# **Community Empowerment of Early Detection of Cervical Cancer**

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Abstract: Cervical cancer is ranked 7th as the leading cause of death in Indonesia with a percentage of 7.5 of all causes of death. Nine out of ten, or about 87% of cervical cancer deaths occur in countries that are less developed. Up to 2014, early detection of cervical and breast cancer program organized by the government has been running at 1,986 health centers in 304 districts / cities located in 34 provinces in Indonesia. However, the coverage from 2007 to 2014 is still low, which is only 2.45% by means the screening is conducted for only 904.099 women. Therefore the aim of this community service is to seek the community empowerment in the early detection of cervical cancer among women of childbearing age. The activities begin with a survey within the location named Rusunawa Seruwai and Kayu Putih, Medan. Then proceed with coordination with the two partners. The activity is in the form of training for local cadres and 20 women who were then received IVA inspection. In addition to understand the success of the training we conducted pretest and posttest on the material given as well. Results showed that there is an increasing knowledge of cadres and mothers about the implementation and benefits of IVA test. Of all mothers who are examined, 5 with IVA test positive, 7 withleucorrhea. We expected the socialization of IVA test can be sustain with the support of partners and local cadres in order to reduce the incidence of cervical cancer.

### **1** INTRODUCTION

Cancer is a major disease in many countries in the world. Based on GLOBOCAN data, the International Agency for Research on Cancer (IARC), it is known that in 2012 there were 14,067,894 new cases of cancer and 8,201,575 cancer deaths worldwide. Based on WHO and World Bank data in 2005, an estimated 7.5 million people die from cancer, and more than 70% of deaths occur in poor and developing countries. In Indonesia, cancer is the seventh cause of death with a percentage of 5.7 percent of all causes of death. Based on Basic Health Research (Riskesdas) in 2013, the prevalence of cancer in the population of all ages in Indonesia was 1.4 percent or estimated at 347,792 people. In North Sumatra, the prevalence of cancer in all age population by 2013 is 1 percent (DirektorJenderal, 2014) (GLOBOCAN, 2014).

World Health Organization (WHO), in 2012 stated that cervical cancer or cancer of uterine neck is the number seventh most common cancer in the world.Cervical cancer case in the world continues to increase. It is estimated; in 2012 there were 528,000 new cases of cervical cancer.Cervical cancer is also the fourth most common cancer of women in the world, where nearly 12 percent of all women with cancer are cervical cancer.The death rate from cervical cancer in the world in 2012 is estimated at 266,000, i.e. 7.5% of all numbers death of women due to cancer. Nine out of ten or about 87% of deaths from cervical cancer occur in less developed countries (Direktor Jeneral, 2014)

Based on the Hospital Information System (SIRS) in 2010, cervical cancer was the second highest type of cancer in inpatients and outpatients in all hospitals in Indonesia with a total of 5,349 patients (12.8%). Estimated incidence of cervical cancer in Indonesia in 2012 was 17 per 100,000 women, which increased from 2002 at 16 per 100,000 women (GLOBOCAN, 2014).

In North Sumatra, the incidence of cervical cancer from 2010 to 2012 continues increasing. Based on data obtained from the Provincial Health Office of North Sumatra, the incidence of cervical cancer in 2010 was recorded as 475 cases, in 2011 as many as 548 cases, and in 2012 as many as 681 cases. The prevalence of cancer is 0.063 per 100,000

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populations. This figure is higher than the prevalence rate nationally (0.043 per 100,000 population), it shows cervical cancer is a health problem that needs attention.

Based on previous research, cervical cancer cases in RSUP H. Adam Malik Medan in 2011 were quite high, as many as 357 cases, where this number had increased compared to 2009, which was 121 cases. In this study it was found that the most cervical cancer patients were in the age group 40-55 as many as 214 patients (58.3%) and all patients with cervical cancer had been married, namely married (Prandana DA, 2013).

WHO estimates that by 2030 there will be a global incidence of cancer incidents of 300% globally, and 70% of the surge will occur in developing countries including Indonesia. Thus, it can be estimated that there will be a surge in the number of cancer sufferers in developing countries by  $\pm$  500% by 2030, if no promotional or preventive measures are taken. One of the prevention measures for cervical cancer is by early detection of cervical cancer. Early detection of cervical cancer of the by Visual Inspection method with Acetic Acid (IVA) and Pap smear method.

