# **Experience of Women of Reproductive Age in Early Detection of Cervical Cancer Through IVA Examination**

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#### **Abstract**

Cervical cancer ranks second as a cancer that causes death in women worldwide. Thus, it is necessary to increase efforts to treat cervical cancer by carrying out early detection through VIA examination. This study aims to explore the experiences of women of childbearing age who have had IVA examinations. This research method uses qualitative research through a phenomenological approach. The participants in this study were 5 main participants and 1 supporting participant who were selected based on a purposive sampling technique. The data analysis used is the Colaizzi technique. The results of this study resulted in 4 themes, namely: (1) Initiatives for early detection, (2) Feelings of WUS during the IVA test process, (3) Support systems in undergoing IVA tests, (4) Expectations for IVA test services. Conclusion: Women of childbearing age who have had an IVA examination have a high self-initiative to take an IVA test. The participants thought that the IVA examination was very useful for early detection of cervical cancer. Feelings of embarrassment and fear were not obstacles for the participants to carry out the IVA examination. It is hoped that further IVA examinations can be carried out with wider counseling and given a room that supports more privacy.

Keywords: IVA Examination, Experience, Women of Reproductive Age



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#### INTRODUCTION

Cervical cancer is a malignant cancer that attacks the cervix and ranks second as a cancer that causes death in women worldwide (Yudhani, Astuti, Mustofa, Indarto, & Muthmainah, 2019). Cervical cancer sufferers are known to be increasing. Cervical cancer in Indonesia is the second highest cancer that has been diagnosed with a total of 36,633 cases in 2020, while the death rate caused by cervical cancer is 21,003 (International Agency for Research on Cancer, 2021). Cervical cancer patients in Riau Province who were diagnosed reached 471 people (1.1%) of the 44,248 women who had carried out early detection from the age range of 30-50 years. Based on the results of early detection of cervical cancer (IVA Positive) in Riau Province in 2019, it was found that Pekanbaru City ranks second in the highest cases of cervical cancer.

Cervical cancer cases have an influence on a person's quality of life. Thus, it can be said that it is very important to increase the prevention of cervical cancer. Prevention can be done with HPV vaccination and through early detection of cervical cancer with colposcopy, endocervical curettage (ECC), cone biopsies, and HPV DNA tests, pap smears, and IVA examinations (Apriliano, Utami, & Arneliwati 2022). The government has made various efforts to control morbidity and mortality from cervical cancer such as early detection of breast cancer and cervical cancer. The types of early detection that are carried out are such as visual acetate inspection (IVA) and clinical breast examination (SADANIS) (Ministry of Health, 2022).

Acetic Acid Visual Inspection or often called the IVA (Acetic Acid Visual Inspection) test is classified as an effective type of examination to detect cervical cancer. IVA test is a visual examination of the cervix or can also be done through the naked eye. VIA examination is carried out by applying a cotton swab dipped in 3-5% acetic acid to the entire surface of the cervix. If

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the cervical part changes color, there is a possibility that the cervix (cervical) has precancerous lesions (Nurhayati & Partina, 2020). According to data from the Pekanbaru City Health Office, the first highest recapitulation was at the RI Sidomulyo Health Center with an age range of under 30 years of 7 people, aged 30-39 years of 28 people, aged 40-50 years of 20 people, and over 50 years of 6 people (Pekanbaru City Health Office, 2021).

Research by Sahr & Kusumaningrum (2018) explains that women who are willing to undergo an IVA examination are motivated by self-awareness on the grounds that early detection of cervical cancer is a very important thing to do as an effort to prevent cervical cancer. Adequate knowledge also has an important role for women of childbearing age in undergoing an IVA test. Another factor that encourages women of childbearing age to take the VIA test is getting support from their husbands as a whole. The support provided by the husband is very influential and makes women of childbearing age's confidence stronger to undergo an IVA examination. Support provided by husbands such as accompanying them to the examination site, and reminding them of the importance of IVA examinations.

Awareness and support from husbands is very influential for women of childbearing age to undergo VIA examinations as early detection in preventing cervical cancer. However, this research has not explored in detail about other things that motivate women of childbearing age in carrying out examinations, how they feel during the examination process. Based on this, researchers are interested in conducting research related to the experiences of women of childbearing age in efforts to detect early cervical cancer through VIA examination.

#### RESEARCH METHODS

The research method used was qualitative research using a phenomenological approach to women of childbearing age who had undergone IVA examinations in the Working Area of the Sidomulyo Inpatient Health Center. Determination of participants using purposive sampling method, namely selected with the inclusion criteria set by the researcher. This research was conducted in January-June 2023 using data collection techniques, namely the in-depth interview method with 5 main participants and 1 supporting participant, namely the family planning officer who provided IVA examination.

