



DETERMINANTS OF BREAST-SELF EXAMINATION (BSE) BEHAVIOR IN STUDENTS

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ABSTRACT

Behavior refers to the actions or reactions of individuals or groups in response to internal or external stimuli. It covers a wide range of activities, including how people communicate, interact with others, and react to their environment. Breast Self-Examination (BSE) is a technique that can be used by individuals, especially women, to check themselves for any unusual changes in their breasts, such as lumps, swelling, or other abnormalities. Mammary carcinoma, commonly known as breast cancer, is a type of cancer that originates from breast tissue. This occurs when cells in the breast grow uncontrollably, causing tumors to form. This type of research is an analytical survey with a cross sectional approach. The location of this research is at UIN North Sumatra Medan. The time of this research starts from August to October 2023. The respondents of this research are all female students who are currently in semesters 3, 5 and 7. The number of samples in this study was 528 people with a sampling technique, namely accidental sampling. . Based on the results of bivariate analysis, the most determinant of BSE behavior in female students is the respondent's knowledge with the support of peers, then BSE actions with the support of health workers, and BSE actions with the support of peer workers. Based on the results of MANOVA analysis using the Kruskal Wallis Test, the most determinant behavior in BSE actions among students is peer support and support from health workers. Based on MANOVA analysis using the Kruskal Wallis Test, of the four behavioral components, only the information exposure variable has a relationship with female students' perceptions about preventing disease according to Islam. The results of this research can be used as

learning material and input for respondents to increase their concern for their own health while also paying attention to the health of the people around them.

Keywords; Behavior, Breast Self Examination, Carcinoma Mammary

ABSTRAK

Perilaku mengacu pada tindakan atau reaksi individu atau kelompok sebagai respons terhadap rangsangan internal atau eksternal. Ini mencakup berbagai aktivitas, termasuk bagaimana orang berkomunikasi, berinteraksi dengan orang lain, dan merespons lingkungannya. Pemeriksaan Payudara Sendiri (SADARI) adalah suatu teknik yang dapat digunakan oleh individu, terutama wanita, untuk memeriksa sendiri apakah ada perubahan yang tidak biasa pada payudaranya, seperti benjolan, pembengkakan, atau kelainan lainnya. Karsinoma mammae, yang biasa dikenal dengan kanker payudara, merupakan jenis kanker yang berasal dari jaringan payudara. Hal ini terjadi ketika sel-sel di payudara tumbuh tidak terkendali sehingga menyebabkan terbentuknya tumor. Jenis penelitian ini adalah survey analitik dengan pendekatan *cross sectional*. Lokasi penelitian ini adalah di UIN Sumatera Utara Medan. Waktu penelitian ini dimulai dari bulan Agustus sampai dengan Oktober 2023. Responden penelitian ini adalah seluruh mahasiswa yang berjenis kelamin perempuan yang saat ini duduk di semester 3, 5 dan 7. Jumlah sampel dalam penelitian ini adalah sebanyak 528 orang dengan teknik pengambilan sampel yaitu *accidental sampling*. Berdasarkan hasil analisis bivariat, perilaku BSE pada mahasiswi yang paling determinan adalah pengetahuan responden dengan dukungan teman sebaya, kemudian tindakan BSE dengan dukungan tenaga kesehatan, dan tindakan BSE dengan dukungan tenaga teman sebaya. Berdasarkan hasil analisis MANOVA menggunakan *Krusall Wallis Test*, perilaku yang paling determinan dalam tindakan BSE pada mahasiswa adalah dukungan teman sebaya, dan dukungan tenaga kesehatan. Berdasarkan analisis MANOVA menggunakan *Krusall Wallis Test*, dari keempat komponen perilaku, hanya variabel keterpaparan informasi yang memiliki hubungan dengan persepsi mahasiswi tentang pencegahan timbulnya penyakit menurut islam. Dengan adanya hasil penelitian ini dapat menjadi bahan pembelajaran dan masukan bagi responden agar semakin meningkatkan kepedulian terhadap kesehatan diri sendiri sembari turut memperhatikan kesehatan orang-orang disekitarnya.

Kata Kunci; Perilaku, Breast Self Examination, Carsinoma Mammae

INTRODUCTION

The incidence of non-communicable diseases in the world community has recently shown a significant increase in sufferers, especially in densely populated developing countries such as Indonesia, thus requiring people not to immediately depend on the government for treatment but rather on prevention, both individual and group nature.

Based on the results of the WHO report (2020), the highest cause of death in the world is caused by non-communicable diseases, namely 63%, which claims around 36 million lives every year, of which countries with low income communities or around 80%. If examined further, it is non-communicable diseases such as hypertension, hyperglycemia, hyperlipidemia, obesity and atherosclerosis that increasingly trigger an increase in cardiovascular disease, COPD, and even the risk of stroke.

Globally, women's deaths due to breast cancer are quite astonishing, with 2.3 million women diagnosed with breast cancer and 685,000 of them dying. Then, at the end of 2020, there were 7.8 million women throughout the world who were living side by side with breast cancer, which ultimately made this cancer a common disease found in almost all women throughout the world. Based on etiology, breast cancer often attacks women aged 40-50 years, where 80% of those aged over 50 years live with breast cancer (WHO, 2020).

