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## HEALTH EDUCATION BY PEER COUNSELORS INCREASES ADOLESCENT KNOWLEDGE ABOUT HEALTHY LIFESTYLES

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### ABSTRACT

**Introduction:** Adolescents have tend to lead an unhealthy lifestyle, such as liking to consume unhealthy food and sedentary behavior. The current phenomenon is an increase in the incidence of obesity and non-communicable diseases in Adolescents that are caused by unhealthy lifestyle. This community service activity aims to optimize the role of peers in providing health education to increase knowledge about healthy lifestyles for Adolescents.

**Methods:** This community service method provided health education to Adolescents by peer counselors. This community service was carried out at Junior High School (SMPN) 62 Surabaya in July to August 2024. Peer counselors provided health information about healthy lifestyles which include healthy eating behavior and physical activity with interactive discussions in small groups. Participants in this community service activity consisted of 5 peer counselors and 20 Adolescents in 8th grade. Each peer counselor provided health education to 4 Adolescents. The activity stages include selecting peer counselors, increasing the knowledge capacity and skills of peer counselors. After receiving training, peer counselors then provide health education to other Adolescents about healthy lifestyles during puberty, then the knowledge of adolescents was evaluated using questionnaire about healthy lifestyles.

**Results:** The results of this community service show an increase in the average value of knowledge about healthy lifestyles in Adolescents after providing health knowledge about diet and physical activity by peer counselors. The average score increased and 65% of students had high knowledge after being given health education, including knowledge about balanced nutrition, healthy food, the importance of breakfast, nutritional status and physical activity.

**Conclusion:** Health education by peer counselors through peer counselor clinics program has proven to be effective in increasing the knowledge and motivation of adolescents in participating in health education. Peer counselor activities are recommended to become a program for middle schools that regularly maintain adolescent health behavior, through activities providing health education, and monitoring adolescent growth, such as measuring the nutritional status of adolescents periodically.

### KEYWORDS

adolescents; community services; healthy lifestyle; peer counselor clinic.

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## 1. INTRODUCTION

Adolescents are in the transition period between children and adults. Adolescents experience puberty as a critical period, during this period they experience

very rapid physical growth and development which, if not properly prepared, will cause suboptimal growth and development which will have an impact in adulthood. Physical and psychological changes cause

Adolescents experience difficulty adjusting, experience confusion in caring for themselves, and lack understanding of the needs that support their growth and development. Adolescents are characterized by closeness to their peers, their daily lifestyles influence each other (Ssewanyana et al., 2018).

The current phenomenon is an increase in the incidence of obesity and non-communicable diseases in children. Data shows that in 2021 more than 340 thousand children aged 6-18 years will experience overweight and obesity, according to the Indonesian Pediatrician Association (IDAI), cases of type 2 diabetes mellitus in children will increase to 70% in 2023. This problem is caused by an unhealthy lifestyle. Research shows that early adolescents up to the age of 15 years tend to lead unhealthy lifestyles (Marques et al., 2020). Unhealthy lifestyles that are often found among Adolescents include the behavior of consuming unhealthy food and not being active. Research on teenagers in one country in Southeast Asia shows that 43.3% consume fast food 4-7 days per week (Li et al., 2020). In East Java, Indonesia, 60.6% of children and teenagers in East Java have more than 2 hours of screen time per day and 29% never exercise during the week (Rachmawati, 2021) (Pietrobelli et al., 2020). Adolescents in urban areas, especially Surabaya, have unhealthy lifestyles, such as liking to consume fast food and sedentary behavior (Ufrida and Harianto, 2022). This unhealthy lifestyle is heavily influenced by peers (Khan et al., 2020; Lestari et al., 2021). An unhealthy lifestyle will have an impact on the risk of obesity and an increase in non-communicable diseases (NCDs), such as cardiovascular disease, diabetes, stroke and cancer in later life (Kementerian Kesehatan Republik Indonesia, 2015; UNICEF, 2022a).

