Family support and peer support related to the physical activity of the prospective bride and groom

Apoyo familiar y apoyo de pares relacionado con la actividad física de los futuros novios

Wiwit Kurniawati^{1a}, Yati Afiyanti^{2a}, Asa Akmelia^a, Neni Fidya Santi^b

SUMMARY

Introduction: Indonesia ranks third for maternal mortality rate (MMR) and second for infant mortality rate (IMR) in Southeast Asia. Weight management as a part of premarital preparation by the couple in welcoming the wedding day and life as spouses is usually done through physical activities or exercises. This study attempted to analyze the characteristics of the prospective bride and groom and the relationship between social support and physical activity done by the prospects.

Methods: This was a correlative descriptive study with a cross-sectional design conducted in Greater Jakarta. There were 239 prospective brides and grooms recruited by convenience sampling technique. The Social Support and Exercise Survey questionnaire measured family and peer support to identify the social

DOI: https://doi.org/10.47307/GMC.2022.130.s5.42

ORCID ID: 0000-0002-9953-068X¹ ORCID ID: 0000-0001-9382-6714²

^aFaculty of Nursing, Universitas Indonesia, Depok, West Java, Indonesia

^bReproductive Health Research Group, Malang, Indonesia

*Corresponding Author: Yati Afiyanti E-mail: yatikris@ui.ac.id

Recibido: 11 de septiembre 2022 Aceptado: 18 de octubre 2022 ava,

support in physical activity. The global Physical Activity Questionnaire (GPAQ) was also used to determine each prospect's level of physical activity. Data were gathered through an online questionnaire. Data were analyzed using univariate and bivariate Chi-Square tests.

Results: The analysis showed a relationship between peer support and the prospective bride's and groom's physical activity (p-value = 0.003). Most respondents had sufficient support from family and peers and willingly carried out physical activities according to professionals' recommendations. On the other hand, the results also found a small proportion of prospective brides and grooms who have insufficient social support and physical activity.

Conclusion: It is recommended for health workers, especially nurses, to do various nursing interventions, such as promoting physical activity to peers or family with prospective brides and grooms to prepare for the physical condition of prospects before marriage properly.

Keywords: Physical activity, prospective bride and groom, social support.

RESUMEN

Introducción: Indonesia ocupa el tercer lugar en tasa de mortalidad materna (MMR) y el segundo en tasa de mortalidad infantil (IMR) en el sudeste asiático. El control del peso como parte de la preparación prematrimonial de los novios para recibir el día de la boda y la vida en pareja se suele realizar a través de actividades físicas o ejercicios. Este estudio intentó analizar las características de los futuros novios y

Gac Méd Caracas S1169

la relación entre el apoyo social y la actividad física realizada por los futuros novios.

Métodos: Este fue un estudio descriptivo correlativo con un diseño transversal realizado en el Gran Yakarta. Hubo 239 posibles novias y novios reclutados mediante la técnica de muestreo por conveniencia. El cuestionario Social Support and Exercise Survey midió el apoyo familiar y de pares para identificar el apoyo social en la actividad física. También se utilizó el Cuestionario de actividad física global (GPAQ) para determinar el nivel de actividad física de cada prospecto. Los datos se recopilaron a través de un cuestionario en línea. Los datos se analizaron mediante pruebas de Chi-cuadrado univariadas y bivariadas. Resultados: El análisis mostró una relación entre el apoyo de los compañeros y la actividad física de los futuros novios (valor p = 0.003). La mayoría de los encuestados tenía suficiente apoyo de familiares y compañeros y realizaba actividades físicas de acuerdo con las recomendaciones de los profesionales. Por otro lado, los resultados también encontraron una pequeña proporción de posibles novias y novios que tienen apoyo social y actividad física insuficientes. **Conclusión:** Se recomienda que los trabajadores de la salud, especialmente las enfermeras, realicen diversas intervenciones de enfermería, como promover la actividad física entre pares o familiares con futuros novios para preparar adecuadamente la condición

Palabras clave: Actividad física, futuros novios, apoyo social.

física de los futuros casados.

INTRODUCTION

The mortality rate of mothers in Indonesia is still fairly high (1-3). According to Statistics Indonesia on maternal mortality ratio per 100 000 live births, there were approximately 305 deaths of women while pregnant and within 42 days of termination of pregnancy in 2015. Meanwhile, for the neonatal mortality ratio per 100 000 live births, there were approximately 32 deaths in 2017. Both ratios show a declining rate of mortality compared to the data from a year prior. Yet, Indonesia is still ranked with the third maternal mortality rate and second neonatal mortality rate in Southeast Asia (4). The health condition mostly influences these issues during preconception, the conception period, and after conception, yet the preconception period is the best period to prepare for pregnancy (5,6). During preconception, couples or prospective bride and

groom can prepare everything to prevent or reduce the risk of maternal complications so that the baby can be delivered safely and healthy (7-9).