If we refer to the report presented previously, it is hoped that the attention of countries throughout the world towards the incidence of non-communicable diseases such as breast cancer will be further increased, supported by relevant policies and involving all aspects they have, such as competent health workers, facilities and infrastructure. investigation and involvement of the community as recipients of policies in preventing cancer, perhaps something like what is envisioned in the 2030 Sustainable Development Goals (SDGs).

In Indonesia itself, the incidence of cancer places Indonesia in 8th place in Southeast Asia and 23rd in Asia in 2019 with 136.2 cases per 100,000 population. Then, based on the findings of

Globocan (2020), there are at least 369 thousand more cancer cases in Indonesia with the incidence of breast cancer occupying the highest position at 17 per 100,000 population.

The Indonesian Government's attention to the incidence of breast cancer in women is a particular concern, however, this is not a basis for the Government to ignore other types of cancer or diseases. At the same time, the Ministry of Health continues to make efforts to control other cancer diseases as stated in the 2022-2022 National Cancer Action Plan. In this provision, The national strategy for dealing with breast cancer in Indonesia emphasizes 3 main things, namely health promotion, screening and case management. In more detail, these three main things set a target of achieving at least 80% of women between the ages of 30-50 years undergoing breast cancer screening, 40% of confirmed cases being found at stages 1 and 2 and guaranteed to receive treatment for 90 days, including from being declared positive breast cancer (Ministry of Health of the Republic of Indonesia, 2022).

The incidence of breast cancer not only attacks developing countries in the western region of the world, but the incidence of breast cancer also attacks people, especially women, in several countries on the African continent, as conveyed by; Simo et al (2021) in their research on 475 women in the country of Kameron, around 91.3% of respondents stated that they knew about breast cancer, their sources of health information were the surrounding environment (64.8%), the media (46.5%), and health workers. (42.7%).

Breast self-examination is an action carried out independently by a woman which is useful as a breast cancer examination. The act of self-examining your breasts is very easy to do, cheap, does not cause injury or injury and can be done by anyone and does not require special equipment. (Hermalinda, 2015).

BSE behavior (Examine Your Breasts) is an act of early detection of the symptoms of breast cancer, so that treatment can be carried out as early as possible and to reduce the death rate due to breast cancer. Apart from that, BSE is also easy, simple, cheap, non-invasive, and can be done by anyone without special equipment (Hermalinda, 2015).

Getu et al (2022) in their research said that 49.9% of respondents had good knowledge regarding BSE and around 92.4% of respondents stated that they had heard about the BSE technique. Then, 50.9% of respondents stated that they received information related to BSE, and the mass media was the biggest answer from respondents or around 64.2%. As a medium, they received information related to BSE. Based on the age at which BSE is implemented, 56.2% of respondents agreed that 19 year olds can carry out BSE examinations.

The results of research by Mihret et al (2021), of the 381 respondents involved in the research, 27.6% of respondents had good knowledge about BSE and 41.7% of respondents said they had heard about the BSE technique. 22.9% of respondents stated that they knew how to do BSE, and 43.5% of respondents stated that the best age to do BSE starts from 21-30 years old. And 17.4% of respondents were able to think about BSE actions properly and correctly.

Amegbedzi et al (2022) in their research on 506 women in Ghana, the level of knowledge of respondents regarding BSE was mostly in the good category (74%), then based on perceptions about BSE most were in the good category (91%), then based on practice, 56% of respondents were able to distribute BSE well. Based on whether or not respondents had ever done BSE, 79.4% of respondents said they had. Then, based on the time of the examination, 65% of respondents stated that they did BSE every month, and based on the age when they first did BSE, 32.1% of respondents stated that the age of 20 years and above was the age when they first did BSE. And based on the results of the BSE examination, 89.8% of respondents stated that there were lumps around the breasts.

Based on the research results of Maresa et al (2023), of the 58 respondents involved in the research, 92.5% of young women who were exposed to information about breast cancer had good knowledge, only 7.5% had poor knowledge. 61.1% of young women who were not exposed to information had good knowledge and the other 38.9% had poor knowledge.

METHOD

This research is a cross-sectional quantitative study using analytical survey methods.

Participant characteristics and research design

The respondents for this research were all female students at UIN North Sumatra Medan spread across 3 locations, namely Campus I Pancing, Campus II Sutomo and Campus IV Tuntungan. This research period starts from August to October 2023. The research design used in this study was cross-sectional.

Sampling procedures

The sampling technique in this research uses accidental sampling. The sample criteria used in this research are as follows:

1. Fill out informed consent
2. Students who are in semesters 3, 5, and 7
3. Have a data package

Sample size, power, and precision

This study used a research sample of 528 female student.

Data analysis

1. Analysis Univariate

Univariate analysis is a procedure carried out to analyze data from variables which aims to describe a research result (Notoatmodjo, 2010).

2. Analysis Bivariate

It is a statistical analysis used by researchers to analyze whether there is a relationship or not and explain the close relationship between two variables using Chi Square analysis.

3. Analysis Multivariate

Analysis of MANOVA is used if the researcher wants to see the effect of one or more categorical independent variables, namely using a nominal or ordinal scale, on two or more numerical scale dependent variables. The multivariate test used is Kruskal Wallis.

