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EARLY DETECTION OF BREAST AND CERVICAL CANCER OF THE RESIDENTS OF PROPO PAMEKASAN SUBDISTRICT

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ABSTRACT

Introduction: Breast cancer and cervical cancer are common cancers in females. Both of these cancers can be detected early. Early detection can reduce cancer morbidity and mortality. The community outreach activities are required to increase knowledge about breast cancer and cervical cancer, in addition to screening as preventive efforts for these two cancers.

Methods: The activity of raising knowledge about the prevention and early detection of breast cancer and cervical cancer was carried out through community counseling to 94 females who were members of the PKK and young females in the Kecamatan Proppo, Kabupaten Pamekasan. Pre and post tests were given before and after the community counseling. After the community counseling, 86 participants were screened for breast cancer by clinical palpation and 46 participants were screened for cervical cancer using the pap smear method.

Results: The result of the post test showed a 27.53% increase in knowledge. The results of the pap smear examination on participants showed 96% concluded as Papanicolaou Class II, 2% Class I, and 2% Class IV. The patient with class IV results was referred to an obstetrician.

Conclusion: Community counseling about breast self examination (BSE) and Pap smear can increase people's knowledge about early detection of breast cancer and cervical cancer.

KEYWORDS

cervical cancer; breast cancer; papanicolau; BSE; early detection

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1. INTRODUCTION

Breast cancer and cervical cancer are the most common malignancies in females. There are more than 1,600,000 new cases of breast cancer every year worldwide (Forouzanfar MH, 2011). To date, about one third of females with breast cancer eventually die from this disease (Kumar V, 2013; Rosai J, 2011). Based on patient data in the Department of Anatomical Pathology of Dr. Soetomo Hospital in 2010-2013, there were 1405 cases of breast

carcinoma. Data from Medical Records of Dr. Soetomo Hospital in 2010-2013 showed the highest number of breast carcinomas in the age group 41 to 50 years.

Based on data from the Cancer Registry (BRK) for 5 years (1996-2000), cervical cancer is the most common malignancy of all primary malignancies in Indonesia with a total of 18,942 cases. In Surabaya, cervical cancer also ranks first of all malignancies with a total of 5561 cases during the period 1996-2000 based on data from BRK. The age distribution of

cervical cancer is bimodal, and mostly affect female in the sixth and fourth decades. The incidence of cervical cancer is higher in groups of people with lower socioeconomic status (Pitkin J, 2003; Berek JS, 2007).

Based on patient data from Pamekasan Hospital during 2017, there were 23 cases of breast cancer and 33 cases of cervical cancer, Breast cancer and cervical cancer are cancers that can be detected early through breast self-examination and pap smear. Early detection of these two cancers will reduce the morbidity and mortality of these cases.

The community service activity program was organized by the Department of Anatomical Pathology in form of a community counseling on breast and cervical cancer in Kabupaten Proppo. The activity was held on September 26, 2017. In addition to the community counseling, clinical breast examination and pap smear were also conducted to participants by medical personels.

In this activity, the benefits obtained were: increasing the community knowledge about the prevention and early detection of breast and cervical cancer. In the long term, this activity is expected to contribute to the prevention and early detection of breast and cervical cancer and also to reduce morbidity and mortality due to late diagnosis of breast and cervical cancer.

2. MATERIAL AND METHODS

There were two methods carried out for increasing knowledge and early detection with each goal in each method. To evaluate the participants's response of the increasing knowledge about the prevention and early detection of breast cancer and cervical cancer, a community counseling was carried out. To find out whether among the participants had lumps in the breasts or lesions in the cervix, clinical examination of breast and cervix evaluation by Pap smear, were carried out.

Prior to the community counseling and screening, requests for permits and coordination were carried

out with the Pamekasan Health Office, particularly the Kecamatan Proppo and the urban village where the activity was conducted. The event was opened by the chairman of the committee. Dyah Fauziah, dr., Sp.PA (K) and Ety Hary Kusumastuti, dr., Sp.PA (K), FIAC gave the community counseling about early signs and early detection of breast and cervical cancer.

