

The Role of Peer Counselors in Breast Self-Examination in Increasing Female Teenagers' Self-Awareness

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ABSTRACT

Background: breast self-examination is a systematic breast self-examination by a woman for the purpose of detecting abnormalities in the breast which is carried out every month. To increase adolescent self-awareness, health education is needed, namely peer counseling which helps peer counselors. In addition to peer activities, the provision of leaflets about breast self-examination also helps counseling in providing information

Purpose: this study was to know the effectivity of peer counselor counseling and leaflets about breast self-examination towards students' self-awareness.

Methods: this study uses a Quasy Experiment approach a pre-test and post-test without control group design. The research sample was 40 respondents. Collecting data used a questionnaire that has been tested by expert on Maternity Nursing. Data analysis used the paired sample *t*-test in the paired group while the independent sample *t*-test in the unpaired group

Results: the results that self-awareness before the group was given peer counselor treatment had an average of 67.10 and given after peer counselors about breast self-examination had an average of 100.50 while in the control group self-awareness before being given leaflets an average of 68.50 and after being given leaflets an average of 73.35. There are differences in peer counselors regarding breast self-examination on self-awareness of students with *p* value = 0.000.

Conclusion: follow-up process is still needed to increase self-awareness in carrying out breast self-examination and coordination from the school.

Keywords:

Breast self-examination; leaflets; peer counselors; self-awarenesss.

BACKGROUND

Breast self-examination is systematically carried out by women with the aim of detecting abnormalities in the breast which is carried out every month in front of a mirror ([Juanita, 2018](#)). In addition, according to (Ministry of Health, 2016) Breast self-examination is a form of a woman's concern for the condition of her own breasts by examining the area around the breast to find out the changes that occur in the breast.

Women do breast self-examination only once a year is 47% ([Bannour I, 2020](#)). On average, most women have intermediate knowledge in breast self-examination techniques. Meanwhile, breast cancer cases in Semarang continued to increase as seen from the Semarang City Health Profile data in 2019 which stated that there was an

increase of 1745 cases in 2019. The data shows that breast cancer sufferers come from the 45-65 year age group as many as 2022 cases and followed by the productive age group, namely 15-44 years as many as 802 cases (Semarang City Health Office, 2019).

Adolescents are included in the productive age, according to ([Sarwono, 2011](#)) Adolescence is a period when a person experiences sexual maturity and reproductive organs that are already functioning, besides that, teenagers do a lot of activities but are not matched by a healthy lifestyle that makes the risk of developing breast cancer high. According to ([Indrati, 2015](#)) that adolescents in carrying out early detection of cancer in the form of breast self-examination need to be improved to find out changes that occur in the breast area because of the lack of awareness of women to do and understand it makes breast cancer always increase every year.

Based on the results of the 2019 Indonesia Health Profile information data, the prevalence rate of early detection of breast tumors nationally (12.2%) while Central Java Province is still low in detecting it at 5.1% ([Ministry of Health RI Secretariat General, 2020](#)). Adolescents in carrying out early detection of cancer in the form of breast self-examination need to be improved to find out any changes that occur in the breast area.

Self-awareness in adolescents needs to be increased. According to ([Daliana, 2016](#)) Self-awareness is how one knows oneself and consciously does what one recognizes. To improve the implementation of early detection, self-awareness is needed for every teenager. Increasing self-awareness in breast self-examination activities in adolescents can be done through health promotion programs, one of which is peer education or peer counseling.

According to ([Indrati, 2015](#)) Peer counseling is one method of providing information and education to peers, this is in accordance with the psychological development of late adolescents who have a closer character and are more open with their friends. These results are in accordance with research conducted ([Dwi W, 2016](#)) that Peer group education increases knowledge of young women about breast self-examination before peer group education has good knowledge of 20.7% and after peer group education has good knowledge of 86.2 %.

