

Analysis of Cervical Cancer Detection Implementation Using Visual Asetat Acid Inspection Method in Padang Panjang Primary Health Care Indonesia

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Abstract—Background: This study aims to analyze the implementation of the program for early detection of cervical cancer by the method of visual acetate inspection (VAI) in Padang Panjang Primary Health Care, West Sumatera Province, Indonesia. **Methods:** This study used a qualitative descriptive research method carried out in April- May 2018 at the Padang Panjang Health Office and the Padang Panjang Primary Health Care, West Sumatera Province, Indonesia. **Informants** consisted of the Head of the Health Office, the Head of the Primary Health Care, the midwife who implementing VAI, the cadres, women of childbearing age who had done VAI and who had never. **Results:** The results of the analysis show that the input of VAI program implementation in terms of human resources, facilities, infrastructure, and funds is in good condition and sufficient to support the implementation of the VAI program. The results of the analysis of the implementation process found that advocacy and socialization were still considered to be less than optimal, resulting in a low coverage of the implementation of the VAI program. Recording and reporting have also been going well. The analysis of the output of the implementation of the VAI program, it was found that the coverage of early detection of cervical cancer with the VAI method increased compared to the previous year, but this achievement was still below the target of achievement. **Conclusion:** The system for implementing the early cervical cancer detection program is still not on target. Need to improve the process of advocacy and socialization from the government to increase community activity in the early detection of cervical cancer using the VAI method.

Index Terms—cervical cancer, system analysis, visual acetate inspection

I. INTRODUCTION

One of the cancers that is classified as many attacks on women is cervical cancer. The incidence of cervical cancer according to GLOBOCAN in 2012 is 17 per 100,000 women, with the third highest prevalence in women worldwide. According to World Health Organization (WHO), an estimated 445,000 new cases in 2012 or 84% of the total number of new cases worldwide. About 270,000 women die

of cervical cancer and more than 85% of these deaths occur in developing countries, including Indonesia [1,2].

Based on data from the Indonesia Basic Health Research in 2013, the prevalence of cancer in Indonesia is 1.4 per 1000 inhabitants, while cervical cancer is a cancer with the second highest prevalence in Indonesia after breast cancer, which is equal to 0.8% or around 98,692 inhabitants [3]. In Indonesia, it is estimated that 40-45 new cases appear every day, 20-25 people die, meaning that every hour an estimated one woman dies from cervical cancer. This means that Indonesia will lose 600-750 women who are still productive every year [4].

According to the Indonesian Cancer Foundation, West Sumatra is a province with a cancer prevalence in 2013 of 170 per 100,000 population. The incidence of cervical cancer is the highest number of 82 per 100,000 population. The increase was seen from 2007 as many as 36 cases until 2013 with 42 cases [3].

A Pap smear is an effective screening method for early detection of cervical cancer. But at the same time VAI is also a simpler method for early detection of cervical cancer in developing countries. WHO has also recommended VAI as a method to identify patients at risk for cervical cancer. Previous study has conducted a study of the effectiveness of VAI compared to Pap Smear for women. The results showed that of 189 women studied, 5 (2.62%) women were positive for VAI, but only 2 (1.1%) women had positive Pap smears. Compared with Pap Smear, VAI has 100% accuracy, specificity 98.4%, positive predictive value 40%, and negative predictive value 100% [5].

Based on data from the West Sumatra Province Health Office, the coverage of the VAI program during 2016 showed that seven major cities in West Sumatra Province had implemented the VAI program. The Padang Panjang City is a city in the lowest position in terms of achieving the coverage of the VAI program. Of the 1,421 people (20%) targeted VAI targets, the VAI program was only implemented in 31 people (2.18%) only where one of them was identified as a positive VAI [6]. The achievement of this coverage is certainly still far from the target coverage of the VAI program where coverage will be increased to 50% in 2019 [7].

The aim of the study determine the correlation of maternal zinc levels with neonatal zinc and neonatal outcomes.