RESULTS AND DISCUSSION

1. Result

Univariate Analysis Results

1) Respondent Characteristics

Table 1.1. Respondent Characteristics

Characteristics	Frequency	Percentage
Faculties:		
1. Da'wah and Communication	82	15,5
2. Tarbiyah and Teacher Training	94	17,8
3. Sharia and Law	57	10,8
4. Ushuluddin and Islamic Studies	43	8,1
5. Islamic Economics and Business	56	10,6
6. Social Sciences	30	5,7
7. Science and Technology	48	9,1
8. Public Health	118	22,3
<i>Total</i>	528	100
Ages:		
1. 18-20 Years	164	31,1
2. 21-22 Years	214	40,5
3. > 23 Years	150	28,4
<i>Total</i>	528	100

Based on the table, mostly female respondes were from the Faculty of Public Health, namely 118 people (22.3%), and the fewest female students came from the Faculty of Social Sciences, namely 30 people (5.7%), and Based on age, the most respondents were aged between 21-22 years, namely 214 people (40.5%), and the fewest were aged > 23 years, namely 150 people (28.4%).

2) Respondents' knowledge about Breast Self Examination (BSE)

Table 2. Respondents' Knowledge About Breast Self Examination (BSE) (n=528)

No	Statements	Answers			
		Correct		Incorrect	
		F	%	f	%
1	Realization aims to detect early signs and symptoms of breast cancer.	521	98,7	7	1,3
2	Realize is an examination technique that can be done independently	502	95,1	26	4,9
3	The Awareness Examination is a simple, easy and effective examination	522	98,9	6	1,1
4	The ideal time for the Sadari examination is 2-3 days after menstruation every month	464	87,9	64	12,1
5	Awareness examination is a form of caring for one's own health	523	99,1	5	0,9
6	Awareness is carried out on women of childbearing age when they are 20 years old or more	450	85,2	78	14,8
7	Awareness is still done even if there is no lump or pain found around the breast	503	95,3	25	4,7
8	The Awareness technique starts with looking at the shape of the breast, feeling clockwise around the breast, and feeling around the armpit	510	96,6	18	3,4
9	Every woman can do Awareness independently	270	51,1	285	48,9
10	Apart from Awareness, there are other techniques for early detection of breast cancer	476	90,2	52	9,8

Based on the table , the majority of respondents answered correctly in statement number 5, namely 523 people (99.1%), and the fewest respondents who answered correctly were in statement number 9, namely 270 people (51.1%).

3) Respondents' knowledge about mammary carcinoma

Table 3 Respondents' Knowledge About Mammary Carcinoma (n=528)

No	Statements	Answers			
		Correct		Correct	
		f	f	f	%
1	Have you ever heard of breast cancer?	527	99,8	1	0,2
2	Does breast cancer only occur in women?	315	59,7	213	40,3
3	Do you agree that women who smoke are at greater risk of breast cancer?	475	90	53	10
4	Does increasing age in women increase the risk of breast cancer?	345	65,3	183	34,7
5	Is breast cancer a disease that can be inherited?	276	52,3	252	47,7
6	Can eating foods that contain carcinogenic substances increase the risk of breast cancer?	494	93,6	34	6,4
7	Are obese women at greater risk of breast cancer?	349	66,1	179	33,9
8	Are married women over 35 years old at risk of developing breast cancer?	297	56,3	231	43,8
9	Do you know the early symptoms of breast cancer?	397	75,2	131	24,8
10	Did you know that breast cancer can be detected early?	468	88,6	60	11,4

Based on the table, the majority of respondents answered Yes, they know about Mammary Carcinoma, which is in the 6th statement number, namely 494 people (93.6%), and the fewest respondents who answered Yes, they know about Mammary Carcinoma are in the 5th statement number, namely 276 people. (52.3%).

4) Female Students' Attitudes Regarding Breast Self Examination (BSE)

Table 4. Attitudes of Female Students Regarding Breast Self Examination (BSE) (n=528)

No	Statements	Answers							
		Strongly agree		Agree		Disagree		Strongly Disagree	
		f	%	F	%	f	%	f	%
1	Realize is one method of early detection of breast cancer that is easy and practical to do.	143	27,1	381	72,2	4	0,8	-	-
2	Realize is the method of choice for the majority of women to check the health of their breasts independently.	135	29	379	79,1	5	0,9	-	-
3	The second to third day after the last menstruation is the most appropriate time to do Awareness	79	15	411	77,8	36	6,8	-	-
4	Age 20 and over is the most appropriate time to start doing Awareness.	75	14,2	384	72,7	63	11,9	6	1,1
5	One form of women's concern for their own health is by doing Awareness.	169	32	354	67	3	0,6	2	0,4
6	When doing Awareness, immediately consult a doctor if there are any abnormalities or abnormalities around the breasts.	187	35,4	336	63,6	4	0,8	-	-
7	Whether there is pain around the breasts or not, the technical awareness is still carried out.	110	20,8	403	76,3	15	20,8	-	-

Based on table 4, the majority of students' attitudes regarding the Breast Self Examination (BSE) lie in statement number 6 with the number of respondents stating that they mostly agree or 169 people (32%), and the lowest number of respondents stating that they strongly agree lies in statement number 4 with 58 people (14.2%). %).

