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THE CORRELATION BETWEEN KNOWLEDGE AND ATTITUDES OF WOMEN OF FERTILE AGE TOWARD BREAST SELF-EXAMINATION

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Abstract

Background. *Breast cancer is the most common disease suffered by women, impacting more than 1.5 million women each year and also causing the largest number of women deaths caused by cancer. In 2015, there were 507,000 women died that caused of breast cancer, which means about 15% of all cancer deaths in women were caused by breast cancer. It can be seen from women at 2.2 per 1,000 inhabitants and men at 0.6 per 1,000 inhabitants. Breast cancer is the highest percentage of new cases (43.3%) and a high percentage of mortality (1the 2.9%) of women in the world. Breast cancer tends to affect elderly women over 50 years old. There were 8-10 cases of breast cancer occurring at the age. Behavior is the action or behavior of an organism that can be observed and learned.* ***Purpose:*** *The research's purpose was to find out the correlation between the knowledge and attitude of women at a fertile age toward breast self-examination (BSE).* ***Method:*** *The instrument of the research was questionnaires. This research used Cross Sectional Design. The population was 100 of fertile age. It used Purposive Sampling and was conducted at Baloi Permai Public Health Centre Batam City in February-September 2020. The researcher used analytics to analyze data.* ***Result:*** *The resulting analytics that among 100 respondents, there were 72 women had good knowledge 28 women had less knowledge, 54 women had a good attitude and 46 women had a bad attitude. 54 women did a breast self-examination (BSE) and 46 women did not do a breast self-examination (BSE). Statistical test results using chi-square obtained (α) = 0.05 and p = 0.01 which means p-value< (α), it means that both variables correlate, so it can be concluded there was a correlation of knowledge and attitude of women on fertile age toward breast self-examination (BSE).*

Keywords: *Knowledge, Attitude, and Breast Self-Examination (BSE)*

Introduction

Breast cancer is the most common disease affecting women, affecting more than 1.5 million women each year and also causing the largest number of deaths in women due to cancer. In 2015, 507,000 women died from breast cancer, which means that about 15% of all cancer deaths in women were caused by breast cancer (WHO, 2014)

According to Infodatin (2015) on Globogan data, *the International Agency for Research on Cancer (IARC)*, it is known that in the world of breast cancer, cancer with the highest percentage of new cases (after being controlled by age), which is 43.3%, and the percentage of deaths (after controlled by age) due to breast cancer by 12.9%. Judging from the sex characteristics of cancer patients in Indonesia, women are 2.2 per 1,000 population and men are 0.6 per 1,000 population. Based on estimates from *Globocan*, the *International Agency for Research on Cancer (IARC)* in 2012 in the Indonesian Ministry of Health (2014), breast cancer is a type of cancer with the highest percentage of new cases (43.3%) and the highest percentage of deaths (12.9%) is women in this world. Based on data from the Hospital Information System in 2010, breast cancer is the highest type of cancer in outpatients and inpatients reaching 12,014 people (28.7%) (Kemenkes RI, 2014).

The prevalence of breast cancer in Indonesia is 0.5 per 1000 women, while the prevalence of breast cancer in Bali Province reaches 0.6 per 1000 women (Kemenkes RI, 2015).

Breast cancer tends to affect women who enter old age over 50 years. There are 8-10 cases of breast cancer occurring at that age. And it's caused by genetic and environmental factors, and daily lifestyle habits. The threat of breast cancer increases along with changes in people's lifestyles (Kemenkes RI, 2017a).

Based on data from the Indonesian Ministry of Health, it is known that the most common cancers that occur in women and causes of death are breast cancer and cervical cancer. Efforts to prevent and control cervical cancer and breast cancer by the Indonesian Ministry of Health are to carry out early detection of cervical and breast cancer through Inspection Visual Asetat (IVA) and BSE examinations for married women aged 30-50 years (Kemenkes RI, 2017).

Based on detection coverage figures cervical cancer and breast cancer were highest in Riau Islands Province, Bintan Regency, which was 7.55% and the lowest coverage was Natuna Regency at 0.45%. In 2017, the coverage rate for early detection of cervical cancer and breast cancer was 5% .From the results of the Inspection Visual Asetat (IVA) examination, the most positive Inspection Visual Asetat (IVA) results were Natuna Regency, which was 3.57% and the results of breast lump examinations showed the most breast lumps / tumors were Lingga Regency in the amount of 8.40% (Dinkes, 2017).

