

FACTORS THAT INFLUENCE THE BEHAVIOR OF WOMEN OF CHILDBEARING AGE (WUS) FOR EARLY DETECTION OF CERVICAL CANCER THROUGH IVA TESTS IN INDONESIA: LITERATURE REVIEW

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ABSTRACT

Cervical cancer is the second largest cancer in Indonesia after breast cancer with an estimated number of new cases of 32,469 (17.2%). Meanwhile, the coverage of early detection of cervical cancer is still far below the target, namely 10.4%, which is ideally 80%. As many as 70% of cervical cancer cases are found to be in an advanced stage, thereby increasing mortality in women. This indicates that women still have low interest in early detection of cervical cancer, namely using the IVA (Visual Inspection with Acetic Acid) method. This literature review aims to determine the factors that influence the behavior of women of childbearing age (WUS) for early detection of cervical cancer through the IVA test. This literature review uses Literature reviews such as articles in research journal databases, searches are carried out via the internet in the form of reviewing articles via Google Scholar. From the initial search results using keywords, 240 articles were obtained and after carrying out the inclusion and exclusion criteria, 9 articles were obtained that were relevant to the publication period starting from 2018-2022. From some of the literature, it was found that the factors that influence WUS behavior for early detection of cervical cancer through the IVA test are influenced by knowledge, attitudes, husband/family support, access and sources of information, access to health services supported by cadres and health workers and culture of shame and fear. knowledge and attitudes of WUS, husband's support, support from health workers, and access to information sources. All factors have a very important role in influencing the behavior of WUS in carrying out VIA examinations. To motivate WUS to carry out IVA, health workers can increase health education regarding cervical cancer and early detection of cervical cancer to husbands and WUS with attractive media to attract the interest and participation of WUS to participate in VIA tests to reduce the morbidity and mortality rates for cervical cancer in Indonesia.

Keywords: *Early detection behavior, IVA test behavior, risk factors, cervical cancer*

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INTRODUCTION

Currently, the burden of cancer is very large, especially physical, emotional, and financial problems for sufferers, families, communities, and the country. Every year, more than 14 million people in the world are diagnosed with cancer, the majority of whom live in low- and middle-income countries. In 2015, 8.8 million people died from cancer, which is one in six deaths. The number of deaths from cancer in low- and middle-income countries exceeds deaths from HIV/AIDS, tuberculosis, and malaria. Around two-thirds of cancer deaths occur in developing countries, this occurs due to a lack of access to cancer services, both promotive and preventive as well as curative, rehabilitative, and palliative. If cancer cases can be detected and followed up early, the prognosis will be better.

Breast cancer and cervical cancer are cancers that have the highest morbidity and mortality rates in Indonesia. Based on 2020 Globocan data, in Indonesia breast cancer ranks first among all cancers in women where the incidence rate is 44.0 per 100,000 people and the death rate is 15.3 per 100,000 people, while cervical cancer ranks second with an incidence rate of 24.4 per 100,000 people and a death rate of 14.4 per 100,000 people (Permenkes RI Nomor 34, 2015).

Cervical cancer is a malignancy that occurs in the cervix, which is the lowest part of the uterus that protrudes to the top of the sexual canal (vagina). Cervical cancer is a disease that can be prevented and can also be cured if early detection is carried out and adequate treatment is carried out, but in reality, cervical cancer remains one of the biggest causes of death in women throughout the world. The number of new cases of cervical cancer is projected to increase from 570,000 to 700,000 between 2018 and 2030, with the number of annual deaths projected to increase from 311,000 to 400,000. Based on 2018 Globocan data, the highest incidence of cervical cancer occurs in the 50-54 year age group, namely 5,294 cases (16.3%), followed by the 55-59 year age group, namely 4,942 cases (15.2%), while those aged above 65 years new cases of cervical cancer are also quite high, namely 5672 cases (17.4%) (World Health Organization, 2021).