During the preconception preparation, the couple can carry out physical activities as a part of physical preparation (10). This is because physical activities are beneficial for maintaining weight loss, getting fit, and reducing the risk of infertility (11-15). However, in reality, it is found that people within Greater Jakarta are the most insufficient physically active while the proportion of obesity keeps increasing, yet the government had publicly released a campaign about the healthy life society movement.

Social bonding can influence the willingness to be physically active in physical activity since humans rely heavily on the social aspect. One effective mechanism in the social aspect is social support (16-19). Therefore, support from peers or family needs to be studied further in terms of its relationship with physical activity, so it can become another solution in the future in motivating the prospective bride and groom to prepare for their physical readiness. Moreover, the research on the characteristics of prospective bride and groom is not yet conducted widely, as well as the relationship between social support and physical activity. This issue motivated researchers to research prospective bride and groom as the subject, with the topic of the relationship between social support and physical activity in Greater Jakarta.

METHODS

A descriptive correlation with a cross-sectional study design was used in this research. The population of this study was prospective brides and grooms domiciled in Greater Jakarta. There were 239 prospective brides and grooms recruited by convenience sampling technique. Due to the pandemic of COVID-19, this research applied the convenience sampling technique in choosing the sample through the internet to reduce the risk of virus transmission. The online poster was also published through social media to gather the respondents. A total of 239 respondents were chosen and contacted one by one. The contact of each respondent was provided by Religious

Affairs Office in Greater Jakarta after being requested and granted by the office.

The Social Support and Exercise Survey questionnaire measured family and peer support to identify the social support in physical activity. Also, Global Physical Activity Questionnaire (GPAQ) was used to determine each prospect's physical activity level. The questionnaire also included age, height, weight or body mass index, sex, ethnicity, educational background, occupation, and average annual income. Data were processed and categorized by ordinal and nominal scales, then analyzed using univariate and bivariate chi-square tests. This study was approved by the Health Research Ethics Commission of the Faculty of Nursing, Universitas Indonesia (No. SK-211/UN2.F12. D1.2.1/ETIK 2020).

RESULTS

Among 239 respondents with a proportion of 31.4% prospective groom and 68.6% prospective bride, it was found that 89.5% of respondents were early adults, 73.2% were not overweight and obese, 12.1% were overweight, and 14.6% were obese. Moreover, most of the respondents come from Java ethnicity. In addition, 62.8% of respondents had higher education, 75.7% were employed, and 54.8% had average income according to Jakarta's 2020 provincial minimum wage (Table 1).

For the social support variable in Table 2, this research used median data to determine the intercept point because the normality test results showed a non-normal distribution. According to both variables, family support, and peer support, it was found that respondents had already gained adequate support, in which 51 % of respondents gained adequate support from family compared to 49 % of others. Also, 52.3 % of respondents gained adequate peer support while other 47.7 % gained poorly. Moreover, the GPAQ questionnaire resulted in the average length of physical activity per week carried out while at work, while traveling, and at home. The data were analyzed further using MET scoring, which was later categorized as physically active

Table 1

The Distribution of Prospective Bride and Individual Groom Characteristics within the Jakarta Metropolitan Area in 2020 (n=239)

Variable(s)	Frequency	Percentage (%)
Age		
Late adolescence	2	0.8
Early adulthood	214	89.5
Late adulthood	23	9.6
Body Mass Index		
Not overweight and obese	175	73.2
Overweight and obese	29	12.1
Obese	35	14.6
Sex		
Male	75	31.4
Female	164	68.6
Educational Background		
Primary education	4	1.7
Secondary education	85	35.6
Higher education	150	62.8
Employment status		
Unemployed	58	24.3
Employed	181	75.7
Income		
Low	108	45.2
Average	131	54.8
Total	239	100.0

(MET minutes per week \geq 600) and insufficiently physically active (MET minutes per week < 600). The results found among 239 respondents that 69 % of respondents were physically active while 31 % of others were insufficiently doing physical activity. The Chi-Square test found a meaningless relationship between family support and physical activity (p=0.291; α =0.05). However, peer support was found to have a meaningful relationship with physical activity (p=0.003; α =0.05).

