

LEVEL OF PHYSICAL ACTIVITY AND IT'S ASSOCIATED FACTORS AMONG PREGNANT WOMEN DURING PREGNANCY

Fatima Aslam¹, Karimah Hanim Abd Aziz¹, Nurjasmine Aida Jamani¹, **Razman Mohd Rus**^{1*}

¹Department of Community Medicine, Faculty of Medicines, International Islamic University, Malaysia
Jalan Istana, Bandar Indera Mahkota 25200 Kuantan, Pahang Darul Makmur, MALAYSIA

*Corresponding Autho's email: razman@iium.edu.my

ABSTRACT

Background: Pregnancy is a normal physiologic event that is complicated by pathologic process, dangerous to health of mother and fetus. However, regular physical activity during pregnancy not only maintains maternal and fetal wellbeing also maintains physical fitness and derives varies health benefits. The objective of this study was to measure the level and factors contributing to physical activity among pregnant women during pregnancy.

Methods: This is a cross sectional study of normal pregnant women (age 18-35 years) receiving antenatal care (gestational age 12-35 weeks) in a primary health clinic in Kuantan, Pahang. Their socio-demographic characteristics were recorded, and two set of questionnaires were used; validated Malay version IPAQ (short-form) for assessing physical activity and DASS -21 Malay version for evaluating psychological symptoms. Chi-square test, Fishers exact test, Independent t-test and multiple logistic regression were applied using SPSS Version 25.0. Significant level was set at p value <0.05.

Results: Among 168 respondents, 24.4% had moderate level of physical activity, but the majority (76.0%) had low level physical activity. Likewise, about 78.6% were physically inactive and only 22.0% physically active during pregnancy. We have not found any factors significantly associated with physical activity level.

Conclusion: Majority of the pregnant women have low physical activity level, thus contributed to high prevalence of physical inactivity.

Keywords: physical activity level, prevalence, associated factors

Acknowledgement: We appreciate IIUM, Department of Community Medicine & Indera Mahkota Health Clinic Kuantan, Pahang for supporting this study. Thanking Ministry of Health, Malaysia for their permission to conduct the study (NMRR: 19247048889).

LEVEL OF PHYSICAL ACTIVITY AND IT'S ASSOCIATED FACTORS AMONG PREGNANT WOMEN DURING PREGNANCY



Fatima Aslam¹, Karimah Hanim Abd Aziz¹, Nurjasmine Aida Jamani², Razman Mohd Rus¹

¹Department of Community Medicine, Kulliyah of Medicine, International Islamic University Malaysia

²Department of Family Medicine, Kulliyah of Medicine, International Islamic University Malaysia

Introduction

- Pregnancy is a normal physiologic event.
- If it is complicated by pathologic process, it can be dangerous to health of mother and fetus^{3,4}.
- Regular physical activity during pregnancy maintains maternal and fetal wellbeing, physical fitness and give rise to various health benefits^{2,3}.
- However, many women reduce their physical activity levels during pregnancy¹.

Objectives

- To measure the level of physical activity among pregnant women in Kuantan, Pahang .
- To determine factors associated with physical activity among pregnant women in Kuantan, Pahang.

Method

- This is a cross sectional study of normal pregnant women (age 18-35 years) receiving antenatal care (gestational age 12-35 weeks) in a primary health clinic in Kuantan, Pahang.
- Their socio-demographic characteristics were recorded, and two set of questionnaires were used;
 - 1. Validated Malay version IPAQ (short-form) for assessing physical activity.
 - 2. DASS -21 Malay version for evaluating psychological symptoms.
- Chi-square test, Fishers exact test, Independent t-test and multiple logistic regression were applied using SPSS Version 25.0.
- Significant level was set at p value <0.05

Discussion

- our findings is consistent with other studies, the level of physical activity was low during pregnancy and pregnant women tended to adopt sedentary behaviors^{1,2,4}.
- In contrast, factors such as age, education level, parity, gestational age income, were associated with physical activity during pregnancy^{1,4}.

Conclusion

- Overall, the level of physical activity was lower and the majority of respondents (78.6%) were not physically active and only 22 % were active .
- Moreover, there is no significant association was found between factors and physical activity level of pregnant women.