The community counseling

The community counseling was given to 94 females who were members of the PKK and young females in the Kecamatan Proppo, Kabupaten Pamekasan. At this activity, the following steps were carried out:

1. Giving a pretest in the form of a questionnaire, to evaluate the participants' knowledge about breast self-examination (BSE), early detection and risk factors for breast cancer before starting the awerness materials.
2. Community counseling. The topic was about Breast Self-Examination Method (BSE), early detection and risk factors for breast cancer and cervical cancer. The media were LCD, photos, and images.
3. Giving a post test in the form of a questionnaire to evaluate the knowledge of participants after attending the community counseling.

The Post-community counseling

After the community counseling, the breast examinations was carried out on participants who had complaints (86 participants). Pap smear examinations were also carried out on 46 females.

Evaluation

Aims to see the response of increasing knowledge about the prevention and early detection of breast cancer in the following ways:

1. To evaluate the knowledge of the participants before attending the community counseling through a pretest in the form of a questionnaire

2. To evaluate the knowledge of extension participants after receiving counseling through a post test in the form of a questionnaire

3. RESULTS

The community service event was held on September 16, 2017 at the Puskesmas Proppo, Kabupaten Pamekasan, attended by 94 participants. BSE examination was carried out on 86 participants. Apart from the BSE examination, the community service program was also accompanied by community counseling on cervical cancer and pap smear examinations. After the screening, 46 participants underwent the pap smear examination. The results of

Table 1. Breast Cancer Pre-Test and Post-Test Questionnaires

Score Categories	Pre Test		Post Test	
	n	%	n	%
Weak	47	50,01	32	34,04
Average	15	15,96	17	18,09
Good	32	34,04	45	47,87
Total	94	100,00	94	100,00

Table 2. Breast Cancer Risk Factors

Risk factors	n	%
Doesn't have many children	69	73,40
Breast feeding for less than 6 months	14	14,89
Exposed to X-ray radiation more than once a year	5	5,32
Over 25 years old	78	82,98
Have had a breast tumor (lump)	2	2,13
Having a family history with cancer	4	4,26

Table 3. Results of Pre-Test and Post-Test of Cervical Cancer Questionnaire

Score Categories	Pre Test		Post Test	
	n	%	n	%
Weak	40	68,97	21	36,2
Average	10	17,24	16	27,59
Good	8	13,79	21	36,21
Total	58	100	58	100

Table 4. Results of the Cervical Cancer Questionnaire

Question	n	%
Sexual intercourse at an early age (<20 yo)	36	62,07
Sexual intercourse >1 persons (including > 1 marital)	11	19,0
Many vaginal delivery (≥5)	16	27,6
Smoking	1	1,72
Often experience genital/vaginal infection	16	27,6
Doesn't do papsmear routinely	50	86,2

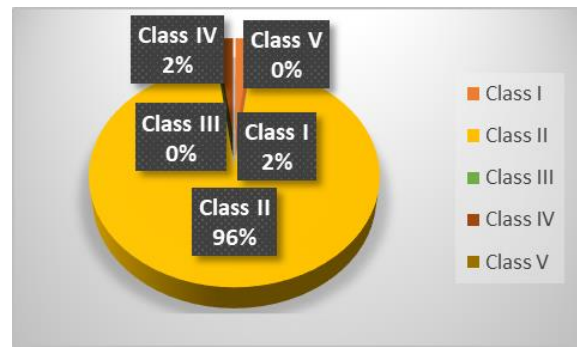


Figure 1. Pap Smear Result According to Papanicolaou Classification

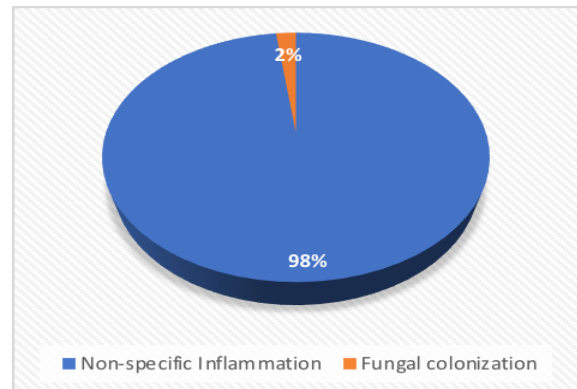


Figure 2. Details of Pap Smear Result for Papanicolaou Class II Category

the questionnaire showed a 27.53% increase in the knowledge of the participants.

