International Archives of Medical Sciences & Public Health

E-ISSN : 2798-5172; P-ISSN : 2798-5276X
Volume 6, Number 1, 2025
DOI: 10.53806/iamsph.v6i1.824
Page: 12–17

THE RELATIONSHIP BETWEEN STUDENT KNOWLEDGE AND ATTITUDES AND BSE BEHAVIOR (BREAST SELF-EXAMINATION) AT THE FACULTY OF PUBLIC HEALTH, ISLAMIC UNIVERSITY OF NORTH SUMATERA UTARA

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Article Info

Article history:
Received : November 30, 2024
Revised : Desember 26, 2024
Accepted : January 20, 2025

Keywords:
Attitude;
BSE Behavior;
Knowledge;
Student.

ABSTRACT

The Cancer is the leading cause of death in the world after cardiovascular disease. Breast cancer represents 1 in 4 cancers diagnosed among women globally. This cancer ranks first in terms of the highest number of cancers in Indonesia and is one of the first causes of death from cancer. This study aims to determine the relationship between knowledge and attitudes of students with BSE (Breast Self-Examination) behavior at Faculty of Public Health, Islamic University of North Sumatera Utara. This study uses a quantitative descriptive correlational research with a cross-sectional approach. The population in this study were all female students of the Public Health Study Program at Islamic University of North Sumatra with a sample of 55 respondents. The data collected was processed manually and then analyzed bivariately and univariately using SPSS 20 (Statistical Program for Social Sciences 20). From the results of the study it was found that students with sufficient knowledge were 26 people (47.3%) and more had a negative attitude were 39 people (70.9%). Most of the female students of Faculty of Public Health, Islamic University of North Sumatra had unsupportive behavior were 42 people (76.4%). There is no significant relationship between knowledge and BSE behavior where the value is $p > 0.05$ (0.578), but there is a significant relationship between attitudes and BSE behavior where the value is $p < 0.05$ (0.025).

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1. INTRODUCTION

Cancer is the leading cause of death in the world after cardiovascular disease. GLOBOCAN (Global Burden of Cancer Study) stated that there was an increase of 19.3 million cases and 10 million deaths from cancer in 2020. Breast cancer represents 1 in 4 cancers diagnosed among women globally [20]. This cancer has overtaken lung cancer as the most frequently diagnosed cancer, with an estimated 2.3 million new cases (11.7%), followed by lung (11.4%), colorectal (10.0%) cancer, prostate (7.3%), and stomach (5.6%). Lung cancer remains the leading cause of cancer death, with an estimated 1.8 million deaths (18%), followed by colorectal (9.4%), liver (8.3%), stomach (7.7%) cancer, and female breasts (6.9%) [7].

Breast cancer ranks first in terms of the highest number of cancers in Indonesia and is one of the first causes of death from cancer [2]. Based on GLOBOCAN data for 2020, the number of new cases of breast cancer reached 68,858 cases (16.6%) of a total of 396,914 new cases of cancer in Indonesia. Meanwhile, the number of deaths reached more than 22 thousand cases [11].

Based on the results of the 2018 Riskesdas, the prevalence of cancer based on a doctor's diagnosis in North Sumatra Province is 1.55 per mil. Data from the Medan City Health Office show that the highest cancer case recapitulation data from Medan City Health Centers during 2015-2016 was 449 cases of breast cancer [22] [21]. Based on data from the Regional General Hospital dr. Pirngadi Medan, from January to February 2015, more than 45 patients treated at this government hospital were due to breast cancer. Based on data from the H. Adam Malik Central General Hospital Medan, the number of women suffering from breast cancer during 2014-2016 was 1,672 breast cancer patients receiving hospitalization. As for outpatient care, around 8,993, so that a total of 10,565 suffer from breast cancer [9] [5].

At present there are many breast cancer sufferers found at a young age, that not a few fourteen year old girls suffer from tumors in their breasts, which tumors that occur can cause breast cancer if not detected early. Even though not all of them are malignant, this shows that there is a trend of increasing breast cancer symptoms in their teens [10] [23].