Acknowledgment

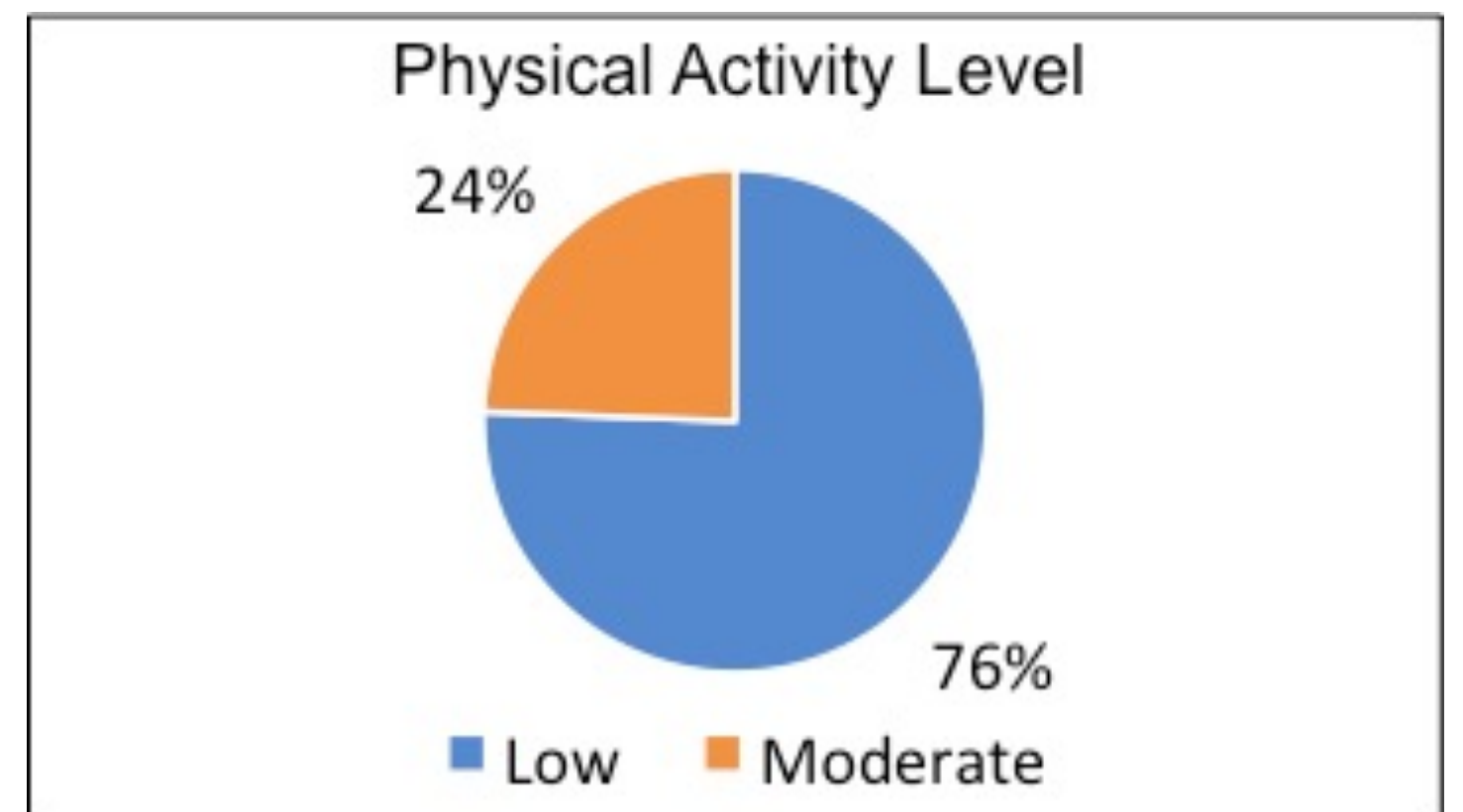
- We are very grateful to Kulliyah of Medicine (IIUM) and Department of Community Medicine for supporting this study. Many thanks to Indera Mahkota Health Clinic Kuantan, Pahang for their cooperation. We are thankful to the Ministry of Health, Malaysia for their permission to conduct the study (NMRR: 19247048889).

References

1. Gebregziabher, D., Berhe, H., Kassa, M., & Berhanie, E. (2019). Level of physical activity and associated factors during pregnancy among women who gave birth in Public Zonal Hospitals of Tigray. *BMC Research Notes*, 12(1), 1–6. <https://doi.org/10.1186/s13104-019-4496-5>
2. Merckx, A., Ausems, M., Budé, L., de Vries, R., & Nieuwenhuijze, M. J. (2017). Factors affecting perceived change in physical activity in pregnancy. *Midwifery*, 51(October 2016), 16–23. <https://doi.org/10.1016/j.midw.2017.05.007>.
3. Kołomańska, D., Zarawski, M., & Mazur-Bialy, A. (2019). Physical activity and depressive disorders in pregnant women-a systematic review. *Medicina (Lithuania)*, 55(5), 1–16. <https://doi.org/10.3390/medicina55050212>
4. Padmapriya, N., Bernard, J. Y., Liang, S., Loy, S. L., Shen, Z., Kwek, K., ... Yeo, G. S. H. (2016). Association of physical activity and sedentary behavior with depression and anxiety symptoms during pregnancy in a multiethnic cohort of Asian women. *Archives of Women's Mental Health*, 19(6), 1119–1128. <https://doi.org/10.1007/s00737-016-0664-y>

Results

Level of Physical Activity



Psychological status

Depressive symptoms



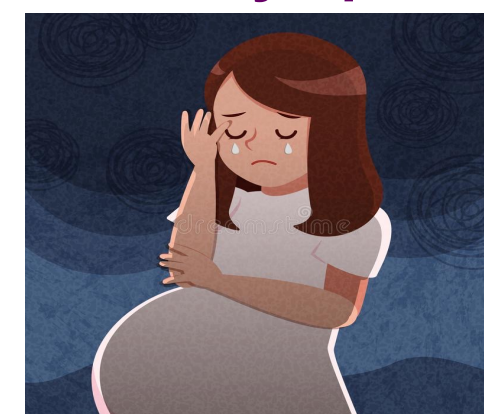
11.9%

Anxiety symptoms



29.8%

Stress symptoms



12.5%

Factors associated with physical activity

- Age
- Race
- Parity
- Gestational age
- Gravida
- Economic status
- Educational level
- Working status
- BMI

Were **not** associated with physical activity



CERTIFICATE OF PARTICIPATION

This certificate is awarded to

Fatima Aslam

in recognition for participation in the Kuantan Research Day 2020: A National Online Event for E-poster Presentation organized by Research Management Centre, IIUM Kuantan Campus on 1st October 2020 - 5th January 2021

Prof. Dr. Nazri Mohd Yusof
Chairman
Kuantan Research Day 2020

VERIFIED

KARIMAH HANIM BINTI ABD AZIZ
(MMC No:44706)
ASSISTANT PROFESSOR
PUBLIC HEALTH MEDICINE SPECIALIST
MD,MPH,DRPH (USM)
Department of Community Medicine
Kulliyah of Medicine



31 May 2021