



## Training of Detection in Cervical Cancer on the Character Readiness to be a Health Author

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### Abstract

Cervical cancer is a disease feared by women this decade. This is because cervical cancer is the most common cause of death in women. The incidence of cervical cancer in Southeast Asia reached 175,229 cases, and 94,294 among sufferers died. WHO placed Indonesia as the country with the highest number of cervical cancer sufferers in the world and this type of cancer was the number one cause of death in women in Indonesia. Every day around 20 Indonesian women die of cervical cancer. Another thing that is the cause is the lack of public knowledge about the symptoms of cancer and initial symptoms that are sometimes also difficult to detect so that the majority of sufferers come for treatment in an advanced stage. Current incidence of cervical cancer throughout the world can be suppressed through effective screening efforts through pap smears or IVA tests. Unfortunately, this activity has not been comprehensive in every country, especially in Southeast Asia (developing countries) like Indonesia. The government set a target for coverage of cervical cancer screening by 80%, but in 2013 it only reached 1.75%. The causes are low public knowledge and lack of information about cervical cancer. Women at risk are largely unaware of the need to undergo an early detection of cervical cancer. Therefore, we consider it important to carry out training activities to form health cadres as well as the importance of the cadre's readiness to become a health educator about Cervical Health Insurance Detection.

The purpose of this study was to determine the readiness of cadres as health educators after training on early detection of cervical cancer and to analyze differences in cadre readiness before and after training on the readiness of cadres as health educators about early detection of cervical cancer.

Research results conducted from the results of the pre- and post-questionnaires collected, the results showed that 61.5% of cadres were ready to become health educators about early detection of cervical cancer, and there were mean differences in the cadre readiness score before and after it was done. Intervention, with P value = 0.000 ( $P < 0.05$ ). So that it can be concluded that cadres who have been trained are better prepared than cadres who have not been trained and there is an effect of training on cadre readiness to become an early detection advisor about cervical cancer.

Based on the results of this study, it is expected that cadres have readiness as an early detection center for cervical cancer so that people get more knowledge and information about early detection of cervical cancer so that the morbidity and mortality rates from cervical cancer can be reduced.

**Keywords:** Cervical cancer detection; Health care training; Cadre readiness

### Introduction

The current era of modernization has had an impact on the health behavior of the world community [1-4]. The flow of information and technology has opened up space for the exchange and adoption of information in various spheres of life, especially with regard to sexuality. One of the direct negative impacts at this time is the consumption of the community towards the content of sexuality that is not appropriate so that it is believed to have influenced the sexual behavior of unhealthy people today. Many risks that might be faced by one of them are the threat of cervical cancer, especially for those who first had sexual contact in their teens.

Cervical cancer is a disease feared by women this decade. This is because cervical cancer is the most common cause of death in women. The incidence of cervical cancer in Southeast Asia reached 175,229 cases, and 94,294 among sufferers died [5].

Current incidence of cervical cancer throughout the world can be suppressed through effective screening efforts through pap smears or IVA tests. Unfortunately, this activity has not

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been comprehensive in every country, especially in Southeast Asia (developing countries) like Indonesia. The government set a target for coverage of cervical cancer screening by 80%, but in 2013 it only reached 1.75%. The causes are low public knowledge and lack of information about cervical cancer. Women at risk are mostly unaware of the need to undergo an examination of early detection of cervical cancer [6].

Indonesia has a population of 89.07 million 15 year old women who are at risk of contracting cervical cancer. Based on the 2014 WHO report, cervical cancer is most often found in women aged 15 and 44 years. Riskesdas reports that there are still many early marriages in Indonesia [6]. The results of the riskesdas show that among women aged 10 to 54 years, 2.6% were married for the first time at the age of less than 15 years and 23.9% were married at the age of 15 to 19 years. Getting married at an early age is the first gate of reproductive health problems because the younger the age to get married, the longer the period of time to reproduce, so the potential for various problems related to reproductive health to occur such as the increased risk of cervical cancer.