A introduction study conducted at Baloi Permai Health Center with 10 women on fertile age between 15-39 years, most mothers didn't know how to do breast examinations on themselves, some only listened and watched television broadcasts or read some articles, without practicing it at home.

Knowledge is the result of knowing, which occurs after a person has perceived a particular object. Sensing is accomplished through the five human senses: sight, hearing, smell, taste, and touch. The majority of human knowledge is acquired via the eyes and ears (Notoatmodjo, 2014).

From a biological standpoint, behavior is an organismal activity (living thing). Consequently, what is meant by human behavior, in essence, is the action or activity of the human being, which has a wide range, including walking, talking, crying, laughing, working, studying, writing, and so forth. From the preceding description, human behavior encompasses all directly observable and non-observable human activities (Notoatmodjo, 2014).

Purpose

Breast self-examination was used to determine the correlation between the knowledge and behavior of women of fertile age.

Research Methods

An analytical survey using the cross-sectional approach is used, namely research, to study the dynamics of the correlation between risk factors and effects by approaching, observing, or collecting data all at once (point time approach). Each research subject is only observed once, and measurements of character status or subject variables are taken during the examination (Notoatmodjo, 2012).

Research Result

Table 1. Distribution of Frequency of Knowledge Women on Fertile Age with Self-Breast Examination (BSE) in the Work Area at Puskesmas Baloi Permai, Batam City, 2020

Knowledge	N	Percentage
Good	60	60%
Less	40	40%
Total	100	100

From Table 4.1 above, it can be obtained that as many as 25 respondents, mostly women on Fertile age, obtained good knowledge about BSE as many as 60 people (60%), for those who had less knowledge about BSE were 40 people (40%).

Table 2. Frequency Distribution of Fertile Age Women with Breast Self Examination (BSE) in the work area of Batam City Baloi Permai Community Health Center in 2020

Behaviour	Frequency	Percantage (%)
BSE Check	40	40%
Don't do BSE Check	60	60%
Total	100	100%

From Table 2 above, it can be obtained that as many as 25 respondents, some women on fertile age did BSE checks as many as 40 people (40%) and some women onfertile age who did not do BSE checks were 60 people (60%).

Table 3. Correlation between knowledge and behavior of women on fertile age doing breast self-examination (BSE) at Baloi Permai Community Health Center in 2020

Knowledge	Behaviour				Total		*p* value
	Do		Don't				
	N	%	N	%	N	%	
Good	60	60	40	40	100	100	**0,001**
Less	40	40	60	60	100	100	
Total	**100**	100	**100**	100	**100**	100	

From table 4.3 above, it can be obtained as many as 100 respondents, mostly women on fertile age who did not carry out BSE checks with 40 people who had less knowledge and 60 people who had good knowledge. Out of 100 women on fertile age who did BSE check, 60 had less knowledge and 40 people had good knowledge. When we looked at the chi-square test with a limit of significance from the outcomes of statistical tests employing chi-square (α) = 0.05 and the p-value results = 0.01 it stands for p-value <(α), It is said that there is a link between the two factors, i.e., knowledge and the behavior of women performing breast self-exams while they are fertile.

Discussion

Knowledge of Women on Fertile Age

From the results of this study it is known that out of 100 women on fertile age, it can be seen that 60 respondents (60%) have good knowledge, while 40 respondents (40%) have poor knowledge of women on fertile age at Baloi Permai health center, Batam City in 2020.

Predisposing variables, information, attitudes, views, beliefs, values, and so on all contribute to the formation of behavioral factors. The physical environment, the availability of healthcare facilities or their lack, the attitudes and behaviors of healthcare professionals, and community behavior are all supporting variables. According to Lawrence Green's theory (1980) (Purwoastuti, 2015).

Efforts to do BSE are health behaviors that are influenced by the knowledge they have. Being aware is also a person's effort to maintain and improve their health, because being aware is a means of early detection of breast cancer. The efforts or activities a person engages in to maintain and improve their health, such as steps to avoid sickness, personal cleanliness, food selection, sanitation (Notoatmodjo, 2009).

