The Implementation of SADARI in the Early Detection of Breast Cancer in Young Women High School of West Aceh Regency

¹Arfah Husna, ¹Muhammad Iqbal Fahlevi.

 ¹Faculty of Public Health, Universitas Teuku Umar, Indonesia Coresponding author: Arfah Husna, e-mail: arfahhusna@utu.ac.id Co-author: MIF: fahlevi@utu.ac.id
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Abstract

Breast cancer (*carcinoma mammae*) is a condition where cells have lost control and normal mechanisms, resulting in abnormal growth, rapid and uncontrolled which occurs in breast tissue.. Early detection of breast cancer aims to find cancer in the early stage so that the treatment is better. The detection is done by doing SADARI, SADARI is an easy examination to find a lump or agility others. The case of cancer of West Aceh Regency in 2015 S/d 2017 recorded the number of cases of breast cancer at most 24.43% compared with other cancers. Women aged 50 years more who have breast cancer reaches 52%, 35% at the age of less than 40 years, 22% of women aged 30 years and the younger age exposed to breast cancer is the age of 15 and 18 years. The study aims to determine the influence of breast cancer counseling and breast-check training (SADARI) in an effort to improve the knowledge and skills of young women in the Act of SADARI for prevention and decrease in cases of breast cancer. This research uses Quasi-Experimental design. The research plan is one group before and after intervention design, or one group pre and posttest design. The population in this study is young women SMAN District ACEH Barat with samples amounting to 30 young women. The results of the study concluded that there was an effect of BSE Implementation (counseling about breast cancer and breast self-examination training) in an effort to increase the knowledge of young women about breast cancer and the skills of young women in breast self-examination

Keywords : SADARI implementation; breast cancer; young women

Introduction

Based on the World Health Organization (WHO) Cancer disease is the most cause of death in the world and the case of breast cancer affects women aged 50 years and above as much as 78%, while women who are less than 40 years experience breast cancer as much as 6%. But breast cancer is also suffered by women who are 30 years of age (Kementerian Kesehatan Republik Indonesia, 2015)

West Aceh District, based on Sistem Informasi Rumah Sakit Umum Cut Nyak Dhien Meulaboh in 2015 S/d 2017 the number of breast cancer recorded at most is 24.43% compared with other cancer cases. Women over 50 years old who have breast cancer reaches 52%, while 35.5% suffer by women who are less than 40 years old. This deadly disease is also suffered by women who are 30 years of age, which is 22% and age is exposed to the case of the youngest breast cancer in West Aceh District is the age of 15 and 18 years. (Rumah Sakit Cut Nyak Dhien Meulaboh, 2018. As the development of health technology, breast disorders can be detected early in various ways with mammography, thermography, biopsy, Ultrasonography of breasts and ductography. There is one of the cheaper, easier and more efficient tests to detect breast cancer by yourself, which is the breast exam yourself (SADARI) (Suryaningsih, 2009).

Early detection of breast cancer aims to find cancer in the early stage so that the treatment is better. The detection is done by doing SADARI, SADARI is an easy examination to find a lump or agility others. SADARI of routine after menstruation, about 1 week after menstruation. (Purwoastuti, 2008).

SADARI as a method of early detection of breast cancer is a very easy, efficient and inexpensive method, but there is a main problem in SADARI the implementation is very little to do it right. SADARI implementation 25% to 30% do SADARI regularly and correctly each month. (Departemen Kesehatan Republik Indonesia, 2008) Researchers have conducted preliminary studies on February 6, 2018 at MAN Unggul Meulaboh West Aceh Regency, through an interview method of SADARI (the goal is realized, understanding aware, when to do realize and how to do realize) There are 12 grade X students, obtained from 12 students who correctly answered only 1 (one) person.

This research aims to determine the impact of breast cancer training and awareness SADARI in an effort to improve young women's knowledge of breast cancer and young women's skills to breast examination (SADARI) for prevention and reduction of breast cancer cases. In addition, participants are expected to provide counseling and training to convey and disseminate information both to family and peers by utilizing leaflets and pocket books provided at the time of extension and training.