The data above shows that the number of cervical cancer sufferers in Indonesia is very large so the incidence of cervical cancer will greatly affect the lives of sufferers and their families and will also greatly influence the government's health financing sector. Information about cervical cancer is still poorly understood by the majority of women of reproductive age in Indonesia. This is very concerning considering that cervical cancer is one of the cancers that can be prevented from an early age. Low knowledge about cervical cancer in general is related to the still high incidence of cervical cancer in Indonesia (Kementrian Kesehatan RI, 2016).

Secondary prevention with early detection of cervical cancer which is considered appropriate for conditions in developing countries with simple resource facilities, including Indonesia, is the IVA test because:

- a. safe, inexpensive, and easy to do;
- b. the accuracy of the test is the same as other tests used to screen for cervical cancer;
- c. can be learned and carried out by almost all health workers at all levels of the health system;
- d. provide immediate results so that decisions can be made immediately regarding management (treatment or referral);
- e. the supply of most of the equipment and materials for this service is easy to obtain and readily available; And
- f. Direct treatment with cryotherapy is associated with non-invasive screening and can effectively identify various precancerous lesions.

Visual examination of the cervix or cervix using Acetic acid (IVA) means looking at the cervix with the naked eye to detect abnormalities after the application of acetic acid or vinegar (3–5%). The abnormal area will change color with a clear border to white (acetowhite), which indicates that the cervix may have a precancerous lesion. This IVA test is carried out on all sexually active women, especially those aged 30-50 years.

Several conditions that are risk factors for the course of cervical cancer include getting married/starting sexual activity at a young age (less than 20 years), changing sexual partners, having sex with men who frequently change partners, a history of recurrent infections in genital area or pelvic inflammation, female smokers have a 2.7 times greater risk of suffering from cervical cancer compared to non-smokers, passive smokers (who live with families who have a smoking habit) will increase the risk 1.4 times, never done Pap smear or IVA examination.

Prevention and early detection are crucial in the overall management of cervical cancer considering the impact of cervical cancer on sufferers, families, and the government.

METHOD

This research is a literature review using the PRISMA method. This approach was deemed suitable for achieving the research objectives. There are 5 steps in this method, namely determining literature topics, searching for sources, selecting relevant sources, grouping and analyzing, and summarizing. In the initial stage, what was done was to conduct a literature search using a database, namely: Google Scholar. The next stage is screening. Screening consists of a title, abstract, year of research, and methods used.

The data source in this research comes from literature obtained from the internet. The inclusion criteria for the studies reviewed were the population of women of childbearing age (WUS), and studies published in the last 5 years (2018-2022). The study approach used is a quantitative study and is published in English or Indonesian. The exclusion criteria are articles published before 2018 and 2023.

The article search was carried out using a database and then continued with hand searching via the online suffering internet via Google Scholar database. The keywords used are "Early Detection Behavior" "VIA Test Behavior" "Risk Factors" and "Cervical Cancer".

RESULTS AND DISCUSSION

A total of 240 articles were identified. After being filtered using inclusion and exclusion criteria, 9 articles were selected for review. All articles are quantitative research with a cross-sectional study design and were conducted in Indonesia. Each article was read from start to finish carefully to gather information regarding factors that could influence WUS behavior in the early detection of cervical cancer using the IVA test method.

Table 1. Research Summary

No	Author	Title	Method	Number of Samples	Results
1.	(Sari, 2021)	Factors that Influence WUS (Women of Childbearing Age) in IVA (Visual Acetic Acid Inspection) Procedures at the Glugur	Cross-Sectional	274	- Health Center - There is a significant relationship between the level of knowledge, number of parties, use of family planning, source of information, and husband's support with IVA measures. - The most dominant factor is the husband's support. - So it can be concluded that 73.1% of WUS do not carry out IVA because of a lack of knowledge about IVA.
2.	(Bunga tiara carolin, 2022)	Analysis of Factors That Influence Women of Childbearing Age in Carrying Out Early Detection of Cervical Cancer Acetic Acid Visual Inspection Method at the Mekar Wangi Community Health Center, Bogor City	Cross-Sectional	66	- There is the influence of knowledge, attitude, husband's support, staff support health and history of STIs. - So it can be concluded that knowledge, attitude, husband's support, support from health workers, and history of sexually transmitted infections (STIs) are factors that influence WUS in carrying out early detection of cervical cancer using the IVA method.