Factors that influence adolescents to be at risk for breast cancer are lifestyle and diet [17]. In addition, the culture of eating food oily foods such as fried foods also have an effect [8]. In addition, the negative effects of fast food trends such as burgers, french fries are at risk for breast cancer. Other risk factors that are thought to be related to the incidence of breast cancer are age, marital status, age at first childbirth, age, menarche, menopause, medical history, family history, and oral contraceptives [16].

Early detection of breast cancer is the first and most important step in breast cancer prevention. With early detection, it is expected that mortality and morbidity rates, and health costs will be lower. Early detection and screening is the key to high survival rates in sufferers [19]. Early detection can reduce mortality by 25-30%. In addition, to improve the recovery of breast cancer sufferers, the key is early detection, early diagnosis and early therapy. For this reason, knowledge about BSE and women's education are needed to carry out breast self-examination [18].

Until now, there is still a lack of awareness among Indonesian women in early detection of breast cancer, and many Indonesian women do not even know the methods of early detection of breast cancer, causing the incidence of breast cancer to be quite high. Students who study in the health sector generally have acquired knowledge about BSE so they will tend to form a positive attitude which is reflected in their behavior. Because this knowledge is a very important domain in shaping one's actions [14].

Based on the problems above, the researcher is interested in researching "Relationships Knowledge and Attitudes of Female Students with BSE Behavior (Self-Examination of Breasts)".

2. RESEARCH METHOD

This type of research uses descriptive correlational quantitative research, namely to determine whether there is a relationship between two variables. The method used is through a cross-sectional approach, namely a study where data collection is carried out simultaneously or at one time. According to [14] [1], a cross sectional approach is an approach in research that includes the dynamics of the relationship between risk factors and their impacts or effects, an observation approach, or by collecting data at a certain point (point time approach).

The population in this study were all female students of the Public Health Study Program at Islamic University of North Sumatra Utara Medan. The sample of this research was female students as many as 55 respondents who met the inclusion and exclusion criteria. Sampling technique carried out using the Google Form which is distributed online via Whatsapp. The data collected was processed manually and then analyzed bivariately and univariately using SPSS 20 (Statistical Program for Social Sciences 20).

3. RESULT AND ANALYSIS

a. Univariate Analysis

Univariate analysis was carried out by looking at the frequency distribution of each category of variables (knowledge and attitudes) obtained.

a) Knowledge

Knowledge variables in this study are grouped into two categories, namely sufficient and insufficient. Sufficient if the respondent is able to answer questions with a correct score of 56-75%, and insufficient if the respondent is able to answer questions with a correct score < 55%. The research results in the form of frequency distribution are presented in the following table.

Table 1: Results of Frequency Distribution according to Knowledge

Number	Knowledge	Amount (n)	Percentage (%)
1	Sufficient	26	47.3
2	Insufficient	29	52.7
	Total	55	100

Based on table 1 above, it can be concluded that there were 29 respondents with insufficient (52.7%), more than respondents with sufficient knowledge were 26 people (47.3%).

According to [14], knowledge is the result of knowing and this occurs after people sense a certain object. Sensing occurs through the five human senses, insight, hearing, smell, taste and touch. Most of human knowledge is obtained through the eyes and ears.

Based on the results of research conducted by Meliana Maria Tae and Fitria Melina (2020) concerning the relationship between the level of knowledge about BSE and adherence to performing BSE in D-III Midwifery Students at Stikes Yogyakarta, the result was that 4 people (6.9%) lacked knowledge; enough knowledge as many as 23 people (39.7); And good knowledge as many as 31 people (53.4%). Another study conducted by Leni Suarni (2020) concerning the relationship between female students' knowledge and BSE in an effort to detect early breast cancer at Islamic Hight School Syekh H. Abdul Halim Hasan al-Ishlahiyah Binjai, obtained results with insufficient as many as 14 people (44%), sufficient 8 people (25

b) Attitude

Attitude variables in this study are grouped into two categories, namely positive and negative. Positive if the respondent is able to answer questions correctly by > 15.2 and negative if the respondent is able to answer questions correctly by ≤ 15.2. The research results in the form of frequency distribution are presented in the following table.

