Breast Self-Examination (SADARI) by Teachers of Methodist High School, Medan

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Abstract

Breast cancer is the most common cancer in women, with an estimated number of new cases not less than 1,050,346 per year. Meanwhile, in North Sumatra in 2019, breast cancer occupied the highest position or 856 cases/incidents of the total number of cancer patients. Efforts to control breast cancer have been carried out by the government of the Republic of Indonesia in particular through the early detection program or BSE. BSE is breast self-examination which aimed to determine the presence or absence of breast cancer in women. This examination performed using a mirror and carried out by women aged 20 years and over. The main indication of BSE was to detect the occurrence of breast cancer by observing the breast from the front, left and right side, whether there were lumps, changes in skin colour, noisy putting and discharge or pus and blood. This research method was descriptive qualitative with 7 informants (subject teachers). This study aimed to determine breast self-examination (BSE) conducted by the Methodist 8 Medan high school teacher. The results showed that all teachers had good knowledge and attitudes about BSE but had fewer actions about BSE. The conclusion of good knowledge and attitudes that teachers have is obtained by obtaining information about BSE through electronic media, namely the internet and fewer actions regarding BSE due to a lack of knowledge to carry out BSE appropriately according to the stages due to the absence of BSE counselling or seminars on BSE.

Keywords: BSE, Knowledge, Attitude, Action.

Introduction

Breast cancer is the most common cancer in women. It is estimated that the number of new cases is not less than 1,050,346 per year. Of that number, 580,000 cases occurred in developed countries, the rest were in developing countries. Based on estimates from the International Agency for Research on Cancer, in 2020 there will be 1.15 million new cases of breast cancer with 411,000 deaths. As many as 70% of new cases and 55% of deaths are predicted to occur in developing countries (Rasjid, 2010).

Data from the World Health Organization (WHO), the incidence of cancer in 2008 to 2012 has increased from 12.7 million cases to 14.2 cases, it is estimated that by 2030 the incidence of cancer will increase to 26 million people and 17 people die from cancer, while based on estimates by the Globocan International Agency for Research on Cancer (IARC) the incidence of breast cancer is 40 per 100,000 women (Aeni & Yuhandini, 2018).

The United States has the highest ranking of breast cancer among other cancers, where in 2019 it is estimated that around 268,600 new cases of invasive breast cancer are suffered by women and about 2,670 new cases in men and 62,930 cases of additional in situ breast...
lesions (DCIS), and approximately The 42,260 cases consisted of 41,760 women and 500 men (America Society Breast Cancer, 2019).

About 1 in 8 women develop invasive breast cancer and by 2020 an estimated 276,480 new cases of invasive cancer and 48,530 new cases of non-invasive (in situ) breast cancer in American women and 2,620 new cases of invasive breast cancer in men. January 2020 more than 3.5 million women with a history of cancer are being treated and some have completed their treatment (America Society Breast Cancer, 2019).

Global Cancer Observatory data 2018 shows that the most cancer cases in Indonesia are breast cancer, which is 58,256 cases or 16.7% of the total 348,809 cancer cases. Cervical cancer (cervix) is the second most common type of cancer in Indonesia with 32,469 cases or 9.3% of total cases. The Ministry of Health (Kemenkes RI) stated that the breast cancer rate in Indonesia has reached 42.1 people 100 thousand inhabitants. The average death rate from this cancer reaches 17 people in 1000 inhabitants (WHO, 2019).

Based on riskesdas 2013 data, North Sumatra Province is in the category of the 7th highest order of 34 provinces in Indonesia with an estimated number of cases of 2,628 cases (Purba et al., 2018). Breast cancer occupies the highest position or 856 cases / incidence of the total number of cancer patients in North Sumatra (North Sumatra) in 2019. Even according to the records of the Health Social Security Administration (BPJS), until 2015 alone BPJS has disbursed Rp. 2.2 trillion for cancer treatment. This was conveyed by the Head of the North Sumatra Health Office, dr.H. Alwi Mujahit Hasibuan, M.Kes on the commemoration of World Cancer Day 2020 in Medan, precisely on February 4, 2020 (No Title, 2019).