Peer counseling is a youth-focused training activity with the aim of training young volunteers and pioneers on health issues and conveying the knowledge and information they have learned to their peers. Thus, it is in peer groups about breast self-examination in adolescents ([Ayan G, 2017](#))

Research conducted by ([Kamoroe, 2015](#)) states that the characteristics of counselors will be able to give assignments to peers to spread the knowledge, skills and attitudes they have learned and acquired to their peers. The results of the research conducted ([Purnani & Qoni'ah, 2018](#)) said that the peer group education method for BSE will be 40.625% more effective than the 9.375% demonstration method.

In addition to the help of peer counselors in providing health promotion, it can also be supported by various media and aids including educational leaflets. Leaflet is one of the print media that contains information or messages through folded sheets, containing

sentences or pictures that attract readers. (Yulianti & et al, 2011) Research from (Fauziah, 2017) states that before counseling, adolescents' knowledge about BSE is 81.48% and after being given counseling with leaflets it becomes 92.16%. This means that there is an increase in knowledge after being given a leaflet about BSE.

The results of a survey conducted in November 2020 interviews about breast self-examination, all of them did not know what breast self-examination was, no students had ever done breast self-examination, lack of awareness of students in doing breast self-examination supported by the lack of sensitivity and curiosity of adolescents seeking information about breast self-examination causes a less positive attitude. The current phenomenon is that students' lifestyles have unhealthy eating patterns, namely liking savory and savory foods and the results of researchers' observations that there is no program regarding breast self-examination.

OBJECTIVE

To analyze the effectiveness of peer counselors regarding breast self-examination on increasing self-awareness of students.

METHODS

This study used a Quasy Experiment approach. The design in this study used a pre-test and post-test without control group design. The research sample was 20 respondents in each group. There were 2 groups: the treatment group received peer counseling and the control group received a leaflet about breast self-examination. Peer counseling was given for 2 weeks for 4 meetings while, the control group was given one time. The sampling technique used was purposive sampling because not all samples have criteria that are in accordance with the research. Collecting data used a questionnaire that has been tested by expert on Maternity Nursing. Data analysis used the paired sample *t*-test in the paired group while the independent sample *t*-test in the unpaired group because the data normality test obtained data with normal distribution.

RESULTS

Characteristics of Respondents

The respondent's characteristic data shows that of the 40 students the lowest age score is at the age of 15 years as many as 5 people (12.5%) and the highest score is 16 years old as many as 16 people (40%). The lowest score is in class 10 as many as 12 people (30%) and the highest in class 11 and 12 as many as 14 people with a percentage of 35%. (Table 1)

Table 1. Frequency Distribution of Respondents Characteristics (n=40)

No	Characteristics	<i>f</i>	%
1.	Age		
	15 y.o	5	12,5
	16 y.o	16	40
	17 y.o	13	32,5

No	Characteristics	<i>f</i>	%
	18 y.o	6	15
2.	Grade		
	Grade X	12	30
	Grade XI	14	35
	Grade XII	14	35

Student Self-Awareness Scores Before and After Giving Peer Counselors and Leaflets about Breast Self-Examination

The value of self-awareness on table 2 shows that there is a difference in the pre-test and post-test scores with an average pre-test of 67.10 and after being given a peer counselor it becomes 100.50, while in the provision of leaflets the average results of the pre-test 68.50 and after being given a leaflet it was 73.35. These results indicate a significant difference between the pre-test and post-test.

Table 2. Average Self-Awareness Scores Before and After Giving Peer Counselors and Leaflets about Breast Self-Examination ($n=20$)

	Peer Counselor		Leaflet	
	Pre-test	Post-test	Pre-test	Post-test
Mean	67,10	100,50	68,50	73,35
<i>SD</i>	4,68	5,31	7,13	5,56
Min	61	90	51	64
Max	79	110	79	83

Peer Counselor Breast Self-Examination toward Student Self-Awareness

Analysis of the data in table 4 obtained a value of $p = 0.000$ ($p < 0.05$), which means that there is a difference in the increase in self-awareness before and after being given a peer counselor.

Table 4. Paired t-test for intervention group

Self-Awareness	Mean	Min	Max	<i>P</i> value
Pre-test	67,10	61	79	
Post-test	100,50	90	110	0,000

Breast Self-Examination Leaflet on Students' Self-Awareness

Analysis of the data obtained p value = 0.000 ($p < 0.05$) which means that there is a difference in the increase in self-awareness before and after being given the leaflet. It shows that there is an increase between the pre-test and post-test.