Materials and Methods

This research uses Quasi-Experimental design. The study aims to evaluate the effectiveness of health program interventions in young women. Planned design is one group before and after intervention design, or one group pre and post test design. The population in this study was the entire young women SMAN West Aceh Regency. Research samples established using were consecutive sampling technique. Samples of 30 in the group are at risk of breast cancer (age 15-17, early menstruation and the family have a history of cancer) students of SMAN West Aceh District, data was collected using a questionnaire, the data analysis is univariate and bivariate analysis.

Results Univariate analysis

Table 1. Frequency distribution characteristics of youn	g
women Age on treatment groups and control groups	

Variable		Treatment Groups (n=30) F %		l Groups =30)
	F			%
Age				
16 years	12	40	14	46,7
17 years	18	60	16	53.3
Total	30	100	30	100

Sumber : Data Primer, 2019

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The characteristics of the young women in this study were name from the age of the young women

The stage of implementation method in this research activity consists of: 1) Preliminary Survey to SMAN in West Aceh District, 2) licensing to the research site is to SMAN in West Aceh district. 3) Pre Test activities, Pre Test activities conducted by the survey technique using questionnaire that contains about breast cancer and SADARI in the young women and performed for once. This pre test activity aims to determine the level of understanding and initial ability of the respondent on breast cancer and SADARI, and to get the young women with the criteria of the inclusion as a young woman. 4) Counseling about breast cancer and SADARI, the content of counseling is to explain about breast cancer and its prevention efforts. The extension materials provided through the media slides, videos, pocket books and leaflets provided to each extension target are equal, complete and delivered in a communicative language and way with the counseling method accompanied by discussions with young women. 5) SADARI training, this activity is done with interpersonal communication system through the media slides, videos, pocket books and leaflets delivered to each of the same counseling objectives, discussion and simulation SADARI using the breast mannequin on Young women. Training time is given once during research. 6) Practice SADARI, young women can perform their own breast examination Practice (SADARI) well in accordance with the SADARI stages. 7) Post Test, post test activity is done by surveying techniques by using the questionnaire that contains about breast cancer and SADARI in the young women directly and performed for a while. The pre test aims to determine the success of breast cancer and realize (Promkes method) and to know the absorption of the young women about the counseling provided.

during research in the year. Porporsi most young women aged 17 years on a group case (60%) and control groups (53.3%)

Table 2. Frequency distribution characteristics of young
women the first age menstruation on treatment groups and
control groups

	Trea	tment	Control			
Variable	Gro	oups	Gre	oups		
variable	(n =	(n = 30)		(n=30) (n=		=30)
	F	%	F	%		
The First Age of menstruation						
9 years	5	16.7				
10 years	9	30				
11 years	15	50				
12 years	1	3.3				

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13 veors			1	13.3
13 years 14 years			8	26.7
15 years			15	50
16 years			3	10
Total	30	100	30	100

The characteristics of the young women in this study were age of the first time young women were menstruating. Porporsi most young women the age range of the first time young women menstruation in the treatment group is 9 - 12 years, the most menstrual period, the first time of 11 years (50%). The first age range of menstruation in the control group is 13 - 16, most of the 15-year-old proportion (50%).

 Table 3. Knowledge frequency distribution of the young women's group of the Treat and control group (Pre Test)

	p (n=30)
F	<u>p (11–30)</u> %
9	30
21	70
30	100
	30

Sumber : Data Primer, 2019

An overview of the level of knowledge on SADARI the young women of the West Aceh District High School in the treatment group most young women have the most point value of 7 (60%). The knowledge of REALIZE in the control group most proportion has 9 points (70%).

Table 4. Frequency distribution actions of the young women's group of the treat and control group (Pre Test)

		ent Group		ol Group			
Variable	(n	=30)	(n	=30)			
	F %		F	%			
SADARI Action Score							
0	23	76.7	0	100			
2	2	6.7					
3	3	10					
4	2	6.7					
Total	30	100	30	100			

Table 5. Knowledge frequency distribution young women control group and treatment group (post test)

Variable	Treatment Group (n=30)			l Group =30)
	Frek	%	Frek	%
Knowledge Score				
6			7	23.3
7			23	76.7
9	4	13.3		
10	26	86.7		

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Total	30	100	30	100
Sumber : Date	a Primer, 2019			

A description of the level of knowledge of SADARI the young women of the West Aceh District High School in the treatment group of most young women has the highest point value of 10 (86.7%). The knowledge of SADARI in the control group has the most proportion of points 7 (76.7%).