Efforts to control breast cancer have been carried out by the Government of the Republic of Indonesia in particular through an early cancer detection program for Indonesian women for breast cancer along with an early detection program for cervical cancer. The program started running in 2008 with the "Design of a National Program for Early Detection of Cervical Cancer and Breast Cancer" in April 2008 by the late first lady. Hj. Ani Bambang Yudhoyono and strengthened by "Design to Increase Community Participation in Prevention and Early Detection of Cancer in Indonesian Women" by first lady Hj. Iriansa Arok Widodo in April 2015 in Kulon Progo, namely screening for early detection of cervical cancer using the Visual Inspection method with Acetic Acid (IVA) and air lung cancer with Clinical Breast Examination (SADANIS) (Kementerian kesehatan Republik Indonesia, 2016).

According to Permenkes RI No. 34/2015, early detection of breast cancer is an effort to detect and identify breast cancer early, if breast cancer can be detected at an early stage and treated appropriately, the cure rate will be quite high. One of the efforts to detect breast cancer early is breast self-examination (BSE) (Permenkes No 34 tahun2015, 2015). BSE is a breast self-examination to find abnormal lumps. Carrying out BSE also encourages women to take active action to take responsibility for breast cancer prevention efforts.

This action is important because nearly 85% of the abnormalities in the breast are actually discovered for the first time by the patient through proper breast self-examination (Olfah et al., 2013). Medan Methodist 8 High School is one of the private schools located in Medan City, precisely on Jalan Yos Sudarso Medan and is willing to accept the author to conduct a survey. Based on the initial survey conducted by researchers on 3 teachers through interviews, it was found that 2 teachers did not know what BSE was, 1 teacher had heard BSE but did not know how to do BSE. Based on the results of the interview, the researcher
saw that the Methodist 8 Medan high school teachers still lacked knowledge about breast self-examination (BSE).

**Methods**

This research is a qualitative research with a phenomenological approach, which is a research method with the main objective of describing or describing the general meaning of a number of individuals regarding their various life experiences related to the concept or phenomenon that occurs (W. Creswell, 2015).

The research conducted by researchers was to find out or describe the experience of informants in carrying out BSE as a first step to early detection of breast cancer by conducting a semi-structured interview method where the results of the interview were recorded using a cellphone and in conducting interviews the researcher gave questions to informants according to the interview guidelines. Which has been prepared by the researcher before the research was carried out.

As stated by Bodgan and Tailor, quoted by Moleong, who said that qualitative methods are research procedures that produce descriptive data, in the form of written or spoken words from people and observed behavior (Moleong, 2013).

**Results and Discussion**

**General description of research informants**

There were 7 informants in this study where the selection of informants was in accordance with the characteristics of the main informant and were willing to be interviewed.

| No | Informant | Age  | Teacher    | Status  | Education |
|----|-----------|------|------------|---------|-----------|
| 1. | Informant 1 | 34 Years | Chemistry  | Married | Bachelor  |
| 2. | Informant 2 | 34 Years | French Language | Married | Bachelor  |
| 3. | Informant 3 | 30 Years | History    | Married | Bachelor  |
| 4. | Informant 4 | 30 Years | Art        | Married | Bachelor  |
| 5. | Informant 5 | 28 Years | Math       | Married | Bachelor  |
| 6. | Informant 6 | 27 Years | Biology    | Not Married | Bachelor |
| 7. | Informant 7 | 38 Years | Computer   | Married | Bachelor  |

The results of the interview showed that employees' knowledge of breast cancer was quite good where all informants could explain the meaning of breast cancer even in their own language. Interview results and conclusions can be seen more clearly in the appendix (interview matrix).

The results of the interview showed that the teacher's knowledge about BSE was quite good where all informants could explain BSE correctly, all informants said that BSE is a breast examination to find out a lump in the breast. Interview results and conclusions can be seen more clearly in the appendix (interview matrix).
The results of the interview found that the teacher's knowledge about the importance of women doing BSE is quite good where some informants could explain the reasons for the importance of doing BSE for women. Interview results and conclusions can be seen more clearly in the appendix (interview matrix). The results of the interview showed that the teacher's knowledge about where we could get information about BSE was quite good where all informants could explain the source of information about BSE. Interview results and conclusions can be seen more clearly in the appendix (interview matrix).

