KnE Life Sciences

IVCN
The 4th International Virtual Conference on Nursing
Volume 2021

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Conference Paper

Factors Related to Self-Breast Examination in Fertile Women in the Work Area of Cimahi Tengah Public Health Center Indonesia

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Abstract

Breast cancer is a major problem for women's health in the world, especially in developing countries that have limited resources such as in Indonesia. The reason is because of the lack of an effective screening program to detect conditions before cancer or cancer at an early stage including treatment before further invasive processes. Early detection of breast cancer needs to be done to reduce mortality. Breast self-examination (BSE) can find breast cancer up to 75-85% if done routinely. Willingness to do breast self-examination (BSE) is one form of behavior that is influenced by many factors including predisposing factors, supporting factors and reinforcing factors. The research aimed to determine factors associated with breast self-examination (BSE) in Fertile Age Women in the Cimahi Middle Health Center Working Area 2017. This study was conducted using quantitative method with cross sectional approach. The population in this study were Fertile Age Women in the working area of the central Cimahi Community Health Center with a sample of 120 people using random sampling techniques. Data collection was carried out through direct interviews using a questionnaire. The results of the study concluded that of the 120 respondents, the majority of respondents (74.2%) did breast self-examination (BSE). Predisposing factors related to BSE are Menarch (Pvalue 0,000), history of breast cancer (Pvalue 0.002), parity (Pvalue 0.001) and knowledge (Pvalue 0.001). The enabling factors related to BSE are information sources (Pvalue 0.006), the availability of information media (Pvalue 0.012), and the availability of facilities that support the BSE (Pvalue 0,000). The reinforcing factors associated with BSE are friend support (Pvalue 0,000), husband / family support (Pvalue 0,000), and support of health workers (Pvalue 0,000). Fertile Age Women mostly do breast self-examination (BSE). The most related predisposing factor is Menarch, enabling factor is the availability of facilities, while the most related reinforcing factor is husband / family support. It is expected that health workers can improve their skills in early detection of breast cancer through the BSE program so that the discovery of breast cancer cases can be found as early as possible and the provision of information using the media so that the public will be exposed to information easily through the information conveyed.

Keywords: breast cancer, early detection, breast self-examination, Fertile Age Women, behavior

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Published: 15 March 2021

Publishing services provided by Knowledge E

Selection and Peer-review under the responsibility of the IVCN Conference Committee.

1. Introduction

Cancer is one of the leading causes of death worldwide. Based on Globocan (IARC) 2012 data, Breast Cancer ranks first for all cancers in women (incidence rate 40 per 100,000 women), new cases were found to be 30.5% with 21.5% deaths per year of all cancer cases in women in world (Ministry of Health Republic of Indonesia, 2015).

Estimated in 1985 (PATH, 2000), only 5% of women in developing countries received screening services compared to 40% of women in developed countries. Deaths in cancer cases in developing countries are 2 (two) times greater than in developed countries, this occurs in addition to the lack of screening programs, also exacerbated by the low ability and accessibility for treatment. Integrated countermeasures must be implemented from the Puskesmas. The key to a successful breast cancer control program is screening (screening) followed by adequate treatment. This is based on the fact that more than 50% of women diagnosed with cancer have never been screened (WHO, 2004).

The high prevalence of cancer in Indonesia needs to be observed with preventive measures and early detection. Cancer cases that are found at an early stage and get a fast and appropriate treatment will provide healing and longer life expectancy. Therefore, it is important to conduct regular checks regularly as an effort to prevent and early detection of cancer. With the screening / screening activity it is expected to reduce the incidence and death from breast cancer and increase the early discovery of cancer in an earlier stage (Ministry of Health Republic of Indonesia, 2015).

Early detection action is carried out in order to detect early abnormal cells (pre-cancerous) in the body so that they can be found before they develop into deadly cancer. Early detection of breast cancer according to the American Cancer Society (ASC) includes breast self-examination (BSE), clinical breast examination (PPK), and Mammography (Tim Cancerhelps, 2010). Early detection of breast cancer needs to be done to reduce the number of deaths from breast cancer. Breast examination alone can find breast cancer up to 75-85% if done routinely (Dalimartha, 2004).