Several other things, like the age of the respondents (most of them are between 23 and 38 years old), affect how well women know about their fertile age (Ariani, 2014), If a person is old enough, he or she will also have a mature mind and experience.

This research is similar to what Hamba (2016) found in his study, "The correlation of Knowledge Level with Self-Breast Examination Behavior (BSE) in Women on Fertile Age in Banjarmasin.". Based on the study's results, it was found that most Fertile Age Women in Banjarmasin knew enough about Self-Breast Examination (BSE) to be in a suitable category. As many as 210 people knew enough to be in the excellent category (56.9%). As many as 87 people were in the excellent category of knowledge (23.5%) 73 people were in the less category (19.7%). This is evidenced by the number of respondents who answered the questionnaire with correct answers between 56%

-75% of the number of questions on the questionnaire.

Based on the data above, it can be concluded that the knowledge of the behavior of women on fertile' age performs breast self-examination (BSE) at Baloi Permai Health Center Work Area, the majority have good knowledge, because this can be seen from the results of the questionnaire with the answers to the most questions due to several women on fertileage understand the meaning, purpose, method, and characteristics of BSE. Meanwhile, women on fertile age who have less knowledge can be due to the lack of information given, seen, and read by them.

Behavior of Women on Fertile Age

From the results 4.2 that out of 100 women on fertile age, it can be seen that as many as 40 respondents (40%) have the behavior to carry out awareness checks, while 60 respondents (60%) have the behavior of not carrying out awareness, checks on fertile age women at Baloi Permai health center, Batam City in 2020.

Three types of factors might be linked to breast self-examination (BSE): internal, information, and external factors. Internal factors are those that come from the person himself or herself. Internal factors used in this study include knowledge, attitudes, and heredity factors for breast cancer (Arafah & Notobroto, 2018)

The results of this study are similar to those of studies done by (Arafah & Notobroto, 2018) With the title Factors Related to the Behavior of Housewives Performing Self-Breast Examination (BSE) in Sido topo Wetan Village, Kenjeran District, Surabaya City, they showed that 61% of thousands of households in SidotopoWetan Village had ever done BSE, with 44% of respondents doing it often and 17% doing it rarely. People say that respondents often do BSE tests once a month, but people also say that they rarely do BSE tests, only 1–2 times a year.

Based on the data above, it can be concluded that the majority of women on fertile age answered that they did not do breast self-examination correctly once a month or after menstruation, some women do not know how to carry out self-awareness examinations and what are the benefits of doing breast self-examination and what are the impacts when they don't do breast self-exams.

The correlation between knowledge of fertile age women and BSE examination behavior

From the results of 4.3 that out of 100 women on fertile age, it can be seen that as many as 60 respondents did not have the behavior to carry out awareness checks, while 40 (40%) respondents had the behavior of carrying out awareness checks on women on fertile age at Baloi Permai health center in Batam City in 2020. When looking at the results of chi-square tests from the point of view of the chi-square test with a limit of significance (α) = 0.05 and the results of p-value = 0.01 which means p-value <(α), People say that the two variables are related, which means that in 2020, there will be a Work Area at the Baloi Permai Health Center.

Knowledge is how well someone knows something. The least important but most basic cognitive skill. Knowing is recognizing or remembering an object, idea, procedure, principle, or theory learned about through experience without changing it. Knowledge, also called cognitive, is an essential factor in how people act (overt behavior). Research and experience have shown that behavior based on knowledge will last longer than behavior not based on knowledge (Soekanto, 2015).

Fertile Age Women will be more concerned about the health of their breasts with the knowledge they have, which comes from external information as well as their own knowledge while undergoing formal education, so cooperation is needed between health workers as informants about the problems faced by fertile age women especially regarding breast health and awareness of itself to be able to perform breast self-examination (BSE) to prevent breast problems or diseases (Hamba, 2016).