Health education has become a school program, but there are still many adolescents who are still not well prepared for this golden period. They do not know and implement a healthy lifestyle such as

meeting nutritional needs and physical activity to support optimal growth and development during puberty. Adolescents are in a transition period from children to adults who require interventions that are appropriate to their developmental characteristics (Krisnana et al., 2019). Adolescents Characteristics prioritize peers as role models and sources of information in their daily activities, so that interventions involving peers are important and urgent to carry out. (Medley et al., 2009). Our partner SMPN 62 Surabaya is a newly established school in the city of Surabaya and there are no health education activities about healthy lifestyles to support the growth and development of students during puberty, such as monitoring nutritional status, fulfilling balanced nutrition, physical activity and puberty. Therefore, This community service activity aims to optimize the role of peers in providing health education to increase knowledge about healthy lifestyles for Adolescents

## 2. MATERIAL AND METHODS

This community service was carried out at SMPN 62 Surabaya. The target of Health Education using the peer counselor method is 25 students in class VIII D, consisting of 5 peer counselors and 20 Adolescents. The stages of implementing community service consist of three stages. The first stage is increasing the knowledge capacity and skills of the selected peer counselors. The second stage is health education by peer counselors for Adolescents and the third stage is evaluation. The duration of each meeting being 2 hours.

The peer counselor selection process involves collaborating with the student's accompanying teacher to select five students who are active in school health cadre activities. Furthermore, the selected peer counselors take part in education and training through peer counselor capacity building activities. At this stage the community service team prepares a team of peer counselors by providing knowledge

about the importance of optimizing growth and development during puberty. After providing education and training to the peer counselor team, the peer counselors then provide health education for Adolescents accompanied by the community service team. The peer counselor team provides counseling to other students using the small group discussion method, that is, all participants are divided into small groups, each group consisting of 4 people, in one group there is one peer counselor.

Peer counselors provide health education to other friends about healthy lifestyle material for Adolescents to support growth and development during puberty, namely healthy food, physical activity, growth and development during puberty. Evaluate changes in adolescent knowledge using a questionnaire filled out before and after health education by peer counselors. The questionnaire sheet consists of questions that explore Adolescents' knowledge and skills about healthy lifestyles during puberty. Apart from evaluating using a questionnaire sheet, the community service team also carries out evaluations through observation.

### 3. RESULTS

This community service activity was attended by 5 peer counselors and 20 Adolescents from SMPN 62 Surabaya, class 8. The ages of the teenagers ranged from 12-15 years, with almost equal numbers. The largest number, namely 45%, is 14 years old and only

15% is 12 years old. Most of the students who participate in this community service are male, amounting to 70%. Meanwhile, 60% of the peer counselors tasked with providing health education are 14 years old and female (Table 1).

Before providing health education by peer counselors, the average value of knowledge about healthy lifestyles was 75 with 25% of students still having low knowledge. After being given health education by peer counselors, the average score increased and 65% of students had high knowledge (Table 2). The knowledge parameter about healthy lifestyles among Adolescents before the intervention shows that the lowest mean value is knowledge about avoiding unhealthy food after being given health education by peer counselors, knowledge about avoiding unhealthy food increases. In the aspect of knowledge about physical activity, the lowest value before the intervention was their knowledge about the benefits of physical activity. The highest difference in increasing knowledge after health education by peer counselors is that Adolescents increasingly know about the importance of a healthy breakfast (Table 3).

The evaluation results through observing the implementation of this activity show 1) peer counselors are enthusiastic and actively participating in the activity; 2) peer counselors are able to provide health education to peers, but they still lack self-confidence so they need assistance to motivate them;

Table 1. Characteristics Of Community Service Participants (n=20)

Characteristics	n	%
<b>Adolescents' characteristics</b>		
<b>Age of Adolescents</b>		
12 years old	3	15
13 years old	8	40
14 years old	9	45
<b>Gender</b>		
Male	14	70
Female	6	30
<b>Peer Counselor Characteristics</b>		
<b>Age of peer counselor</b>		
13 years old	2	40
14 years old	3	60
<b>Gender</b>		
Male	2	40
Female	3	60

3) Adolescents appear to actively listen to the peer counselor's explanation.