# RESEARCH RESULTS AND DISCUSSION Characteristics of Participants

The main participants involved in this study were 5 participants with different characteristics. The age of the participants varied from 38 to 49 years old, the religion adhered to by all participants was Islam, their education was high school-masters, and the participants' occupations were civil servants and housewives. Supporting participants for source triangulation were family planning officers at the Sidomulyo Inpatient Health Center.

## **Research Result**

Theme 1: Initiatives for Early Detection

Various opinions were conveyed by the participants regarding their reasons for wanting to do an IVA examination. The reasons and motivations for the participants to carry out early detection were on their own initiative to detect early cervical cancer. The statement is as follows: "Eee, I want to anticipate it by detecting it early..." (P1)

# Theme 2: WUS Feelings During the IVA Test Process

a. Dealing with Anxiety Before the IVA Test. Anxiety is a feeling felt by almost all participants before taking the IVA test. The statement is as follows: "...there must be anxiety, fear because

- first..." (P1). The participant's statement is in accordance with the statement of the participant supporting this study that the majority of participants felt anxious before the examination and were afraid of inappropriate results.
- b. Discomfort When IVA Test. Discomfort felt by the participants such as discomfort during the installation of the speculum and embarrassment when going through the checking process. These feelings emerged during the IVA test process. The statement is as follows: "...feeling uncomfortable is the name of sensitive areas that we never open to other people" (P2)
- c. Feeling of Relief After IVA Test. The participants revealed that they felt relieved after going through the IVA test process and knowing the results. All participants in this study got negative IVA results and felt they didn't need to worry anymore. The statement is as follows: "Just relieved, oh it turns out like this..." (P4)

# Theme 3: Support System in Undergoing IVA Test

- a. Husband Support. The participants generally stated that they were more confident about taking the IVA test because of their husband's support. However, there were 2 participants who did not get support to carry out an IVA examination. Participants said that if they told their husbands, they were worried that problems would occur later. The statement is as follows: "Don't tell your husband...hmm why are you embarrassed? I'm worried that there will be problems, right..." (P3)
- b. There is information about the IVA Test. The participant support system for carrying out the IVA test is information about the examination. The sources of information obtained by the participants varied, but most of the participants received information from counseling held by the community or the health center. The statement is as follows: "...from socialization in the office such as dharma women..." (P1) "...the inpatient health center does routinely, how often do they periodically make announcements..." (P4)
- c. Good Service Regarding IVA Test. The existence of good services provided is one of the supporting sources for participants to carry out IVA examinations. Participants revealed the services provided such as motivation before the examination, being given food after the test, and services that were in accordance with the SOP.
- d. The Checkup is Free. Facilitated examinations (free of charge) are a source of support for participants to undergo an IVA test. The participants revealed that if they had to pay, it felt quite expensive. The statement is as follows: "... given free of charge for our health, just to check it, we don't want to do that..." (P2)

# Theme 4: Expectations for IVA Test Services

Expectations for the IVA test service are the wishes of the participants to improve the IVA examination in the future. This expectation arose based on the experiences that had been lived by the participants in conducting IVA examinations. The expectations that can be identified from the participants are the existence of an examination room that is more private, and intensifying wider outreach so that the public gets information and knows more about VIA examinations.

## Discussion

#### Theme 1: Initiatives for Early Detection

The results of the interviews in this study, namely the participants revealed that their reason for carrying out VIA examinations was on the basis of their own initiative to detect early whether there were pre-cancerous lesions or not. Participants stated that they had a great motivation for early detection. This encouragement arose because the participants were afraid that later they would get cancer and there could be symptoms of cervical cancer. These reasons

made the participants confident about carrying out an IVA examination. The participants of this study thought that there were benefits from the examination. From this perception, behavior to reduce risk arises.

This is in line with the theory of the Health Belief Model of the influence of the Perceived Benefits factor, namely the perceived benefit is an individual's perception of the usefulness of a new behavior in an effort to reduce the risk of disease (Notoatmodjo, 2018). A new behavior to reduce risk in this study is by early detection of cervical cancer through IVA examination. This is also in line with research conducted by Rahmi & Sinta (2020) that based on the results of this study the researchers assumed that there was a relationship between motivation and behavior in carrying out VIA examinations. Because self-motivation is also the main determining factor and influences individuals to do or not to take an action.

# Theme 2: WUS Feelings During the IVA Test Process

In undergoing a series of IVA examination processes, there were various kinds of feelings felt by each participant. These feelings are grouped into three sub-themes, namely before, during, and after the IVA examination. Before carrying out the IVA examination, the participants mentioned that they felt worried if the results later did not match and were worried because this was their first examination. This is in accordance with the statement of the supporting participant (IVA examination officer) that the majority who took part in conducting the IVA examination felt anxious about the results that would later be inappropriate. This is in accordance with research conducted by Wulandri & Lestari (2018), namely there were 60 (81%) respondents who experienced anxiety, while 14 (19%) respondents who did not experience anxiety where there was a relationship between anxiety and participation in the IVA examination. However, the results of this study, even though they felt anxious, these feelings did not become an obstacle for the participants to continue to carry out IVA examinations.

