

# Factors Associated with Breast Self-Examination (BSE) in Class X and XI Students at SMA Cenderawasih 1 Jakarta in 2022

Nabila Dian Safitri, Ony Linda and Prihayati

Public Health Study Program, Faculty of Health Sciences University Muhammadiyah Prof. Dr. HAMKA, Indonesia

Keywords: Realize, Breast, Adolescent.

**Abstract:** An efficient and straightforward breast self-examination (BSE) is one method for detecting breast cancer early. The high incidence of breast cancer is a result of public awareness, fear of surgery, laziness and embarrassment at showing breasts, and a lack of education about early detection and treatment. This research aimed to identify the parameters associated with breast self-examination (BSE) among students in classes X and XI at SMA Cenderawasih 1 Jakarta. The research was conducted between December 2021 and August 2022. Quantitative research using a cross-sectional study design was used. This research consisted of 163 students in classes X and XI at SMA Cenderawasih 1 in Jakarta. The method of data collection used an online questionnaire distribution with proportionate random sampling. Utilizing the chi-square test, univariate and bivariate analyses are conducted. The univariate findings indicated that breast self-examination (BSE) was inadequate (90.2%), that information was inadequate (56.4%), that attitudes were negative (72.4%), and that parental support was unfavorable (64.4%). The bivariate analysis revealed a correlation between attitude (0.002) and parental support with breast self-examination (0.000), but not between knowledge and breast self-examination (0.179). Students may raise their understanding of BSE in order to do breast self-examinations accurately and routinely.

## 1 INTRODUCTION

The Indonesian Ministry of Health has established a breast cancer early detection program that attempts to identify the presence or absence of breast cancer using breast self-examinations, often known as mammograms (BSE). Self-examination of the breast enables women to more successfully avoid breast cancer. Pulungan & Hardy (2020)

Medicinal A BSE may be used to detect an atypical lump without the assistance of a medical professional. The American Cancer Society in the breast cancer screening project even though there are no complaints, it is still recommended to do BSE. 25-30% of mortality may be cut by early identification. Wahyuni et al. (2020)

Nearly 85% of breast lumps are discovered by the patient herself. Therefore breast self-examination (BSE) is recommended for every woman because it is a very important procedure. Doing BSE is easy to do by yourself and at no cost. Widyaningsih (2019).

Women after the age of 20 years and menstruating can do BSE every month before or after menstruation

or menstruation. Utilizing the BSE method to identify breast cancer in its earliest stages is simple and free of charge. By doing BSE examinations can reduce deaths caused by breast cancer. Sinaga & Ardayani (2016)

Based on a report from the DKI Jakarta Provincial Health Office in 2015-2016, the scope of clinical breast examinations carried out by experienced health workers starts from patients who carry out breast self-examinations to find out whether there is a lump or other abnormality. In Central Jakarta, there are as many as 6,524 people (4%) while in North Jakarta, there are as many as 2,539 people (0.9%), West Jakarta as many as 7,422 people (1.8%), South Jakarta as many as 12,510 people (3.5%). Ministry of health (2016).

## 2 METHOD

The research was conducted between December 2021 and August 2022. It was quantitative research using a cross-sectional study design that was conducted. The

population of this research consisted of students in classes X and XI at SMA Cenderawasih 1 in Jakarta, with a sample size of 163 individuals. The method of data collecting included proportionate random sampling. Online distribution of a Google form questionnaire was used to gather data. Univariate and bivariate analysis using the chi-square test are used.

### 3 RESULTS AND DISCUSSION

Based on the research title that has been determined, the researcher explains the correlation between the independent variable (independent) and the dependent variable (dependent). The variables studied included knowledge, attitudes and family support.

Table 1: Rekapitulation Results Univariate results showed that breast self-examination (BSE) at SMA Cenderawasih 1 Jakarta in 2022.

Variable	Category	n	%
Breast self- examination behavior	Do not do	147	90,2
	Do	16	9,8
Knowledge	Not Good	92	56,4
	Good	71	43,6
Attitude	Negative	118	72,4
	Positif	45	27,6
Parental Support	Not Support	105	64,4
	Support	58	35,6

According to study done at Cenderawasih 1 High School in Jakarta in 2022, the percentage of class X and XI students who practice BSE is 90.2% higher than the percentage of respondents who are proficient at doing BSE. BSE (9.8%). This study is consistent with Yunanda (2019) The study was carried out at SMA Negeri 4 Langsa City. In 2019, 52 students from class XI at SMA Negeri 4 Langsa City comprised the study's population. According to the findings of this survey, 15 students (28.8%) out of 52 respondents participated in BSE, whereas 37 students (71.2%) did not.