The results of the interview revealed that the teacher's knowledge of the BSE program was suitable for application in the community, where all informants strongly supported the BSE program in order to detect breast cancer early. Interview results and conclusions can be seen more clearly in the appendix (interview matrix). The results of the interview showed that the teacher's attitude about the BSE program was that they had a positive attitude where they agreed to do BSE as a first step to early detection of breast cancer. Interview results and conclusions can be seen more clearly in the appendix (interview matrix).

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The results of the in-depth interview found that the teacher's attitude about BSE helped to recognize and feel the curves of our breasts, namely that all informants agreed because by doing BSE we could feel the shape of our breasts. Interview results and conclusions can be seen more clearly in the appendix (interview matrix). The results of the interview found that the teacher's attitude about breast self-examination being able to cure breast cancer was disagree because BSE could not cure just to prevent it. Interview results and conclusions can be seen more clearly in the appendix (interview matrix).

The results of the in-depth interview found that the teacher's attitude about BSE was still effective at the age of menopause, namely all informants agreed because BSE was not only done at the age before menopause but also needed. Interview results and conclusions can be seen more clearly in the appendix (interview matrix). The results of the interview showed that the attitude of the teacher disagree about BSE having to spend a lot of time doing it because doing BSE only took 5 to 10 minutes. Interview results and conclusions can be seen more clearly in the appendix (interview matrix).

The results of the in-depth interviews found that the teacher's actions in implementing BSE was still lacking because all informants were unable to properly explain the technique of implementing BSE. Interview results and conclusions can be seen more clearly in the appendix (interview matrix). The results of the in-depth interview showed that the teacher's actions regarding the frequency of doing BSE was still lacking because all informants could not give correct answers, on average, informants said that BSE could be done every day while bathing. Interview results and conclusions can be seen more clearly in the appendix (interview matrix).

The results of the interview showed that the teacher's actions about where to do BSE, all informants said that BSE can be done at home and can be done alone. Interview results and conclusions can be seen more clearly in the appendix (interview matrix). The results of the interview showed that the teacher's actions regarding the benefits of doing BSE, all informants could know the benefits of doing BSE by saying that BSE can prevent or detect breast cancer early. Interview results and conclusions can be seen more clearly in the appendix (interview matrix). The results of the interview showed that the teacher's actions regarding the stages of doing BSE, all informants did not know the correct stages in doing BSE, the informants only said that they raised their hands up then the other hand touched the
breasts. Interview results and conclusions can be seen more clearly in the appendix (interview matrix).

**The knowledge of Medan Methodist 8 High School Teachers about breast self-examination (BSE)**

From the results of research conducted by researchers to 7 SMA Methodist 8 Medan teachers, breast cancer is a breast cancer suffered by a woman where there is an abnormal lump (cell formation) in the breast that can cause pain or tenderness in the breast. BSE is an examination of the breast itself which is carried out by a woman while bathing by massaging the breasts clockwise with one hand raised upwards while the other hand massages the breast to check for abnormalities (lumps) in the breast.

This is in accordance with the results of research conducted by Reni Puspita Sari regarding the relationship of knowledge with BSE behavior as early detection of breast cancer. It is known that there is a positive and significant relationship between knowledge and BSE behavior as early detection of breast cancer (Sari, 2015). The results of research conducted by Utama Ladunni Lubis, on young women at MA Alfatah Natar school about the knowledge of young women about breast self-examination (BSE) and BSE behavior, it is known that there is a significant relationship between knowledge about BSE and BSE behavior (Lubis, 2017).

Through the good knowledge possessed by informants about BSE, it is hoped that they can make promotional efforts about BSE as a first step in preventing breast cancer because the promotion of BSE can be done to people who are still healthy such as to all students in Methodist 8 Medan Senior High School as one of the preventive measures (prevention) in order to minimize the incidence of breast cancer or as an effort to determine whether there is a lump in the breast so that treatment can be taken before it reaches an advanced stage.