Table 2: Frequency Distribution according to Attitude

Number	Attitude	Amount (n)	Percentage (%)
1	Positive	16	29,1
2	Negative	39	70,9
	Total	55	100

Based on table 2 above, it can be concluded that 39 respondents (70.9%) had a negative attitude, more than 16 respondents (29.1%) had a positive attitude.

According to [3], attitude is always directed at something or an object. There is no attitude without an object. LaPierre defines attitude as a pattern of behavior, tendencies, or anticipatory readiness, predisposition to adapt in social situations. In simple terms, attitude is a response to social stimuli that have been conditioned [9].

Based on research conducted by [23] regarding knowledge and attitudes with behavior BSE in Nursing Kesdam II/Sriwijaya students, positive results were obtained by 31 people (45.6%) and negative attitudes by 37 people (54.4%).

The results of another study conducted by [15] concerning the relationship between knowledge and attitudes of female students and BSE at the Health Polytechnic of the Banjarmasin Department of Health majoring in midwifery obtained good results as many as 27 people (67.5%) and very good as many as 13 people (32.5%).

c) BSE Behavior (Breast Self-Examination)

BSE (Breast Self-Examination) behavior variables in this study were grouped into two categories, namely supporting and not supporting [4]. Support if the respondent is able to answer the question

correctly by > 6.35 and not support if the respondent is able to answer the question correctly by ≤ 6.35. The research results in the form of frequency distribution are presented in the following table.

Table 3: Frequency Distribution according to BSE Behavior

Number	BSE Behavior	Amount (n)	Percentage (%)
1	Supporting	13	23.6
2	Not Supporting	42	76.4
	Total	55	100

Based on table 3 above, it can be concluded that there were 42 respondents (76.4%) who did not support it, more than the respondents who supported were 13 people (23.6%).

According to [12], BSE has only been carried out by a small number of women. It is estimated that only 25% to 30% of women carry out proper and regular breast self-examination each month. Generally this step is avoided because it creates scary images. Even though breast self-examination (BSE) is an examination performed on the breast to be able to find abnormal lumps so that it can detect breast cancer early. This activity is very simple and can be done by all women without the need to feel embarrassed about being examined, it doesn't require any money, and for busy women they only need to spend about five minutes. No special time is needed, just do it while taking a shower or while lying down.

Another study conducted by [6], obtained the results that most respondents behaved poorly were 42 (73.7%) and only 15 (26.3%) respondents who behaved well towards realize.

b. Bivariate Analysis

Bivariate analysis aims to see the relationship between variables (knowledge and attitudes) and BSE behavior using the chi-square test with a significance limit of $\alpha = 0.05$.

a) Relationship between Knowledge and BSE Behavior (Breast Self-Examination)

Table 4: Relationship between Knowledge and BSE behavior

No	Knowledge	BSE Behavior				Total		ρ value
		Supporting		Insupporting				
		n	%	n	%	n	%	
1	Enought	19	45,2	7	55,8	26	47,3	0,578
2	Not enought	23	54,8	6	46,2	29	52,7	

Table 4 shows that of the 26 respondents who had sufficient knowledge about breast cancer and BSE, there were 19 (45.2%) respondents who did not support BSE behavior, while of the 29 respondents who had less knowledge about breast cancer and BSE there were 6 (46). 2%) of respondents who support BSE behavior.

Based on the results of statistical tests using chi-square with 95% degree of confidence, obtained p value = 0.578 , which means that there is no significant relationship between knowledge and BSE behavior in female students of the Faculty of Public Health, Islamic University of North Sumatera Utara.

Knowledge is a domain factor that influences behavior somebody. According to theory, BSE behavior is a habit of doing BSE according to the right steps. Good knowledge tends to show supportive behavior, otherwise sufficient knowledge shows unsupportive behavior. Adequate knowledge about breast cancer and BSE shows behavior that does not support BSE examination. Many factors can influence this. One of them is the lack of support from health workers to encourage young women to do BSE as an early detection of breast cancer. Therefore, it is important to increase the knowledge of young women by health workers regarding BSE in order to broaden their horizons so that they want to do early detection of breast cancer properly through a socialization program on how to do BSE from an early age [13].