Based on the data collected at SMA Cenderawasih 1 Jakarta, the univariate analysis reveals that there are more respondents with weak knowledge (92 people, 56.4%) than respondents with excellent knowledge (71 people, 43.6%). The bivariate analysis using the chi-square test revealed no correlation between knowledge and BSE-related behavior (0.179). This study is consistent with Nurhanifah Siregar's research from 2018, which was

done at SMA Negeri 3 Padangsidempuan City. This study's sample consisted of 45 pupils. The findings of the chi-square test yielded a P value of 0.826, which is more than 0.05, indicating that there is no correlation between knowledge and BSE-related behavior.

According to the data obtained at SMA Cenderawasih 1 Jakarta, the univariate analysis revealed that the number of respondents with a negative attitude was 118 (72.4%) more than the number of respondents with a good attitude, which was 45 (27.6%). According to the bivariate analysis and chi-square test findings, there is a correlation between attitude and conduct (0.002). This conforms to Angrainy (2017). According to the findings of a study done at SMK N 1 Teluk Kuantan, there was a correlation between attitude and BSE implementation for as many as 31 respondents (62%). The chi-square test yielded a p-value of 0.001 ( $0.001 < 0.05$ ) This indicates a link between attitudes and the implementation of BSE.

On the basis of the findings obtained at SMA Cenderawasih 1 Jakarta, the univariate analysis revealed that respondents who did not get parental help numbered 105 (64.4%) more than respondents who did receive parental support, who numbered 58 (35.6%). The bivariate analysis using the chi-square test revealed a correlation between parental support and BSE-related behavior (0.000). This is in line with Wahyuni et al (2020). The population in this study were 108 people aged 15-21 years. Statistically, there is a significant association between family support and the practice of breast self-examination (BSE) among teenage females in Palangka Raya City, as shown by a p value of 0.001 from the chi-square test.

### 4 CONCLUSION

For students, it can increase awareness about BSE so that they can practice breast self-examination correctly and regularly every month so that they can detect early if there are breast abnormalities.

For parents, they can take the time to communicate between parents and children as a form of attention and provide education to students on breast self-examination and pay attention to reproductive health problems for their teenage daughters so that students can understand BSE.

## ACKNOWLEDGEMENTS

Thank you to SMA Cenderawasih 1 Jakarta for supporting data collection to complete the thesis, as well as lecturers and staff at the University of Muhammadiyah Prof. Dr. Hamka for help and support for this thesis.