II. MATERIALS AND METHODS

A. Study Design and Research Sample

This study used a qualitative descriptive research method

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carried out in April- May 2018 at the Padang Panjang Health Office and the Padang Panjang Primary Health Care, West Sumatera Province, Indonesia. Informants consisted of the Head of the Health Office, the Head of the Primary Health Care, the midwife who implementing VAI, the cadres, women of childbearing age who had done VAI and who had never.

B. Operational Definitions

The variables of this study included input: policy, human resources, facilities, money and method. Process: advocacy, socialization, implementation of early detection and determination of diagnosis. Output is coverage of early detection of cervical cancer with the VAI program.

C. Data Collection Technique

This study was approved by the Ethical Committee of Medical Faculty, Universitas Andalas. The data collection technique used in-depth interview, observation, documentation study and focus group discussion.

D. Data Analysis

Data analysis used data reduction, data display dan conclusion drawing/ verification.

III. RESULTS

The results of qualitative study known in the input components, namely the Padang Panjang City, West Sumatera Province VAI program has been implemented based on Minister of Health Regulation No. 34 of 2015 and No. 29 of 2017. Human resources are adequate in carrying out VAI programs, almost all implementing staff have received VAI training. The Padang Panjang City does not yet have a cryotherapy device so it obstructs the See and Treat VAI program. Funding in the VAI program in Padang Panjang City Primary Health Care can come from national health insurance, regional income and expenditure budget, and health operational assistance. The Padang Panjang City has used active and passive methods to run the VAI program.

The component of the advocacy process regarding the VAI program has been carried out to the Head of Sub-District, Sub-District, Head of Police, with the results of obtaining policy support and means of implementing VAI. Information dissemination or counseling is considered uneven, there are still people who do not know about the VAI program. The implementation of early detection has been done well with the standard operating procedures. But the See and Treat program was hindered due to the absence of cryotherapy tools. There are still doubts by midwives in determining the results of VAI examinations. Recording and reporting are made every month based on the book register, and reporting is sourced from recapitulation of registers every month.

In the output component it is known that the coverage of early detection of cervical cancer by the VAI method in 2018 increased compared to the previous year. But the number of coverage is still below the target.

IV. DISCUSSION

The results of this study known the system for implementing the early cervical cancer detection program is still not on target. Need to improve the process of advocacy

and socialization from the government to increase community activity in the early detection of cervical cancer using the VAI method.

Some causes that the knowledge level and understanding of the community regarding VAI is not maximized. This makes the community instill things that are not true about VAI in his mind, thereby reducing the interest and awareness of conducting IVA examinations. This can also be related to the socialization process provided by health workers. The socialization process must indeed be improved both in terms of quantity and quality. Optimal counseling is needed to increase the level of public knowledge regarding early detection of cervical cancer using the VAI method.

In this study, it should be emphasized to the examining officer to truly maintain patient privacy as well as maintain the confidentiality of the results of the examination that can lead to social problems in the future. Where these social problems can influence people's attitudes to not be interested in conducting VAI examinations. Apart from that, the government must accompany equal distribution of supporting facilities in program development, so that new programs can be implemented as they should.

The low level of coverage of early detection of cervical cancer can be concluded from the results of in-depth interviews caused by the low participation of the community to be actively examined. This is caused by the lack of information and public knowledge regarding cervical cancer and its early detection. This is again related to the socialization process carried out by health workers who are also considered to be not optimal.

However, the increase in performance from the previous year has been able to provide a positive picture for the future, which is expected to increase coverage. The greater the coverage of the implementation of the early detection program, the greater the hope of preventing the occurrence of morbidity and mortality due to cervical cancer. For this reason, the Padang Panjang City Government is expected to improve the shortcomings of inputs and processes in the early cervical cancer detection program, especially in the midwife socialization. In order to create a new method in terms of health promotion, so that people can increase their interest and knowledge to actively participate in VAI examinations.

V. CONCLUSION

The conclusion of this study confirmed the system for implementing the early cervical cancer detection program is still not on target. Need to improve the process of advocacy and socialization from the government to increase community activity in the early detection of cervical cancer using the VAI method.

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