**The teacher's attitude about BSE**

From the results of research conducted by researchers to 7 SMA Methodist 8 Medan teachers, all informants agreed that every woman can do BSE as early as possible to prevent breast cancer. Then regular BSE can also help women to recognize and feel the curves of their breasts. BSE can not cure breast cancer but can prevent breast cancer. Based on statements from informants, it is known that informants have a good (positive) attitude about BSE because they support the BSE program. Based on the results of research conducted by Rizka Angrainy regarding the relationship of knowledge, attitudes about BSE in early detection of breast cancer in adolescents, it is known that there is a relationship between knowledge and BSE and there is a relationship between attitude and BSE (Angrainy, 2017).

The results of research conducted by Alvita Brilliana, et al., On housewives regarding factors related to the behavior of housewives doing BSE, it is known that the variables related to BSE behavior of housewives are attitudes, accessibility of information and support for health service providers, the majority of housewives. stairs in the sidotopo village, wetan kenjeran sub-district, Surabaya, showed a good attitude and support for BSE (Arafah & Notobroto, 2017). Researchers also think that with a good attitude from the informants, it is hoped that the informants can carry out a BSE program campaign through the mass media as a promotional step for every woman so that more women will know how important it is for a woman to do BSE as an early preventive step to detect breast cancer early so as to reduce the number of breast cancer sufferers.
Teachers' actions about BSE

From the results of research conducted by researchers to 7 SMA Methodist 8 Medan teachers, the technical implementation of BSE can be done by massaging the breast area by lifting one hand above the head and the other hand doing massage, this activity can be done while bathing. Implementation of BSE can be done every day while bathing or once a week or even 2x a month (Orbell et al., 1997; Rise et al., 2003).

Based on the results of research conducted by Puji Lestari regarding the importance of breast self-examination (BSE) as an effort to detect breast cancer early, it is known that the practice of implementing breast self-examination (BSE) is mostly in the never category and at least always doing BSE (Lestari & Wulansari, 2018). The results of research conducted by Harnianti, et al regarding the study of breast self-examination behavior (BSE) in students of the Faculty of Public Health, Halu Oleo University, found that respondents had a good level of knowledge, a good level of attitude but had less actions as large as (Harnianti et al., 2016).

According to the findings of researchers in the field, it is known that teachers' knowledge about BSE is good because they often get BSE information through electronic media such as the internet and an informant has attended seminars on BSE so that they have a positive (good) attitude towards BSE activities where women can routinely do BSE. Preventing breast cancer early on, but what became an obstacle for informants (teachers) was that they could not take BSE actions correctly according to the stages this was because they were never invited to take part in training or counseling about BSE using phantoms as material the practice was carried out by health workers and there was no direction from the leadership of the Medan Methodist 8 SMA to all teachers or employees to carry out BSE during sports class hours or in the UKS room to all students, so information man can only mention one step in doing BSE.

Researchers hope that with these activities the informants will later be able to practice BSE for themselves and become an example or role model for others as a step to promote the BSE program to people in their environment, both in their living environment and work environment to prevent (preventive) breast cancer in women as we know that the BSE program has been encouraged by the government for a long time, but due to the lack of knowledge and willingness and interest of a woman to do BSE, the incidence of breast cancer continues to increase.

Conclusion

Based on the results of the research that the authors conducted by analyzing the data, information and explanations from the informants that the authors obtained, it can be concluded that breast cancer is a group of abnormal cells in the breast that continue to grow multiple and eventually form a lump in the breast. BSE is an examination of the breast itself which aims to determine the presence or absence of breast cancer in women. Informants (teachers) can explain completely about breast cancer knowledge and understanding of BSE to researchers where informants get knowledge about breast cancer and knowledge about BSE through electronic media, namely the internet. BSE is not only done by young women but menopausal women can also do BSE regularly to find out changes in breast shape and all informants (teachers) said that doing BSE does not take a lot of time and BSE is not to cure breast cancer but as early detection to prevent breast cancer in women. In doing BSE there are 3 stages that need to be done, namely: seeing, massaging and feeling the breasts and can be done in front of a mirror or while taking a shower, from the results of interviews with the informants (teachers) it is known that the results of the interviews are that all informants
(teachers) cannot perform BSE according with the stages it is because they do not know in detail the stages in doing BSE and the right time to do BSE.

