FACTORS INFLUENCING THE INTEREST OF WOMEN OF REPRODUCTIVE AGE IN EARLY DETECTION OF CERVICAL CANCER AT THE ONEKORE COMMUNITY HEALTH CENTER (PUSKESMAS), ENDE REGENCY

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Abstract

Background: Cancer is the leading cause of death both nationally and globally. The number of women with cervical cancer has been high in the past three years in the Onekore Community Health Center (Puskesmas) working area. Purpose: The aim of this study was to identify and analyze factors influencing early detection of cervical cancer in women of reproductive age. Methods: The research method used was Mixed Methode research. Data collection was conducted over a period of one month, from June to July 2025. The sampling method used was consecutive sampling. The sample size was determined based on the Slovin formula with a target sample size of at least 100 respondents. Results: The results of the study showed that Husband's support is the most dominant factor influencing the interest of women of childbearing age (WUS) in early detection of cervical cancer, and 60% of respondents had good knowledge, had good attitudes, beliefs and perceptions as much as 66%, did not have access to information on cervical cancer screening as much as 76%, lacked support from health workers as much as 93%, lacked support from peers as much as 97% and had lacked support from husbands as much as 82%. The results of the analysis showed that the most dominant variable influencing WUS's interest in early detection of cervical cancer was husband's support with $p < 0.000$ and OR 4.286, which means that WUS who were not supported by their husbands were 4.286 times more likely to not do the VIA test compared to those who were supported. Conclusion: Therefore, information dissemination is not only provided to women of childbearing age but also to men, including husbands, to help motivate women to undergo early detection of cervical cancer.

Keywords: Faktors, Interest, Early Detection, Cervical Cancer.

1. INTRODUCTION

Cervical cancer is the fourth most common cancer in women with an estimated 570,000 new cases in 2018. (1). The mortality rate from cervical cancer in women is significantly higher in countries in transition compared to countries in transition (15.0 vs. 12.8 per 100,000 and 12.4 vs. 5.2 per 100,000, respectively) (2). The global mortality rate can be reduced through a comprehensive approach that includes prevention, early diagnosis, effective screening and treatment programs (3). Deaths in cancer cases in developing countries are 2 times greater than in developed countries, this occurs not only due to the lack of screening programs, but also exacerbated by low ability and accessibility to treatment (4). Integrated prevention must be implemented starting from the Community Health Center. The key to the success of the cervical cancer control program is screening followed by adequate treatment (5). This is based on the fact that more than 50% of women diagnosed with cancer have never been screened (6). The prevalence of cancer in Indonesia shows an increase from 1.4 per 1000 population in 2013 to 1.79 per 1000 population in 2018. NTT Province is mostly in the age group 35-54 years at 9.08%, the most women suffer from cancer at 2.09% (7). The acceleration of cervical cancer elimination contains four

pillars including service pillars that include screening, Human Papilloma Virus (HPV) vaccine immunization, and management for pre cancer patients (4). Screening should be performed at least once for every woman in the target age group (30-49 years); HPV testing, cytology, and visual inspection with acetic acid (VIA) are recommended screening tests (1). Data from the Ende Regency Health Office in 2023 showed that the coverage of early cervical cancer detection using the VIA and PAP smear methods among women of childbearing age in Ende Regency was 2.09% (8). Onekore Community Health Center, a service facility with the highest number of cervical cancer cases in the past three years, remains low. The practice of early cervical cancer detection among women of childbearing age remains low, with only 49 (0.02%) of 2,779 women aged 30-50 years undergoing early detection. Lack of knowledge and information about cervical cancer and fear of detection lead to diagnosis at an advanced stage (8). Although cases of cervical cancer have increased over the past three years, no research has yet been conducted on the causes of cervical cancer in Ende Regency. This is due to the still-low level of knowledge and awareness among women of reproductive age regarding early detection of cervical cancer. The purpose of the study is to identify and analyze the factors that influence the early detection of cervical cancer among women of reproductive age.

2. METHODOLOGY

This study employs a mixed-methods research approach (quantitative and qualitative) with a descriptive cross-sectional design. Data collection will be conducted over a one-month period, from June to July 2025. The dependent variable is the early detection of cervical cancer. The independent variables include: Predisposing factors (knowledge, attitudes, beliefs, and values); Enabling factors (exposure to information, availability of facilities/infrastructure for early detection services, funds, and time); and Reinforcing factors (support from husbands, healthcare workers, and friends). The study population consists of all women of reproductive age (WUS) residing within the working area of the Onekore Community Health Center (Puskesmas).