Table 5. Paired t -test Control Group

Self-Awareness	Mean	Min	Max	P value
Pre-test	68,50	51	79	0,000
Post-test	73,35	64	83	

The Effectiveness of Peer Counselors and Breast Self-Examination Leaflets on Students' Self-Awareness

Based on the Independent Sample T-Test, $p = 0.000$ ($p < 0.05$) with a t -count value of 15.77 (more than t -table = 2.02). This means that there are differences in the effectiveness of peer counselors between peer counselors and leaflets about breast self-examination for students.

Table 6. Independent Sample t -test

Self-awareness	F	Sig.	T	P value
The Effectiveness of Peer Counselors and Breast Self-Examination Leaflets	0,206	0,65	15,77	0,000

DISCUSSION

Students' Breast Self-Examination Awareness With Peer Counselors Role

The results of data analysis in table 4 there are significant differences in the value of self-awareness before and after being given a peer counselor. These results are in accordance with research conducted (Wdiatmoko, 2018) that the application of counseling can help students develop student self-awareness because this technique introduces the ego representation system contained within oneself. Other research from (Martinez, 2020) shows that peer counselors are very effective in certain groups where they can interact freely about the problems they face. Women who were assisted by a peer counselor were more likely to be satisfied with breastfeeding training at the time of delivery (98.2%) compared to women who were not assisted by a peer counselor in breastfeeding after giving birth (83.6%).

The success of increasing self-awareness is supported by the theory from (Directorate General of Nutrition and Maternal and Child Health, 2013) that adolescents with peer counseling skills will help adolescents make positive changes in their lives. Peer counseling services will make it easier for teenagers to optimize their self-reflection abilities and explore psycho-social aspects that are beneficial for themselves and others.

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Cognitively there is an increase in adolescent thinking and orientation to behave in a healthy manner and deal with stressful situations with effective self-management strategies.

The peer counselor approach can be used as one of the effective media to create a more varied, interactive atmosphere of group guidance services, as well as interaction and group dynamics (Sari, 2021). Adolescents will be more courageous in expressing opinions and exchanging thoughts, knowledge, ideas and new ideas that lead to adolescent self-development. This is in accordance with research (Astuti, 2019) that the counseling process carried out by peer counselors can solve student problems because students can express his feelings, the counselor can confirm the student's feelings with verbal and nonverbal language such as holding his shoulder, focused gaze and strengthening words.

Peer counselors have the potential to provide positive reinforcement by being a motivator for other friends. This is in line with research conducted by (Muniasih, 2021) showing that group counseling services with the online peer tutor method increase motivation from low learning motivation to high learning motivation reaching 80% and students who have very high learning motivation by 20% . If peer counselors are carried out optimally, the self-awareness that develops will become the basic basis for observing, understanding, and facilitating thoughts, emotions, and breast self-examination actions (Ministry of Health, Directorate General of Public Health, 2010).

The process of providing peer counseling is carried out for 30-40 minutes with the help of peer counselors from Stikes Karya Husada Semarang students, totaling 2 people. Previously, prospective peer counselors were provided with knowledge and skills about breast self-examination through online and then provided peer counseling students.

The acceptance of peer counselors is very important because adolescents will try to behave, behave, dress and other social behavior according to their group. Adolescents will follow the changes because of the existence of peer counselors so that they can increase self-awareness in doing breast self-examination.

Students' Breast Self-Examination Awareness Trough Leaflets

The results of data analysis in table 5 show that there are differences in the value of self-awareness before and after being given a leaflet about breast self-examination. These results are in accordance with research conducted by (Efni & Fatmawati, 2021) that the average score before being given health education with leaflet media is 6.33 and after being given health education with leaflet media is 8.33, the results of the pretest of the ability to do breast self-care. Examination in the capable category (>60%) as many as 19 respondents and increased to 100% after being given a leaflet at the time of the posttest.