Gac Méd Caracas S1171

FAMILY SUPPORT AND PEER SUPPORT RELATED TO THE PHYSICAL ACTIVITY

Table 2

Relationship between social support and physical activity on prospective bride and groom in Greater Jakarta (n=239)

Variable(s)	Physical activity			
	Active n (%)	Inactive n (%)	Total n (%)	X^2
Family support				0.291
Adequate	88 (36.8)	34 (14.2)	122 (51.0)	
Inadequate	77(32.2)	40 (16.7)	117 (49.0)	
Peer support				0.003
Adequate	97(40.6)	28(11.7)	125(52.3)	
Inadequate	68(28.5)	46(19.2)	114(47.7)	

DISCUSSION

The results show that the prospective bride and groom in Jakarta Metropolitan Area are dominated by the productive age group and, more specifically, the early adult age group. This is appropriate considering that the minimum age for marriage regulated in Indonesian legislation is 19 years old for both men and women. Moreover, at this stage of productive age, someone usually starts working to be more financially ready to start building a household compared to the younger age group.

The results also showed that the bride and groom in DKI Jakarta had a Body Mass Index (BMI) that did not fall into the category of overweight and obese. However, a study on body weight and health in early adulthood to mid-adulthood also found that weight gain was more prevalent in the early thirties to early fifties (20). This condition is related to the bride and groom's activities and the productive age to start working. Therefore, Bride-to-be, mostly in the productive age category, is dominated by early adulthood and the marriage preparation period, which may be a factor in the small BMI number.

The results of further research are the characteristics of respondents in terms of education, occupation, and income of the prospective bride and groom in DKI Jakarta. From these three individual characteristics, the study's results found that most prospective brides were highly educated (diploma, bachelor,

master, specialist, doctorate), worked, and had an income that was in line with the provincial minimum wage DKI Jakarta in 2020. This is in line with government programs in which 9 years of study are compulsory and high levels of education also provide higher employment opportunities. This is following research which states that higher education tends to get more job opportunities (21). However, in terms of income, although most of the prospective brides earn according to the provincial minimum wage, some of the prospective brides' jobs during the research did not generate income that was in accordance with the DKI Jakarta provincial minimum wage even though the education they had taken was high. One possibility is that the job the bride and groom are doing is informal work and can also be affected by the pandemic.

Most brides and grooms in DKI Jakarta receive sufficient support in physical activities, both from their family and friends. Most of the prospective brides, both male and female, are also physically active according to the recommendations of physical exercise (30 minutes per day) or World Health Organization (WHO) (150 minutes/per week for moderate-intensity physical activity; or 75 minutes/per week for heavy-intensity physical activity; or 600 METs per week for both mixtures). These findings support the claim that having better social relationships has lower morbidity and mortality rates and is involved in healthier behaviours (22,23). Having other people provide emotional support or assistance can encourage, set an example, monitor change, and provide assistance as needed. Knowing that someone cares and can help when needed is invaluable for sustaining behaviour change. Sharing ideas and goals, as well as feedback on the best approach to achieve them, is empowering and can effectively promote self-care behaviour with personal meaning, purpose, and a sense of belonging (16).

The study also showed that social support related to the physical activity found a significant relationship between peer support and physical activity for the bride and groom. Meanwhile, there is no relationship between family support. Abadini and Wuryaningsih's research (24) on 174 office workers with an age range of 21-58 years in DKI Jakarta also shows the same results; namely, friend support is related to physical activity of office workers (p = 0.013) while family support does not find a significant relationship (p=0.139). Seeing this result, one of the factors that might influence is because more support from friends is obtained from both sexes, both by the prospective groom and the future bride. This is different from family support which the prospective bride only accepts. In addition, the bride and groom, who are in a productive period, most of their time is spent at work, so physical activities performed at work play a significant role in total physical activity per week, not physical activities in their spare time done with family.

CONCLUSION

The study found that peer support had a significant relationship with physical activity for the bride and groom; this is because the bride and groom, mostly early adults, have more physical activity while working. The study recommends making efforts to promote physical activity. For further research, it is suggested to be able to conduct research by adding the area, questions about individual characteristics related to first marriage or not, and directly going to the field, such as the regional health centers and or religious affair office, so that bias can be reduced. The results of this study are also expected to impact nursing services for prospective brides in Primary care. The nurse can play a role in educating about the benefits of physical activity in building a family and supporting the bride and groom to

maintain and carry out physical activities with their closest people so that support in carrying out physical activity can be given to each other.

CONFLICT OF INTERESTS

The authors declare no conflict of interest.

ACKNOWLEDGEMENT

The Directorate General of Higher Education, Ministry of Culture and Education, the Republic of Indonesia sponsored this research financially with grant numbers: NKB-1810/UN2.R3.1/HKP.05.00/2019.