The sample for the qualitative research consisted of 5 husbands of the respondents, 5 healthcare workers, and 5 friends of the respondents who had previously undergone early detection screening for cervical cancer. The sample size was determined using the Slovin formula, with a target minimum sample size of 100 respondents. Primary data were collected through interviews conducted by the researcher. The data collection instruments included questionnaires and structured interviews to obtain qualitative data. The collected data were then processed and analyzed.

3. RESULTS

In-depth interviews were conducted using a questionnaire guide regarding support from husbands, peers, and healthcare workers in increasing interest in early detection of cervical cancer among women of reproductive age. In-depth interviews were conducted with husbands, peers, and health workers, as follows:

1. Husband's Support

To gather information regarding husbands' support, the researcher conducted direct interviews with five husbands of women of reproductive age (WUS). The statements obtained were as follows:

“I have never heard about the kind of screening you mentioned; I feel that matters regarding my wife's health are a woman's business. As a husband, I only focus on earning money...” (R 1)

“Matters regarding women's health are the wife's responsibility; as a husband, I am busy working to provide the money...” (R 2)

“I have never heard of or read about cervical cancer screening; I feel that matters regarding my wife's health are a woman's business. As a husband, I only work to earn money...” (R 3)

"I always support my wife's health, but I cannot accompany her to the screening because I have to work..." (R 4)

"I have never heard information about cervical cancer screening, so I cannot pass any information on to my wife—especially since I am busy working every day." (R 5)

The results of interviews with 5 husbands indicate that women of reproductive age (WUS) do not receive support from their husbands.

2. Peer Support

"I have never talked to friends about cervical cancer screening because I am afraid they won't want to get checked..." (R 1)

"I don't want to talk to friends about it because I feel embarrassed." (R 2)

"I once talked to friends about it, but they said they didn't want to get checked yet because they didn't feel sick." (R 3)

"I once talked to friends about it, but they said they didn't want to get checked yet because they were afraid it would be painful." (R 4)

"I have never talked to friends about it because I assume they have already received information from the midwife at the community health center..." (R 5)

The results of interviews with 5 participants felt embarrassed and hesitant to tell their peers and invite them to do early detection.

3. Health Worker Support

"We rarely conduct health education or outreach regarding early detection of cervical cancer for women of reproductive age when they visit the community health center because we are busy with other tasks; we only provide education at the integrated health post (Posyandu), and even that happens only occasionally." (R 1)

"There are no posters or information regarding early detection of cervical cancer at the community health center facility as part of health promotion efforts." "Regarding health, we need to make preparations for the future…" (R 2)

"We do not limit the time for early cervical cancer screening; we offer it to women during every service day, though sometimes they are not yet willing to undergo the examination." (R 3)

"We also conduct home visits to encourage women to get screened, but they often refuse, citing work commitments; indeed, changing community behavior is quite challenging…" (R 4)

"At the moment, we have not yet shifted to a 'proactive outreach' strategy—bringing services closer to the community—due to limited facilities and personnel… hopefully, this can be implemented next year…" (R 5)

The research findings indicate that women of reproductive age still receive insufficient support from healthcare workers. Health personnel rarely provide education or outreach regarding the early detection of cervical cancer when these women visit community health centers (puskesmas), often due to being occupied with other tasks. Furthermore, some healthcare workers noted that they conduct home visits to encourage women to undergo screenings; however, the women often decline, citing work commitments. Indeed, changing public behavior is quite challenging.

This is supported by statements from the respondents' husbands during interviews; one said, "I never knew about the kind of screening you mentioned; I feel that matters regarding my wife's health are a woman's business—as a husband, I only know how to earn a living..." (R 5), while another expressed a similar view: "I have never heard information about screening for cervical cancer detection,

so I couldn't pass any information on to my wife—especially since I am busy working every day" (R 5). Husbands who are part of a family with a good understanding of healthy behaviors are more likely to provide support to their wives. Husband support offers emotional benefits, such as providing a sense of comfort and encouraging the individual to take health-related actions. Therefore, the husband's role is crucial regarding individual actions, particularly concerning early detection of cervical cancer. Research by Febriani (2015) found that husband support was the most dominant factor influencing the participation of women of childbearing age (WUS) in early cervical cancer detection using the VIA method. Consequently, it is strongly recommended that Community Health Centers (Puskesmas)—specifically healthcare workers—intensify and regularly conduct health promotion regarding cervical cancer and VIA-based early detection for women of childbearing age. Furthermore, health promotion efforts should be expanded to include men and the husbands of these women, enabling them to support and motivate their partners to undergo early cervical cancer detection via the VIA test (18).

