

Community Empowerment through the Cervical and Breast Cancer Early Detection Program with the Formation of Srikandi Cadres (Early Cancer Awareness) in Kangean Islands, Sumenep Regency

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Abstract: *Cervical cancer and breast cancer are two types of cancer that often occur in women and contribute to a high mortality rate. However, there are still many people who do not know about the early detection of cervical cancer and breast cancer to prevent diseases. This community service aims to make people aware of the dangers of breast and cervical cancer. The subjects of this community service program assistance were women in Arjasa sub-district, Kangean Islands, Sumenep Regency. The method used in community service is Community-based Research (CBR) to develop early detection programs for non-communicable diseases of breast cancer and cervical cancer. Research findings showed 91.1% of respondents did not know about early detection of IVA test. The results of the IVA screening test on 90 respondents, there is one respondent with a definite IVA pre-cancerous lesion. SRIKANDI (Sadar Kanker Sejak Dini) Cadre was formed to increase public awareness. Srikandi's cadre provisioned with knowledge about cervical and breast cancer, equipped with pocketbooks and given training on breast self-examination (BSE). They invited the public to increase awareness of cervical and breast cancer by conducting IVA tests and being able to do breast self-examinations to reduce the incidence of cervical and breast cancer.*

Keyword: *Cervical Cancer, Breast Cancer, Srikandi, Community Based Research (CBR)*

Introduction

Cancer is one of the biggest contributors to death in the world. Based on the results of the Basic Health Research (Riskesdas) in 2018 in Indonesia, the prevalence of cancer increased from 1.4% in 2013 to 1.8% in 2018. Cervical cancer and breast cancer are the largest cancers that cause death in women.¹ Data presented by Schiffman et al. (2007) from the results of his research Cervical cancer is cancer with the highest incidence (> 80%) in developing countries.²

Cervical and breast cancer could prevent by reducing behavioural risk factors, namely, by engaging in healthy living behaviours. Cancer can be cured if known early and get the right

¹ Badan Penelitian dan Pengembangan Kesehatan, *Hasil Utama Riskesdas 2018* (Jakarta: Kementerian Kesehatan RI, n.d.).

² Mark Schiffman et al., "Human Papillomavirus and Cervical Cancer," *The Lancet* 370, no. 9590 (2007): 890–907.

treatment. However, based on research in 2017, it was found that Indonesian women's awareness of risk factors for breast cancer is still low.³

Some steps that can be done for early detection of cervical cancer by doing Visual Inspection with Acetic Acid (IVA), as well as early detection of breast cancer by doing Breast Self-Examination (BSE) and Clinical Breast Examination (SADANIS)⁴. Prevention of this cancer can also be done by vaccinating HPV (Human Papilloma Virus) to prevent infection in young women (18 years), and detection of carcinogenic HPV in older women (30 years).⁵ Because the cases that occur, the women do not know of any indications that he had cervical cancer so that he experiences late diagnosis so that cancer continues to develop in the body.⁶

In 2016 in East Java Province, the number of women examined and found breast lumps were 1,059 women (0.55%). Then until 2017, there were 634,710 women (3.81%) with IVA positive with 9,494 women (4,94%)⁷. Until now, there are no data that describe the prevalence of cervical and breast cancer in the Kangean Islands.

The number of women who have been examined for the early detection of cervical cancer and breast cancer is still low. It is necessary to increase the program for early detection of cervical cancer and breast cancer, especially for regions with remote geographical conditions and far from health access⁸ such as in the Kangean Islands.

Kangean Islands is part of the Sumenep Regency. Kangean Islands has located 120 km from Sumenep Regency and takes about 10 hours by boat if the weather is good. The considerable distance to higher health facilities means that people in the Kangean Islands cannot get optimal health services. Besides, access to information is also minimal because of the availability of electricity, and the internet is not always available. Even some areas do not have power and internet access.

Early marriage in the Madura area is still a lot. This happens because the age of marriage

³ Aira Putri Mardela, Khomapak Maneewat, and Hathairat Sangchan, "Breast cancer awareness among Indonesian women at moderate-to-high risk," *Nursing and Health Sciences* 19 (2017): 301–306.

⁴ Eva Sulistiowati and Anna Maria Sirait, "Pengetahuan Tentang Faktor Risiko, Perilaku Dan Deteksi Dini Kanker Serviks Dengan Inspeksi Visual Asam Asetat (Iva) Pada Wanita Di Kecamatan Bogor Tengah, Kota Bogor," *Buletin Penelitian Kesehatan* 42, no. 3 (September 2014): 10.

⁵ Isabel C. Scarinci et al., "Cervical Cancer Prevention: New Tools and Old Barriers," *Cancer* (2010): NA-NA.

⁶ Jacquelyn Reid, "Women's Knowledge of Pap Smears, Risk Factors for Cervical Cancer, and Cervical Cancer," *Journal of Obstetric, Gynecologic & Neonatal Nursing* 30, no. 3 (May 2001): 299–305.