REFERENCES

- 1. Efendi F, Sebayang SK, Astutik E, Hadisuyatmana S, Has EMM, Kuswanto H. Determinants of safe delivery utilization among Indonesian women in eastern part of Indonesia. F1000Research. 2020;9.
- Paulson KR, Kamath AM, Alam T, Bienhoff K, Abady GG, Abbas J, et al. Global, regional, and national progress towards Sustainable Development Goal 3.2 for neonatal and child health: All-cause and cause-specific mortality findings from the Global Burden of Disease Study 2019. Lancet. 2021;398(10303):870-905.
- 3. Cahyono MN, Efendi F, Harmayetty H, Adnani QES, Hung HY. Regional disparities in postnatal care among mothers aged 15-49 years old: An analysis of the Indonesian Demographic and Health Survey 2017. F1000Research. 2021;10:1-20.
- ASEAN. ASEAN Statistical Yearbook 2015. Jakarta: The ASEAN Secretariat; 2016:328.
- 5. Sri S. Micronutrients supplementation during preconception period improves fetal survival and cord blood insulin-like growth factor 1. Asian J Clin Nutr. 2015;7(2):33-44.
- Kurniati A, Chen C-M, Efendi F, Berliana SMM. Factors influencing Indonesian women's use of maternal health care services. Health Care Women Int. 2018;39(1):3-18.
- 7. Stern J. Preconception Health and Care: A Window of Opportunity. Acta Universitatis Upsaliensis; 2015.
- WHO. Preconception care: Regional expert group consultation. New Delhi, India World Heal Organ. 2014.

Gac Méd Caracas S1173

FAMILY SUPPORT AND PEER SUPPORT RELATED TO THE PHYSICAL ACTIVITY

- Simanungkalit N, Handayani S, Akbar MIA. Poedji Rochjati Score Card as Media for Preconception Counseling. Folia Medica Indones. 2021;57(4):310-316
- Kurniawati W, Afiyanti Y. Establishing healthy family and offspring on prospective bridegroom: A qualitative analysis. Enfermería Clínica. 2019:29:855-861.
- 11. Palmer NO, Bakos HW, Fullston T, Lane M. Impact of obesity on male fertility, sperm function and molecular composition. Spermatogenesis. 2012;2(4):253-263.
- Palomba S, Falbo A, Valli B, Morini D, Villani MT, Nicoli A, et al. Physical activity before IVF and ICSI cycles in infertile obese women: an observational cohort study. Reprod Biomed Online. 2014;29(1):72-79.
- 13. Vigriawan GE, Putri EAC, Rejeki PS, Qurnianingsih E, Kinanti RG, Mohamed MNA, et al. High-intensity interval training improves physical performance without C-reactive protein (CRP) level alteration in overweight sedentary women. J Phys Educ Sport. 2022;22(2):442-447.
- Suryadinata R V, Wirjatmadi B, Adriani M, Lorensia A. Effect of age and weight on physical activity. J Public Health Res. 2020;9(2):187-190.
- Puteri MM, Saskianti T, Estu AR, Bornado B, Maulani B, Naomi N. The Correlation between oral health condition in down syndrome children with physical fitness: A Literature Review. J Int Dent Med Res. 2022;15(2):922-925.
- Lachman ME, Lipsitz L, Lubben J, Castaneda-Sceppa C, Jette AM. When adults don't exercise: Behavioral strategies to increase physical activity in

- sedentary middle-aged and older adults. Innov aging. 2018;2(1):igy007.
- 17. Thoits PA. Mechanisms linking social ties and support to physical and mental health. J Health Soc Behav. 2011;52(2):145-161.
- Marthammuthu T, Hairi FM, Choo WY, Salleh NAM, Hairi NN. A qualitative investigation on the roles of social support on physical activity behaviour among the rural-dwelling older women in Malaysia. Int J Environ Res Public Health. 2021;18(18):9609.
- Santoso CMA, Bramantoro T, Nguyen MC, Nagy A. Lifestyle and psychosocial correlates of oral hygiene practice among Indonesian adolescents. Eur J Oral Sci. 2021;129(1).
- Zajacova A, Burgard SA. Body weight and health from early to mid-adulthood: A longitudinal analysis. J Health Soc Behav. 2010;51(1):92-107.
- Ali MS, Jalal H. Higher Education as a Predictor of Employment: The World of Work Perspective. Bull Educ Res. 2018;40(2):79-90.
- Uchino BN. Understanding the links between social ties and health: On building stronger bridges with relationship science. J Soc Pers Relat. 2013;30(2):155-162.
- Holt-Lunstad J, Smith TB, Layton JB. Social relationships and mortality risk: A meta-analytic review. PLoS Med. 2010;7(7):e1000316.
- Abadini D, Wuryaningsih CE. Determinants of physical activity of adults in office workers in Jakarta in 2018. J Promoting Indonesian Health. 2019;14(1):15-28.