Factors that Influence the Behavior of Women of Childbearing Age (WUS) for Early Detection of Cervical Cancer Through IVA Tests in Indonesia: Literature Review

No	Author	Title	Method	Number of Samples	Results
3.	(Manihuruk et al., 2021)	Analysis of Factors that Influence Mother's Behavior in Carrying out IVA Tests in the Hutarakyat Health Center Working Area, Dairi Regency	Cross-Sectional	96	<ul style="list-style-type: none"> - The most dominant variable that influences behavior in carrying out IVA tests is the source of information. - Factors that influence maternal behavior in carrying out IVA tests include maternal knowledge, sources of information, and support from health workers, while factors that are not related to maternal behavior in carrying out IVA tests include education and husband's support.
4.	(Apriyanti et al., 2020)	Factors Associated with Cervical Ca Examination Using the Visual Acetic Acid (IVA) Method	cross-sectional	96	There is a relationship between knowledge, husband's support, and the role of health workers with Cervical Ca examination using the Visual Acetic Acid method (IVA).
5.	(Nisa et al., 2019)	Factors that Influence the Utilization of Visual Inspection for Acetic Acid (IVA) in Women of Childbearing Age in the Mandala Health Center Work Area, Medan Tembung District, Medan City	cross-sectional	50	There is a relationship between family/husband support, information, and support from health workers regarding the utilization of IVA services at the Mandala Community Health Center
6.	Yulistiharoh et al. (2020)	Factors Associated with IVA Examination in WUS in the Working Area of Gadingrejo Health Center	cross-sectional	255	There is a relationship between early detection of cervical cancer examination using the IVA method with knowledge, attitudes, exposure to information, support from husband/family, support from staff health, and cadre support.
7.	(Aprianti et al., 2018)	Factors Associated with Early Detection of Cervical Cancer by IVA Method in Padang City Health Center	cross-sectional	110	<ul style="list-style-type: none"> - 60% of respondents have never carried out an IVA detection test. - There is a significant relationship between the level of knowledge and attitudes, access to information, and husband's support with the IVA test. - The most dominant variable influencing women's participation in early detection of cervical cancer through VIA tests is their husbands' support, which means that respondents who are supported by their husbands can carry out VIA tests 46 times compared to those who are not supported.
8.	(Arnas et al., 2022)	Factors Associated with Early Detection of Cervical Cancer in Couples of Childbearing Age Using the Iva Test Method in the Working Area of Batoh Community Health Center Banda Aceh City	cross-sectional	44	There is a relationship between knowledge, husband's support, access to information, and support from health workers as well as access to health services with the detection of early cervical cancer through the IVA test method.
9.	(Izah et al., 2022)	Factors that Influence Early Detection of Cervical Cancer with IVA Method in Banyumas Regency (Study at Cilongok I Community Health Center)	cross-sectional	93	<ul style="list-style-type: none"> - Most respondents did not carry out early detection of cervical cancer IVA method (62.4%). - Attitude factors are the most influential factor in the early detection of cervical cancer using the IVA method in Banyumas Regency (Study at Cilongok I Community Health Center).

Based on the results of a review of the selected articles, the variables discussed are related to factors that influence the behavior of women of childbearing age (WUS) for early detection of cervical cancer through IVA tests, showing that knowledge, attitudes, support from husbands/family/health workers and sources and Access to information is a factor that

influences WUS in carrying out early detection of cervical cancer using the IVA method. Meanwhile, educational factors are not related to WUS behavior in carrying out the IVA test.