It is the responsibility of health workers to improve understanding, awareness and motivation of women to be willing to undergo early detection of cervical cancer independently through community-based health education activities. Community-based activities need to be carried out with the aim of fostering healthy behavior from the community, both individuals and groups consciously towards independence. Empowerment of the community component is the main factor that influences the ability to make healthy life decisions. Midwives and other health workers or even non-health workers such as cadres have the potential to help individuals and communities to empower themselves through groups and individuals.

Health cadres according to the Indonesian Ministry of Health in the field of Directorate of Community Participation, namely citizens from the local environmental community who are selected by the community and also reviewed by the community and can work voluntarily. Cadres are responsible for the local community, especially in the health sector. The role and function of cadres as a driving force for society include giving motivation about environmental sanitation, personal health, general healthy habits, giving motivation about diseases, especially infectious diseases, prevention and/or referral, and other roles.

To improve the cadres' ability as a driving force for "agent" change in the community that is responsive to cervical cancer its capacity needs to be improved through training activities as an extension agent for early detection of cervical cancer. This activity is expected to build the cadres' confidence as a change agent that will increase their readiness to move the community in their area to be willing to undergo early detection of cervical cancer independently.

The training that will be conducted is used as a method to improve the quality of cadres which includes the knowledge, skills and attitudes of cadres in a positive direction. For the effectiveness of this cadre training, a training curriculum design is specifically designed by the research team that refers to current standards. This cadre training is carried out with the coverage of existing health cadres, or prospective cadres formed specifically to act as cadres concerning cervical cancer.

Ibrahim Adjie Health Center is one of the primary health care facilities in the city of Bandung that provides services related to reproductive health [7-9]. From the reproductive health service data,

there were several cases of STIs. STI is a high risk factor for cervical cancer. In 2015 it was reported that as many as 16% to 18% of clients were diagnosed with positive STIs. There are >500 couples who are at high risk of STI, including young women (20 to 25 years). IMS doesn't just happen, this is a series of events that is quite time consuming. STIs are closely linked to patterns of sexual activity. The discovery of young WUS affected by STIs illustrates the possibility of early sexual activity, so it is necessary to make efforts to increase the capacity of all elements of society to be alert to the incidence of cervical cancer through early detection of cervical cancer.

Therefore, in order to increase the insight and ability of cadres in providing reproductive health counseling, especially regarding early detection of cervical cancer so that they are able to play a strategic role as mediators between the community and health services and as a change agent in the community, training is needed to improve readiness as a health educator on detection early cervical cancer for cadres in the health center area of DTP Ibrahim Adjie.

## Research Methods

### Research design

This study uses quasi-experimental research using the design of one group pretest and posttest to look for the effect or effect of treatment on a group without a control group. Measurements were made before (pre test) and after (post test) treatment. In this study the two groups were given a tool in the form of a training curriculum, a module on early detection of cervical cancer, and an extension guidance module [10].

### Time and place

This research will be conducted from April dd. September 2017, in the area of Ibrahim Adji Health Center in Bandung City.

### Population and samples

**Population:** The target population in this study was all Posyandu cadres active in the Ibrahim Adji Health Center area of Bandung City. Affordable populations are all Posyandu cadres in the Ibrahim Adji Health Center area, Bandung City.

**Sample:** The sample of this study was active cadres in the Ibrahim Adji Health Center area of Bandung City.

$$N = (Z_{\alpha} + z_{\beta} SD)^2 / (X_1 - X_2)^2$$

Information:

$Z_{\alpha}$ : deviat alpha standard (1.96)

$Z_{\beta}$ : beta standard deviate (0.84)

X1-X2: mean difference

The results of the calculation, the study sample amounted to 26 people

### Criteria for inclusion and exclusion:

Inclusion criteria:

- Active cadres
- Willing to participate in research

Exclusion criteria:

- Cannot read and write and can read and write

**Operational variables and definitions** (Table 1).

**Table 1:** Operational variables and definitions.

Variable	Operational Definition	How to measure	Measuring instrument	Measuring Results	Scale
<b>Dependent Variable</b>					
<b>Cadre Training</b>	The process of increasing the knowledge and attitudes of posyandu cadres through regular training/health education	Observation	Questionnaire	1. Conducted Training	Nominal
				2. Training is not conducted	
<b>Independent variable</b>					
<b>Cadre Readiness</b>	Cadre readiness as health educator about early detection of cervical cancer	Interview	Questionnaire	1. < mean	Interval
				2. > mean	
<b>Variable (Characteristics)</b>					
<b>Level of education</b>	The highest formal education ever achieved by respondents			1 = Low	Ordinal
				2 = Intermediate	
				3 = High	
<b>Occupation</b>	Permanent work that is used to earn a living		Check list	1 = work	Nominal
				2 = Not Working	
<b>Parity</b>	The number of surviving children owned by the respondent			1= 1-3	Ordinal
				2= 3-5	
				3= >5	

### Data collection method

**Data type:** The data used are primary data in the form of readiness of Posyandu cadres as health educators about the detection of cervical cancer, who were given training in early detection of cervical cancer.

**Research instruments:** The instrument in this study was a questionnaire to measure the level of knowledge of cadres about early detection of cervical cancer, in the form of closed questions arranged structurally with questions about early detection of cervical cancer. In addition, respondents also filled out a questionnaire to measure the readiness of cadres as counselors for early detection of cervical cancer.

Measurement using a questionnaire with a Likert scale that contains selected statements and has been tested for validity and reliability.

#### Positive statement (favorable):

a) Strongly agree (SS) if the respondent strongly agrees with the statement of the questionnaire given through the questionnaire answer 4.

b) Agree (S) if the respondent agrees with the statement of the questionnaire given through the questionnaire answers to score 3.

c) Disagree (TS) if the respondent does not agree with the statement of the questionnaire given through the questionnaire answer score 2.

d) Strongly disagree (STS) if the respondent strongly disagrees with the statement of the questionnaire given through the questionnaire answer 1.

#### Negative statement (unfavorable):

a) Strongly agree (SS) if the respondent strongly agrees with the statement of the questionnaire given through the questionnaire answer score 1.

b) Agree (S) if the respondent agrees with the statement of the questionnaire given through the questionnaire answer score 2.

c) Disagree (TS) if the respondent does not agree with the

statement of the questionnaire given through the questionnaire answers to score 3.

d) Strongly disagree (STS) if the respondent strongly disagrees with the statement of the questionnaire given through the questionnaire answer 4.

Readiness criteria are categorized into:

- Ready: >mean
- Not ready: <mean

**Taking research data:** Retrieval of data in this study was carried out with the steps as follows:

1. The researcher submits a research permit
2. Coordinate with Ibrahim Aji Health Center to plan cadre training activities
3. Determine the sample based on inclusion and exclusion criteria
4. Conduct cadre training on early detection of cervical cancer and standardized methods of counseling.
5. Perform a pretest before training and posttest after training
6. Respondents in the control group were given a booklet about early detection of cervical cancer

### Data analysis

In this study the data analysis design was univariate and bivariate analysis. Univariate analysis was conducted to describe the characteristics of each variable studied. Bivariate analysis to determine the effect of training on the readiness of cadres as health educators about early detection of cervical cancer, namely the Paired T Test [11,12].

## Results and Discussion

### Results

#### Univariate:

1. Characteristics of Respondents: Characteristics of

**Table 2:** Distribution of frequency of cadre readiness to health extension based on characteristics of respondents.

Characteristics	N	%
<b>Age</b>		
35-40 years old	7	26.9
41-45 years old	10	38.5
46-50 years	2	7.7
>50 years old	7	26.9
<b>Work</b>		
Does not work	24	92.3
Work	2	7.7
<b>Education</b>		
Basic education	1	3.8
Middle education	25	96.2
<b>Parity</b>		
5-Feb	26	83.9
<b>Marital status</b>		
Married	24	92
Janda	2	8
<b>Amount</b>	<b>26</b>	<b>100</b>

Based on Table 2 above, it can be seen that the characteristics of respondents based on the most age are 41-45 (38.5%). While the characteristics of respondents based on work as much as 92.3% did not work. Based on education, most respondents were secondary education (96.2%). Based on parity, all respondents had parity of 2-5 (100%).