⁷ Tim Riset Penyakit Tidak Menular, *Laporan Riset Penyakit Tidak Menular Tumor Payudara dan Lesi Prakanker Serviks* (Jakarta: Kementrian Kesehatan RI, December 2016).

⁸ E. Kathleen Adams, Nancy Breen, and Peter J. Joski, "Impact of the National Breast and Cervical Cancer Early Detection Program on Mammography and Pap Test Utilization among White, Hispanic, and African American Women: 1996–2000," *Cancer* 109, no. S2 (January 15, 2007): 1996–2000.

in Madura is not limited, so there are many underage marriages. The habit of marrying children who are not of age is still a tradition in the Sumenep area. Most young married women are 9 to 15 years old.⁹ In Sumenep District, the total early marriage was 45,08%.¹⁰

Sexual relations that are active at a young age less than 20 years can increase the risk of cervical cancer 10-12 times greater than those married at the age of 20 years. This happens because at that age, the maturation of epithelial cells in the cervix is not perfect, so it is susceptible to damage during sexual intercourse and increases the risk of invasion of HPV.¹¹

The community service activity is expected to raise Kangean community awareness, especially Arjasa District. The initial step in early detection of breast cancer and making Arjasa District a pilot project for periodic other sub-districts in Sumenep Regency in the Srikandi Kangean Kader program to promote early detection of cervical and breast cancer as a first step to reduce the incidence of cervical and breast cancer.

Methods

The strategy used in community service is community-based research (CBR).¹² The technique used because it is following the community service plan in the context of developing an early detection program for non-communicable diseases of breast cancer and cervical cancer. CBR method is used because the research conducted can explore and collect data about health in the community, so that community service activities that will be carried out can be adjusted to the conditions of the community. Research-based community service is carried out on commitments from the community (society, community leaders and health workers).

There are four stages in the CBR method, namely :

1. *Laying the foundation*

At this stage, researchers, together with communities in the Kangean Islands, carry out discussions, convey research and dedication to be carried out. The activities included: (1) The

⁹ Masthuriyah Sa'dan, "Menakar Tradisi Kawin Paksa Di Madura Dengan Barometer HAM," *Jurnal Musawa* 14, no. 2 (2015).

¹⁰ Esti Yunitasari, Retnayu Pradanie, and Ayu Susilawati, "Pernikahan Dini Berbasis Transtuktural Nursing Di Desa Kara Kecamatan Torjun Sampang Madura," *Jurnal Ners* 11, no. 2 (2016): 6.

¹¹ Tim Riset Penyakit Tidak Menular, *Laporan Riset Penyakit Tidak Menular Tumor Payudara dan Lesi Prakanker Serviks*.

¹² Mohammad Hanafi et al., *Community-Based Research Sebuah Pengantar*, 1st ed. (Surabaya: LP2M UIN Sunan Ampel Surabaya, 2015). The use of research strategies in community service with community-based research (CBR) approaches has also been carried out by Muhid, et al. (2018). Perubahan Perilaku Open Defecation Free (ODF) melalui Program Sanitasi Total Berbasis Masyarakat (STBM) di Desa Babad Kecamatan Kedungadem Kabupaten Bojonegoro. *Engagement : Jurnal Pengabdian Kepada Masyarakat*, 2(1), 99–119.

research team and the community discussed the aims of the study, submitting a plan of community service activities to be carried out in the Kangean Islands; (2) Focus group discussion with the Head of the Arjasa District Health Center and local health workers. The condition of the Kangean Islands community related to the incidence of cervical and breast cancer in the Kangean Islands, utilization of health facilities for IVA and SADANIS examinations, health workers deliver the availability of health facilities available at the Arjasa Health Center and Supporting Health Centers; (3) FGD with the Head of Puskesmas and community leaders about the condition of the Kangean Islands region. Also, the number of sub-districts and the condition of the area that can be reached for activities.

2. Research planning

At this stage, it is determined and chosen the main priority to be used as research, the methods and analysis. The research team conducted a research planning discussion that would be carried out with community leaders, the Head of the Puskesmas health worker, and community cadres related to (1) Determine the location of research and community service activities. The Head of the Puskesmas and community prepare a place that allows events to be carried out related to the availability of inspection facilities and the condition of the community; (2) Arrangement of schedule and format of activities. Each party conveys a timeline of events that allow for research and service activities. Community leaders and health workers participate in the preparation of schedules and activities for the implementation of activities. They adjust the time of the Puskesmas visit and Supporting activities; (3) Community leaders together with local cadres and the community to attend research and community service activities; (4) Preparation of tools and materials for an examination of IVA and SADANIS held by the Head of the Puskesmas and health workers.

