



Peer Group Education Effective on Students' Anxiety Levels Facing Premenstrual Syndrome

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ARTICLE INFO

Article history:

Received 21 January 2023

Accepted 1 April 2023

Published 10 June 2023

Keyword:

Premenstrual syndrome anxiety
Peer Education

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DOI: 10.30604/jika.v8i2.1933

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ABSTRACT

Adolescence in teenage girls, sexual maturity is marked by menstruation. Disorders accompanying menstruation are called Premenstrual Syndrome (PMS). The most common symptoms are crying easily, irritability, difficulty concentrating, and anxiety. The purpose of this research is to analyze the effect of peer group education on the level of PMS anxiety in female students at BHK Grogol High School, West Jakarta. The design of this research is pre-experimental with one group pre-post test design. The population is all students of grades X and XI at SMA BHK Grogol, who are already menstruating with sample 77 students. The technique used is the proportional random. Peer education and independent variables PMS anxiety dependent variable. Data collection using a questionnaire, and statistical test. The paired t-test is used to see the effect of peer group education on the level of students' anxiety about PMS. There was a lot of respondents' anxiety before pre-education categories of no stress, mild anxiety, moderate, severe, and very severe, as many as 29 each (37.7%) 23 (29.9%), 16 (20.8%), 8 (10.4%), and 1 (1.3%). Respondents' anxiety after the intervention 56 (72.7%) had no anxiety, 15 (19.5%) had moderate anxiety and 6 (7.8) had anxiety currently. The results of the paired t-test showed a significant value of $0.000 < 0.05$. It can be concluded that there is an effect of peer group education on PMS anxiety in class X and XI students at BHK Grogol High School, West Jakarta.

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INTRODUCTION

The teenage period is a transitional period from childhood to early adulthood. At this time adolescent girls will experience changes both in terms of psychological, biological, physiological and social, one of the changes is changes in the reproductive system, namely sexual maturity characterized by menstruation which affects the quality of life of adolescents. (Lubis, 2013).

Approaching menstruation, a woman will experience premenstrual syndrome (PMS). Symptoms caused as a result of PMS include affective symptoms and somatic symptoms, these symptoms will have an impact on the quality of life of adolescent girls, because if not properly handled it will interfere with adolescent activities both at home and at school. Teens with premenstrual syndrome (PMS) experience various disorders, including interference in the

learning process and in daily activities. PMS makes adolescent girls unable to carry out their daily activities normally and requires treatment. This leads to a decrease in quality of life. An example is a female student with PMS who is unable to concentrate on her studies and her motivation to learn declines due to the pain she feels.

The light symptoms of PMS are nothing to worry about, because, it is not a serious disease, mild symptoms such as mood disorders, irritability, irritability, these conditions can disappear on their own, while severe symptoms of premenstrual syndrome or Premenstrual Dysphoric Disorder (PMDD) such as headaches, fever, even tinsan, must be consulted to a doctor. PMDD symptoms arise due to abnormal levels of estrogen and progesterone hormones (Sinaga E et al, 2017). Quality of life for teenagers is an assessment of a positive life cycle, feeling satisfied with themselves in terms of physical and psychosocial health

including a positive self-image, having good relationships with friends and family and being able to join in carrying out their roles such as in the school environment (Ali, Mohammad & Asrori 2014). An obstacle to the quality of life of teenage girls is the period before menstruation or PMS. Azurah's research (2018) showed that Premenstrual Syndrome (PMS) greatly affects the quality of life in the form of physical disorders (heartburn, nausea, dizziness, pain and swelling of the breasts) and psychosocial such as, decreased academic performance of female students due to absence from school, difficulty concentrating while studying.

PMS is a psychosomatic set of symptoms that occur in the menstrual cycle, PMS is a problem that occurs in productive women, during menstruation, and has an impact on activity. Based on research found 23-31% of women experience activity barriers due to PMS (Shreshta, et al 2019). PMS is categorized into three types: mild, moderate and severe. According to a 2012 study by the American College of Obstetricians and Gynecologist (ACOG), symptoms of PMS were experienced by 65.7% of adolescent girls. Research at one of the health schools in Nepal found 72.3% of female students experienced mild intensity PMS and 25.9% moderate to severe, (Shreshta et al 2019). In Indonesian, 69.04% of female students in one of the vocational schools in Yogyakarta experienced PMS (Rahayu 2019). The rate of occurrence of PMS in Indonesia occurs around 85% which is divided, 60-70% of mild PMS, 65% moderate and about 15% severe (Stefanie 2018). Research at SMP Negeri 12 Tangerang from 122 respondents, 50 people (41.0%) experienced moderate PMS (Azizah, et al 2020).