**Table 3:** Frequency distribution of cadre readiness to become health educator.

Cadre Readiness	N	%
Ready	16	61.5
Not ready	10	38.5
<b>Total</b>	<b>26</b>	<b>100</b>

Based on Table 3, it was found that, as many as 61.5% of cadres were ready to become health caregivers about early detection of cervical cancer.

respondents in this study can be seen in Table 2.

2. Distribution of frequency of cadre readiness to become health extension (Table 3 and 4).

## Discussion

The results showed that the frequency of cadre readiness to become health extension was found, as many as 61.5% of cadres were ready to become health educators about early detection of cervical cancer, and there were mean differences in cadre readiness scores before and after intervention, with P value =0.000 (P = <0.05).

Cervical cancer is a disease feared by women this decade. This is because cervical cancer is the most common cause of death in women. The incidence of cervical cancer in Southeast Asia reached 175,229 cases, and 94,294 among sufferers died [13].

Current incidence of cervical cancer throughout the world can be suppressed through effective screening efforts through pap smears or IVA tests. Unfortunately, this activity has not been comprehensive in every country, especially in Southeast Asia (developing countries) like Indonesia. The government set a target for coverage of cervical cancer screening by 80%, but in 2013 it only reached 1.75%. The causes are low public knowledge and lack of information about cervical cancer. Women at risk are mostly unaware of the need to

**Table 4:** Differences in cadre readiness scores before and after train.

Readiness Score	Before treatment (n=26)	After treatment (n=26)	P value
- Mean	72,96	77,96	
- Elementary school	6,452	5,888	0,001
- SE	1,265	1,154	(P= <0.05)

\*t dependent test

Based on Table 4, it was found that there was a mean difference (mean) of cadre readiness scores before and after the intervention, with P value =0.000 (P = <0.05). This means that there is difference.

undergo an examination of early detection of cervical cancer [6].

The number of deaths caused by being discovered late and too late to be treated, even though the actual course of this disease does not occur quickly, but will get worse in a matter of years. From the condition of a normal woman to a pre-cancerous disease it takes 5 years, whereas a pre-cancer to a mild cancer takes 5 years and from a mild cancer to a moderate cancer it takes 3 years. Seeing from the course of this disease, actually if recognized from the beginning it will have a good prognosis, which can be cured [14]. Early detection of this disease is done through IVA test and follow-up examination through PAP SMEAR [15].

Referring to the mother's low knowledge and lack of sources of information about cervical cancer, the importance of midwives' extension is the health cadre to provide information about cervical cancer in the community and provide information about the importance of early detection of cervical cancer, so that mothers who make early detection about cervical cancer.

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Cadre readiness is the overall condition for responding to and practicing an activity in which the attitude contains mental, skills and attitudes that must be possessed and prepared during certain activities. Readiness is very important to start a job, because by having readiness, any work will be overcome and can be done smoothly and get good results.

Therefore, in order to increase the insight and ability of cadres in providing reproductive health counseling, especially regarding early detection of cervical cancer so that they are able to play a strategic role as mediators between the community and health services and as a change agent in the community, training is needed to improve readiness as health educators about early cervical cancer for cadres. Counseling is a way to increase public knowledge about cervical cancer and carry out IVA Test as screening as early as possible to reduce the cervical cancer death rate.

Health cadres are expected to have knowledge about early

detection of cervical cancer and its symptoms, have knowledge about early detection cervical cancer includes lifestyle, environment, and healthy eating patterns including how to maintain the cleanliness and health of female organs, play a role and make people aware of the importance of doing early detection of cervical cancer, can disseminate these knowledge and skills to family and society [16,17].

## Conclusion

Based on the results of the discussion it can be concluded that there is an influence of cadre readiness as a health educator after training on early detection of cervical cancer as much as 61.5% cadres are ready to become health care providers about early detection of cervical cancer. Cadre readiness after training has a mean difference in mean readiness scores before and after the intervention, with P value =0.000 (P= <0.05).

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