

# Health Education about the Importance of Visual Acetate Inspection (IVA) as an Effort to Early Detect Cervical Cancer in Women of Childbearing Age

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## ABSTRACT

Cervical cancer is one of the most common disorders in women. This disease can affect the cells in the cervix which can be dangerous if not treated immediately. Even so, symptoms can appear after the cancer cells have spread, so early treatment is difficult. The incidence of cervical cancer which is still quite high is influenced by early detection behavior which is still low. Several puskesmas in the city of Kediri already have IVA test examination programs, but the achievement is still low because the motivation of mothers to do early detection is still lacking. Therefore, it is recommended that every woman have a routine examination of the uterus every year. One of the tests that can be done to detect cervical cancer is the IVA test. The purpose of community service is to improve the knowledge of women of childbearing age in the examination of the IVA Test, and early detection of cervical cancer in women of childbearing age. The method used to achieve these goals is participatory action research among others through Forum Group Discussion (FGD), questions and answers, and conducting IVA examination, Outcomes of these activities are in the form of goods and services. In the form of goods in the form of scientific publications through journals. The outcomes in the form of services are our health education on the IVA Test and examination of IVA. There is an increase in the knowledge and attitudes of mothers in conducting early detection of cervical cancer. Some mothers willing to do IVA tests show that there is an increase in motivation after the implementation of counseling activities. After the implementation of this community service, it is hoped that mothers will continue to routinely carry out early detection with the support of the active role of cadres and health workers.

**Keywords:** Cervical cancer, IVA test, women of childbearing age

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## INTRODUCTION

Cancer is one of the public health problems in the world. Cancer can invade various tissues in the body's organs, including the female reproductive organ, the cervix, or cervix. Cervical cancer is a primary malignant tumor derived from squamous epithelial cells. Cervical cancer can originate from cells in the cervix, but it can also grow from cells of the cervix or both.

Cervical cancer is cancer or malignancy that occurs in the cervix which is a female reproductive organ that is the entrance to the vagina caused by most of human papillomavirus.

The incidence and death rate from cervical cancer in the world ranks second after breast cancer. Meanwhile, in developing countries it still ranks as the cause of death from cancer in reproductive age. East Java is one of the provinces in Indonesia that has a fairly high number of cervical cancer cases. The incidence of cervical cancer per year is 100 per 100,000 population per year. Data from the anatomical pathology laboratory found that in Indonesia the frequency of cancer occurrence was 92.4% accumulated in Java and Bali the survival of a person with cervical cancer depends on the stage suffered, namely the five-year survival five-year stages I, II, III, and IV is 85%, 60%, 33%, and 7% (Savitri, 2015). Based on Riskesdas data in 2013, data found estimating the number of cervical cancer cases in East Java Province as many as 21,313 which had the largest number of cervical cancer patients compared to other provinces (Ministry of Health RI, 2015).

The results of observations of maternal health cases still found mothers who had cervical cancer based on interviews conducted because they had never done an IVA Test. From these problems, we want to educate with a focus on women aged 30-50 years about the importance of the IVA Test to prepare as early as possible and prevent cervical cancer (Kemenkes RI, 2015).

Problems found in patients with cervical cancer include patients coming to health care facilities after entering an advanced stage and already experiencing metastases in other organs, this is because at the early stages, they have not shown specific symptoms and signs so patients do not realize that they have cancer cervix. Patients who come to health care facilities at an advanced stage will be difficult to treat and need a lot of money for care and treatment, therefore efforts are needed to find out or detect cervical cancer as early as possible, one of which is the Visual Inspection of Acetic Acid (IVA Test) (Siwi & Trisnawati, 2017).

Acetic Acid Visual Inspection (IVA Test) for early detection of cervical cancer only uses simple equipment, a solution of vinegar (acetic acid 3-5%), the results are quickly known, accurate, simple, effective, and easily available at basic service places such as Puskesmas. The IVA test carried out on the condition of the pre-cancerous stage of the patient can already be found so that the patient can be treated immediately so that he does not fall at an advanced stage (Cholifah, Rusnoto, & Hidayah, 2017).

The target of the IVA Test is women aged 30-50 years, although women who are susceptible to pre-cancer are 20-30 years old, but as age increases the incidence of pre-cancerous wounds increases because of the risk of persistent and persistent infection.

The low participation of women of childbearing age to do the IVA test is influenced by several factors, according to the theory of Lawrence Green (Nursalam, 2016) predisposing factors that influence a person's behavior are knowledge, attitudes, beliefs, beliefs, and others. Based on the research of Dewi, Made, Suryani, & Murdani (2013) about the relationship between the level of knowledge and attitudes of women of childbearing age with the VIA examination at the Buleleng Health Center, it shows that the higher the knowledge of the respondents, the greater the participation of the respondents in conducting the IVA Test. Cholifah et al., (2017) research on factors that affect early detection of cervical cancer includes knowledge, where respondents who have less knowledge (63.8%) do not do the IVA Test. Detection of cervical cancer as early as possible and knowing the risk factors for cervical cancer can be prevented and if cervical cancer occurs it can be treated immediately so that it does not fall to a further stage, this will have an impact on improving the health of women of childbearing age themselves. Efforts are needed to increase the coverage of the IVA test, one of which is health education and easy access to the IVA test.