A research by Rahayu (2019) shows that PMS symptoms can be prevented or overcome by doing physical activities such as exercise, resting and consuming nutritious foods that contain protein, and iron and avoiding foods that contain a lot of salt and caffeine (Sinaga E et al, 2017). Studies on health counseling regarding adolescents' understanding of PMS and efforts to improve reproductive health such as self-care, can help adolescents better understand reproductive health, handling pre menstrual syndrome (Raudhatun et al, 2019).

WHO and Unesco state that health education is a series of integrated activities carried out using different strategies in increasing knowledge, influencing attitudes so as to form health behavior. Education is one of the tasks of nurses as educators, this is in accordance with the nursing theory of the Nola Pender Health Promotion Models. Nola J. Pender believes that health education will improve the quality of individual health and one of the tools for education is the use of media, to display the material or material to be provided. The media for health education can be in the form of pamphlets, booklets, posters (Jatmika, et al, 2019). The Use of social media also greatly affects the level of knowledge of teenagers about PMS (Handayani, et al, 2020).

Peer education is a method of intervention or program delivery that uses members of a learning group to facilitate some or all of the program activities with members of the same age or status (Tolli 2012). Peer Education is a group with the same status and age (peers), this group can be formed because, work environment, profession, hobbies and so on (Damsar 2012). to share health information is considered successful through the social influence of peer groups, which can have a strong impact on teenagers (Maticka et al. 2010). The peer educator role ranges from low responsibility to high responsibility. Low responsibility may only include certain aspects of implementation, such as visiting to share stories, or participating in role plays. Higher levels of participation may include full input in program

development, co-facilitation, or full facilitation. After the family, peer education is the second social institution to play a role in the lives of teenagers (Imron 2012). The results of an unstructured interview in August 2021, with the teacher guidance and counselling and the principal of SMA BHK Grogol West Jakarta, a year there are around 15% of students who are absent because they experience PMS and there has been no counseling about PMS for several years. Based on the above phenomenon, the researcher is interested in researching the effectiveness of peer group education on the anxiety level of female students facing premenstrual syndrome at SMA BHK Grogol classes X and XI.

METHODS

The research use quantitative method with Pre-Experiment research design. This population was class X and XI students of SMA BHK, Grogol, West Jakarta with a total of 77 respondents and 14 facilitators, using purposive sampling method. This survey applied research ethics in accordance with KEPPKN Kemenkes RI 2017. The research was from September 2021 to March 2022 at SMA BHK Grogol, West Jakarta with the questionnaire on the anxiety level of the Hamilton Anxiety Rating Scale (HARS), pre and post research. Processing data using SPSS with a paired t test. Ethic Test from KEPPK Sint Carolus no 025/KEPPKSTIKSC/II/2022.

RESULTS AND DISCUSSION

Table 1. Class Characteristics of Respondents SMA BHK Grogol, West Jakarta

Class	Frequency (n)	Percentage (%)
X	40	52
XI	37	48
Total	77	100

Based on table 1 above, the number of students in class X is 40 (52%) and class XI is 37 (48%).

Table 2. Age characteristics of respondents at SMA BHK Grogol

Age	N	%
15 years	16	21
16 years	34	44
17 years	27	35
Total	77	100

In table 2, it can be seen that of the class X and XI students the most age is 16 years, 34 people (44%).

Table 3. Distribution of anxiety levels before and after being given peer group education

Anxiety Level	Pre Education		Education Post	
	n	%	N	%
1. Not Worried	29	37,7	56	72,7
2. Light	23	29,9	15	19,5
3. Medium	16	20,8	6	7,8
4. Weight	8	10,4	0	0,0
5. So Heavy	1	1,3	0	0,0
Total	77	100.0	77	100.0

Tabel 3 showed the difference in anxiety levels before and after peer educations for BHK Grogol Senior High School students. It was obtained that most respondents in pre-education were not anxious, but there were respondents who experienced severe anxiety as much as 10.4% and as much as 1.3% with severe anxiety. Meanwhile, in the post-education group, most experienced no anxiety and none with severe and very severe anxiety.

The purpose of the analysis the effectiveness of peer group education on student anxiety levels

Table 4. The effectiveness of peer group education on student anxiety levels

Worry	N	Means	t	Average difference	Pvalue
Pre test	77	16,4	3,684	4,7	0.000
Post test	77	11,7			

Above table shows the difference in anxiety levels before and after the peer education was given to BHK Grogol Senior High School students. the p-value is 0.000, which means that there is an effect of peer group education on the anxiety level of BHK Grogol Senior High School students.