5) Breast Self Examination (BSE)

Table 5. Breast Self Examination (BSE) (n=528)

No	Statements	Characteristics	Frequency
1	What is the body position when doing Awareness?		
	A. Sit	95	18
	B. Stand up	204	38,6
	C. Lie down	34	6,4
	D. All Correct	195	36,9
2	What do you see in your breasts when you do Sadari?		
	A. Around the breasts	233	44,1
	B. Around the areola	8	1,5
	C. Around when	3	0,6
	D. All are correct	284	53,8
3	How is the touch process during the Awareness examination carried out?		
	A. Clockwise	442	83,7
	B. Counterclockwise	42	8
	C. Move perpendicularly	17	3,2
	D. Twisting movement	27	5,1
4	When is the best time to do Awareness?		
	A. Free time	83	15,7
	B. Before going to bed	45	8,5
	C. While showering	164	31,1
	D. Anytime when you are alone	236	44,7
5	What is required to do Awareness?		
	A. Certain special rooms	52	9,8
	B. Certain specialized skills	27	5,1
	C. Help from others	6	1,1
	D. Interest and awareness of the importance of health and personal hygiene	443	83,9
6	The Awareness examination is an examination that does not require?		

A. Cost	159	30,1
B. Energy	24	4,5
C. Help	16	3
D. All Correct	329	62,3

Based on the table, the majority of respondents' answers were in question number 5, option D, interest and awareness of the importance of health and personal hygiene, or as many as 443 people (83.9%), and the lowest respondents' answers were in question number 2, option C, namely as many as 3 people (0.6%).

6) Exposure to Information Related to Breast Self Examination (BSE)

Table 6. Exposure to Information Related to Breast Self Examination (BSE) (n=528)

No	Statements	Answers							
		Once		Often		Sometimes		Never	
		f	%	f	%	f	%	f	%
1	I got information about Awareness from print and electronic media	338	64	34	6,4	94	17,8	62	11,7
2	I read news related to Realize	340	64,4	20	3,8	93	17,6	75	14,2
3	I read the news that one form of women's concern for their own health is by doing Awareness.	352	66,7	75	14,2	74	14	27	5,1
4	I've heard that whether or not there is pain around the breasts, technically awareness is still done.	352	66,7	57	10,8	75	14,2	44	8,3
5	I have received information regarding the procedures for implementing Adari	370	70,1	25	4,7	76	14,4	57	10,8

Based on the table, the majority of respondents' statements were at number 5, namely I have received information regarding the procedures for implementing Awareness, as many as 370 people (70.1%), and the lowest statement was at number 1, namely 338 people (64%).

7) Support from Health Workers to Perform Breast Self Examination (BSE)

Table 7. Support from Health Workers for Carrying Out Breast Self Examination (BSE) (n=528)

No	Statements	Answers							
		Often		Often		Often		Often	
		f	%	f	%	f	%	f	%
1	There was a demonstration that I received from health workers regarding the good and correct management of Sadari	176	33,3	16	3	198	37,5	138	26,1
2	Health workers say that 2-3 days after the last menstruation is the most appropriate time to do Awareness	185	35	13	2,5	180	34,1	150	28,4
3	There is counseling from health workers stating that the age of 20 years and over is the most appropriate time to start doing Awareness	175	33,1	22	4,2	203	38,4	140	26,5
4	I received information from health workers that one form of women's concern for their own health is through awareness	190	36	42	8	193	36,6	103	19,5
5	I received information from health workers that immediately consult a doctor if you find any lumps or pain around the breasts after doing Awareness	227	43	44	8,3	167	31,6	90	17

Based on the table, the majority of respondents' statements were at number 5 which stated that I had received information from health workers that I should immediately see a doctor if I found a lump or pain around the breast after doing Awareness, or as many as 227 people (43%).

8) Peer Support for Carrying Out Breast Self Examination (BSE)

Table 8. Peer Support for Carrying Out Breast Self Examination BSE) (n=528)

No	Statements	Answers			
		Yes		No	
		f	%	f	%

1	Having friends who understand about breast health.	338	73,5	140	26,5
2	Having friends who know about the Awareness technique	336	69,3	162	30,7
3	There was support from friends for me to do Awareness.	350	66,3	178	33,7
4	There was appreciation from friends when I did Awareness.	312	59,1	216	40,9
5	There are friends who always remind me to do Awareness every month after I menstruate.	278	52,7	250	47,3

Based on the table, the majority of respondents' statements were in number 3 with the number of respondents saying that there was support from friends for me to do Awareness as many as 350 people (66.3%), and the lowest was in statement number 5 with the number of respondents stating that there were friends who always reminded me 278 people (52.7%) want to do Awareness every month after my period.