3. Information gathering and analysis

This stage is the process of meaning and learning through collecting, analyzing and interpreting data. Data collection was carried out in the Arjasa Health Center and Pajanangger Village to see issues related to reproductive health, risk factors for breast cancer and cervical cancer using a questionnaire. The data collected with questionnaires from 100 respondents. Also, early detection of cervical cancer with IVA and early detection of breast cancer with SADANIS by health workers from the Arjasa Health Center. Data collection was carried out within three days, one day at the Arjasa Health Center, and two days in Pajanangger Village. The data that has been collected is then analyzed to determine risk factors for cervical and breast cancer in the Arjasa Subdistrict community.

4. *Acting on findings*

Next, the results of the research that have been carried out and can be used as new knowledge for the community. The results of this study can be utilized for the community. The findings from the data analysis discussed with the community for further action. The research team, together with the community, formed the SRIKANDI. Srikandi's cadre was given material about cervical and breast cancer, was given training on how to do a breast self-examination (BSE) and was provided with a pocketbook.

The cadre job was providing education to the public about cervical and breast cancer as well as how to do early detection of cervical cancer using IVA and early detection of breast cancer with BSE. Furthermore, Cadre Srikandi will deliver the material obtained in training activities to the community.

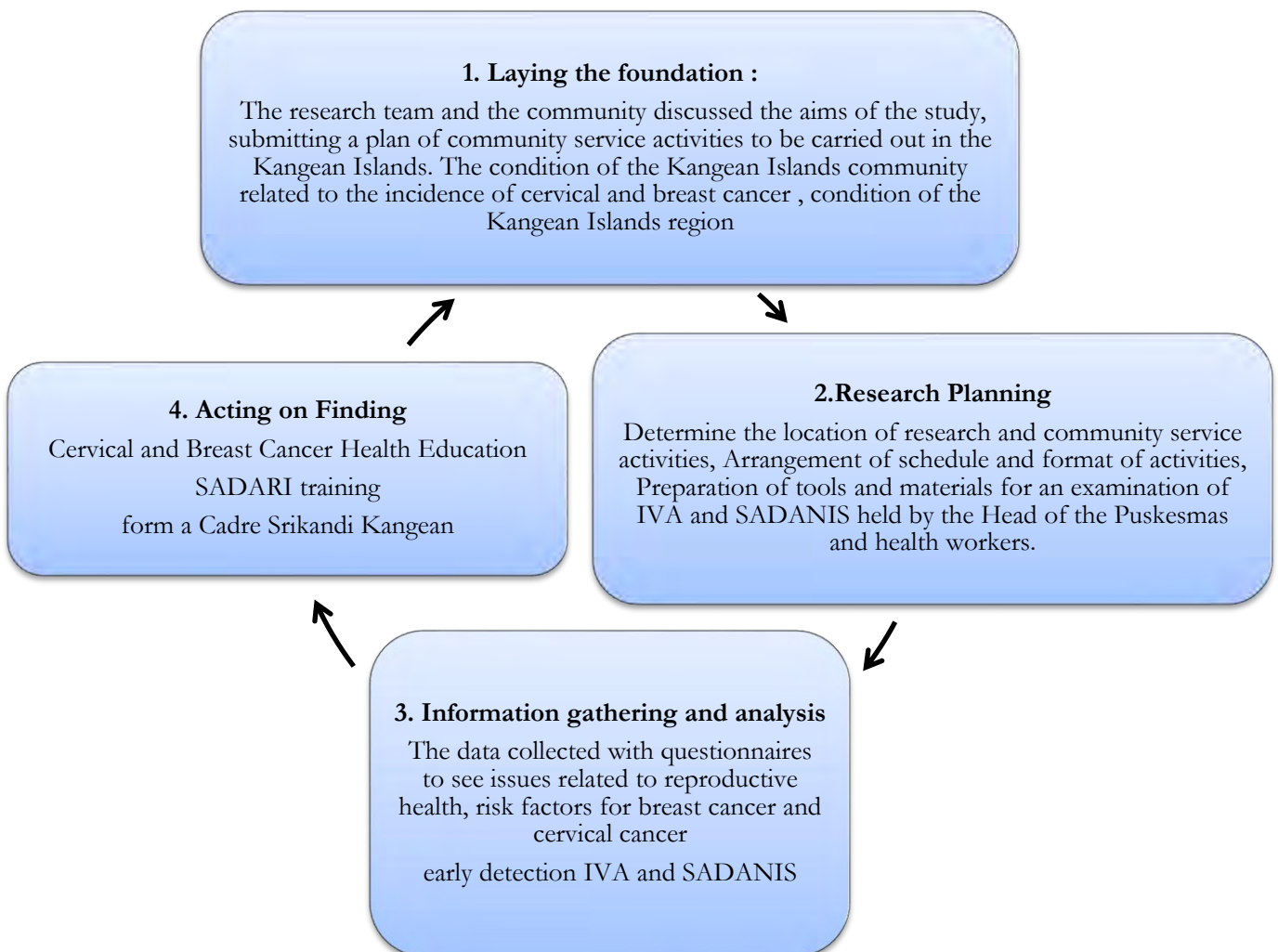


Figure 1. Four Stages of CBR

Results and Discussion

Implementation of the FGD with the community found that there was no data related to the incidence of cervical and breast cancer. The Head of the Puskesmas said that the Puskesmas in the Kangean Islands had provided services for IVA and SADANIS examinations. Still, not many people were interested in having a check-up. As of 2018, only ten people had examined IVA at the Arjasa Health Center. According to health workers at the Arjasa Community Health Center, the facilities used for examinations are also very limited, where there are only six speculum instruments for IVA examination. Sterilization in the form of an autoclave to sterilize check equipment is very limited and difficult to use in remote areas of Arjasa District, where most of the area has not yet been electrified. Based on the discussion, the research team and the community agreed to hold health education related to cervical and breast cancer and carry out IVA and SADANIS examinations. The research team will help provide a disposable speculum to make it easier for health workers to use it for examinations because it does not need to be sterilized.

The Kangean Islands consist of 3 subdistricts, namely Arjasa, Kangayan and Sapeken. Arjasa Subdistrict has 19 villages with conditions scattered on the largest island in the Kangean Islands. Transportation access in Arjasa Subdistrict is more likely to be reached because it can be traversed by land with better road conditions compared to Kangayan and Sapeken districts. Easy transportation access will support the research and service activities that will be carried out.

Based on the results of the FGD with the community, it was decided that the community service and research activities were carried out in two places, namely Arjasa Health Center and Pajanangger Village. Arjasa Public Health Center has a strategic location and can be reached by 12 nearby villages namely Arjasa, Laok Jang-Jang, Kalikatak, Sambakati, Forces, Duko, Paseraman, Bilis Bilis, Kalisangka, Angon-angon, Pandeman and Sumberangka.