The analysis results showed that the average value of respondents' anxiety during the pre-test was 16.4. While at the time of the post-test, the results of respondents' anxiety decreased, namely 11.4. From these data it can be seen that the mean value of anxiety in peer education at SMA BHK Grogol, West Jakarta, has decreased significantly. Based on the data obtained, the researcher assumed that this was because the peer educators were able to explain the material well, so that the respondents could understand and become aware of the symptoms of anxiety experienced during PMS. This was influenced from religious education at school and at home, peer education, information from mass media (in the delivery of information, mass media plays a role in conveying messages that include a suggestion that can direct a person's opinion), the surrounding environment where respondents live (the environment affects the entry process of knowledge into individuals who are in that environment, this happens because of the mutual interaction or not that will be responded as knowledge for each individual), and the family's decision to guide and teach the child. (Yuliasri and Armalina, 2015).

The effectiveness of peer group education on the anxiety level of female students facing PMS at SMA BHK can be seen from the results of the analysis using the Paired T Test obtained a t value of 3.684 (p-value 0.000 <0.05), meaning that there is a significant influence between peer group education (peer education) and the anxiety level of class X and XI female students faced PMS, at SMA BHK Grogol West Ja

Based on the research of Yuni et al 2021, there is an effect of peer group education on the level of knowledge of reproductive health of female teenagers at MTsN 3 Aceh. There is an improvement in knowledge after, the education of the peer group is carried out. In agreement with the research of Ni Luh Anik Utami et al (2018), the effectiveness of the Peer Education method and the lecture method on the level of knowledge of female students about teenage pregnancy, the results of the peer education method are more effective in increasing knowledge than the lecture method. The research results are also relevant to research conducted by Magfirotulloh (2019) which examines the "Effect of Peer Education (Peer Education) on Pre-Menstrual

Anxiety in Adolescent Girls in Class VII and VIII SMPN 2 Jogoroto Jombang Regency, the results of the research state that there is an effect of Peer education on the level of teenage girls' anxiety.karta.

The authors assumed that based on the results of the study and related theories, the effectiveness of peer group education is very effective in the reduction of teenage girls' anxiety when PMS occurs. The education carried out by peers can be well received by young women who follow education and help in realizing the anxieties that arise during PMS every month, but to maintain this, it is necessary to carry out regular education, and evaluation is needed, so that respondents, can be more aware of the anxiety that most often appears while PMS, so that respondents can control this anxiety.

LIMITATION OF THE STUDY

The limitation of this study is hard to sending instrument for student because the pandemic.

CONCLUSIONS AND SUGGESTIONS

Base on the results of research on the effectiveness of peer group education on the anxiety level of female students facing PMS, it can be concluded that the level of anxiety facing PMS before getting education in class X and XI students at SMA BHK Grogol West Jakarta, the majority felt no anxiety with a total of 29. The anxiety level facing PMS after getting education in the female students, the majority felt there was no anxiety as many respondents with a total amount of 56. There was a significant effect of peer group education on the level of PMS in class X and XI female students at SMA BHK Grogol West Jakarta. For teenage girls, it is expected to be more familiar with what anxiety is experienced during PMS, so that it does not interfere with school activities and for high schools can make a policy concerning healthy education and for nursing agencies can also provide health information to teenage girls.

Acknowledgment

Thank you for all responden in this research.

ETHICAL CONSIDERATIONS

Ethic Test from KEPPK Sint Carolus no 025/KEPPKSTIKSC/II/2022.

Funding Statement.

No funding was received for conducting this study.

Conflict of Interest Statement

There is no conflict of interest

REFERENCES

Ali, Mohammad & Asrori, M. 2014. Adolescent Psychology. Jakarta: PT Bumi Aksara. All, Shrestha et. 2019.

