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FACTORS INFLUENCING THE BEHAVIOR OF CONDUCTING BREAST SELF-EXAMINATION ON WOMEN OF CHILDBEARING AGE IN THE BANDUNG HEALTH CENTER AREA SERANG REGENCY IN 2023

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Abstract
Global Buren of Cancer data shows data on cancer patients in the world as many as 19.3 million cases. The highest number is in breast cancer patients totaling 2.261 million cases (Globocan, 2020). Data from the International Agency for Research on Cancer (IARC) in 2020, the number of new cases of breast cancer has increased and become the highest incidence of cancer in women, namely breast cancer with 665,339 new cases and 131,252 deaths from breast cancer worldwide (Globocan, 2020). The low desire of women to do BSE examination can be influenced by internal and external factors. Internal factors include knowledge, attitudes and family history of cancer. As for external factors, namely sources of information and parental support. This type of research is quantitative research with a research design using a cross sectional approach. The purpose of this study is to determine the factors that influence the behavior of conducting breast self-examination in women of childbearing age in the Bandung Health Center area, Serang Regency in 2023. By using the total sampling technique, the determination of the sample obtained was as many as 120 mothers who met the inclusion criteria. Chi Square test results show a significant relationship between knowledge, education, the role of health workers, and information media with breast self-examination behavior (P−value 0.000).

Keywords: Breast Self Examination, Breast Cancer, Behavior

1. Introduction

Data Global Buren of Cancer shows data on cancer patients in the world as many as 19.3 million cases. The highest number is in breast cancer patients totaling 2.261 million cases (Globocan, 2020). Data International Agency for Research on Cancer (IARC) in 2020, the number of new cases of breast cancer increased and became the highest incidence of cancer in women was breast cancer with 665,339 new cases and 131,252 deaths from breast cancer worldwide (Globocan, 2020). Basic Health Research Data (Riskesdas) in Indonesia, cancer prevalence shows an increase from 1.4 per 1000 population in 2013 to 1.79 per 1000 population in 2018. Breast cancer in Indonesia ranks first with 65,858 cases.

The high incidence of breast cancer results in not a few patients who lead to death. If only the sign And symptoms of breast cancer can be found as early as possible then the cure rate will be higher (Berek, Niron, Riwoerohi, & Fouk, 2019), this percentage has increased from 2017 which only 77 people (1.85%) women aged 30-50 years were positive for breast tumors from 4,163 people examined, this is because the average knowledge and awareness of doing BSE to prevent breast cancer is still lacking.

The low desire of women to do BSE examination can be influenced by internal and external factors. Internal factors include knowledge, attitudes and family history of cancer. As for external factors, namely sources of information and parental support.

Therefore, the author is interested in conducting research on factors that influence the behavior of conducting breast self-examination in women of childbearing age in the Bandung Health Center area, Serang Regency in 2023. Notoatmodjo defines behavior as the activity or activities of a person (living being) concerned.

2. Theoretical Background

Behavior as a response that an individual makes to an observable stimulus or action and has a specific frequency, duration, and purpose whether conscious or unconscious. Breast cancer or CA Mamae is a pathological entity that begins with genetic changes in a single cell and may take several years to palpate.

The most common type of breast cancer histology is filtrating ductal carcinoma (80% of cases), in which the tumor arises from the collecting system and invades surrounding tissue. Infiltration of lobular carcinoma causes 10-15% of cases. These tumors arise from the lobular ephallium and usually occur as areas of thickening that define disease in the breast. (Brunner & Suddart, 2015). According to Brunner & Suddart, (2015) there are several factors that cause breast cancer, namely:

1) Risk factors: Gender (female), no history of breast cancer in the individual or family (mother, sister, daughter), genetic mutation (BRCA1 or BRCA2) causes most breast cancers.
2) Homonal factors: fertile women, early menarche (menstruation before age 12), nuliparatis (childbirth at age 30 years or more), late menopause (after age 50 years).
3) Productive factors can include regular strenuous exercise (lowering body fat), pregnancy before age 30, and breastfeeding.

This study aims to determine the factors that influence the behavior of conducting breast self-examination in women of childbearing age in the Bandung Health Center area, Serang Regency in 2023.

3. Methods

This type of research is quantitative research with a research design using an approachCross sectional. This research will be conducted in July-August 2023. The location of this study was in the Bandung Health Center Area, Serang Regency by taking data on women of childbearing age 20-45 years.

The population in this study was women of childbearing age 20-45 years who made examination visits in the Bandung Health Center Area, Serang Regency with a total of 120 respondents. The sample in this study was mothers aged 20-45 years who were considered representative of the population (Notoatmodjo, 2012). By using the total sampling technique, the determination of the sample obtained was as many as 120 mothers who met the inclusion criteria.