References

Aeni, N., & Yuhandini, D. S. (2018). Pengaruh Pendidikan Kesehatan Dengan Media Video Dan Metode Demonstrasi Terhadap Pengetahuan SADARI. Care : Jurnal Ilmu Kesehatan, 6(2), 162. https://doi.org/10.33366/cr.v6i2.929

Angrainy, R. (2017). Hubungan Pengetahuan, Sikap Tentang Sadari Dalam Mendeteksi Dini Kanker Payudara Pada Remaja. Jurnal Endurance, 2(2), 232. https://doi.org/10.22216/jen.v2i2.1766

Arafah, A. B. R., & Notobroto, H. B. (2017). Faktor Yang Berhubungan Dengan Perilaku Ibu Rumah Tangga Melakukan Pemeriksaan Payudara Sendiri (Sadari) Alvita Brilliana R. Arafah, Hari Basuki Notobroto. Ijph, 12(August), 143–153. https://doi.org/10.20473/ijph.v12i1.2017.143-153

Dr.dr.Imam Rasjadi, spOG (K)Onk. (2010). Epidemiologi kanker pada wanita. cv sagung seto.

Harnianti, H., sakka, A., & Saptaputra, S. (2016). Studi Perilaku Pemeriksaan Payudara Sendiri (Sadari) Pada Mahasiswa Fakultas Kesehatan Masyarakat Universitas Halu Oleo Tahun 2016. Jurnal Ilmiah Mahasiswa Kesehatan Masyarakat Unsyiah.

Kementerian kesehatan Republik Indonesia. (2016). Infodatin Kanker payudara. InfoDatin, p.1-10.

Lestari, P., & Wulansari. (2018). Pentingnya Pemeriksaan Payudara Sendiri (SADARI) sebagai Upaya Deteksi Dini Kanker Payudara. Indonesian Journal Of Community Empowerment (IJCE), 1161, 55–58.

Lubis, U. L. (2017). Pengetahuan Remaja Putri Tentang Pemeriksaan Payudara Sendiri (SADARI) dengan Perilaku Sadari. Jurnal Aisyah : Jurnal Ilmu Kesehatan, 2(1), 81–86. https://doi.org/10.30604/jika.v2i1.36

Moleong Lexy J. (2013). Metode Penelitian Kualitatif (Edisi Revi). Bandung : PT Remaja Rosdakarya.

Olfah, Y, Mendri, N. K. A. (2013). Kanker payudara & Sadari (Pertama). Yogyakarta : Nuha Medika.

Orbell, S., Hodgkins, S., & Sheeran, P. (1997). Implementation intentions and the theory of planned behavior. Personality and Social Psychology Bulletin, 23(9), 945-954.

Permenkes No 34 tahun2015. (2015). penanggulangan kanker payudara dan kanker leher rahim.

Purba, A., Sari, U., & Indonesia, M. (2018). Hubungan Pengetahuan Dan Sikap Tentang Sadari Dengan Tindakan Wus Melakukan Pemeriksaan Sadari Di Puskesmas Sunggal Tahun 2018. Jurnal Maternal Dan Neonatal, 3(1), 1–12.

Rise, J., Thompson, M., & Verplanken, B. (2003). Measuring implementation intentions in the context of the theory of planned behavior. Scandinavian journal of psychology, 44(2), 87-95.

Rosenthal, T. L. (1993). To soothe the savage breast. Behaviour research and therapy, 31(5), 439-462.
Sari, R. P. (2015). Hubungan Pengetahuan dengan Perilaku Sadari Sebagai Deteksi Dini Kanker Payudara. *Bidan Prada: Jurnal Publikasi Kebidanan Akbid YLPP Purwokerto*, 8(2).

W. Creswell, J. (2015). *Penelitian Kualitatif & Desain Riset* (Saifuddin Zuhri Qudsy (Ed.); Edisi ke-3). Pustaka Pelajar.

WHO. (2019). Kasus Kanker Payudara Paling banyak Terjadi di Indonesia. *Databoks*.

Wang, S. P., Chin, D., & Rao, F. (2009). *U.S. Patent No. 7,556,602*. Washington, DC: U.S. Patent and Trademark Office.