Adolescents also lack good knowledge about the benefits and intensity of physical activity

Table 2. Knowledge of Participants Before and After Training by The Peer Counselor (n=20)

Knowledge	Pre-test			Post-test		
	n	%	Mean	n	%	Mean
Low	5	25	75	4	20	77
Moderate	4	20		3	15	
High	11	55		13	65	
Total	20	100		20	100	

Table 3. Parameters of Knowledge About Healthy Lifestyles for Adolescents (n=20)

Parameter	Mean	
	Pre-test	Post-test
<b>Knowledge about diet</b>		
Balanced nutrition for Adolescents	7	7,5
Avoid unhealthy foods	5	5,5
The importance of a healthy breakfast for Adolescents	9	10
Monitoring nutritional status of adolescents	8,5	9,5
<b>Knowledge about physical activity</b>		
Benefits of physical activity	6,5	7
Intensity of physical activity for adolescents	8,5	9

#### 4. DISCUSSION

The average knowledge about healthy lifestyles among Adolescent participating in community service activities has increased after being given health education by peer counselors. Before giving health education by peer counselors about healthy lifestyles, most Adolescents do not have adequate knowledge about healthy lifestyles, which includes knowledge about healthy food, healthy activities for teenagers, and growth and development during puberty. Before health education by peers, Adolescents had poor knowledge about avoiding unhealthy foods. Adolescents are the age group most vulnerable to consuming unhealthy foods (Sahoo et al., 2015). Adolescents have a tendency in choosing food to look more at trends than at food nutrition. Adolescents who live in urban areas consume a lot of unhealthy foods, soft drinks, fast food, foods high in sugar and salt which are prone to causing adolescents to experience health problems (Nurwanti et al., 2019). In line with research results, it is stated that the majority of Adolescents consume fast food more than 1 day per week, never consume fruit and vegetables and never eat breakfast (Lalusu et al., 2022)(Dunford, Popkin and Ng, 2020).

recommended. They do not understand that physical activity is very necessary to prevent health problems in Adolescents. They still don't know the time limits for sedentary activities such as playing with gadgets and the time needed for exercise. Research shows that there is a decrease in physical activity in adolescents and an increase in sedentary behavior (Bates et al., 2020). Other research states that the decline in physical activity is due to an increase in sedentary behavior (Margaritis et al., 2020).

An Adolescent's lack of knowledge is caused by a lack of exposure to information (Arief et al., 2021). Adolescence is a transitional age between childhood and adulthood, which is a critical period in which individual changes occur not only physically but also in psychosocial characteristics (Rachmawati et al., 2023), one of the characteristics of adolescent postsocial development is being closer and more trusting with friends. (Medley et al., 2009). Peers for teenagers are role models and trusted sources of information. Peers influence teenagers' healthy or unhealthy lifestyles (Morton and Montgomery, 2012). Previous studies in Indonesia stated that health education for adolescents through peer educators was proven to be effective in improving adolescent

health behavior (Claramita et al., 2021) (Isni, 2021)(Harini and Susanti, 2017). Peers have a tendency to give the best to each other and their friends and have a high sense of empathy (Khasanah, 2019).

The stages of community service by optimizing the role of peer counselors are through several stages, the first is the peer counselor selection process. The peer counselor selection process is to determine which students will be selected as peer counselors through analysis of daily activities in collaboration with the school. Selected students are students who are active as school health cadres. Peer counselors need to go through a selection stage to ensure they get students who are committed to becoming peer counselors (Khasanah, 2019). A person's commitment can improve health behavior, someone who has committed to improving health means they have a good awareness of the importance of self-involvement in improving the health of their peers (Vahedian Shahroodi et al., 2021). So that students who are selected to be peer counselors in this community service activity have commitment and are active as cadres at. In addition, according to Khasanah (2019) the requirements for teenagers to become peer counselors are being active in social activities, having concern, and good communication skills. The results of the observations show that the peer counselor is able to explain to his friends and other teenagers, listen and provide positive feedback to the peer counselor, by saying they understand and asking questions.