Table 6.	frequency	distribution	action	young	women
control Gr	oup and Tre	eatment group	(Post 7	[est]	

Variable	Treatment Group (n=30)		Control (n=1	1			
	Frek	%	Frek	%			
SADARI Action Score							
0			30	100			
10	30	100					
Total	30	100	30	100			

Figure of notice of action realize the young women SMA Negeri ACEH Barat Group treatment is the highest proportion of its points is 10 (100%) and the control group 0 (100%).

Bivariat analysis

Tabel 7. Frequency distribution actions of respondents before and after are given awareness and training SADARI (n = 30)

Action	Ν	Mean	Increased	SD	P _{Value}
Pre test	30	0.7	03	1.342	0.000
Post test	30	10	9.5	0.000	0.000

Source : Data Primer, 2019

From the research known that the action SADARI young women value mean pre test 0.7 and the value of the mean post Test 10, there is an increase of 9.3 with Indigo P 0.000, which means that there is a statistical difference in statistics the action SADARI Group treatment after the counseling and training SADARI.

Table 8. Frequency distribution of respondents ' knowledge before and after given awareness and SADARI training

Knowledge	Ν	Mean	Increased	SD	P_{Value}
Pre test	30	6.8	3	0.610	0.000
Post test	30	9.8		0.345	-
Source: Data	Primer	r. 2019			

Based on research it is known that the average value of pre test 6.8 and post test value of 9.8, there is a 3 increase with the value of P 0.000, which means that there is a statistical difference statistically awareness and training.

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Table 9. F	requenc	y distri	bution of	pre and	d post		
respondents knowledge of the control group							
Knowledge	Ν	Mean	Increased	SD	P_{Value}		
Pre test	30	6.7	0.06	0.466	0.157		
Post test	30	6 76	0.06	0.430	0.137		

Source : Data Primer, 2019

Based on the results of the research known that the average value of pre test 6.7 and the mean post test 67.6 value, there is an increase in 0.006 with the value of P 0157, which means that there is no statistical difference in statistically meaningful level of knowledge control group.

Discussion

SADARI the young women's knowledge before and after intervention

This research is in accordance with the research of Yulinda (2018) The increase in young women's knowledge of SADARI after being given counseling intervention and training at SMKN 5 Surabaya. With a statistical test result using Wilcoxon Signed Rank Test showed the value of P (0.000) > α (0.005), it was concluded that knowledge before and after health counseling and training was a difference.

Bloom states that knowledge is the process of knowing or the "Cognitive domain" section consisting of six levels of Know (know), (Comprehension), understanding Application (application), analysis, Synthesis (synthesisi) and Evaluation. Knowledge (cognitive) is a domainn that is very important in creating actions (over behaviour). Forming behavior is a process of knowledge that is the outcome of the learning process.

This study is also in line with research Crista F Sinaga & Tri Rdayani, there is a relationship between knowledge and attitudes of young women about early detection of breast cancer through BSE in Pasundan 8 High School in 2016 with a p-value of 0.003.

This study is not in line with research conducted by Weni Tri Purnani & Binti Qoniah, more effective health education is the Peer Group Education method with a demonstration method of breast self-examination skills (BSE) in young women at SMAN 1 Kediri City in 2018. In this study Improvement in Self-Awareness Actions for Senior High School Girls in Aceh Barat District were given interventions using Demonstration, Training and Video Screening methods. The results of this study are in line too with research conducted by Murnita & Parlindungan (2014), there is a relationship of knowledge with examination (BSE) in Class III Manggeng State High School students. This is in line with Sari *et al.* (2019) The average score of knowledge of female students has increased before and after the intervention in Andalas University Students

This study also shows the same results as the research conducted by Bringiwatty Batbual in SMA Negeri 1 Baumata Kabupaten Kupang 2014. This research is a descriptive study with a pre-post design. The results showed that most respondents (41.2%) had less knowledge about BSE and 59% had good knowledge after the seminar.