9) Prevention of Disease According to Islam

Table 9. Perceptions of Female Students Regarding Prevention of Disease According to Islam (n=528)

No	Statements	Answers			
		Yes		No	
		f	%	f	%
1	I pray before and after eating and drinking.	520	98,5	8	1,5
2	In Islam, I understand that eating unhealthy food can cause various diseases.	513	97,2	15	2,8
3	Islam teaches me to eat halal tayyiban food.	552	98,9	6	1,1
4	In Islam, I understand that preventing disease is better than treating it.	521	98,7	7	1,3
5	Eating healthy food helps me in worshipping fervently.	517	97,9	11	2,1
6	Islam teaches me to keep the food I consume clean.	521	98,7	7	1,3
7	Islam teaches me to maintain personal hygiene.	525	99,4	3	0,6
8	Islam teaches me to eat in moderation and not excessively.	525	99,4	3	0,6

Based on the table, the majority of respondents' answers are in statement number 3 which states that Islam teaches me to eat halal tayyiban food, namely 552 people (98.9%) and the lowest statement is number 2 which states that in Islam, I understand that eating unhealthy food can cause various kinds of diseases, namely 513 people (97.2%).

10) Frequency Distribution of Characteristics of Knowledge, Attitudes, Actions, Exposure to Information, Family Support, Health Professional Support, Peer Support, and Prevention of Disease According to Islam

Table 10. Frequency Distribution of Characteristics of Knowledge, Attitudes, Actions, Exposure to Information, Family Support, Health Professional Support, Peer Support, and Prevention of Disease According to Islam (n=528)

No	Characteristics	Frequency	Percentage
Respondents' knowledge about BSE:			
1	1) Good	490	92,8
	2) Enough	38	7,2
	3) Less	-	-
Respondents' knowledge about Carsinoa Mammae:			
2	1) Good	523	99
	2) Enough	5	1
	3) Less	-	-
Attitude:			
3	1) Positive	385	72,9
	2) Negative	143	27,1
Action:			
4	1) Good	515	97,5
	2) Enough	13	2,5
	3) Less	-	-
Information exposure:			
5	1) High	120	22,7
	2) Medium	197	37,3

	3) Low	211	40
	Health worker support:		
6	1) Good	251	47,5
	2) Enough	191	36,2
	3) Less	85	16,1
	Peer support:		
7	1) Good	257	48,7
	2) Enough	201	38,1
	3) Less	70	13,2
	Student Perceptions Regarding Prevention of Disease According to Islam:		
8	1) Good	424	80,3
	2) Enough	104	19,7
	3) Less	-	-

Based on the table, the majority of respondents' knowledge about BSE is in the good category, namely 490 people (92.8%) and 38 people (7.2%) fair. Based on respondents' knowledge about mammary carcinoma, the majority of respondents' knowledge was in the good category, namely 523 people (99%) and 5 people (1%) had sufficient knowledge. Based on attitudes, the majority of respondents' attitudes were in the positive category, namely 385 people (72.9%) and negative as many as 143 people (27.1%). Based on actions, the majority of respondents' actions were in the good category, namely 515 people (97.5%) and 13 people (2.5%) fair. Based on exposure to information, the most answers were in the low category, namely 211 people (40%), medium as many as 197 people (37.3%) and low as many as 120 people (22.7%). Based on support from health workers, the majority of answers were in the poor category, namely 250 people (47.3%), 22 people (42%) adequate and 56 people (10.6%) good. Based on peer support, the majority of answers were in the good category, namely 251 people (47.5%), 191 people (36.2%) enough and 85 people less (16.1%). And based on the prevention of disease according to Islam, the majority of respondents' answers were in the good category, namely 424 people (80.3%) and 104 people (17.7%) fair.

Bivariate Analysis Results

Table 11. Results of Chi-Square Analysis of the Relationship between Respondents' Knowledge About BSE and Support from Health Workers

<i>Statistic Test</i>		<i>P-Value</i>
Respondents' Knowledge About BSE	Health Worker Support	.306

Based on the table, the results of statistical tests using Chi-Square show a p value = 0.306 or greater than 0.05 so it can be concluded that there is no relationship between respondents' knowledge about BSE and support from health workers.

Table 12. Results of Chi-Square Analysis of the Relationship between Respondents' Knowledge About BSE and Peer Support

<i>Statistic Test</i>		<i>P-Value</i>
Respondents' Knowledge About BSE	Peer Support	.000

Based on the table, the results show p value = 0.000 or smaller than 0.05, so it can be concluded that there is a relationship between respondents' knowledge about BSE and peer support.

Table 13. Results of Chi-Square Analysis of the Relationship between Attitudes and Support from Health Workers

<i>Statistic Test</i>		<i>P-Value</i>
Attitude	Health Worker Support	.273

The results show, p value = 0.273 or >0.05, in other words it means there is no relationship between respondents' attitudes and support from health workers.

Table 14. Results of Chi-Square Analysis of the Relationship between Attitudes and Peer Support

<i>Statistic Test</i>		<i>P-Value</i>
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Attitude	Peer Support	.541
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The results show, p value = 0.541 or >0.05 in other words it means there is no relationship between respondents' attitudes and peer support.

Table 15. Results of Chi-Square Analysis of the Relationship between BSE Actions and Support from Health Workers

<i>Statistic Test</i>		<i>P-Value</i>
BSE Action	Health Worker Support	.003

The results show p value = 0.003 or <0.05, in other words it means there is a relationship between BSE measures and support from health workers.