The second stage is increasing the capacity of peer counselors through training and education for peer counselors. This stage aims to provide provisions to increase peer counselors' knowledge before providing health education to other teenagers. The third stage is health education for teenagers by peer counselors. After providing health education by peer counselors, there is an increase in teenagers' knowledge. This shows that there has been a process

of transfer of knowledge from peer counselors to their adolescent peers (Arief et al., 2021). The method used by peer counselors in this community service activity is small group discussions in each group consisting of 4 adolescents, with small groups of peer counselors it is easier to control and provide explanations using lecture methods and active discussions. Education through peer counselors on the use of language will be easier to understand, teenagers will not be embarrassed to express their thoughts and feelings (Khasanah, 2019). Effective training conducted by peer counselors has been proven to significantly increase health knowledge and behavior (Harini and Susanti, 2017). The limitation of this community service activity was that the team need to evaluate the ability of Adolescents to implement a healthy lifestyle in terms of choosing healthy food and physical activity.

## 5. CONCLUSION

Optimizing the role of peer counselors in providing health education to Adolescents in this community service activity is able to increase the knowledge of Adolescents at SMPN 62 Surabaya about healthy lifestyles which include healthy eating behavior and physical activity. Peer counselor clinic program are highly recommended in the future as a secondary school program that regularly maintains adolescent health behavior, through activities providing health education, and monitoring adolescent growth including adolescents nutritional status.

## 6. REFERENCES

- Arief, Y. S. *et al.* (2021) 'PEER GROUP COUNSELING IN IMPROVING PROSIAL BEHAVIOR OF ADOLESCENT IN SURABAYA', *Jurnal Pengabdian Masyarakat Dalam Kesehatan*, 3(1 SE-Articles), pp. 18–22. doi: 10.20473/jpmk.v3i1.24385.
- Bates, L. C. *et al.* (2020) 'COVID-19 Impact on Behaviors across the 24-Hour Day in Children and Adolescents: Physical Activity, Sedentary Behavior, and Sleep', *Children*, 7(9), p. 138. doi: 10.3390/children7090138.
- Claramita, M. *et al.* (2021) 'Empowering adolescents as peer-educators for early prevention of non-