In the second sub-theme, there is a feeling felt by participants during the IVA examination, namely discomfort. This discomfort is described as uncomfortable when an instrument (speculum) is inserted, and there is a feeling of embarrassment during the IVA examination. Participants stated that the embarrassment arose because the examination revealed the intimate parts of women and was examined through the naked eye. In research conducted by Supini, Duarsa & Ani (2020) stated that based on the results of interviews, the majority of participants revealed that they did not want to do an IVA examination because they were embarrassed. In contrast to the results of the interviews in this study, although they felt embarrassed, the participants thought that this embarrassment was not an obstacle for them to carry out an IVA examination. Because the participants really had a great desire to carry out an examination and already understood the purpose of the IVA examination. So the researcher assumes that the results of this study can be used as a new reference source to complement previous research. Feelings of relief after carrying out an IVA examination were expressed by all participants in this study. The participants said that they felt relieved because they had done an IVA examination and got a negative result. Participants mentioned that there was no need to worry anymore because they felt safe with the examination results they obtained. This statement is in line with the statement of the triangulation participant (IVA examination officer at the Sidomulyo Inpatient Health Center) who explained that all participants who had undergone an IVA examination felt happy and relieved when they received the appropriate examination results.

# Theme 3: Support System in Undergoing IVA Test

In this interview there was a sub-theme of husband's support, in which several participants who had conducted an IVA examination received full support from their husbands.

Family support, especially the husband, is important in decision making. Research from Sahr & Kusumaningrum (2018) says that there is an influential relationship from husband's encouragement to the behavior of early detection of cervical cancer IVA. So the results of this study complement the research that the husband's support is indeed one of the reasons for them to convince themselves to undergo an IVA examination. Participants said that the support provided by their husbands was in the form of emotional support such as giving permission to participants and convincing participants that VIA examination was indeed important for health. The participant's statement was in accordance with the statement of the triangulation participant (IVA examination officer at the Sidomulyo Inpatient Health Center) that the majority of participants who took part in the IVA examination received support from each husband.

Two other participants mentioned that they did not receive support from their husbands to carry out an IVA examination. Prior to the examination, the participants did not consent with their husbands on the grounds that they were afraid that the results would be positive later, and were afraid that this examination would trigger unwanted things. However, even though they did not receive support from their husbands, the participants believed that the husband's support was actually important considering the husband's role as the individual closest to the participants (family). Based on this statement, the researchers assumed that even though they did not get support from their husbands, this did not prevent the participants from wanting to undergo an IVA examination.

Participants in this study revealed that they received different sources of information regarding IVA examinations. Generally, all participants get information from counseling held by the community. 3 participants received information from the socialization held by the local Dharma Wanita community. The information provided by the community included an explanation regarding the IVA examination, the benefits of the VIA examination, and preparations before undergoing an IVA examination. Other participants said they got information from the health center. The health center provided information, then gave authority to the local posyandu cadres to provide counseling regarding IVA examinations to residents around the working area of the Sidomulyo Inpatient Health Center. The counseling includes information about VIA examinations and invites women of childbearing age to detect early cervical cancer through VIA examinations. Several participants revealed that at first they had a negative view of the IVA examination, but after holding counseling and information about the IVA examination, they believed that this examination was indeed very important and had to be carried out considering the benefits of this examination, namely for early detection of cervical cancer. Triangulation participants in this study also mentioned that counseling had been carried out in several places such as the Dharma Wanita community, the PKK association, and the local Posyandu.

This is in accordance with the theory of the Health Belief Model of the influence of the perception factor cues to external action, namely obtaining information from outside. These external factors strengthen the participants' beliefs and attitudes in undergoing an IVA examination (Notoatmodjo, 2018). The participants' statements also complement research conducted by Rachmawati et al., (2019) that counseling techniques have an influence on WUS's desire to carry out IVA examinations. This happens because counseling provides direct information to all women of childbearing age regarding the importance of early detection of cervical cancer through VIA examination. With counseling, those who previously did not know about IVA examinations will know and have awareness about the importance of this examination.

Good service is also a source of support for participants carrying out IVA examinations. Participants mentioned that the services provided at the IVA examination were very good. Starting from providing information about the examination, giving emotional support to reduce anxiety from health workers, and being given food intake after the examination. Of all the services provided by local health workers, the researchers assumed that this would be a source of support for participants because participants felt comfortable and safe with the services provided. This is consistent with the theory that health workers, especially midwives or examination providers, have several functions, namely as educators, facilitators and motivators. The role and support of health workers is intended to provide materials, information, facilities or emotions that influence the behavior of participants in conducting IVA examinations (Muzdalia et al., 2022).