Pajanangger Village was chosen for research and service activities because the village is located in a remote location. This village is located in the southernmost district of Arjasa, close to 4 other villages. According to the Midwife and Pajanangger village cadres, the Pajanangger community has the wrong understanding of cervical cancer. This understanding is obtained from health product sellers who claim to be able to treat cervical cancer, but unfortunately, the quality and safety of these health products have not clinically tested. This triggers public misconceptions about the treatment of cervical cancer instantly, as well as misconceptions in paying attention to reproductive health. So there needs to be a correct understanding of cervical and breast cancer in the Pajanangger Village community.

Research activities related to cervical and breast cancer are carried out by taking data

through questionnaires and IVA and SADANIS examinations. The activity was carried out from July 26, 2019, to July 31, 2019. The first research and service activity was carried out at the Arjasa Community Health Center for one day to 40 respondents. The research team collected questionnaire data from respondents, while midwives conducted IVA and SADANIS examinations at the Arjasa Health Center. Questionnaire data contains an overview of reproductive health and risk factors for cervical and breast cancer. The respondents who had interviewed continued the IVA and SADANIS examination activities.



Figure 2. Preparation of VIA Inspection at Arjasa Health Center

Data collection was then carried out in Pajanangger Village, Arjasa District for two consecutive days. Pajanangger Village located in the southern part of Kangean Island, with a travel time of approximately 2 hours from the Arjasa Health Center. The research team and health workers from the Arjasa Community Health Center had to take a pretty difficult road to Pajanangger Village. The condition of the road is badly damaged and if residents can not pass the rainy season, so residents must pass by sea. Electricity in the village is not available 24 hours a day but only exists from 5 pm to 5 am. The location used for the activity is the Pajanangger Village Health Center.

The research team took the questionnaire data aided by a local cadre because when conducting the data collection, some respondents could not speak Indonesian, and some even could not read and write. The IVA and SADANIS examinations were carried out by midwives from the Arjasa Community Health Center and midwives of the Pajanangger Village Health Support Center, which was coordinated by the Head of the Arjasa Health Center. The number of respondents who attended was 60 people.

IVA and SADANIS examinations are performed on women who are already sexually active and are not menstruating, so respondents who are menstruating are asked to do an IVA and

SADANIS examination at another time. Of the 100 respondents taken at the Arjasa Puskesmas and Pajanangger Village, as many as 90 respondents were able to undergo IVA and SADANIS examinations.



Figure 3. Data collection in Pajanangger Village

The data that has been collected is then analyzed to find out the risk factors for cervical and breast cancer that mostly occur in the Arjasa District community. The results of data collection obtained as much as 91.1% of respondents did not know about early detection of IVA and SADANIS. Knowledge of IVA and SADANIS will influence the behaviour of women to conduct IVA and SADANIS examinations in health workers. The results of questions and answers with respondents found that some respondents had a wrong understanding of the prevention of cervical cancer by using health products that have not clinically tested. Even the use of these products which must be entered into the female reproductive organs will actually be at risk for their health.