## REFERENCES

- Aminah, Angrainy, R. (2017). Relationship of Knowledge, Attitudes About Consciousness in Early Detecting Breast Cancer in Adolescents. *Journal of Endurance*, 2(2), 232. <https://doi.org/10.22216/jen.v2i2.1766>
- Apriliyana, D., Agushyvana, F., Mawarni, A., & Nugroho, D. (2017). The Relationship of Perception, Exposure to Media Information and Parental Support with the Practice of Breast Self-Examination (Aware) in Young Women at Sma Negeri 3 Semarang in 2017. *Journal of Public Health (e-Journal)*, 5(4), 207–214.
- Arikunto, P. D. S. (2013). *Research Procedure: A Practical Approach*. Rineka Cipta.
- Deby Afianty, S., & Handayani, S. (2019). Determinant of BSE Behavior of Young Women in The Early Detection Efforts of Breast Cancer.
- Fatimah, H. R. (2018). Factors that influence the behavior of early detection of breast cancer with BSE in women in Tegalrejo District, Yogyakarta City. *Journal of Applied And Educational Psychology*, 99.
- Fatmasari, N. M., & Aniroh, U. (2021). Pro Health Scientific Journal of Health Correlation of Peer Support with the Practice of Breast Self-Examination (BSE) in Adolescents. 3(2), 158–165.
- Gunawan, I. A., & Nurrachmawati, A. (2021). Adolescent Conscious Determinants. 5, 238–246.
- Julaecha, J. (2021). Health Education on Early Detection of Breast Cancer through Breast Self-Examination (BSE). *Journal of Abdimas Health (JAK)*, 3(2), 115. <https://doi.org/10.36565/jak.v3i2.162>
- K Armika, S., Wayan, I., & Pustaka, T. (2020). Relationship Level of Knowledge, Attitude, and Behavior of Pulmonary TB Patients. April, 10–28. <http://repository.poltekkes-denpasar.ac.id/4428/2/BAB2.pdf>
- Ministry of Health, R. 2016. (2016). *InfoDatin-Month-Care for-Cancer-Breast-2016.pdf*.
- Indonesian Ministry of Health. (2015). National Program for Prevention and Early Detection of Cervical Cancer and Breast Cancer. Indonesian Ministry of Health, April, 1–47.
- Krisdianto, B.F. (2019). Early detection of breast cancer with breast self-examination (BSE). In *Andalas University Press (Vol. 53, Issue 9)*. [www.jurnal.uta45jakarta.ac.id](http://www.jurnal.uta45jakarta.ac.id)
- Lubis, U. L. (2017). Knowledge of Young Women About Breast Self-Examination (BSE) with Conscious Behavior. *Journal of Aisyah: Journal of Health Sciences*, 2(1), 81–86. <https://doi.org/10.30604/jika.v2 i1.36>
- Lumban Gaol, H., & Briani, F. (2014). Breast cancer. *Capita Selecta Medicine*, 230–236.
- Masturoh, I., & Anggita, N. (2018). Health Research Methodology. In *Teaching Materials of Medical Record and Health Information (RMIK)* (p. 307).
- Misgiyanto, & Susilawati, D. (2019). The Relationship Between Family Support with Anxiety Levels In Palliative Cervical Cancer Patients. *Indonesian Journal of Nursing*, 22(2), 92–100.
- Notoatmodjo, S. (2012). *Health Research Methodology*. PT. Rineka Cipta.
- Notoatmodjo, S. (2013). *Health Education and Behavior*. Rineka Cipta.
- Notoatmodjo, S. (2014). *Behavioral Health Sciences*. Rineka Cipta.
- Notoatmodjo, S. (2018). *Health Research Methodology*. Rineka Cipta.
- Nurhanifah Siregar. (2021). Knowledge Relationship With Behavior Behavior (Check Your Own Breast) as Early Detection Measures Of Breast Cancer In Class X Students In Sma Negeri 3 City Of Padangsidempuan
- Nurhanifah Siregar. *Journal of Midwifery Maternity*, 6(1), 8–13.
- Nursalam. (2017). *Science Research Methodology Nursing: A Practical Approach*. Salemba Medika
- Oliver, J. (2016). *Teori Lawrence Green*. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699.
- PULUNGAN, R. M., & HARDY, F. R. (2020). Education “Aware” (Breast Self-Examination) for Early Detection of Breast Cancer in Cipayung Village, Depok City. *Dissemination: Journal of Community Service*, 2(1), 47–52. <https://doi.org/10.33830/diseminatabdimas.v2i1.756>
- Sastroasmoro, S., & Ismael, S. (2014). *Basics clinical research methodology*. Sago Seto.
- Septi Angraini, E. H. (2013). Factors Affecting Breast Self-Examination Behavior (BSE) in Non-Health Students at UIN Antasari Banjarmasin. June.
- Sinaga, C. F., & Ardayani, T. (2016). Early Detection of Breast Cancer Through Breast Self-Examination in SMA Pasundan 8 Bandung in 2016. *Scientific Journal of Pharmacy*, 4(1), 16–19.
- Sugiyono. (2015). *Qualitative Quantitative Research Methods And R&D*. ALFABETA.
- Sugiyono. (2018). *quantitative research methods* (pp. 267–268). ALFABETA.
- Wahyuni, S., Meyasa, L., Ministry of Health, P., Raya, P., & Tengah, K. (2020). Factors related to the practice of breast self-examination (unconscious) in adolescents. 7(1), 52–57.
- Widyaningsih, E. B. (2019). Factors Associated with Adolescent Behavior About Breast Self-Examination (BSE) in Class XI Students of SMAN 86 Jakarta 2016. *Scientific Journal of Health Delima*, 3(2), 171–179.
- Yunanda, F. (2019). Factors Related to Breast Self-Examination (Aware) in Class Xi Students at SMA Negeri 4 Langsa City in 2019. <http://repository.helvetia.ac.id/id/eprint/2489>
- Yuniar, Z. F., & Qomaruddin, M. B. (2019). The relationship between personal factors and breast self-examination behavior BSE in undergraduate students of public health, Universitas Airlangga. *Muhammadiyah Journal of Nursing*, 4(1), 74–80.