- “Premenstrual Syndrome in Students of a Teaching Hospital. J Nepal Health.”
- Arikunto, Suharsimi. 2012. *Research Procedures A Practice Approach*. Jakarta: PT Rineka Cipta.
- Astari, Ruri, and Eri Fitriyani. 2019. "The Influence of Peer Education on Adolescents' Knowledge and Attitudes About Hiv-Aids Prevention at Korpri Majalengka Vocational High School." *Journal of Health Sciences Bhakti Husada: Health Sciences Journal* 10(2):143–52. doi: 10.34305/jikbh.v10i2.93.
- BKKBN. 2007. *Curriculum and Training Modules for Giving Information on Adolescent Reproductive Health by Peer Educators*.
- Collier. 2016. "May 2016, Peer Education Network 1." (May):1–8. Damsar. 2012. *Introduction to Sociology of Education*. Jakarta: Kencana.
- Azizah et al. 2020. "Relationship between sports activities and premenstrual syndrome in young women." 2:393–98.
- et al Ibrahim Andi. 2018. *Research Methodology*. Ismail Ily, edited by I. Ilyas. Makassar: Gunadarma of Science.
- Ernawati, et al. 2017. "Menstrual Health Management." Pp. 148–62 in Vol. 148. Jakarta.
- Eva Ellya Sibagariang. 2016a. *Women's Reproductive Health*. revision. edited by A. Mafftuhin. Jakarta.
- Handayani, Dwi Sri, Elsi Dwi Hapsari, and Widyandana Widyandana. 2020. "Online Social Media Health Education Affects Adolescents' Knowledge of Premenstrual Syndrome." *JHeS (Journal of Health Studies)* 4(2):107–18. doi: 10.31101/jhes.1646.
- Health., Massachusetts General Hospital Center for Women's Mental. nd "PMS and PMDD Cambridge: Harvard Medical School;" 2016.
- Imron. 2012. *School-Based Student Management*. Jakarta: Earth Script.
- Jane, Joyce &. 2014. *Bedeah Medical Nursing*. 8th ed. indonesia : CV Pentasada Media Education.
- Kasron et al. 2016. *Nursing Theory and Characters*. Jakarta: CV Trans Info Media.
- Kathryn, Heuters &. 2012. *Textbook of Pathophysiology*. volume 2. edited by P. dr. Djoko. Jakarta, Indonesia.
- KEPPKN RI Ministry of Health. 2017. "Guidelines and Ethical Standards for National Health Research and Development." RI Ministry of Health 1–158.
- Kurniasih, Dewi, Yudi Rusfiana, Subagyo Agus, and Rira Nuradhawati. 2021. "Analytic Techniques." Bandung alphabet 1–9.
- Lubis, NM 2013. *Psychology of women's reproductive health and reproductive development in terms of physical and psychological aspects*. Jakarta.
- Maticka et all. nd "Peer-Led Interventions to Reduce HIV Risk of Youth: A Review. Evaluate Program Plann. titles." 2010.
- Meliyanti, Fera. 2015. "Effectiveness of Using Leaflets on Increasing Knowledge of Grade VIII Adolescents About HIV / AIDS at SMP Negeri 2 Ogan Komering Ulu." *Baiturrahim Academic Journal* 4(2):26–34.
- Muflihunna, A. et all. 2020. "Increasing Understanding of Menstruation Through Counseling and Examination of Blood Groups at an Early Age." III(November):155– 65.
- Ni Komang Ratih, A. 2012. "The Relationship between Anxiety Level and Student CopingSMUN 16 in Facing the National Exam." 1.
- Notoatmodjo. 2011. *Public Health Science and Art*. Revision. Jakarta. Nurhanifah, Tia, and Menik Sri Daryanti. 2020. "The Relationship of Eating Habits With Premenstrual Syndrome (PMS) in Adolescents." *Journal of Nursing Care & Biomolecular* 5(1):93–100.
- Nursalam. 2016. *Nursing Science Research Methodology: A Practical Approach*. Jakarta: Salemba.
- Pender. 2011. *Health Promotion in Nursing Practice*. Sixth.
- Rahayu, Herlina. 2019. "Relationship of Sports Activity to the Incidence of Premenstrual Syndrome in Adolescents at Sman 1 Bayat Klaten." *Proceedings of the National Seminar on Women's Gait in Sports towards a Healthy Lifestyle* (April).
- Raudhatun et al. 2019. "Journal of Community Service (Health) Vol. 1 No. October 2, 2019 University of Ubudiyah Indonesia Health Counseling About Premenstrual Syndrome (Pms) for Young Women Efforts to Improve Reproductive Health at State Vocational School 3 Banda Aceh Hea." 1(2):28–32.
- Rohana, Nana, Mariyati, and Fatmah. 2019. "The Relationship between Caring Nurses and the Anxiety Level of the Patient's Family in the Intensive Care Unit (ICU) Room of RSUD Dr. H Soewondo Kendal." *Indonesian Journal Of Nursing Science And Practice* 100–108.
- Sinaga E et al. 2017. *Menstrual Health Management*. Jakarta: Global One; 2017.
- Stefanie, Evrianasari. 2018. "The Influence of Avocados on Premenstrual Syndrome (Pms) Symptoms in First Level Midwifery Students in the Midwifery Study Program, Malahayati University, Bandar Lampung in 2017."
- Stuart. 2007. *Mental Nursing Pocket Book*. 5th ed. Jakarta. EGC.
- Sugiyono. 2018. *Quantitative Research*. Bandung: Alfabeta.
- Tolli, MV 2012. "Effectiveness of Peer Education Interventions for HIV Prevention, Adolescent Pregnancy Prevention and Sexual Health Promotion for Young People: A Systematic Review of European Studies." *Health Education Research* 27(5):904–13. doi: 10.1093/her/cys055.
- Tumurang 2019. *Health Promotion*. Sidoarjo: Indomedia Pusaka.