Besides, 7.7% of respondents had a family with a history of breast cancer, and 2.2% had a family with a history of cervical cancer. Women who have a family history of cervical cancer or breast cancer have a risk of 2 to 3 times higher for cervical cancer and breast cancer so that women with a family history of cancer need early detection to be known if cancer cells appear¹³.

Many of the respondent had their first pregnancy at age of 19-21 year old. This early

¹³ Elisabet Surbakti, "Hubungan Riwayat Keturunan Dengan Terjadinya Kanker Payu-dara Pada Ibu Di RSUP H. Adam Malik Medan," *Jurnal Precure* 1 (April 2013): 15.

pregnancy will lead to other health complication such as anemia,¹⁴ pre-eklamsi¹⁵ and others. Therefore many of respondent, use contraceptives. The use of hormonal contraceptives on respondents with an installation time of more than five years is 20% of respondents. Prolonged use of hormonal contraception can increase the risk of cervical cancer 17.9 times compared to women who do not use contraceptives.¹⁶ A similar study found that the use of hormonal contraception has a risk of cervical cancer 0.18 higher compared to non-hormonal ones.¹⁷ The use of hormonal contraceptives also has a significant relationship with the occurrence of breast cancer in women in Dr. Soetomo Hospital. Women who use hormonal contraception for more than five years need to do early detection early with IVA and SADANIS.¹⁸

Early age marriage less than 20 years was found as many as 61.1% of the respondents studied. Early marriage is related to cervical cancer. Sexual intercourse that is too early will affect the damage to epithelial tissue in the walls of the vaginal cavity and cervix. If the cervical mucosal cells are not yet mature, they will experience changes and damage to the cervical cells¹⁹.

The results of IVA screening of 90 respondents, there is one respondent with a positive IVA pre-cancerous lesion, while in the SADANIS examination, no positive results found. Women who had positive IVA results were found in Pajanangger Village, then given a referral letter to the Arjasa Health Center to get further therapy.

Cervical and breast cancer can be prevented by recognizing cancer risk factors and making early detection of breast and cervical cancer. Therefore it is necessary to increase knowledge about cervical and breast cancer as well as early detection of IVA and SADANIS in the Arjasa District community. Early detection with IVA can detect early on the presence of pre-cancerous cells so that treatment can be done immediately so as not to develop into cancer cells. Likewise, the early detection of breast cancer with BSE and SADANIS. Examination of breast self-examination conducted by women can detect any abnormalities in the breast, then a test of breastfeeding can

¹⁴ Irul Hidayati and Esti Novi Andiarini, "View of The Relationship Between The Number of Parities and Pregnancy Age with Maternal Anemia | Journal of Health Science and Prevention" 2, no. 1 (n.d.): 42–47.

¹⁵ Wahyu Eka Ekasari, "Pengaruh Umur Ibu, Usia Kehamilan, Paritas Dan Berat Lahir Bayi Rendah Terhadap Asfiksia Bayi Pada Ibu Pre-Eklamsia Berat" (Tesis, Universitas Sebelas Maret, 2015).

¹⁶ Muthiah Rissa Pratiwi, *Pengaruh Pemakaian Alat Kontrasepsi Kombinasi Progesteron Estrogen terhadap Kejadian Kanker Leher Rahim Di RSUD Dr. Moewardi Surakarta*, Laporan Tugas Akhir (Fakultas Kedokteran: Universitas Sebelas Maret Surakarta, 2009), digilib.uns.ac.id.

¹⁷ Sarwenda Abdullah, Jeavery Bawotong, and Rivelino Hamel, "Hubungan Pemakaian Kontrasepsi Hormonal Dan Non Hormonal Dengan Kejadian Kanker Serviks Di Ruang D Atas BLU, Prof. Dr. R.D. Kandou Manado," *E-Jurnal Keperawatan* 1, no. 1 (August 2013).

¹⁸ Gusti Ayu Triara Dewi and Lucia Yovita Hendrati, "Analisis Risiko Kanker Payudara Berdasar Riwayat Pemakaian Kontrasepsi Hormonal Dan Usia Menarche," *Jurnal Berkala Epidemiologi* 3, no. 1 (January 2015): 12.

¹⁹ Rita Darmayanti, Hapisah, and Rita Kirana, "Faktor-faktor yang Berhubungan Dengan Kanker Leher Rahim Di RSUD Ulin Banjarmasin," *Jurnal Kesehatan* VI, no. 2 (October 2015): 172–177.

be done by health workers. Early detection can prevent the spread of breast cancer cells.

Based on this, it is necessary to increase public knowledge about cervical and breast cancer and early detection that can be done to prevent disease. This knowledge enhancement activity will be more effective if it involves the community as a mobilizer, given the limitations of the regional languages of the research team.