One of the efforts to increase the participation of women of childbearing age in carrying out the IVA Test The Indonesian Strada Institute of Health Sciences has collaborated with the

Pesantren District, and the Health Office to carry out health education about the IVA Test followed by the implementation of the IVA Test. The purpose of this community service is to implement health education to improve behavior, increase knowledge about the importance of the IVA Test and carry out early detection of cervical cancer with the IVA Test in women of childbearing age.

## METHOD

Based on the analysis of problems from the results of related research on cervical cancer early detection behavior and the results of interviews with midwives of the Kediri City Pesantren Health Center, the main problems related to lack of knowledge, negative attitudes and lack of action from mothers in the working area of the Pesantren Health Care perform IVA examination actions. The solution to the problem carried out is by conducting a community service program in the Faculty of Nursing and Midwifery of the Institute of Health Sciences Strada Indonesia by providing counseling on the importance of conducting IVA examinations as an Effort to Early Detection of Cervical Cancer.

The preparation stage of the activity began with the management of activity permits for Bakesbangpollinmas, Kediri City Health Office, and Pesantren Health Center. The team leader coordinates with the head of the Pesantren Health Center and the midwife in charge of IVA regarding the plan for implementing community service activities. Coordination was also carried out with cadres to be able to present mothers at the event.

Community service is carried out in lectures, questions and answers and ends with an IVA test examination. The material presented consisted of two pieces, namely "Getting to Know Cervical Cancer Closer" and "Reproductive Organ Self Examination". The purpose of the first material is to introduce the causes of cervical cancer, symptoms of cervical cancer, due to cervical cancer, treatment and prevention. While the purpose of providing the second material is to increase the mother's understanding of examinations that can be done independently by the mother herself to recognize early any disorders in her female organs. Activities are carried out in lectures and questions and answers so that participants have the opportunity to ask questions about material that has not been understood or ask about women's health problems they experience related to cervical cancer symptoms.

The implementation of this community service program uses funding from the Faculty of Nursing and Midwifery, Strada Indonesia Institute of Health Sciences in 2022, involving 3 lecturers from the Nursing and Midwifery Study Program. All lecturers involved in this community service have competence, and experience in the field of women's reproductive health so that they are able to carry out this activity directly. Ok. Funding is also supported by the Kediri City Islamic Boarding School Health Center.

The series of events in this community service activity include opening, pretest, providing material on getting to know cervical cancer more closely, providing material on early detection methods, post-tests, and carrying out IVA test examinations. The topic presented was getting to know cervical cancer more closely. This material discusses the understanding of cervical cancer, the causes of cervical cancer, stages, symptoms, treatment, side effects of treatment, and prevention of cervical cancer. The second material discusses the definition, purpose, and introduction of female reproductive organs, how to conduct an independent examination, some abnormal findings that can be found, and IVA tests. After the post-test, the participants received leaflets related to the material that had been submitted.

## RESULT

This community service activity has been carried out in the meeting room of the Kediri City Pesantren Sub-District Office attended by midwives of the Pesantren Puskesmas as well as

health cadres and 127 mothers in the working area of the Pesantren puskesmas. After the counseling and discussion, the activity continued with IVA test examinations conducted by 127 people. Some other mothers are not interested and cannot take the IVA test because they do not meet the requirements for the examination. Community service activities have been carried out smoothly as planned. Pretest is carried out before giving material to see the knowledge and attitudes of participants before giving material. The process of delivering the first and second materials went well and smoothly. In the question and answer session, several mothers were interested in asking about the material that had been presented. This shows the enthusiasm of the participants to improve their understanding of cervical cancer and IVA. The next event after the question and answer session was a post test to assess the knowledge and attitude of mothers after being given counseling

Table 1. Demographic characteristics of mothers

Characteristics	Quantity	Presents
<b>Usia</b>		
21 – 30 years	34	26,7 %
31 – 40 years	56	44,2 %
41 – 50 years	37	29,1 %
<b>Education</b>		
Elementary School	2	1,6 %
Junior High School	21	16,5 %
Senior High School	82	64,6 %
Bachelor	22	17,3 %
<b>Work</b>		
Housewife	43	33,6 %
Privat Employees	81	63,8 %
Government employess	3	2,4 %

Table. 2 Knowledge before being given counseling

Knowledge	Quantity	Presents
Good (Score 80 sd 100)	39	25 %
Enough (Score 50 sd 79)	88	75 %
Not Enough (Score < dari 50)	0	0 %
Total	127	100 %

It is known that the respondent's knowledge of VIA before being given counseling was 75% with a sufficient value of 88 respondents.

Table. 3 Knowledge after being given counseling

Knowledge	Quantity	Presents
Good (Score 80 sd 100)	127	100 %
Enough (Score 50 sd 79)	0	0 %
Not Enough (Score < 50)	0	0 %
Total	127	100 %

It is known that there is an increase in respondents' knowledge before and after being given counseling where from 75% with a sufficient score of 88 respondents to 100% with a good score of 127 respondents.