The success of increasing self-awareness in the control group is supported by the theory from (Kusmawaty, 2019) that breast self-examination can reduce mortality by 25-30% with the help of the role of leaflet media which is very important in shaping one's knowledge in understanding health problems. This is in accordance with research from (Kusmawaty, 2019) which states that there is an effectiveness of health education with

BSE knowledge leaflet media with a p value of $0.000 < 0.05$ and BSE attitudes with a p value of $0.000 < 0.05$.

Leaflets use simple language that is easy for readers to understand, besides that leaflets also have the advantage of being easy to make, reproduce and revise. The advantages of leaflets described above can help in health promotion. (Yulianti & et al, 2011) Research conducted by (Nasution, 2019) obtained the average value of knowledge of community leaders before being given knowledge about malaria with leaflet media was 8.8 and after being given knowledge about malaria with leaflet media increased to 13.1.

In addition, previous research stated that the advantages of leaflet media are that it can be stored for a long time, the target can be adjusted and learn independently, the user can view the contents while relaxing, the target range is wider, can help other media and the contents can be reprinted. This study is in line with research from (Pusparina, 2019) that leaflet media has an influence in increasing knowledge about drugs with a p value of $0.000 < 0.05$.

The Effectiveness of Peer Counselors and Leaflets on Breast Self-Examination

In accordance to Independent Sample T -Test in table 6, the results obtained are differences in peer counselors and leaflets on students' self-awareness with a p value of $0.000 < 0.05$, so there are differences in effectiveness between peer counselors and leaflets about breast self-examination on students' self-awareness.

This study found that the peer counselor method was more effective than the leaflet method for increasing self-awareness of students as evidenced by the t -count value of 15.77 (more than t table = 2.02) and the mean in the peer counselor group of 100. Fifty higher than the leaflet group of 73,35. This is in accordance with the statement (Ministry of Health, Directorate General of Public Health, 2010) that peer counselors provide positive changes, namely being able to become a motivator for other friends, providing assistance to peers who are experiencing a problem in order to solve a problem at hand.

The benefits of peer counseling include that adolescents are able to approach and foster conversation well, are able to observe and assess a person's behavior, are able to make decisions in dealing with any problems, apply observation or observation skills and demonstrate the ability to behave ethically. (Directorate General of Nutrition and Maternal and Child Health, 2013)

The treatment for each group was carried out to increase students' self-awareness in doing breast self-examination. This is in line with research conducted by (Rawi, 2019) that the provision of counseling and leaflets supports each other because leaflets can provide information for self-study, strengthen information previously provided, become a source of reference and good reviews so that the information provided during counseling can still be seen. and read again through the leaflet.

Research conducted by (Hamidah, 2021) stated that the results of the Mann-Whitney U Test showed p value of $0.001 < 0.05$, which means that there is a significant difference in the level of self-confidence between the group who received peer counseling and those who did not receive peer counseling services.

CONCLUSION

Based on the results of the research and analysis of the data obtained, it can be concluded that there is an effectiveness of peer counselors and leaflets about breast self-examination on increasing student self-awareness with $p = 0.000$. Moreover, a follow-up process is still needed to increase self-awareness in carrying out breast self-examination and coordination from the school.