According to Green in Notoatmodjo (2007), health behavior is influenced by predisposing factors, supporting factors and reinforcing factors. Factors that influence women of childbearing age in conducting breast self-examination include predisposing factors (knowledge, attitudes, family history of breast cancer, menarche, parity, breastfeeding history, and demographic status (age, education, occupation)), enabling factors (availability of facilities / availability, information media and accessibility), and reinforcing factors (support of health workers, support of friends).

Socialization in the early detection of breast cancer must be a top priority so that giving birth to a strategy by striving how to increase public awareness to detect cancer early, especially breast cancer. To overcome these problems, early detection and diagnosis procedures and 'cost effective' measures have been developed with evidenced-based practices with limited resources so that they can be used in countries with minimal health facilities and breast cancer awareness.

2. Methods

This study uses an observational analytic method with a cross sectional approach in which the researcher tries to look for relationships between variables at the same time. The population in this study were women of childbearing age in the Cimahi Middle Health Center working area of Cimahi City as many as 516 people.

Based on the calculation of several variables, the minimum sample size that must be met (taken from the largest sample of the calculation results) is 97 people. To anticipate the drop-out of respondents, the number of respondents was added by 20% to obtain 120 respondents of women of childbearing age. The method of sampling is using random sampling technique, which is sampling of women of childbearing age in the working area of Cimahi Tengah Public Health Center. Literature review in this study was obtained through a systematic search of a computerized database (ie google scholar, Proquise, Cochrane) by entering the keywords "breast cancer" "early detection" "breast self-examination", and "women of childbearing age", until selected journals were considered most relevant a number of 6 journals published in Indonesian between 2013 and 2017. The research in the journal was conducted in Indonesia, Jordan, using research designs such as Quasi Experiments and Comparative Studies. Other references consist of 2 Health Profiles sourced from the official website of the Ministry of Health. Writing this scientific article uses the harvard bibliography.

3. Results and Discussion

3.1. Relationship between predisposing factors with breast self-examination (BSE) in Fertile Age Women

The results of research on predisposing factors that are most related to BSE are menarch.

Table 1: Relationship between Predisposing Factors and BSE

Reinforcing Factor	Breast Self-Examination (BSE)							
	No		Yes		Total		OR (95% CI)	P Value
	n	%	n	%	n	%		
a. Age								
>40 - 49 years	11	34.4	21	65.6	32	100	1.781 (0.736-4.309)	0.292
15 -- 39 years	20	22.7	68	77.3	88	100		
b. Education								
≤ junior high school	15	23.4	49	76.6	64	100	0.765 (0.337-1.736)	0.666
≥ high school	16	28.6	40	71.4	56	100		
c. Occupation								
No working	27	25.5	79	74.5	106	100	0.854 (0.247-2.950)	0.755
working	4	28.6	10	71.4	14	100		
d. Menarch								
<12 years	15	57.5	11	42.3	26	100	6.648 (2.582-17.118)	0.000
≥12 years	16	17	78	83	94	100		
e. History of Breast Cancer								
There is	12	54.5	10	45.5	22	100	4.989 (1.878-13.258)	0.002
there is no	19	19.4	79	80.6	98	100		
f. Parity								
≤ 1	11	61.1	7	38.9	18	100	6.443 (2.218-18.713)	0.001
> 1	20	19.6	82	80.4	102	100		
g. Breastfeeding History								
Do not breastfeed	2	18.2	9	81.8	11	100	0.613 (0.125-3.006)	0.726
Breastfeeding	29	26.6	80	73.4	109	100		
h. Knowledge								
Less	19	19.2	80	80.8	99	100	0.178 (0.066-0.484)	0.001
Good	12	57.1	9	42.9	21	100		
i. Attitude								
Negative	22	34.9	41	65.1	63	100	2.862 (1.187-6.902)	0.029
Positive	9	15.8	48	84.2	57	100		

The risk of developing breast cancer is increased in women who experience their first menstruation (menarch) before the age of 12 years. Early menstrual age is related to the length of exposure to the hormones estrogen and progesterone in women that affect the process of tissue proliferation including breast tissue. Until now there has

been no research that discusses menarch with conscious behavior. But based on the results of Anna's research (2015) states that there is a relationship between the age of menarch with the incidence of breast cancer with a P value of 0.001.