Table 16. Results of Chi-Square Analysis of the Relationship between BSE Actions and Peer Support

<i>Statistic Test</i>		<i>P-Value</i>
BSE Action	Health Worker Support	.016

The results show, p value = 0.016 or <0.05, in other words it means there is a relationship between BSE actions and peer support.

Table 17. Results of Chi-Square Analysis of the Relationship between Exposure to BSE Information and Support from Health Workers

<i>Statistic Test</i>		<i>P-Value</i>
Exposure Information	Health Worker Support	.116

The results show, p value = 0.116 or < 0.05, in other words it means there is no relationship between exposure to BSE information and support from health workers.

Tabel 18. Analisis *Chi-Square* Hubungan Keterpaparan Informasi BSE Dengan Dukungan Teman Sebaya

<i>Statistic Test</i>		<i>P-Value</i>
Exposure Information	Peer Support	.751

The results show, p value = 0.751 or >0.05 in other words it means there is no relationship between exposure to BSE information and peer support.

Table 19. Chi-Square Analysis of the Relationship between Knowledge, Attitudes, Actions, Exposure to Information and Prevention of Disease According to Islam

<i>Statistic Test</i>		<i>P-Value</i>
Knowledge	Female Students' Perceptions	0,827
Attitude	About Preventing Diseases	0,002
Action	According to Islam	0,692
Information Exposure		0,104

The results show, p= 0.827 or <0.05 in other words it means there is a significant relationship, then the relationship between attitudes and prevention of disease according to Islam has a value of p= 0.092 or <0.05 which it can be concluded that it has a meaningful relationship, then the relationship between actions and students' perceptions about preventing disease according to Islam has a value of p = 0.692 or <0.05 which can be concluded that it has a meaningful relationship, and based on the relationship between exposure to information and prevention of disease according to Islam it has value p= 0.104 or < 0.05 which can be concluded to have a relationship.

Multivariate Analysis Results

Table 20. Kruskal Wallis Analysis of All Independent Variable Components

<i>Variabel</i>		<i>P-Value</i>
Knowledge	Health Worker Support	0,756
	Peer Support	0,004
Attitude	Health Worker Support	0,108
	Peer Support	0,357
Action	Health Worker Support	0,007

	Peer Support	0,101
Exposure to BSE	Health Worker Support	0,172
Information	Peer Support	0,016
Knowledge		0,827
Attitude	Student Perceptions Regarding	0,093
Action	Prevention of Disease According to	0,692
Information	Islam	0,072
Exposure		

The results show, the results of the knowledge test with the support of health workers have a value of $p = 0.756$, which is <0.05 , so it can be concluded that the two variables have no relationship. Based on the relationship between knowledge and peers, the p value = 0.004 is <0.05 so it can be concluded that the two variables have a relationship. Based on the relationship between attitudes and support from health workers, the p value = 0.108 is >0.05 so it can be concluded that the two variables have no relationship. Based on the relationship between attitudes and peer support, the p value = 0.357 is >0.05 so it can be concluded that the two variables have no relationship. Based on the relationship between action and support from health workers, the p value = 0.007 or smaller than 0.05 so it can be concluded that there is a relationship between the two variables. Based on the relationship between actions and peer support, the p value = 0.101 is >0.05 so it can be concluded that the two variables have no relationship. Based on exposure to BSE information with the support of health workers, the p value = 0.172 is >0.05 so it can be concluded that the two variables have no relationship. Based on exposure to BSE information with peer support, the p value = 0.016 is <0.05 so it can be concluded that the two variables have a relationship. And based on the relationship between knowledge, attitudes, actions and exposure to information with students' perceptions about preventing disease according to Islam, the result was that the relationship between knowledge and prevention of disease according to Islam obtained a p value of 0.827 which was >0.05 so it could be concluded that the two variables were not have a relationship. Based on the relationship between attitudes and female students' perceptions about preventing disease according to Islam, the p value = 0.093 is <0.05 , so it can be concluded that the two variables have a relationship. Based on the relationship between actions and female students' perceptions about preventing disease according to Islam, the p value = 0.692 is >0.05 , so it can be concluded that the two variables have no relationship, and based on the relationship between information exposure and female students' perceptions regarding preventing disease according to Islam, the p value is obtained. = 0.072 is <0.05 so it can be concluded that the two variables have a relationship.

DISCUSSION

1) Relationship between respondents' knowledge and support from health workers

Based on filling out the questionnaire, there were 227 of the 528 respondents who participated stated that "I received information from health workers that I should immediately consult a doctor if I found a lump or pain around the breast after doing Adari" where the expected answer was "there was a demonstration that I received from health workers regarding the good and correct management of Awareness" but in this question, out of 528 respondents, 176 people said never, 16 people said often, 198 people said sometimes and 138 said never, so based on this data the researchers assumed that There are still many people or women who cannot be said to receive direct demonstrations from health workers where they live.

The findings in this study are supported by the results of research conducted by Sari et al (2020), where no relationship was found between support from health workers and behavioral awareness in women of childbearing age.

Windari et al (2017) say that forms of support from health workers can take the form of certain supports such as physical, psychological support, appreciation, giving awards, and instrumental support.

