Original Research

Evaluation of the early detection program for cervical cancer using the see-and-treat method

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ARTICLE INFO	ABSTRACT
Article history: Received 3 March 2024 Revised 13 March 2024 Accepted 25 March 2024 Publish 1 April 2024 *Keywords*: Cervical cancer See-and-treat Program evaluation	*Background*: Cervical cancer is the second most common type of cancer among women in Indonesia after breast cancer and is the third leading cause of cancer death. *Objective*: Evaluating the implementation of the early detection program for cervical cancer using the see-and-treat method at Martapura 2 Community Health Center. *Method*: The research design uses quantitative descriptive methods. Sampling used random sampling techniques and obtained 23 health workers as respondents. Data collection was carried out using a checklist sheet. Data were analyzed using univariate analysis. *Results*: The results of the study showed that all respondents (100%) stated that they had carried out coordination, had not provided training to cadres (100%), Health Workers who had attended training in early detection of cervical cancer (13%), had provided education to the community about cervical cancer (87%), and counseling about the HPV vaccine (61%), there were no problems during the VIA examination (78%), the completeness of the cryotherapy examination equipment met the standards (100%), there were no problems during the implementation of cryotherapy (100%), supported the procurement of the HPV vaccine (96%), but only (22%) proposed the procurement of the vaccine, the majority of respondents stated that patients with IVA results with extensive lesions > 75% were willing to be referred (87%), and stated that there were no obstacles in the referral system (91%). *Conclusion*: Implementing the early detection program for cervical cancer using the see-and-treat method at Martapura 2 Community Health Center needs improvement.

1. Introduction

The healthy Indosesia program intends to enhance community health and nutrition via health initiatives and community empowerment backed by financial security and equitable access to healthcare services (Widodo et al., 2024). 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, which is mainly caused by human papillomavirus (HPV) infection. Risk factors for cervical cancer include mothers who are sexually active from a young age (<20 years), have multiple sexual partners, have a history of sexually transmitted infections (STIs), human immunodeficiency virus (HIV), acquired immunodeficiency syndrome (AIDS), and women who are active and passive smokers (Ministry of Health of the Republic of Indonesia, 2015). This cancer has a high mortality rate due to late early detection. Nearly 70% of cancer patients are detected at an advanced stage (Ministry of Health of the Republic of Indonesia, 2022). Cervical cancer is a cancer that is often suffered by women and is the third most common cancer experienced by women in the world. Globally, in 2020, it is estimated that around 600,000 patients will be diagnosed with cervical cancer, and more than 340,000 deaths will occur due to cervical cancer (International Agency for Research on Cancer, 2020). Estimates of contracting cervical cancer range from 14–20% in European countries; about 70% of the population is in the United States, and about 95% is in Africa.

Cervical cancer is the second most common type of cancer among women in Indonesia after breast cancer and is the third leading cause of cancer death. In Indonesia, cervical cancer cases continue to increase every year. Based on data from the Global Burden of Cancer Study (Globocan) from the World Health Organization (WHO), the total number of cervical cancer cases in Indonesia in 2018 was recorded at around 32,469 new cases diagnosed. There was an increase in 2020; 36,633 new cases were diagnosed, and the death rate was 18,279 (8.8%). It is estimated that 52 million women are at risk of developing cervical cancer. In contrast, 36% of all women suffering from cancer are cervical cancer patients (Ministry of Health of the Republic of Indonesia, 2023).

Based on data from the South Kalimantan non-communicable disease information system, in 2020, there were 2,295 new cases and old cases diagnosed with cervical cancer. Banjar Regency is one of the regencies/cities in South Kalimantan that has a relatively high prevalence of cervical cancer. It was recorded that in 2020, there were 263 new cases and old cases diagnosed with cervical cancer in Banjar Regency (Public Health Office of South Kalimantan, 2023).