- communicable diseases: Through existing "POSBINDU" program in Indonesia.', *Journal of family medicine and primary care*. India, 10(6), pp. 2202–2208. doi: 10.4103/jfmpc.jfmpc\_2613\_20.
- Dunford, E. K., Popkin, B. M. and Ng, S. W. (2020) 'Recent Trends in Junk Food Intake in U.S. Children and Adolescents, 2003-2016.', *American journal of preventive medicine*. Netherlands, 59(1), pp. 49–58. doi: 10.1016/j.amepre.2020.01.023.
- Harini, R. and Susanti, H. (2017) 'Peer Counselor Training on Knowledge, Attitudes and Skills of Central Committee of Student Health Information and Reproductive Health Consultation (PIK-KRM) BT - Proceedings of the Health Science International Conference (HSIC 2017)', in. Atlantis Press, pp. 28–40. doi: 10.2991/hsic-17.2017.6.
- Isni, K. (2021) 'Peer Counseling Training As A Method Of Sexual Health Promotion In Adolescents', *The Indonesian Journal of Public Health*, 16(2 SE-Articles), pp. 242–252. doi: 10.20473/ijph.v16i2.2021.242-252.
- Kementerian Kesehatan Republik Indonesia (2015) *Pedoman umum pengendalian obesitas*. Jakarta.
- Khan, S. R. *et al.* (2020) 'Parental and Peer Support are Associated with Physical Activity in Adolescents: Evidence from 74 Countries', *International Journal of Environmental Research and Public Health*. doi: 10.3390/ijerph17124435.
- Khasanah, N. N. (2019) 'Peran peer counselor sebagai Agent of Change dalam perilaku Anti Kekerasan Seksual pada Anak', in Apriliani Yulianti W (ed.) *Prosiding Seminar Nasional The 2nd Unissula Nursing Conference (UNC) Sultan Agung Islamic University: implementing the spirit of nurses: a voice to lead health for all*. Semarang: Unissula. doi: <http://dx.doi.org/10.26532/unc.v2i1.15456.g54> 31.
- Krisnana, I. *et al.* (2019) 'Adolescent characteristics and parenting style as the determinant factors of bullying in Indonesia: A cross-sectional study', *International Journal of Adolescent Medicine and Health*. Maternity and Pediatric Nursing Department, Faculty of Nursing, Universitas Airlangga, Surabaya, East Java, 60115, Indonesia: De Gruyter, 33(5), pp. 1–9. doi: 10.1515/ijamh-2019-0019.
- Lalusu, E. Y. *et al.* (2022) 'Unhealthy Food Consumption Pattern and Nutritional Status among Adolescents: A Cross-sectional Study', *Open Access Macedonian Journal of Medical Sciences*, 10(E SE-Public Health Epidemiology), pp. 349–354. doi: 10.3889/oamjms.2022.8002.
- Lestari, A. *et al.* (2021) 'Fast Food Consumption Behavior in Adolescents', *Muhammadiyah International Public Health and Medicine Proceeding*, 1(1), pp. 607–616. doi: 10.53947/miphmp.v1i1.107.
- Li, L. *et al.* (2020) 'Fast food consumption among young adolescents aged 12-15 years in 54 low- and middle-income countries.', *Global health action*. United States, 13(1), p. 1795438. doi: 10.1080/16549716.2020.1795438.
- Margaritis, I. *et al.* (2020) 'How to deal with COVID-19 epidemic-related lockdown physical inactivity and sedentary increase in youth? Adaptation of Anses' benchmarks', *Archives of Public Health*, 78(1), p. 52. doi: 10.1186/s13690-020-00432-z.
- Marques, A. *et al.* (2020) 'Adolescents' healthy lifestyle', *Jornal de Pediatria (Versão em Português)*, 96(2), pp. 217–224. doi: <https://doi.org/10.1016/j.jpdp.2018.09.001>.
- Medley, A. *et al.* (2009) 'Effectiveness of peer education interventions for HIV prevention in developing countries: a systematic review and meta-analysis', *AIDS Education and Prevention*. Guilford Press, 21(3), pp. 181–206.
- Morton, M. H. and Montgomery, P. (2012) 'Youth Empowerment Programs for Improving Adolescents' Self-Efficacy and Self-Esteem: A Systematic Review', *Research on Social Work Practice*. SAGE Publications Inc, 23(1), pp. 22–33. doi: 10.1177/1049731512459967.
- Nurwanti, E. *et al.* (2019) 'Rural–Urban Differences in Dietary Behavior and Obesity: Results of the Riskesdas Study in 10–18-Year-Old Indonesian Children and Adolescents', *Nutrients*, 11(11), p. 2813. doi: 10.3390/nu11112813.
- Pietrobelli, A. *et al.* (2020) 'Effects of COVID-19 Lockdown on Lifestyle Behaviors in Children with Obesity Living in Verona, Italy: A Longitudinal Study', *Obesity*. John Wiley & Sons, Ltd, 28(8), pp. 1382–1385. doi: 10.1002/oby.22861.
- Rachmawati, P. D. *et al.* (2023) 'Coping strategies and family support to the adjustment of adolescents who have parents working as migrant workers', *Jurnal Ners*, 18(1), pp. 3–8. doi: 10.20473/jn.v18i1.27086.
- Sahoo, K. *et al.* (2015) 'Childhood obesity: causes and consequences.', *Journal of family medicine and primary care*. India, 4(2), pp. 187–192. doi: 10.4103/2249-4863.154628.
- Ssewanyana, D. *et al.* (2018) 'Perspectives on Underlying Factors for Unhealthy Diet and Sedentary Lifestyle of Adolescents at a Kenyan Coastal Setting', *Frontiers in Public Health*, 6. doi: 10.3389/fpubh.2018.00011.
- Ufrida, K. and Harianto, S. (2022) 'Konsumerisme makanan siap saji sebagai gaya hidup remaja di

Kota Surabaya', *Jurnal Analisa Sosiologi*, 11(1), pp. 137–156. doi: 10.20961/jas.v11i1.57134.  
UNICEF (2022) *Analisis Lanskap Kelebihan Berat Badan & Obesitas di Indonesia*. Jakarta: UNICEF.  
Vahedian Shahroodi, M. *et al.* (2021) 'Effect of a theory-based educational intervention for

enhancing nutrition and physical activity among Iranian women: a randomised control trial', *Public Health Nutrition*. 2021/06/21. Cambridge University Press, 24(18), pp. 6046–6057. doi: DOI: 10.1017/S1368980021002664.