2) Relationship between Respondents' Knowledge and Peer Support

According to Adila et al (2022), knowledge and peer support both have an influence on young women in deciding on efforts to prevent anemia during menstruation so that the results of this study can be concluded to be similar to the results of this study.

Peer social support is social support that comes from peers that can provide information related to what teenagers should do in an effort to socialize with their environment, apart from that it can also provide feedback on what teenagers do in their groups and social environment and provide opportunities for teenagers. to examine various roles in resolving crises in forming optimal self-identity (Saputro & Sugaiti, 2021).

Peer support is a form of social support. When facing a problem, support is really needed. In peer support, each individual has a role in socializing regarding how to interact, behave, and achieve certain goals (Alawiyah et al, 2019). This support can provide comfort to individuals so that individuals feel loved and have value in their existence. According to Benight and Bandura (2004) adequate and appropriate social support can provide a sense of comfort and feelings of being valued, cared for and valued can increase individual self-efficacy.

Peer social support is a form of support or encouragement in the form of attention, affection or appreciation for other individuals. Islam always teaches compassion for all creatures, and gives attention to other creatures.

The first aspect of peer social support is emotional support includes expressions of empathy, compassion, care and attention towards individuals, so that the individual feels comfortable, loved and cared for. In Islam we are taught to care about others, please others and love each other as stated in the Al-Quran, Surah Al-Balad verse 17:

ثُمَّ كَانَ مِنَ الَّذِينَ آمَنُوا وَتَوَاصَوْا بِالصَّبْرِ وَتَوَاصَوْا بِالْمَرْحَمَةِ ﴿١٧﴾

"Then he was one of those who believe, and advised each other to be patient and advised each other to be affectionate."

The letter above explains that we should not be enemies with each other, as creatures created by Allah, we should always love each other and stick to Allah's religion to obtain guidance.

3) Relationship between attitudes and support from health workers

Attitudes and support of health workers are two important things in influencing an individual's intention to participate in an activity. Kusumawati (2021) in her research also said that the attitudes and support of health workers are two things that can influence. The better the attitude and support of health workers, the better the action taken (Siahaan, 2022).

Then, based on table 4.8, in statement option number 3, out of 528 female students, 79 people said they strongly agreed that the second to third day after the last menstruation was the most appropriate time to do Awareness, 411 people said they agreed and 36 people said they disagreed. Where the expected answer in this research is that the majority of respondents answered strongly agree. Researchers assume this could happen because students still don't understand the best time for an examination. They only understand when it can be carried out, but not the best time to carry out the Awareness examination.

Attitude is a person's expression that reflects his or her likes or dislikes for an object. Attitude means a view or a tendency to express something, whether an object or a person, in the form of likes or dislikes (Alisuf, 2010). It can be interpreted that attitude means a human tendency to react to something he sees. The form of human reaction can be feelings of indifference or indifference, liking or disliking, accepting or not accepting. According to Notoatmodjo (2012), attitude is an individual's opinion about certain things related to health, disease or factors that pose a risk of endangering health. Attitude can be interpreted as a collection of symptoms of responses that arise from an assessment of an object so that it forms thoughts, feelings of attention and other psychological impacts.

4) Relationship between attitudes and peer support

Devianti (2020) said that there is a relationship between mutual support and attitude where these two things mutually influence the taking of an action.

The definition of peers according to Santrock (2007) is children or teenagers who have more or less the same age or maturity level. In Desmita (2010) it is also not much different, the term peers is defined as children who are at more or less the same age and level of maturity as their friends. According to Jean Piaget and Harry Stack Sullivan, through peer relationships, children and adolescents learn about symmetrical reciprocal relationships. Individuals learn about the principles of honesty and justice through events such as conflicts with peers (Desmita, 2010). According to Santrock (2007), pressure to follow peers is very strong during adolescence. Especially during about eighth and ninth grade. He defines peers as a group of children or teenagers of the same age or maturity level. Peers can be a source of social support and primary socialization agents.

5) Relationship between BSE Actions and Support from Health Workers

The research results show that the p value = 0.003 is <0.05 , in other words it means there is relationship between BSE actions and support from health workers. However, the results of this study contradict the results of Fitriwati and Meinarisa's (2022) research which said that there was no relationship between support from health workers and BSE practices or actions. Sari et al (2020) also said that there was no relationship between support from health workers and Awareness practices or actions.

The synthesis of health worker support in this research is the role of health workers in carrying out a profession which aims to help the community in the form of health services so that they can help in eradicating mosquito nests, with indicators: information, facilitator and motivator.

6) Relationship between BSE Actions and Peer Support

Ana and Lutfiyati (2023) in their research said that many female students in this study had received peer support in the good category and most had done BSE in the sufficient category. The results show that there is a relationship between peer support and breast self-examination behavior in female students.

Research conducted by Lula et al (2018) also showed relationship between peer support and BSE practices as indicated by the results with a p-value of 0.001 ($p < 0.05$), a positive correlation. This is different from research by Zulaika and Rochmayani (2021) which proved there was no relationship between peer support and BSE behavior with a value of 0.803 ($p > 0.05$).

It is estimated that having peers who understand and are able to do BSE can help other peers to be able to understand and practice BSE independently so that with help from peers it is hoped that they can also provide understanding to those who do not understand or are not yet able to practice BSE.