Formation of health cadres had previously done by Dewi et al.²⁰ in community service activities in Garut Regency. The involvement of health cadres in these activities can help the community to recognize breast cancer and how to detect it early.

Community involvement in efforts to increase knowledge about health is very effectively used, for example, in the community service that forms exclusive breastfeeding ambassadors and reproductive health. The presence of the health ambassador can increase public knowledge and community interest in conducting early detection of SADARI²¹. Other services performed by Kusworo et al.²² The involvement of religious leaders/activists are essential in changing the outlook, mindset, attitude and behaviour of the people towards HIV.

Based on that, the research team, together with the local community, agreed to form a Cadre Srikandi Kangean. The heroine is short for Cancer Awareness Early. It is hoped that by becoming a cadre of Srikandi Kangean, people, especially women in the Kangean area, will be more aware of the dangers of cervical and breast cancer. Cadre Srikandi is a native of Arjasa District who plays an active role in various community activities. By involving local people from Arjasa Subdistrict as Srikandi Kangean who have the enthusiasm and commitment as cadres can guarantee the sustainability of the program²³.

Cervical and Breast Cancer Health Education

Providing health education or counselling in the form of lectures, demonstrations, and practices. This form of activity was chosen because based on Wantini's research in 2018,

²⁰ Dewi, Nurdiamah, and Achadiyani, "Pembentukan Kader Kesehatan untuk Meningkatkan Pengetahuan dan Kemampuan Melakukan Deteksi Dini Kanker yang Sering Terjadi Pada Wanita di Desa Sukamanah dan Desa Cihaurkuning, Kecamatan Malangbong Kabupaten Garut," *Jurnal Aplikasi Ipteks untuk Masyarakat* 2, no. 2 (November 2013): 78–84.

²¹ Ana Zumrotun Nisak et al., "Upaya Peningkatan Kualitas Kesehatan Kampung Sayang Ibu Anak melalui Duta Asi Eksklusif dan Kesehatan Reproduksi Perempuan," *E-Dimas: Jurnal Pengabdian kepada Masyarakat* 10, no. 1 (April 11, 2019): 61.

²² Nyoko Adi Kusworo et al., "Penguatan Peran Faith Based Organizations (FBO) dalam Pencegahan dan Penanggulangan HIV dan AIDS melalui Peran Aktif Young Religious Leader di Tretes Prigen Pasuruan," *Engagement: Jurnal Pengabdian Kepada Masyarakat* 2, no. 2 (November 2018): 17.

²³ Ibid.

counselling activities in the form of lectures, presentations and training will affect the increase in knowledge about health, in this case, reproductive health, cervical and breast cancer²⁴.

Health education about cervical and breast cancer was carried out by the research team at Arjasa Health Center by inviting 40 prospective cadre Kangean. In this health education activity, delivered related to cervical and breast cancer. The results of the health education obtained interactive discussions between participants and the research team. In the discussion, the participants actively conveyed the problems they experienced related to reproductive health and conducted a question and answer session with the research team. At the end of this activity produced participants who were able to explain risk factors, causes, early detection and management of cervical and breast cancer. Through this activity, awareness was also generated from participants to conduct early detection of cervical cancer with IVA and conduct breast self-examination for early detection of breast cancer. This is consistent with previous research in which increased knowledge about cervical and breast cancer can increase women's awareness to conduct early detection of IVA and SADARI.



Figure 4. Health Education about Cervical and Breast Cancer

Breast Self-Examination (SADARI) Training

Breast Self-Examination training for participants was carried out by the research team. Participants taught how to do SADARI steps, characteristics of normal and abnormal breast conditions. Each participant practiced SADARI and immediately evaluated by a research team and trained health workers from the Arjasa Community Health Center. The participants were

²⁴ Nonik Ayu Wantini, "Efek Promosi Kesehatan Terhadap Pengetahuan Kanker Payudara Pada Wanita Di Dusun Terongan, Desa Kebonrejo, Kalibaru, Banyuwangi, Jawa Timur," *Jurnal Medika Respati* 13 (2018): 8.

enthusiastic in participating in this activity, seen from the high participation of participants in conducting SADARI practices.

Health education, accompanied by demonstrations or practices is very effective in increasing knowledge about health. This can also be seen in the dedication made by Khamidah (2018), where participants were more enthusiastic and active when attending counselling and demonstrations²⁵.

As a result of the SADARI training, participants are able to practice the SADARI steps correctly. Participants are able to recognize the condition of normal and abnormal breasts by checking themselves. When practicing SADARI, other participants will remind if something is wrong in practicing SADARI.



Figure 5. SADARI Training (Breast self-examination)

Giving a Pocket Book

Each cadre of Srikandi Kangean provided with a pocketbook "Recognize Breast Cancer and Cervical Cancer Early". The book contains about cervical and breast cancer, starting from the understanding, causes, risk factors, early detection and treatment. This book can be used by cadres as a medium to convey to other communities about cervical and breast cancer and to teach SADARI steps as an early detection step for breast cancer.