The final source of support is the existence of a free examination conducted by the local health service. The participants stated that they were greatly helped by the holding of this free examination. Participants mentioned that opportunities like this must be utilized as well as possible, because it is quite expensive to spend. So the researchers assumed that free examinations were a source of support for participants to undergo IVA examinations.

# Theme 4: Expectations for IVA test services

From the entire IVA test examination process that has been undertaken by each participant, they certainly have an assessment and input on the services they receive. All participants can evaluate their experience of the services provided during the inspection process, how the facilities are, and what their hopes are for the next inspection. Several participants revealed that the examination room was not closed enough so that discomfort occurred during the examination. In the future, it is hoped that the examination room can be more closed and guarantee privacy so that the examination feels comfortable. In addition to a more closed room, the participants hope that the government and local health services can conduct more extensive outreach to the public, because they remember that there are still many women who do not want to take an IVA test even though it has been facilitated and the examination is free.

#### **CONCLUSION**

Women of childbearing age who have had an IVA examination have a high self-initiative to take an IVA test. The participants thought that the IVA examination was very useful for early detection of cervical cancer. Feelings of embarrassment and fear were not obstacles for the participants to carry out the IVA examination. Husband's support, information about VIA examinations, and good service were sources of support that encouraged participants to carry out VIA examinations. It is hoped that further IVA examinations can be carried out with wider counseling and given a room that supports more privacy.

#### **BIBLIOGRAPHY**

Apriliano, Y. B., Utami, S., & Arneliwati. (2022). Gambaran perilaku wanita usia subur (WUS) dalam upaya deteksi dini kankerserviks dengan metode acetic acid visual inspection (IVA) di wilayah kerja puskesmas simpang baru. Jurnal Kesehatan, Kebidanan, dan Keperawatan: Viva Medika, 16. https://doi.org/10.35960/vm.v16i1.871

Dinas Kesehatan Kota Pekanbaru. (2021). Rekapitulasi deteksi dini kanker payudara (SADANIS) dan kanker leher rahim (IVA) puskesmas se kota pekabaru.

International Agency for Research on Cancer. (2021). Indonesia - Global cancer observatory. https://gco.iarc.fr/today/data/factsheets/populations/360-indonesia-fact-sheets.pdf

- Kementrian Kesehatan. (2022). Wanita beresiko terkena kanker serviks. https://yankes.kemkes.go.id/view\_artikel/389/wanita-beresiko-terkena-kanker-serviks
- Muzdalia, I., Darmawan, S., Sakka, L., & Muzakkir. (2022). Belajar promosi kesehatan. Eksismedia Grafisindo.
- Notoatmodjo, S. (2018). Promosi kesehatan & ilmu perilaku. In Jakarta: Rineka Cipta.
- Nurhayati, N., & Partina. (2020). Deteksi dini CA. cerviks melalui metode pap smear / iva dan pemberian kie bagi wanita usia subur warga desa tambak agung-puri-mojokerto. Nunuk Nurhayati Partina, 340–348.
- Rachmawati, M., Ca, S., Wati, R., & Marliana, Y. (2019). Pengaruh teknik penyuluhan terhadap keikutsertaan pemeriksaan IVA pada WUS di kelurahan dasan agung kota mataram nusa tenggara barat. 1(1), 20–25.
- Rahmi, L., & Sinta, L. El. (2020). Faktor-faktor yang mempengaruhi pemeriksaan inspeksi visual asam asetat (IVA) factors affecting the visual inspection of acetic acid (IVA) examination. JIK:Jurnal ilmu kesehatan, 4(2), 72–77.
- Sahr, L. A., & Kusumaningrum, T. A. I. (2018). Persepsi dan perilaku wanita usia subur dalam melakukan tes inspeksi visual asam asetat. Jurnal Promosi Kesehatan Indonesia, 13(2), 114. https://doi.org/10.14710/jpki.13.2.114-128
- Supini, R., Duarsa, D. P., & Ani, L. S. (2020). Persepsi WUS dan intensitas pelaksanaan deteksi dini kanker serviks metode IVA di wilayah kerja puskesmas aikmel lombok timur. 75–84.
- Wulandri, E. T., & Lestari, P. (2018). Hubungan kecemasan terhadap partisipasi pemeriksaan IVA pada wanita usia subur (WUS) di desa sinar banten kecamatan bekri kabupaten lampung tengah tahun 2018. 25–32.
- Yudhani, R. D., Astuti, I., Mustofa, M., Indarto, D., & Muthmainah, M. (2019). Metformin modulates cyclin d1 and p53 expression to inhibit cell proliferation and to induce apoptosis in cervical cancer cell lines. 20, 1667–1673. https://doi.org/10.31557/APJCP.2019.20.6.1667