Until 2014, the government's cervical cancer and breast cancer early detection program has been running on 1,986 Puskesmas in 304 regencies / cities in 34 provinces in Indonesia. The coverage of early detection of cervical cancer and breast cancer from 2007 to 2014 is still low, amounting to 2.45 percent or just screening of 904,099 people.

The results of previous studies of the knowledge and attitudes of married women towards IVA examination (Radiah, 2009) in the Medan Area South Health Center in 2009 showed that WUS still had a low awareness of conducting an IVA examination, with only 22% of respondents receiving IVA examinations and 78% of respondents did not conduct IVA examination. Based on previous research at the Padang Bulan Health Center, Medan in October 2013, the final report of 2013 from the KIA / KB Program officers, from 5954 targets, had only 1,786 (30%) of PUS mothers, 594 (10%) other PUS mothers. perform pap smear checks to other facilities, and 3,572 (60%) PUS mothers have not conducted an IVA examination. Also at the time of the survey in the field, 10 PUS mothers obtained 3 PUS mothers who had already done IVA examinations, while 7 PUS mothers had never done an IVA examination for different reasons, including, not yet knowing about IVA examinations, feeling reluctant because they have to open their nakedness during IVA

examination, do not feel any symptoms of cervical cancer.

The Pap 'smear program for the detection of cervical cancer in women of childbearing age (WUS) carried out at the Medan City Health Center has also not been able to increase service coverage. The report on the implementation of the Pap 'smear activity at the Medan City Health Office shows that the percentage of WUS who conducted examinations was only around 43.7% of all puskesmas that provided Pap' smear service. Pap' smear service coverage at the Petisah Health Center is a low one because below the coverage rate in Medan City is 32.4%.

Various factors can influence the participation of WUS in examining IVAs or pap smears. Based on previous research by Yuliwati in 2012, the factors that influenced it were knowledge, attitudes, and affordability of service providers, exposure to information / mass media, husband's support, health worker support, and support from health cadres.

While the results of previous research conducted by Pertiwi in 2015 showed that the factors that affected were age, occupation, parity, health insurance, access to health services, and knowledge. Where is the result of WUS aged> 35 years as many as 153 people (80.1%), high school education as many as 90 people (47.1%), the work of IRT as many as 94 people (49.2%), the age of marriage 21-35 years is 125 people (65.4%), low economic status as many as 97 people (50.8%), parity 1- 3 times as many as 160 people (83.8%), have health insurance of 153 people (80.1%), access to services health with a medium distance of 80 people (41.9%), and those who received husband support as many as 150 people (78.5%).

#### **1.1 Partner Problems**

Medan Tembung sub-district is the third highest population in the city of Medan with a population of around 150,000. Therefore the problems in the region represent the existence of problems in the city of Medan.

In Medan City one of the most prominent problems is the low participation of the community in the early detection of the disease. The report on the implementation of the Pap' smear activity at the Medan City Health Office shows that the percentage of WUS who conducted examinations was only around 43.7% of all puskesmas that provided Pap' smear service. For early detection with IVA selfexamination only reached 30% of target. In interviews with several mothers of productive age in the initial survey, they admitted that they had never tested IVA at all. They do not know the benefits of the test despite knowing that cervical cancer is a deadly cancer.

This low awareness of IVA causes people to often come for treatment when the cancer has entered its final stage. According to interviews with their stages of cervical cancer development they do not know.

### 1.2 Solution Offered

As a way of dealing with low public awareness, especially mothers of childbearing age in early detection of cervical cancer, this activity will seek to change awareness about the importance of health. Activities will begin by identifying the main figures of the community, especially those associated with the fertile-age mothers of cadres in Rusunawa Seruwai and Kayu Putih. Furthermore, the training activities will be carried out on cadres chosen to then together with the dedication team conduct socialization to women of childbearing age. In the training activities will be explained about cervical cancer in general, etiology and modes of transmission and prevention efforts at the individual level. All materials will be prepared in the form of modules to be prepared by the implementing team. For socialization activities, the implementing team together with the trained cadres will present information and distribute pocket book containing practical information about cervical cancer and IVA examination. Knowledge, attitude and behavior assessment activities will be carried out before and after training and socialization activities for the community to measure the effectiveness of the service activities carried out.