So it can be concluded that women on fertile age who have good knowledge can find out early detection of breast cancer by doing BSE on themselves, while the knowledge of women on fertile age who do not know about early detection

of breast cancer and less knowledgeable about doing breast examinations on themselves. It can be concluded that as many as 40 female respondents of fertile age did not carry out awareness checks because several factors such as mothers felt lazy, did not have enough time, lack of self-awareness, were too busy taking care of children and some did not know how to carry out a conscious examination properly and true For information for women on fertile age that it is very important to carry out breast examinations from an early age in order to know the early signs of breast cancer and it is hoped that women on fertile age can be more important to care for themselves and can be consulted immediately if a lump, fluid is present, abnormalities of the nipples, the presence of unnatural swelling around the armpits or breasts, and expect to frequently check the breasts after menstruation where the breast glands still feel tender when doing before menstruation will feel a little sore.

The results of this study are in accordance with research conducted by (Hamba, 2016) with the title correlation between Knowledge Level and Self-Breast Examination Behavior in Fertile Age Women in Banjarmasin in 2016.

Based on the results of the study, it was found that there are as many as 87 women in Banjarmasin who are of fertile age and have good knowledge about the Self-Breast Examination (BSE), consisting of those who have breast self-examination (BSE) with good categories as many as 51 people (58, 6%), behavior with adequate category was 33 people (37.9%), and behavior with poor category was 3 people (3.4%).

From the results of the knowledge questionnaire, we can see that women of childbearing age who do BSE checks in the work area at Baloi Permai Health Center have good knowledge, that answers many questions that answer correctly because the knowledge of women understands more about symptoms, and how to do awareness checks. This is because some well-informed women have read articles or on social media and have practiced doing self-examination on their own breasts.

Conclusion

Based on the results of research that has been carried out in the work area of Public Health at Baloi Permai Batam City in 2020, it can be concluded as follows: It is known that the results of knowledge of women on fertile age from 100 respondents were 60 (60%) respondents with good answers and 40 people (40%) respondents with less knowledge. It is known that the results of the behavior of women on fertile age from 100 respondents, there were 40 (40%) respondents with good answers and doing BSE checks on themselves and 60 (60%) respondents with answers that did not understand about BSE checks on themselves. The knowledge and behavior of fertile women and doing breast self-examination in the BSE at the Baloi Permai Health Center in 2020 are significantly correlated, with a p-value of 001 (<0.05).

Reference

Arafah, A. B. R., & Notobroto, H. B. (2018). Faktor Yang Berhubungan Dengan Perilaku Ibu Rumah Tangga Melakukan Pemeriksaan Payudara Sendiri (Sadari). *The Indonesian Journal of Public Health*, *12*(2), 143. https://doi.org/10.20473/ijph.v12i2.2017.143-153

Ariani. (2014). *Aplikasi Metodologi Penelitian Kebidanan Kesehatan Reproduksi*. Nuha Medika.

Dinkes. (2017). *Renstra Provincial Health Office Kepulauan Riau, 2017*.

Hamba, R. A. (2016). Hubungan Tingkat Pengetahuan Dengan Perilaku Pemeriksaan Payudara Sendiri (SADARI) Pada Wanita Usia Subur (WUS). *Dinamika Kesehatan*, *7*(2), 239–249.

Kemenkes RI. (2014). Profil Kesehatan Indonesia 2014. In *Jakarta: Kementerian Kesehatan RI*.

Kemenkes RI. (2015). Profil Kesehatan RI 2016. In *Profil Kesehatan Indonesia Tahun 2016*. https://pusdatin.kemkes.go.id/resources

/download/pusdatin/profil-kesehatan-indonesia/Profil-Kesehatan-Indonesia-Tahun-2015.pdf
Kemenkes RI. (2017a). *PROFIL KESEHATAN INDONESIA*.
Kemenkes RI. (2017b). *Profil Kesehatan Indonesia 2017* (Vol. 1227, Issue July). https://doi.org/10.1002/qj
Notoatmodjo. (2009). *Metodologi Penelitian*. Rineka Cipta.
Notoatmodjo. (2012). *Metodologi Penelitian*. Rineka Cipta.
Notoatmodjo. (2014). *Metodologi Penelitian Kesehatan*.
Purwoastuti. (2015). *Ilmu Obstetri & Ginekologi Sosial*.
Soekanto. (2015). *Metodologi Penelitian Pendidikan*. Raja Grafindo Persada.
WHO. (2014). Latest global cancer data. *Asian Pacific Journal of Cancer Prevention*, *4*(1), 3–4.