REFERENCES

- Astiti, S. P. (2019). The Effectiveness of Peer Counseling in Solving Student Problems in Indonesia . *Journal of Islamic Psychology Vol.1 Number 2*, 243-263.
- Ayran G, d. (2017). The Effect of Peer Education upon Breast Self-Examination Behaviors and Self-Esteem among University Students. *Eur J Breast Health Volume 13*, 138-144.
- Bannour I, d. (2020). Breast Self-Examination: Knowledge And Practices Among Women In Sousse, Tunisia. *European Journal of Public Health 30(5)*.
- Daliana, S. (2016). *Description of Self Awareness and Mathematical Reasoning Ability of Class VII Students of SMP Muhammadiyah Sokaraja*. Purwokerto: Universitas Muhammadiyah.
- Directorate General of Nutrition and Maternal and Child Health. (2013). *Pedoman Standar Nasional Kesehatan Peduli Remaja (PKPR)*. Jakarta: Kementerian Kesehatan RI.
- Dwi W, B. (2016). The Influence of Peer Group Education About BSE on the Knowledge Level of Young Women About BSE (Breast Self-Examination) at SMAN 1 Gondang, Mojokerto Regency. *Jurnal Hesti Wira Sakti Volume 3 Nomor 2*, 6-13.
- Efni, N., & Fatmawati, T. Y. (2021). The Effect of Health Education with Leaflet Media on Adolescent Girls Knowledge in Early Detection of Breast Cancer Through Breast Self-Examination (Aware) at SMA N 8 Jambi City. *Ilmiah Universitas Batanghari Jambi Vol 21 No 1*, 52-55.
- Fauziah, A. N. (2017). Use of Leaflets on Increasing Knowledge About Breast Self-Examination (BSE) in Pematang. *GASTER Volume XV No 2*.
- Hamidah, T. d. (2021). The Effectiveness of Peer Counseling to Increase Confidence in Class VII Students of MTS Tarbiyatut Tholabah Kranji Paciran Lamongan 2017/2018 Academic Year. *Jurnal Bimbingan dan Konseling Islam Vol 1 No 1*, 31-40.
- Indrati, E. N. (2015). The Effectiveness of Reproductive Health Improvement Module on Self Awareness of SMPN students in Malang City. *Jurnal Konseling Indonesia 2(1)*).
- Juanita, J. P. (2018). Educational Programs to Promote Breast Self-Examination: Literature Review. *Jurnal Keperawatan Ide Vol. IX(No. 1)*.
- Kamoroe, S. K. (2015). Four Pillars of Effectiveness of Peer Counselling Programs in Meru South District High Schools, Kenya. *International Journal of Humanities and Social Science Volume 5 No 2*.
- Kusmawaty, J. d. (2019). Effectiveness of Health Education with Media Leaflet on Knowledge and Attitude of Self-Breast Examination in Young Woman. *Jurnal Advances in Health Sciences Research, volume 27*, 334-336.

- Martinez, N. G. (2020). "Real-world" effect of a peer counselor on breastfeeding outcomes in an urban prenatal clinic in the United States. *Jurnal BMC Pregnancy and Childbirth Volume 20:671*, 1-8.
- Muniasih, S. (2021). Peer Guidance in Counseling Guidance Services to Motivate Students' Distance Learning Based on Whatshap Groups. *Jurnal Bimbingan dan Konseling Vol 5 No 2*, 1-8.
- Ministry of Health RI Secretariat General. (2020). *Indonesian Health Profile 2019*. Jakarta: Ministry of Health RI.
- Nasution, F. d. (2019). Improvement Of Knowledge And Attitude Of Community Figure in Preventing Malaria Disease through Discussion with Leaflet and Module. *Jurnal Kesehatan Vol. 12 No. 2*.
- Purnani, W. T., & Qoni'ah, B. (2018). The Effectiveness of Health Education Peer Group Education Method With Demonstration Method Against Conscious Skills. *JPH RECODE Volume 2 No 1*.
- Pusparina, I. d. (2019). The Effectiveness of Using Leaflet Media on Increasing Knowledge About Drugs at SMPN 5 Banjarbaru. *Jurnal Keperawatan Suaka Insan Vol. 4 Ed. 2*.
- Rawi, U. D. (2019). Analysis of the Effectiveness of Giving Counseling and Leaflets on Compliance Levels in Taking Drugs in Controlling Blood Pressure in Hypertensive Patients At Dr. Hospital. Adjudarmo Lebak Regency. *Jurnal Farmagazine Vol. VI No. 1*, 8-16.
- Sari, W. K. (2021). The Influence of Group Guidance Services with Peer Group Techniques on Adolescents' Social Self-Concept. *Jurnal Psychocentrum Review Vol. 3 No. 1*, 72-79.
- Sarwono. (2011). *Adolescent Psychology. Revised Edition*. Jakarta: Rajawali Pers.
- Semarang City Health Office. (2019). *Semarang City Health Profile*. Semarang: Dinas Kesehatan Kota Semarang.
- Yulianti, D., & dkk. (2011). *Health Promotion in Midwifery Practice*. Jakarta: EGC.