The expected partner participation is in the form of willingness, willingness and cooperation in the implementation of each step of service to realize the program objectives. In this regard, the Head of Rusunawa and cadres have expressed their willingness to cooperate.

## **2** IMPLEMENTION METHOD

This activity is carried out by carrying out the following stages:

• First, program socialization to partners. This activity is carried out by visiting community leaders, health workers and government officials at the site of activities. The goal is to reach agreement on what the target of the devotion team is.

- Secondly, recruitment of health cadres. To improve the sustainability of activities at partner locations, the team will recruit cadres so that they can later do the recruitment work of community members. These cadres will be trained on cervical cancer, IVA examination techniques, communication with the community and become ideal cadres.
- Third, as a follow-up, the cadres were asked to recruit women of productive age. These mothers will be trained together with the cadres to become trained cadres in the field of cervical cancer. Fourth is the IVA examination. This check will be done to the cadres and mothers they recruit. It is planned to conduct this examination for 40 cadres and mothers.

To find out the success of the activity, the activity implementing team will conduct evaluation measurements by comparing the knowledge, attitudes and actions of the cadres and mothers before and after the training activities.

# 3 RESULTS OF SERVICE ACTIVITIES

#### 3.1 Results Planning

The activities undertaken at the planning stage are as follows:

#### 3.1.1 Socialization of Community Service Programs for Both Partners

After the community service proposal was approved the team conducted a socialization program on the two partners, namely Rusunawa Seruwai and Kayu Putih as well as cadre team on the implementation of community service and the selection of cadres that will be included in the socialization program of the IVA examination program in an effort to early detection of cervical cancers in women of childbearing age at the location of service. In addition, there is also the availability of facilities and infrastructure in the area of service implementation.

#### 3.1.2 Preparation of Pocket Books and Leaflet as Part of the Material That Will Be Delivered to Community Service Activities

This activity began with a literature review of health promotion materials published by the Indonesian Ministry of Health to ensure that the information provided did not deviate or contradict. This also remembers that the IVA test activity is already running in the puskesmas that has a trained midwife.

#### 3.1.3 Preparation of a Questionnaire to Measure Participants' Knowledge, Attitudes and Actions

This activity begins by conducting a literature review of previous research results that measure mother's knowledge, awareness and action on the IVA test, then adjusted to the activities to be performed in the field. Questions in the questionnaire were made in as simple a language as possible so that they could be easily understood by mothers.

#### 3.2 Implementation of Activities

Activities undertaken in the implementation of community service programs are as follows:

#### 3.2.1 Socialization of Community Service Programs

This activity started with recruitment of cadres, especially in health sector. This is done in an effort to improve the sustainability of activities at partner sites, The cadres will be trained on cervical cancer, IVA examination techniques, communication with the community and become ideal cadres..

# 3.2.2 Identification of Mothers of Productive Age

Search of productive age mothers as many as forty (40) people who meet the criteria for IVA test, where the determination is done by the cadres after being trained. These mothers were then presented with matters related to cervical cancer, including primary and secondary prevention. Then it is expected that the selected mothers can help the cadres in disseminating information about the importance of early detection of cervical cancer after understanding and getting IVA test.

#### 3.2.3 Efforts to Emppower the Community by Increassing Knowledge, Attitudes and Action Regarding Early Detection of Cervical Cancer

This activity is in the form of delivery of material about cervical cancer and early detection efforts conducted, especially IVA test, conducted by the team leader. The outcome of this activity is expected to increase the post test score and public willingness to undergo IVA test. This activity was conducted on June 25, 2018 in Rusunawa Seruwai, witnessed by the Head of Rusunawa and cadres selected.