There were 86 participants aged 19 to 60 with various professions, the majority were housewives. Physical examination on the right and left breast, showed that 6 of the participants had nodules on the breasts, 1 woman had nodules of the neck, and 1 woman had nipple retraction. These patients were then advised to undergo further investigations by ultrasound and fine needle aspiration biopsy if necessary.

Lack of public knowledge about the etiology, symptoms, risk factors, and early detection of cervical cancer was reflected in the results of the pre-test participants, 58 participants who filled out the cervical cancer pre-test questionnaire before community counseling, had a 75 score or more was 31.03%, whereas , after the community counseling, it increased to 63.80%. The following is a table of the pretest and posttest scores for cervical cancer questionnaire.

The results of the pap smear examination on participants showed 96% was concluded as Papanicolaou Class II, 2% Class I, and 2% Class IV. In patients with Papanicolaou Class IV, we recommended a follow-up to an Obstetrician and Gynecologist. Among the 96% participants with Papanicolaou class II results, 98% of participants had non-specific inflammation and 2% of participants with fungal infections.

For all participants with non-specific inflammatory processes and fungal infections, it was recommended to repeat pap smear examination for another 1 year and also be treated according to the cause. For participants with pap smear results within normal limits, it is advisable to do another examination 1 year later. The complete results can be seen in the image below.

4. DISCUSSION

Health promotion plays an important role in early detection and improving cancer survival (Agide et al., 2018). Someone who has knowledge about early detection of cancer, will know when to ask the medical team for help and believe in the medical action that will be taken (Calderón- Garcidueñas et al., 2015; Rezaeian et al., 2014).

The awareness and participation of Indonesian females on breast and cervical cancer screening has differences depending on the social and economic level of the individual (Anwar et al., 2018) so that interventions are needed which are expected to increase this awareness.

The timely preventive treatment according to clinical condition can reduce the morbidity and mortality of breast and cervical cancer (Miller et al., 2014). This is also consistent with the study conducted by Hoerger and his colleagues that early detection of breast and cervical cancer can reduce mortality (Hoerger et al., 2011).

One of the effective methods that can be used to increase knowledge is education (Kisuya et al., 2014; Rezaeian et al., 2014). A study in rural Tamil Nadu

used a method similar to this study, by providing materials with power point presentations, flipcharts, true story narratives, brainstorming, distribution of local language pamphlets prepared according to CDC standardized guidelines, questionnaires before and after pretest, resulting in significant increase in knowledge of extension participants (Nisha & Murali, 2020).

Besides increasing knowledge, intervention with breast self examination and pap smears can also be done as early detection. Studies in Taiwan prove that pap smears can reduce the prevalence and incidence of cervical cancer (Kau et al., 2019). Cancer detection is important because prevention also has a less cost advantage than treatment (Denny & Prendiville, 2015).

5. CONCLUSION

The following are the conclusions that can be drawn from the examination and community counseling activities with the theme "Increasing Knowledge about Self-Breast Examination (BSE) for residents of the Kecamatan Proppo, Kabupaten Pamekasan". Community service activities by conducting community counseling on breast self-examination can increase the knowledge and understanding of the residents of the Kecamatan Proppo, Kabupaten Pamekasan about the importance of breast tumor detection, and can do it independently and regularly so that they can detect any changes in the breast, in a simple and inexpensive way. Breast self-examination can help the participants to detect tumors, so early and precise treatment can be given to the person who suffer from tumor. Cervical cytology screening activities can help the residents in early detection of cervical cancer.

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