7) Relationship between exposure to information and support from health workers

However, the results of Puspitasari's (2019) research suggest that there is a relationship between exposure to information and the role or support of health workers.

Support from health workers to other people can be expressed in various forms, such as good communication, sincere attention, and can also take the form of giving awards or rewards. With the support of health workers, it is hoped that we can also build a relationship of mutual trust and openness so that health information such as BSE procedures can be conveyed accurately and easily understood.

The statement above is in line with Prianti (2017) where the support of health workers can be expressed in the form of comfortable communication, sincere attention, being awarded for achievements or assistance in both physical and psychological forms, while the support that can be provided by health workers can be in the form of mental, instrumental support. and information support.

8) The relationship between behavioral components and female students' perceptions regarding the prevention of disease according to Islam

Based on the relationship between knowledge, attitudes, actions and exposure to information with students' perceptions about preventing disease according to Islam, the result was that the relationship between knowledge and prevention of disease according to Islam obtained a value of $p = 0.827$ which is greater than 0.05 so it can be concluded that the two variables do not have a

difference. connection. Based on the relationship between attitudes and the prevention of disease according to Islam, the p value = 0.093 is smaller than 0.05, so it can be concluded that the two variables have a relationship. Based on the relationship between action and the prevention of disease according to Islam, the p value = 0.692 is greater than 0.05, so it can be concluded that the two variables have no relationship, and based on the relationship between exposure to information and the prevention of disease according to Islam, the p value = 0.072 is smaller than 0.05 so it can be concluded that the two variables have a relationship.

Islam as a teaching not only regulates the relationship between humans and God, but also regulates how humans relate to fellow humans, which covers various aspects of life, including health issues. In Islamic doctrine, maintaining health is better than dealing with disease.

The Islamic religion is based on two main sources, namely the Koran and the Sunna or Hadith. The first is a collection of revelations from Allah SWT. to Rasulullah Saw., while the second is what was narrated from the Prophet Muhammad Saw. in the form of his words, actions and confession (iqrâr).

The preservation of health must be the main goal of medicine carried out by physicians and all health workers and servants. Throughout the history of Islamic civilization, the primary task of the medical system was to maintain health rather than cure disease or restore health. This is in line with the objectives of Islamic law which states that maintaining health is better than dealing with disease. In other words, the important goal of medical science is to save human life and reduce the suffering of living creatures.

Imam Bukhârî also collected Hadiths related to methods of healing diseases that were practiced during the time of Muhammad SAW. It was found that the methods of treating diseases at that time could be said to be quite advanced considering the level of development of knowledge at that time. If general history is often likened to a tool for life, medical history is a tool for medical life. It is clear that modern methods of dealing with disease are better than the methods of dealing with disease described in the Hadith collection. This is due, among other things, to the fact that what is called prophetic medicine (al-thibb al-nabawî) is not entirely based on medical experiments, but rather is based on inspiration and experience from previous cultures and traditions.

LIMITATION OF THE STUDY

The limitations of the research in this study are 1) the diversity of majors held by each respondent, which causes a variety of answers received, especially UIN North Sumatra Medan itself is a university where most of the study programs are religious, so many female students still do not understand the management of BSE. 2) The sample size originally planned was more than 1000 people, but because the time of conducting the research coincided with the semester holidays, the sample size obtained was not in accordance with what was planned.

CONCLUSIONS AND SUGGESTIONS

1. Conclusions

- 1) Based on the results of bivariate analysis using Chi-Square, the most determining BSE behavior in female students is the respondent's knowledge with the support of peers, then BSE actions with the support of health workers, and BSE actions with the support of peer workers.
- 2) Based on the results of MANOVA analysis using the Kruskal Wallis Test, the most determinant behavior in BSE actions among students is peer support and support from health workers.
- 3) Based on MANOVA analysis using the Kruskal Wallis Test, of the four behavioral components, only the information exposure variable has a relationship with female students' perceptions of preventing disease according to Islam.

2. Suggestions

- 1) For Research Respondents

The results of this research can be used as learning material and input for respondents to increase their concern for their own health while also paying attention to the health of the people around them. It is hoped that with this research, students will be more aware of maintaining and preventing the emergence of diseases, both infectious and non-infectious, so that health is not only owned by themselves but can also provide health to others through preventing the emergence of diseases, especially increasing knowledge about how the BSE or Awareness procedure is carried out properly and correctly to detect early the presence or absence and symptoms of breast cancer or mammary carcinoma.

2) For Further Researchers

It is hoped that future researchers can carry out further research or studies and use other variables with the aim that the results of further research can provide diverse results so that they can make a significant contribution to the advancement of the field of knowledge, especially in the field of breast health.

Conflict of Interest Statement

The researcher declares that there is no conflict of interest in this research.

Ethical Considerations

This research was declared not to describe ethical provisions and conflicts by the Ethics Committee of University Of Sari Mutiara Medan with number: 2475/F/KEP/USM/IX/2023.

Funding Statement

This research was funded by the BOPTN of the State Islamic University of North Sumatra for Fiscal Year 2023 with the Decree of the Chancellor of the State Islamic University of North Sumatra Number 242 of 2023.

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