# 3.2.4 Implementation of IVA Test Examination

This activity was carried out by a trained midwife midwife who was assisted by 2 nurses and supervised by the head of the team. Before the examination was carried out, the mothers were asked to sign preprepared informed consent. The examination also begins with a simple breast examination to detect the possibility of a lump. From the examination results found one (1) mother with a lump in the breast to the left of the upper lateral quadrant. Then proceed with the IVA test and recording if the mother has leucorrhea or not. From the results of the examination all mothers gave negative results for the IVA test and nineteen (19) mothers suffered from leucorrhea. Every mother who was diagnosed with leucorrhea was then given Mycoral drugs to treat Candida and Baquinor infections to overcome bacterial and parasitic infections while all mothers were given vitamin for a week of use.

## 4 **DISCUSSION**

The dedication to the community of BOPTN mono year held in Rusunawa Seruwai and Kayu Putih to cadres and community has been going well. This is evident from the high interest of PKK cadres who follow socialization activities. This proved the number of questions raised during the activity, the questions submitted not only to the material presented but to the discussion of appropriate delivery techniques in the field adapted to local customs. The input given by the cadres becomes a consideration before the decision is made.

The public interest in following the extension activities and examination of early detection of cervical cancer in the form of IVA test is very high. This is evidenced by the presence of the community, in which case the mothers who meet the criteria at the time of the implementation of the test reached 100% until the end of the event, although had to wait quite long during the implementation of the IVA test. This indicates that the cadres and the community welcomed positive activities that have been implemented. In accordance with the expectation of the Head of Rusunawa and cadres who are looking forward to activities that are providing health promotion to the community so as to raise their desire in seeking medical treatment when needed, not only rely on alternative medicine as it has so far. Head of Rusunawa and cadres welcomed the enthusiasm related to the implementation of community service and hope to do activities continuously for the material and other matters relating to health. Likewise, people who are involved with this activity feel very helpful with this activity especially for early detection of cervical cancer.

In the counseling and IVA test examination of mothers who underwent tests in this activity, it was seen that the mother was interested in the various information conveyed. Almost every mother asked for counseling material, especially about the tests carried out. Some mothers also ask about the symptoms and signs they have experienced all this time which are allegedly related to reproductive and genital devices. Increased knowledge made mothers feel more calm and comfortable so that no one refused the examination, even though at first there were those who felt hesitant, afraid and ashamed. In addition, the implementing team also stated the importance of moral support from fellow friends when it comes to reproductive health, given that our culture still regards this as taboo.

#### REFERENCES

- Direktorat Jenderal Pengendalian Penyakitdan Penyehatan Lingkungan Kementerian Kesehatan Republik Indonesia, 2014. Pers Rilis Hari Kanker Sedunia Tahun 2014 Tema: "Hilangkan Mitos Tentang Kanker" [Internet]. 2014 Feb [cited 2016 April 26]
- GLOBOCAN, 2012. Estimated Cancer Incidence, Mortality, and Prevalence Worldwide in 2012.
- Harahap S., 2014. Analisis Pengetahuandan Sikap Ibu Rumah Tangga Terhadap Profil Kanker Indonesia, 2014.Registrasi Kanker Berbasis Rumah Sakit di Indonesia.
- Pelaksanaan Pap Smear Untuk Deteksi Dini Kanker Serviks di Puskesmas Petisah Medan Tahun 2013. Medan: Universitas Sumatera Utara.
- Kementerian Kesehatan RI., 2015. Buletin Jendela Data dan Informasi Kesehatan Semester 1. Kementerian

Kesehatan RI.

- Ningsih R., 2010. Pengetahuan dan Sikap Wanita yang Telah Menikah tentang PemeriksaanIVA UntukMendeteksi Kanker Leher Rahim di Puskesmas Medan Area Selatan Tahun 2009. Medan: Universitas Sumatera Utara.
- Prandana DA., 2013. Pasien Kanker Serviks di RSUP H.Adam Malik Medan Tahun 2011. E-Jurnal FK USU.
- Tindaon E., 2014. Karakteristik Penderita Kanker Serviks yang Dirawat Di Rumah Sakit Pemerintah Di Kota Medan Tahun 2014. Medan: Universitas Sumatera Utara.

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