Benefits from community service

1. Contribute to improving public health by reducing morbidity and mortality, especially in maternal and child health.
2. Increasingly recognized as an institution that has a concern with public health problems.
3. As a form of responsibility as an educator in carrying out the tri dharma of higher education

## DISCUSSION

Training using health education as part of health promotion is an effort to increase knowledge and better attitudes of mothers so that the community is willing and able to maintain and improve health. After being given health education about cervical cancer and IVA, an increase in knowledge was obtained from mothers at the Pesantren Public Health in Kediri city. This is in accordance with the results of research showing that health promotion is able to increase maternal knowledge about cervical cancer to support the improvement of early detection behavior. A study in developing countries supports that health promotion will increase knowledge of early detection of cervical cancer (Maulana, 2013).

Health Promotion in this community service activity is in the form of health education about cervical cancer and IVA. The material about cervical cancer, it is explained the understanding of cervical cancer, causes of cervical cancer, stages of cervical cancer, symptoms of cervical cancer, treatment, and prevention of cervical cancer. The second material about IVA, it is explained the meaning of IVA, its purpose of IVA, how to examine internal and external reproductive organs, and abnormal findings.

After being given health education, there is an increase in knowledge from mothers at the Kediri City Islamic Boarding School Public Health A person's knowledge is influenced by the level of education, experience, beliefs, and socio-culture. The higher one's level of education, the easier it will be to receive information related to knowledge. The more experience a person has about something, the more knowledge the person will have about it. The majority of participants in this community service activity have a high school education level, so they have the ability to receive good information and increase their knowledge about cervical cancer and prevention efforts. The increase in knowledge of the participants was supported by experience factors, which were associated with the age of the participants, the majority of whom were over 30 years old. Many participants over the age of 30 years show that they have had many experiences associated with cervical cancer such as getting information from various sources both directly from various parties, as well as mass media (Chizoma M. Ndikom & Ofi, 2017).

After being given health education, there was an increase in attitudes from mothers at the Kediri City Islamic Boarding School Public Health to detect cancer with the IVA method. Related research shows the results that health promotion can influence the attitude of mothers doing IVA tests. This indicates that an increase in knowledge will be followed by an increase in a positive attitude. Providing information about cervical cancer and its dangers, it will affect the attitude of the mother to do early detection (Notoatmodjo, 2012). From the results of the questionnaire, it was found that there are still mothers who have a negative attitude, this is because changes in a person's attitude cannot go through a short time. The procedure for examining the reproductive organs that must be passed by the mother in the IVA examination and imagining the results of the examination often causes the mother to be reluctant to do early detection even though she already has a good knowledge of cervical cancer. The components of attitude include cognitive, affective, and acting tendencies which are a unified system. All three together form a personal attitude. Anxiety and fear of IVA procedures will affect mothers

who still have a negative attitude toward doing IVA examinations (Fridayanti & Laksono, 2017). Some mothers have experienced a change in attitude from negative to positive. A positive attitude will be formed when the stimulation that comes to a person gives a pleasant experience. In mothers who have a positive attitude, mothers have gained an understanding that early detection measures are very beneficial compared to the adverse effects that will be felt if they experience cervical cancer (Rasul, Cheraghi, & Moqadam, 2015).

Health education that explains the dangers of cervical cancer and the importance of early detection can increase maternal motivation. Related research shows that health education about Acetic Acid Inspection (IVA) can increase the motivation of women of childbearing age in cervical cancer detection at Putri Ayu Jambi Health Center. Cervical cancer patients will experience physical and psychological impacts as a side effect of cancer therapy and the development of their own cancer. Other studies show that cervical cancer will have an impact on sexuality and quality of life problems (Bhattacharyya, Nath, & Deka, 2015). The act of performing early detection can also be influenced by individual values. A qualitative study shows that the assumption of women who always feel in good health even though they have been married for 15 years will affect not to do early detection. The hope after this activity is the increasing behavior of early detection of cervical cancer with the IVA test method as the simplest method to detect early. A study shows that the IVA test has advantages with a fairly high accuracy value and low cost so that it is easily affordable by the wider community. It is expected that at least once a year mothers can do IVA examinations, test independently and implement self-examinations at home once a month. In an effort to improve maternal behavior, support is needed that can be done by health workers, cadres, and by the mother's family. A study shows the results that empowering cervical cancer care cadres can improve women's behavior in detection. Family support is related to cervical cancer early detection behavior. In the next community service activity, cadre revitalization and family support improvement programs can be carried out for women of childbearing age to carry out cervical cancer prevention behaviors (Setyani, 2018).

## CONCLUSION

The knowledge and attitudes of mothers in the work area of the Pesantren public health have increased related to cervical cancer prevention through IVA tests and material provision after the implementation of community service. The mother's action for the IVA test examination at the Pesantren Health Center in Kediri City has increased after the implementation of community service.

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