towards family such as need to take care of their children and family members became a barrier to perform physical activity.

## 5.0 Conclusion and recommendation

This study reveals a wide discrepancy of perceived barrier of physical activity among respondents. Despite of the descriptive data of the KOSPEN community in Putrajaya that shows the majority of respondents have no obstacle to physical activity, a domain shows a very significant difference between the personal barrier domain and the total barrier such as marital status and knowledge about health and physical activity. Demographic predictors explain more variance about domain barrier.

The results of this study can be used to design the appropriate intervention using the appropriate domain for health program purposes. At the same time, relevant parties such as

the local authorities may be aware of the actual problems affecting Putrajaya residents on the implementation of physical activity. For future studies, it is proposed to make separate studies on predictors of each perceived barrier domain and to propagate independent variables in order to obtain much more information in the future.

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## Declaration

Author(s) declare that Authors declare that there is no conflict of interests. This manuscript has never been published in any other journal or duplicated in any mean concerned.

## Authors contribution

Author 1: Information gathering, preparation and editing of manuscript
Author 2: Review and editing final manuscript

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