Banjar Regency is one of the districts in South Kalimantan that has several health risks for mothers and toddlers, such as stunting (Lathifah et al., 2024) and low early detection

coverage for cervical cancer. In 2022, only 2350 women of childbearing age will undergo early detection of cervical cancer through VIA examinations; the number of cervical cancers is 2 people, and the number of patients with positive VIA examinations is 6 people (Public Health Office of South Kalimantan, 2023). Martapura 2 Community Health Center is one of the health centers with low early-detection coverage for cervical cancer. Based on the results of a preliminary study, it was recorded that the number of women of childbearing age who underwent VIA examination in 2022 was 287 people (31.74%) out of the target number of 904 women of childbearing age, the number of cervical cancers was 1 person in 2022, in 2023 the number of cervical cancers was 1 person. From these data, it is known that the results of the early detection program for cervical cancer are still significantly less than the predetermined target (Ministry of Health of the Republic of Indonesia, 2017). This research aims to evaluate the implementation of the early detection program for cervical cancer using the see-and-treat method at Martapura 2 Community Health Center.

2. Method

This research is a type of descriptive research with a quantitative descriptive research approach. The research was conducted from January to August 2023. The population in this study consisted of health workers who had implemented the early detection program for cervical cancer in the Martapura 2 Community Health Center area. The sampling method used a random sampling technique to obtain 23 respondents, consisting of medical doctors, community health center midwives, and village midwives. The variable for this research is the see-and-treat method based on 5 pillars, including (preparation of target areas, training of cadres and health workers, outreach to the community, implementation of IVA, Cryotherapy, HPV vaccine, and referral to advanced health facilities). This research has received ethical permission from the UNISM Research Ethics Commission with Number 928/KEP-UNISM/IX/2023.

3. Results

The two characteristics of respondents observed in this research are education level and type of work. The data is then presented in a table to show the frequency and percentage of each characteristic. Data on respondent characteristics are presented in Table 1.

Table 1. Respondent characteristics

Characteristics	F (Respondent)	Percentage (%)
Education levels		
3-year Diploma	18	76.26
Bachelor	5	21.74
Occupations		
Village midwives	13	56.52
Health center midwives	7	30.44
Medical doctors	3	13.04

The research results show that most of the pillars have been implemented well. However, the implementation of outreach to the community regarding the prevention and treatment of cervical cancer can still be improved because only a percentage of 60% of health workers carry it out. Likewise, the implementation of VIA examinations and HPV vaccines with participation of 0% - <25% requires attention. The complete research results are presented in Table 2.

Table 2. Data on the implementation of the early detection program for cervical cancer

Aspects	Yes (respondents{%])	No (respondents[%])
Preparation of target areas		
Coordination of facilities and infrastructure	23[100]	0[0]
Coordination of IVA examinations	23[100]	0[0]
Information on IVA implementation	23[100]	0[0]
Training of cadres and health workers		
Training cadres	0[0]	23[100]
Training health workers	3[13]	20[87]
Outreach to the community		
Counselling about cervical cancer and VIA examination	20[87]	3[13]
Cancer prevention and HPV vaccine education	14[61]	9[39]
Implementation VIA		
Via examination obstacles	5[22]	18[78]
Cryotherapy, HPV vaccine, and referral		
Cryotherapy equipments	23[100]	0[0]
Cryotherapy obstacles	0[0]	23[100]
Proposed HPV vaccine	5[22]	18[78]
HPV vaccine support	22[96]	1[4]
Patient willingness to be referred	20[87]	3[13]
Referral barriers	2[9]	21[91]

The ages of women of childbearing age who underwent VIA examinations at the Martapura 2 Community Health Center are presented in Table 3. The data collected came from medical records from January to March 2023.