3.2. Relationship of Enabling Factors with breast self-examination (BSE) in Fertile Age Women

Table 2: Relationship between Enabling Factors and breast self-examination (BSE)

Reinforcing Factor	Breast Self-Examination (BSE)							
	No		Yes		Total		OR (95% CI)	P Value
	n	%	n	%	n	%		
a. Resources of information								
No	10	55.6	8	44.4	18	100	4.821 (1.694-13.727	0.006
Yes	21	20.6	81	79.4	102	100		
b. Availability of Information Media								
No	7	58.3	5	41.7	12	100	4.9 (1.426-16.832)	0.012
Yes	24	22.2	84	77.8	108	100		
c. Availability of Facilities								
No	9	81.8	2	18.2	11	100	17.795 (3.586-88.316)	0.000
Yes	22	20.2	87	79.8	109	100		

Based on the results of the study, the enabling factor most associated with breast self-examination is the availability of facilities. According to Green (2007), one of the factors that determines the formation of healthy living behaviors is the enabling factor, which is manifested in the physical environment, the availability or unavailability of health facilities or facilities. The availability of health facilities will also support and strengthen the formation of healthy living behaviors.. Facilities in practicing awareness are the availability of tools in the form of glass / mirrors. Based on the results of interviews that the average mirror in their home is not available in a mirror that is suitable for conscious practice so that they have difficulty doing BSE practices correctly.

3.3. Relationship between Reinforcing Factors with breast self-examination (BSE) in Fertile Age Women

Based on the results of the study, the reinforcing factor most associated with breast self-examination is husband / family support. Social support according to House & Khan

Table 3: Relationship of Reinforcing Factors with Self Breast Examination

Reinforcing Factor	Breast Self-Examination (BSE)							
	No		Yes		Total		OR (95% CI)	P Value
	n	%	n	%	n	%		
a. Friend support								
No	17	68	8	32	26	100	12.295 (4.461-33.888)	0.000
Yes	14	14.7	81	85.3	95	100		
b. Husband / family support								
No	16	72.7	6	27.3	22	100	14.756 (4.873-43.779	0.000
Yes	15	15.3	83	84.7	98	100		
c. Support of health workers								
No	9	75	3	25	12	100	11.727 (2.927-46.990)	0.000
Yes	22	20.4	86	79.6	108	100		

(2012), is a helpful action that involves emotions, providing information, instrument assistance, and positive assessment of individuals in dealing with their problems. Husband or family support in the form of ever giving information about BSE and always reminding to do and suggesting or inviting BSE. According to Lahey (2007) social support is one of the determinants of one's behavior. Because with the support, then someone will be motivated to do a behavior.

4. Conclusion

1. Fertile Age Women who do breast self-examination shows that the majority of respondents (74.2%) do breast self-examination (breast self-exam).

2. Predisposing factors related to breast self-examination (BSE) in Fertile Age Women are Menarch (78.3%), history of breast cancer (81.7%), parity (85%) and knowledge (82.5) %).

3. Enabling factors related to breast self-examination (BSE) in Fertile Age Women are sources of information (85%), the availability of information media (90%), and the availability of supporting facilities in BSE (90.8%).

4. Reinforcing factors related to breast self-examination (BSE) in Fertile Age Women are friend support (79.2%), husband / family support (81.7%), and support of health workers (90%).

5. The most dominant factor related to breast self-examination (BSE) in Fertile Age Women is husband / family support (OR = 33,184), where WUS who get support from a husband / family has a 14.7 times chance of BSE.

5. Implications

1. This research is expected to provide useful information on the development of health sciences, especially those related to breast self-examination that husband / family support has a very large contribution for women of fertile testing with breast self-examination (BSE).

2. For practitioners, the results of this study can be used as literature for further research and for stakeholders (stakeholders), the results of this study can be used as a guide in making decisions related to all matters relating to policy in tackling the incidence of breast cancer in terms of early detection of findings case.

3. For Fertile Age Women to always instill their own breast examination practices routinely to minimize fear, rejection, myths and misconceptions about breast cancer through early detection of breast cancer by breast self-examination (BSE).

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