1) Inclusion criteria:
   a. WUS age 20-45 years
   b. WUS who conducted an examination visit in the Bandung Health Center Area, Serang Regency
2) The exclusion criteria in this study were WUS positive breast cancer patients

Primary data is data obtained directly from the results of questionnaires to women of childbearing age between 20-45 years. The data we obtain from electronic recording and reporting of examination visits of women of childbearing age between 20-45 years. Data collection is a research activity to collect data.

Explain the research design, population and research sample with an explanation of the sample size and sampling technique. The time and place of the study are clearly written. Data collection techniques and tools are described in detail. Research that is experimental in nature must clearly list procedures, tools and materials.

4. Results and Discussion

4.1 The results of univariate analysis are presented in the form of frequency tables, which are included with the narrative as an explanation of the table view.

Table 1. Frequency Distribution of Respondents Based on the Behavior of Conducting Breast Self-Examination in Women of Childbearing Age in the Bandung Health Center Area, Serang Regency in 2023

Behavior of Performing Breast Self-Examination	Sum	Percentage (%)
Not Done	106	88,3
Done	14	11,7
Total	120	100

Based on the table above, it shows that most respondents do not conduct breast self-examination behavior (88.3%).

Table 2. Frequency Distribution of Respondents Based on Knowledge of Breast Self-Examination in Women of Childbearing Age in the Bandung Health Center Area, Serang Regency in 2023

Knowledge	Sum	Percentage (%)
Less	96	80,0
Good	24	20,0
Total	120	100

Based on Breast Self-Examination Knowledge shows that respondents have the most knowledge (80.0%).

Table 3. Frequency Distribution of Respondents Based on Breast Self-Examination Education for Women of Childbearing Age in the Bandung Health Center Area, Serang Regency in 2023

Education	Sum	Percentage (%)
SD	33	27,5
Junior High School	58	48,3
High School	29	24,2
College	0	0
Total	120	100

Based on the Distribution of Respondents' Frequency Based on Education, it shows that respondents have the most junior high school education (48.3%).

Table 4. Frequency Distribution of Respondents Based on the Role of Puskesmas Officers for Breast Self-Examination in Women of Childbearing Age in the Bandung Health Center Area, Serang Regency in 2023

The role of puskesmas officers	Sum	Percentage (%)
Inactive	6	5,0
Active	114	95,0
Total	120	100

Based on the Frequency Distribution of Respondents Based on the Role of Puskesmas Officers for Self-Examination of Women of Childbearing Age in the Bandung Regency Puskesmas Area, it shows that respondents have the most active health worker roles (95.0%).

Table 5. Frequency Distribution of Respondents Based on Media Information on Breast Self-Examination in Women of Childbearing Age in the Bandung Health Center Area, Serang Regency in 2023

Media Information	Sum	Percentage (%)
Never	105	87,5
Ever	15	12,5
Total	120	100

Based on the Distribution of Respondents' Frequency Based on Information Media shows that respondents have the most information media never (87.5%).

Table 6. Distribution of Knowledge-Based Respondents with Breast Self-Examination in Women of Childbearing Age in the Bandung Health Center Area, Serang Regency in 2023

Knowledge	Breast self-examination behavior				Total		P−Value (95% CI)
	Done		not done				
	n	%	n	%	N	%	
Less	1	1,0	95	99,0	96	100	0,000
Good	12	54,2	11	45,8	24	100	

Table 6 shows that respondents who have breast self-examination behavior are more likely to have good knowledge (54.2%) than respondents who have less knowledge (1.0%). The results of the Chi Square test showed a significant relationship between knowledge and breast self-examination behavior (P−value 0.000).

4.2 The relationship of education with breast self-examination behavior

Table 7. Distribution of Respondents Based on Education with Breast Self-Examination in Women of Childbearing Age in the Bandung Health Center Area, Serang Regency in 2023

Education	Breast self-examination behavior				Total		P−Value (95% CI)
	Done		not done				
	n	%	n	%	n	%	
SD	0	0,0	33	100,0	33	100	0,000
Junior High School	1	1,7	57	98,3	58	100	
High School	13	44,8	16	55,2	29	100	

Shows that respondents who have breast self-examination behavior are more in respondents who have high school education (44.8%) than respondents who have junior high school education (1.7%) and elementary school (0.0%). The results of the Chi Square test showed a significant relationship between education and breast self-examination behavior (P−value 0.000). Knowledge is very important in making a person's behavior. Knowledge is a domain factor that influences a person's behavior. People who have good knowledge tend to show good behavior as well. Conversely, people who have less knowledge have a tendency to show less behavior (Notoatmodjo, 2014). This study is in

line with Dewi's research (2021), also found a significant relationship between knowledge and breast self-examination behavior with a positive relationship, the better the level of knowledge, the better the breast self-examination behavior (P value < 0.000, r = 0.363).