Table 3. Grouping of women of childbearing age who undergo VIA examination

Age groups	Patients (person)	Percentages (%)
under 30 years old	18	25
30 – 39 years old	32	45
40 – 50 years old	21	30

4. Discussions

The research results showed that all respondents (100%) stated they had coordinated with village officials, family welfare education cadres (WEC), and WEC mothers regarding the facilities and infrastructure for implementing VIA program activities. Good communication between Health officers and related parties helped disseminate information well. The results of research conducted by Nurhidayati et al. (2018) stated that information sources affected increasing participants' knowledge.

The results of the study showed that all respondents (100%) of posyandu cadres stated that they had not participated in training regarding cervical cancer and VIA examinations. 3 health workers (13%) had taken part in VIA examination training, and 20 respondents (87%) had not taken VIA training. Harini & Dewi (2022) and Darmiyanti & Adiputri (2020) stated in their research that training cadres is critical to carry out; it can improve community skills and involvement and participation in government activities or programs. Officers' lack of cadre training could be due to limited community health center funds. Training for health workers is one of the factors in the success of implementing a program. Services provided by health workers can influence the quality of services provided to patients. This follows research by Desy and Putra (2022), which states that adequate training will help improve patient discovery.

Respondents who stated that they had provided education to the public about cervical cancer and VIA examinations were 20 (87%), and those who had not completed the education were only 3 (13%). Furthermore, the majority of respondents had provided education about efforts to prevent cervical cancer and the HPV vaccine, as many as 14 (61%). On the other hand, 9 (39%) had not been provided education. The formation of knowledge about cervical cancer is obtained from education provided by health workers. Mothers' participation in VIA examinations based on knowledge is in line with the research results of Mastikana et al.

(2020), which concluded that there was an increase in knowledge and an enthusiastic or caring attitude towards reproductive health by participating in VIA examinations with a suitable category of 87%.

Respondents were generally able to carry out VIA examinations well, where 18 people (78%) of medical officers did not experience problems in VIA examinations, while 5 people (22%) still experienced problems. According to Yarnita (2020), the longer a midwife works, the more skilled and experienced she is in carrying out the work. In this study, this factor influences the smoothness of health workers carrying out VIA examinations without problems.

This research also shows that all respondents stated that the completeness of the cryotherapy equipment met standards. All respondents also did not experience problems in carrying out cryotherapy examinations. Researchers concluded that Martapura 2 Health Center had adequate facilities and infrastructure. This is expected to support the successful implementation of the early detection program for cervical cancer. Five people (22%) proposed to procure the HPV vaccine at the Martapura 2 health center, while 18 people (78%) had not proposed the HPV vaccine. Even though not many people proposed the HPV vaccine, most health workers, 22 (96%), supported the procurement of the HVP vaccine, and only 1 person (4.35%) did not support the procurement of the HPV vaccine. This is in line with the statement by the government of the Republic of Indonesia through the Ministry of Health of the Republic of Indonesia (2022), where the government is committed to preventing morbidity, death, and disability due to diseases that can be prevented by immunization.

Most respondents stated they did not experience problems in the referral system, namely 21 people (91%). The implementation of the referral system is running well because there are clear and directed referral guidelines. Guidelines for providing referral services to patients must be implemented based on statutory regulations and standards contained in these guidelines (Nurrizka & Setiawati, 2019).

The age of women of childbearing age who underwent VIA examination at Martapura 2 Community Health Center mostly ranged from 30-39 years, namely 32 (45%). Furthermore, the group of women aged 40-50 years was 21 people (30%), and the group aged <30 years was 18 people (25%). These results are still far from the specified target. One of the reasons why the inspection target has not been achieved is the breadth of the inspection target. This

statement follows research by Budiman et al. (2019), which states that the inspection target has not been achieved due to the high target not following the number of human resources and a lack of public awareness about carrying out a VIA examination.

5. Conclusion

The implementation of the early detection program for cervical cancer using the see-and-treat method at the Martapura 2 Community Health Center is not yet optimal. It is recommended that efforts be made to increase and develop human resources and outreach to the community to support the program's success.

6. Conflict of interest

All authors declare no conflict of interest.

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