²⁵ K Kamidah, "SADARI Sebagai Upaya Menurunkan Angka Mortalitas Ca Payudara," *GEMASSIKA: Jurnal Pengabdian Kepada Masyarakat* 2, no. 2 (December 26, 2018): 129.



Figure 6. Book "Recognize Breast Cancer and Cervical Cancer Early"

Cadre Srikandi Kangean delivered material on cervical and breast cancer to the community in various community activities such as Posyandu, PKK activities, and community gathering. The role of cadre Srikandi Kangean is crucial in raising public awareness in carrying out early detection of cervical cancer with IVA and carrying out BSE. Cadre Srikandi Kangean from the local community facilitated the process of delivering cervical and breast cancer material following the conditions of the local community. This can be seen when cadres explain about cervical and breast cancer to the local community using the Kangean language more easily accepted and understood by the community.

Enthusiastic community to conduct early detection with IVA and SADANIS increased after this community service held. Many residents who previously did not attend early detection are now interested in conducting examinations at the Puskesmas. Increased public awareness to perform early detection of cervical and breast cancer with IVA and SADANIS is expected to reduce the occurrence of cervical and breast cancer.

The use of local language and local culture in community service activities can increase community participation in conducting an early examination of cervical cancer through IVA and SADANIS. Furthermore, community involvement in every service activity can guarantee the continuity of the planned program or activity so that the objectives of the action can be achieved.



Figure 7. Research Team with Cadre Srikandi Kangean

Conclusion

Community service by providing reproductive health education can increase public knowledge about reproductive health. Besides, BSE training and IVA examinations was able to increase public awareness to conduct early detection of cancer. The formation of Cadre Srikandi Kangean as a form of community empowerment in Arjasa Sub-District able to increase public awareness to perform early detection of cervical cancer and breast cancer.

It hoped that the formation of the Cadre Srikandi Kangean could be carried out in other areas so that more and more people are aware to conduct early detection of breast cancer and cervical cancer. Increased public awareness is expected to reduce the risk of cervical and breast cancer.

References

- Abdullah, Sarwenda, Jeavery Bawotong, and Rivelino Hamel. "Hubungan Pemakaian Kontrasepsi Hormonal Dan Non Hormonal Dengan Kejadian Kanker Serviks Di Ruang D Atas BLU, Prof. Dr. R.D. Kandou Manado." *E-Jurnal Keperawatan* 1, no. 1 (August 2013).
- Adams, E. Kathleen, Nancy Breen, and Peter J. Joski. "Impact of the National Breast and Cervical Cancer Early Detection Program on Mammography and Pap Test Utilization among White, Hispanic, and African American Women: 1996–2000." *Cancer* 109, no. S2 (January 15, 2007): 348–358.
- Badan Penelitian dan Pengembangan Kesehatan. *Hasil Utama Riskesdas 2018*. Jakarta: Kementerian Kesehatan RI, n.d.
- Darmayanti, Rita, Hapisah, and Rita Kirana. "Faktor-faktor yang Berhubungan Dengan Kanker