The results of the same study conducted by Aulia & Azam (2015) in SMK N 1 Kersana students showed that all respondents experienced an increase in scores after being given material about breast cancer and early detection by breast self-examination (BSE) through Facebook social media. Research conducted by Sharifia *et al.* (2019) also shows the same research results, namely the level of knowledge and confidence felt by women in the intervention group compared to the increased control after HBMbased educational interventions.

Research connducted on female undergaraduates in Uyo, Akwa Ibom State, Nigeria, found that brest cancer and BSE awareness levels were high among respondent, respectively 99% and 91,35, but knowledge about risk facktors for breast cancer is very beld. Only 20% of respondent know the right time to do BSE, and 4% have good knowledge about BSE, bad BSE practices, onlu 9% of them do it every month (Motilewa *et al.*, 2015).

Research conducted by Katkuri & Gorandla (2018) Among women age 15 years above in urban slums show only 35% of the study population are aware of the initial danger sign and 66% are unware. Awarness about breast cancer risk factors is very poor, with only 21% knowing about breast cancer risk factors. Nearly 54% said they knew about breast cancer by a clinical examination conducted by a doctor, 35% said by breast self-examination and 12% said by mammography.

Of the 256 female Allied health science undergraduated students, 142 (55,47%) had good knowledge while 114 (44,53%0 had poor awareness and knowledge about breast cancer and its screening methods (Safrina *et al.*, 2019).

SADARI action before and after intervention

Action is a person's behavior to Mmepraktap or do what is being addressed or that is judged well. Visual stimulus (vision) and audio (hearing) stimulation can affect a person's interest in improving action for the better (Notoatmodjo, 2012). Analysis results are known to influence given before and after the intervention (counseling and training) on the actions of SADARI the young women of the upper middle School of West Aceh Regency

This study is also in line with research by Sinaga & Rdayani (2016) showing that there is a significant relationship between the knowledge of young women about early detection of breast cancer through BSE in Pasundan 8 High School Bandung in 2016.

Before being intervened (counseling and training) the majority of young women never did SADARI. Only a small part of the young woman who performed the act of SADARI, and the SADARI steps that the young women had performed before the intervention was still lacking, from a small portion of young women who asked the young women to do so Step because the young women do not know the appropriate SADARI steps and feel embarrassed, the young women just doing the step fingering the breasts. SADARI training that young women to do SADARI according to the steps of SADARI.

The results of this study were supported by the research of Ouyang & Hu (2014) The presence of accurate increase in breast self-examination after being given the intervention of breast-check training themselves.

Research conducted by Murnita & Parlindungan (2014) in Class III students of Manggeng State High School also showed the same results, namely there was a relationship between the action against examination (BSE).

This study is in line with research conducted by Lubis (2017) on all XI MA Al-Fatah Natar students. Chi square statistical test shows that there is a significant relationship between knowledge about breast self-examination (BSE) with BSE behavior p value 0.016. This research is in line with research conducted by Desanti *et al.* (2010) in the city of Semaraang, Central Java, that the variables related to breast self-examination behavior are confounding variables, namely the level of knowledge, education, and information about breast self-examination.

This study is also in line with research conducted by Tiwari & Naik (2018) among female collage students in the chosen University of Bhilai, Chhattsgarh, India, known after intervention, the average post-test knowledge and practice score regarding breast self-examination of collage girls was significantly increased in the experimental group (p = 0,00). The average post-test knowledge and student

The mean age of students was 20.23 ± 2.61 years. Of all participants, 11.3% were diagnosed with breast disease by a doctor. Meanwhile, in 15.8% of those positive family history of breast cancer were found. After training on breast cancer and methods of early diagnosis, their knowledge of health care, and its application increased (p <0.05). After training, students' vulnerability, seriousness, self-efficacy, health motivation and perceived benefits increased and their perceptions of barriers decreased (p <0.05). (Sekerci *et al.*, 2019)

Conclusion

Realized implementation in the early detection of breast cancer researchers have conducted in the young women have a positive influence on the knowledge and actions realized so as to prevent the risky group to not experience Breast cancer, thus able to suppress the number of breast cancer cases with no increase in new cases.

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Author Contribution and Competing Interest

Authors' contributions in this research are involved in the design of research projects, collecting data or analyzing results, involved in drafting or revising scientific papers.

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