Knowledge

Knowledge plays a big role in influencing WUS to foster attitudes and behavior in carrying out early detection of cervical cancer. The results of human sensing of objects through the eyes, nose, ears, and so on are called knowledge. The knowledge a person possesses has different levels (Notoatmodjo, 2012). Knowledge is the result produced after an individual senses a particular object. Sensing occurs through the five human senses, namely the senses of sight, hearing, smell, taste, and touch. Knowledge or the cognitive domain is very important in shaping a person's actions (Notoatmodjo, 2012).

Increasing knowledge will not necessarily lead to changes in behavior, but there is a positive relationship between these two variables where if knowledge is high then behavior tends to be good. Lack of knowledge will influence WUS/mothers not to carry out VIA examinations (Fentie et al., 2020). Knowledge about cervical cancer and early detection can be obtained through print media such as leaflets, brochures, electronic media such as TV, cellphones, and online media, and information from health workers and husbands/families. Increasing WUS knowledge about cervical cancer can be done through health promotion namely the dissemination of messages through regular outreach. This is in line with research conducted by (Aprianti et al., 2018), and that there is a significant relationship between the level of knowledge and WUS participation in the early detection of cervical cancer using the IVA method.

Attitude

Attitude has a positive influence on early detection of cervical cancer with the IVA test (NCT, 2016). WUS who have a positive attitude tend to participate better in carrying out the IVA test because a positive attitude makes WUS want to approach, like, and hope for a certain object, namely the IVA test. This is in line with research conducted by (Maya et al., 2022) showing that WUS with a positive attitude about the benefits of early detection of cervical cancer with an IVA test in health service facilities do not feel embarrassed and want to carry out the IVA test.

Husband/Health Worker Support

The husband's support is very important and influences changes in WUS behavior. The husband's support provided can be in the form of giving permission, reminding, providing costs, looking after the children, encouraging and taking WUS to health service facilities to get the services needed, in this case, the IVA test. In general, husbands are not only breadwinners but act as motivators in various policies that will be decided within the family, including matters relating to the health of WUS. This is in line with research conducted by Sari (2021) which states that there is a relationship between husband's support. /family with WUS behavior for IVA test.

Support from health workers, for example, midwives, as one of the people who are influential and considered important by the community, plays a very important role in the emergence of health behavior in the community. The support provided can be in the form of

recommending, accompanying, and taking WUS for IVA tests at health service facilities. Apart from that, health workers are considered to be able to provide accurate information and advice that WUS needs so that it has an emotional effect on WUS to change their behavior. This is in line with research conducted by Arnas et al. (2022) that there is a significant relationship between support from health workers and WUS behavior for IVA tests.

Resources

Knowledge can be obtained from experience originating from various sources of information so that it can form a belief for a person (George T, 2021). One of the factors that influence a person's knowledge is information from people who are competent in their field, in this case, the health sector, namely doctors, nurses, midwives, including health cadres, respected figures, namely community leaders and religious figures who play a big role in disseminating information sources. which increased WUS's interest in carrying out early detection of cervical cancer using the IVA test. The more information that WUS can obtain and access, the more their interest and behavior will increase (Dirirsa et al., 2022). Delivery and access of information to WUS regarding cervical cancer and early detection with VIA tests can be done using audio-visual media through images and sounds as well as attractive and easy-to-understand lay language to make it more interesting and not boring. This is in line with research conducted by Manihuruk et al. (2021) that the most dominant factor influencing behavior in carrying out an IVA test is the source of information.

CONCLUSION

Many factors influence the IVA test, namely knowledge, attitudes, husband/family support, access and sources of information, access to health services supported by cadres and health workers, and a culture of shame and fear. From this literature review, it can be concluded that there is a significant relationship, including WUS knowledge, attitudes, husband's support, support from health workers, access to information through print media, interesting electronic media and trusted sources of information, namely health workers in the form of formal socialization and counseling (community health centers/posyandu) and informal (religious studies/social gatherings) play a role in increasing the behavior of WUS to carry out early detection of cervical cancer with the IVA test.

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