4.3 The relationship between the role of health workers and breast self-examination behavior

Table 8. Distribution of Respondents Based on the role of health workers with Breast Self-Examination for Women of Childbearing Age in the Bandung Health Center Area, Serang Regency in 2023

The Role of Health Workers	Breast self-examination behavior				Total		P−Value (95% CI)
	Done		not done				
	N	%	n	%	n	%	
Inactive	0	0,0	6	100,0	114	100	1,000
Active	14	12,3	100	87,7	6	100	

Table 8. shows that respondents who have breast self-examination behavior are more likely to have an active officer role (12.3%) than respondents who have an inactive officer role (0.0%). Chi Square test results showed no significant relationship between the role of officers and breast self-examination behavior (P−value 1,000). Education is an effort that provides knowledge so that there is an increase in positive behavior change. Knowledge is very closely related to education where it is expected that someone with higher education, then the person will be wider in knowledge. However, it is worth emphasizing that a person who is poorly educated does not mean absolutely low-knowledgeable. As according to Notoatmodjo (2014) which states that the higher the level of education, the easier it will be to receive information so that the more experience you have, in this case, especially about breast cancer and BSE examination.

The results of this study are in line with the results of Ladyani's research (2017), that there is a relationship between the level of education and the level of knowledge of BSE (p 0.000). The level of education influences behavior and produces many changes, especially knowledge in the field of health. The higher the level of formal education, the easier it is to absorb information including health information, the higher the awareness to behave in a healthy life. Education can bring insight or knowledge someone who is more educated will have broader knowledge than someone with a lower level of education (Notoatmodjo, 2014).

4.4 The relationship of information media with breast self-examination behavior

Table 9. Distribution of Respondents Based on information media with Breast Self-Examination for Women of Childbearing Age in the Bandung Health Center Area, Serang Regency in 2023

Information Media	Breast self-examination behavior				Total		P−Value (95% CI)
	Done		not done				
	N	%	n	%	n	%	
Never	2	1,9	103	98,1	105	100	0,000
Ever	12	80,0	3	20,0	15	100	

Table 9 shows that respondents who have breast self-examination behavior are more likely to have information media (80.0%) than respondents who have never (1.9%). The results of the Chi Square test showed a significant relationship between information

media and breast self-examination behavior (P−value 0.000). Factors that encourage or reinforce the occurrence of individual behavior include behavioral factors of community leaders, religious leaders, health workers and families. Support from these officers can be in the form of emotional support, informational support, or appreciation. The support of officers is influential in attitude, interest, appearance and behavior. Officers are used as role models in terms of behavior. With the support of officers, it will provide interest in doing BSE.

This is in line with research (Siregar, 2022) showed that 75% of respondents had an officer's influence on BSE behavior, p value < 0.05 (p = 0.00), namely a meaningful relationship between the influence of officer roles and BSE behavior. Information sources can be obtained through print, electronic and health workers (Notoatmojo, 2014). Examples of sources of information that can be obtained through health workers are counseling. The results of Andita's (2018) research entitled The Influence of Slide Media and Imitation Media on Knowledge and Awareness Skills in PKK Mothers in Dau Malang Village, East Java, showed a significant change, namely as much as (100%) in their knowledge and awareness skills. This is because counseling using artificial objects can help respondents demonstrate directly the practice of awareness. So, this is what causes his knowledge and skills to increase.

4.5 The relationship of information media with breast self-examination behavior

Table 10. Distribution of Respondents Based on information media with Breast Self-Examination for Women of Childbearing Age in the Bandung Health Center Area, Serang Regency in 2023

Information Media	Breast self-examination behavior				Total		P−Value (95% CI)
	Done		not done				
	N	%	N	%	n	%	
Never	2	1,9	103	98,1	105	100	0,000
Ever	12	80,0	3	20,0	15	100	

Table 10 shows that respondents who have breast self-examination behavior are more likely to have information media (80.0%) than respondents who have never (1.9%). Test results Chi Square showed a significant relationship between information media and breast self-examination behavior (P−value 0.000). Media or information exposure is how a person gets information that can benefit his life. Information can be received from various sources such as from parents, peers, books, internet, mass media such as newspapers, magazines, radio, and television. A teenager who has been informed about the importance of breast self-examination (BSE) tends to practice BSE (Lusiana et al., 2020).

This is in line with research (Basuki &; Julianti, 2019) shows the relationship between information sources and BSE behavior in adolescents. On research (Siregar, 2022) It was found that there was a meaningful relationship between media information and SADARI.

5. Conclusion

The conclusions in this study are as follows:

1) Overview of breast self-examination behavior, most respondents do not do breast self-examination (88.3%).
2) In terms of knowledge, most respondents have less knowledge (80.0%).

3) In terms of education, most respondents have junior high school (48.3%) and elementary school (27.5%) education.
4) Describing the role of puskesmas officers, most respondents have the role of active puskesmas officers (95.0%).
5) Overview of information media, most respondents have information media never (87.5%).
6) There is a relationship between knowledge, education, and information media and breast self-examination behavior ($p < 0.05$).
7) There was no relationship between the role of puskesmas officers and breast self-examination behavior ($p > 0.05$).

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