- Leher Rahim Di RSUD Ulin Banjarmasin.” *Jurnal Kesehatan* VI, no. 2 (October 2015): 172–177.
- Dewi, Gusti Ayu Triara, and Lucia Yovita Hendrati. “Analisis Risiko Kanker Payudara Berdasar Riwayat Pemakaian Kontrasepsi Hormonal Dan Usia Menarche.” *Jurnal Berkala Epidemiologi* 3, no. 1 (January 2015): 12.
- Dewi, Nurdiamah, and Achadiyani. “Pembentukan Kader Kesehatan untuk Meningkatkan Pengetahuan dan Kemampuan Melakukan Deteksi Dini Kanker yang Sering Terjadi Pada Wanita di Desa Sukamanah dan Desa Cihaurkuning, Kecamatan Malangbong Kabupaten Garut.” *Jurnal Aplikasi Ipteks untuk Masyarakat* 2, no. 2 (November 2013): 78–84.
- Ekasari, Wahyu Eka. “Pengaruh Umur Ibu, Usia Kehamilan, Paritas Dan Berat Lahir Bayi Rendah Terhadap Asfiksia Bayi Pada Ibu Pre-Eklamsia Berat.” Tesis, Universitas Sebelas Maret, 2015.
- Hanafi, Mohammad, Nabiela Naili, Nadhir Salahudin, and A. Kemal Riza. *Community-Based Research Sebuah Pengantar*. 1st ed. Surabaya: LP2M UIN Sunan Ampel Surabaya, 2015.
- Hidayati, Irul, and Esti Novi Andiarini. “View of The Relationship Between The Number of Parities and Pregnancy Age with Maternal Anemia | Journal of Health Science and Prevention” 2, no. 1 (April 2018): 42–47.
- Kamidah, K. “SADARI Sebagai Upaya Menurunkan Angka Mortalitas Ca Payudara.” *GEMASSIKA: Jurnal Pengabdian Kepada Masyarakat* 2, no. 2 (December 26, 2018): 129.
- Kusworo, Nyoko Adi, Zainul Ahwan, Mukhid Mashuri, and Mochamad Hasyim. “Penguatan Peran Faith Based Organizations (FBO) dalam Pencegahan dan Penanggulangan HIV dan AIDS melalui Peran Aktif Young Relegius Leader di Tretes Prigen Pasuruan.” *Engagement : Jurnal Pengabdian Kepada Masyarakat* 2, no. 2 (November 2018): 17.
- Mardela, Aira Putri, Khomapak Maneewat, and Hathairat Sangchan. “Breast cancer awareness among Indonesian women at moderate-to-high risk.” *Nursing and Health Sciences* 19 (2017): 301–306.
- Muhid, A., Sumarkan, Rakhmawati, Fahmi, L. (2018). Perubahan Perilaku Open Defecation Free (ODF) melalui Program Sanitasi Total Berbasis Masyarakat (STBM) di Desa Babad Kecamatan Kedungadem Kabupaten Bojonegoro. *Engagement : Jurnal Pengabdian Kepada Masyarakat*, 2(1), 99–119.
- Nisak, Ana Zumrotun, Subiwati Subiwati, Muhammad Abdur Rozaq, Noor Azizah, and Atun Wigati. “Upaya Peningkatan Kualitas Kesehatan Kampung Sayang Ibu Anak melalui Duta Asi Eksklusif dan Kesehatan Reproduksi Perempuan.” *E-Dimas: Jurnal Pengabdian kepada Masyarakat* 10, no. 1 (April 11, 2019): 61.
- Pratiwi, Muthiah Rissa. *Pengaruh Pemakaian Alat Kontrasepsi Kombinasi Progesteron Estrogen terhadap Kejadian Kanker Leher Rahim Di RSUD Dr. Moewardi Surakarta*. Laporan Tugas Akhir. Fakultas Kedokteran: Universitas Sebelas Maret Surakarta, 2009. digilib.uns.ac.id.
- Reid, Jacquelyn. “Women’s Knowledge of Pap Smears, Risk Factors for Cervical Cancer, and Cervical Cancer.” *Journal of Obstetric, Gynecologic & Neonatal Nursing* 30, no. 3 (May 2001): 299–305.

- Sa'dan, Masthuriyah. "Menakar Tradisi Kawin Paksa Di Madura Dengan Barometer HAM." *Jurnal Musawa* 14, no. 2 (2015).
- Scarinci, Isabel C., Francisco A.R. Garcia, Erin Kobetz, Edward E. Partridge, Heather M. Brandt, Maria C. Bell, Mark Dignan, Grace X. Ma, Jane L. Daye, and Philip E. Castle. "Cervical Cancer Prevention: New Tools and Old Barriers." *Cancer* (2010): NA-NA.
- Schiffman, Mark, Philip E. Castle, Jose Jeronimo, Ana C. Rodriguez, and Sholom Wacholder. "Human Papillomavirus and Cervical Cancer." *The Lancet* 370, no. 9590 (2007): 890–907.
- Sulistiowati, Eva, and Anna Maria Sirait. "Pengetahuan Tentang Faktor Risiko, Perilaku Dan Deteksi Dini Kanker Serviks Dengan Inspeksi Visual Asam Asetat (Iva) Pada Wanita Di Kecamatan Bogor Tengah, Kota Bogor." *Buletin Penelitian Kesehatan* 42, no. 3 (September 2014): 10.
- Surbakti, Elisabet. "Hubungan Riwayat Keturunan Dengan Terjadinya Kanker Payu-dara Pada Ibu Di RSUP H. Adam Malik Medan." *Jurnal Precure* 1 (April 2013): 15.
- Tim Riset Penyakit Tidak Menular. *Laporan Riset Penyakit Tidak Menular Tumor Payudara dan Lesi Prakanker Serviks*. Jakarta: Kementerian Kesehatan RI, December 2016.
- Wantini, Nonik Ayu. "Efek Promosi Kesehatan Terhadap Pengetahuan Kanker Payudara Pada Wanita Di Dusun Terongan, Desa Kebonrejo, Kalibaru, Banyuwangi, Jawa Timur." *Jurnal Medika Respati* 13 (2018): 8.
- Yunitasari, Esti, Retnayu Pradanie, and Ayu Susilawati. "Pernikahan Dini Berbasis Transtuktural Nursing Di Desa Kara Kecamatan Torjun Sampang Madura." *Jurnal Ners* 11, no. 2 (2016): 6.