The results of this study are in line with research conducted by Baswedan and Listiowati (2014) concerning the relationship between the level of knowledge about breast self-examination (BSE) and BSE behavior in non-health students at the Muhammadiyah University of Yogyakarta. The results showed that there was no significant relationship between knowledge about BSE and breast tumors and BSE behavior ($p = 0.680$) with weak correlation strength. So it can be concluded that high knowledge is not always related to one's behavior. Although in this case the behavior can be said to be beneficial for the individual because it can prevent him from a very dangerous disease. The magnitude of one's sense of laziness still beats high knowledge.

Table 5: Relationship between Attitude and BSE Behavior

No	Attitude	BSE Behavior				Total		ρ value
		Supporting		Not supporting				
		n	%	n	%	n	%	
1	Positive	9	21,4	7	53,8	16	29,1	0,025
2	Negative	33	78,6	6	46,2	39	70,9	

b). The Relationship between Attitude and BSE Behavior (Breast Self-Examination)
Table 5 shows that of the 16 respondents who have positive attitude about BSE, there were 9 (21.4%) respondents who did not support BSE behavior, while out of 39 respondents who had negative attitudes about BSE, there were 6 (46.2%) respondents who supported BSE behavior.

Based on the results of statistical tests using chi-square with 95% degree of confidence, obtained p value = 0.025 , which means that there is a significant relationship between attitudes and BSE behavior in Faculty of Public Health, Islamic University of North Sumatera Utara students.

Students with good attitudes do not mean that they will always manifest in concrete actions because attitudes have a certain relationship with an object. Factors that influence attitudes to BSE are determined by factors such as the mass media, educational institutions, personal experience or the influence of other people who are considered important. Notoatmodjo states that attitude is a reaction or response that is still closed from someone to a stimulus or object. This is supported by the theory of the adoption process put forward by Roger and Soemaker that even though someone already knows and is interested in something new, at the assessment stage he still seeks support by asking for opinions from friends or people who influence his life.

In addition, attitudes are also formed by a person's emotional factors. This is because attitudes can be positive or negative towards a response they encounter. It could be that an individual has a negative response or that individual has excessive anxiety, so he thinks that if he does BSE regularly and the result turns out to be a lump, then he will become increasingly frustrated or disappointed so he decides not to do BSE even though he knows the benefits of it. the BSE. [15].

The results of this study are in line with research conducted by [13] concerning the relationship between knowledge and attitudes of young women about breast cancer and BSE behavior in Public Hight School 4 Bengkulu. The results showed that there was a significant relationship between attitudes and BSE behavior in adolescents with a value of $p = 0.012$. Another study conducted [23] concerning knowledge and attitudes with BSE behavior in Nursing Kesdam II/ Sriwijaya students, obtained the result that there was a significant relationship between attitudes and behavior in early detection of breast cancer with a p value = 0.053. Thus the hypothesis that there is a relationship between attitude and early detection of breast cancer is statistically proven.

4. CONCLUSION

Based on the results of the research that has been done, it can be concluded that:

a. Nearly half of the knowledge of Faculty of Public Health, Islamic University of North Sumatera Utara students about breast cancer and BSE have sufficient knowledge were 26 people (47.3%).

b. Attitudes of Faculty of Public Health, Islamic University of North Sumatera Utara students towards breast cancer and BSE more who had a negative attitude were 39 people (70.9%).

c. Most of the female students of Faculty of Public Health, Islamic University of North Sumatera Utara had unsupportive behavior were 42 people (76.4

d. There is no significant relationship between knowledge and BSE behavior Faculty of Public Health, Islamic University of North Sumatera Utara students with a value of $p > 0.05$ (0.578).

e. There is a significant relationship between attitudes and BSE behavior Faculty of Public Health, Islamic University of North Sumatera Utara students with a value of$p > 0.05$ (0.025).

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