The quantitative research results show that significant factors influencing the interest of women of childbearing age (WUS) in the Onekore Community Health Center (Puskesmas) working area regarding early detection of cervical cancer: insufficient husband support (p=0.000, OR=4.286), insufficient support from health workers (p=0.054, OR=2.189), and inadequate knowledge regarding early detection (p=0.023, OR=1.390). According to Green's theory, "reinforcing factors" are determinants of behavior; specifically, the attitude of one's immediate social circle—in this case, the husband—plays a crucial role in the decision to undergo cervical cancer screening (17). In a patriarchal society, the husband, as the head of the family, acts as the primary decision-maker regarding family health, including that of his wife. Therefore, education on cervical cancer screening should not be limited to women of childbearing age; their husbands also need to receive accurate information so they can support their wives in undergoing the test.

This indicates that health promotion regarding cervical cancer and its early detection is not yet being delivered optimally; 45.5% of respondents were unaware of the benefits of early detection. More than half of the respondents (76%) lacked access to information regarding early detection screenings; this is corroborated by peer interviews revealing that educational sessions on the subject are infrequent—often limited to *Posyandu* (integrated health post) activities or visits to Maternal and Child Health (KIA) clinics—leaving many mothers unconvinced of the benefits. Furthermore, some respondents held negative attitudes toward early detection, believing that screening is unnecessary in the absence of perceived abnormalities. Although the majority of respondents lived close to a Community Health Center (89%), most of their husbands did not support the screening (82%), thereby influencing the women's decisions regarding whether to undergo the procedure. A lack of support from healthcare workers (93%) also impacted the women's interest in early screening. Knowledge is a crucial factor in shaping an individual's actions; research suggests that actions grounded in knowledge are more sustainable than those that are not. An attitude is an individual's covert reaction or response to a stimulus or object. It is not yet an action or activity, but rather a predisposition toward a specific behavior. Barriers contributing to low early detection uptake include a lack of knowledge regarding cervical cancer and a perception of low cancer risk. Additionally, there are fears of receiving a positive screening result and reluctance to undergo pelvic examinations (9); (10). The Ministry of Health (2020) reported that out of an estimated 144,250,230 women of reproductive age (15–49 years), only 8.3% (3,207,659) underwent early detection; of these, 50,171 tested positive via the VIA method, and 584 were suspected of having cervical cancer (11). Anwar et al. found that 81% of respondents had never undergone a Pap smear; among them, 28% had never heard of cervical cancer, and 33% were unaware of the Pap smear test (12). A 2019 study by Miftahil et al. at a Community Health Center (Puskesmas) in Padang City showed that 60% of respondents had never undergone cancer detection using the VIA method (13). Wulandari, studying at the Sukmajaya Community Health Center, found that 29.3% of respondents were knowledgeable about cervical cancer, while only 0.14% (10 out of 7,100) knew about HPV, and only 7.4% had ever undergone a Pap smear (14). Beyond the influence of limited knowledge regarding cervical cancer and the HPV vaccine, early cervical cancer screening uptake can also be influenced by support from family or spouses and healthcare workers (13). Nurlelawati et al. (2018) identified a relationship between knowledge levels and the incidence of cervical cancer (15). Knowledge regarding HPV and cervical cancer remains very low within local communities, indicating that the impact of health promotion regarding immunization programs is still limited (12); (16).

4. CONCLUSIONS

Husband's support is the most dominant factor influencing the interest of women of childbearing age (WUS) in early detection of cervical cancer within the Onekore Community Health Center (Puskesmas) service area. Support from healthcare workers and the women's own knowledge regarding cervical cancer are also factors influencing this interest. It is recommended that healthcare personnel at the Puskesmas—specifically doctors, nurses, and midwives—intensify and regularly conduct health promotion regarding cervical cancer and early detection among women of childbearing age. Furthermore, these promotional efforts should be expanded to include the women's husbands and the wider community, thereby enabling them to support and motivate their partners to undergo early cervical cancer detection.

ACKNOWLEDGEMENTS

Sincere thanks go to the Director of Poltekkes Kemenkes Kupang and the participants who supported the conduct of this research.

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