

# **Affecting Factors For The Implementation of Early Detection of Cervical Cancer by Visual Inspection With Lactic Acid in Primary Health Centers in Surabaya**

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*Cervical cancer detection program through an examination of the IVA has been implemented in all Primary Health Center in Surabaya since 2010. Target of this program are 80 % women and the target examination at least 25 people per month, but the achievement only 3-4 people per month. The purpose of the research is to analyze the factors that affect the implementation of IVA's programs in primary healthcare centers in Surabaya .*

*The Research conducted by observational analytic cross sectional approach. The population were responsible for IVA program at the health center (52 people) by total sampling. Data was collected through interviews and observation using a structured questionnaire. Analyzed using T test track with the program VPLS ( Visual Partial Least Square)*

*The results showed IVA program by Primary Health Center in Surabaya 57.7 % had less communication, the implementor attitude 55.8% were supportive IVA program , 53,8% character of health centers provide less support , understanding of the standard and target 51.9% less understand. The test results showed that the communication model of the structure, characteristics and health centers responsible attitude directly affects the implementation of the IVA program , while managing and understanding of the standard target indirectly influence the IVA program implementation through communication and attitude. Taken together these five factors influence the implementation of the IVA program with a contribution of 82.7% which is the most influential variable is communication.*

*It is suggested that health office (DKK) establish clearly that the IVA is mandatory and impose targeted SPM to all health centers, as well as improving the provision of resources and commitment through regular supervision. Primary Health Centers are advised to develop a strategic plan and conduct internal monitoring as well as discussions and refressing on IVA program information .*

*Keywords : Early detection of cervical cancer, program implementation, Primary Health Center*

## INTRODUCTION

Cervical cancer is a malignant disease of the cervix (cervical) caused by HPV (Human Papilloma Virus). Throughout the world, the disease is a type of cancer that affects most to two women after breast cancer, but became the first cause of death of women due to cancer. The incidence of nearly 20 million people per year and 90 % of which occur in developing country like south Asia, Southeast Asia, central and Southern America and East Africa.<sup>1</sup>

In Indonesia The incidence of cervical cancer continues to increase each year with increased  $\pm$  15,000 cases, and 7493 of them ended in death because nearly 70% of new cases are found already in a state of advanced stage. The high incidence of cervical cancer in Indonesia is the highest incidence of cervical cancer in world. Most cases in Indonesia are found in East Java. From the report of POSA (Poli Onkologi Satu Atap) at Dr. Soetomo Hospital, obtained cases reached 2,879 cases in 2011 and 3780 in 2012, every day discovered 8-10 new cases and in the last 3 years (2010-2012) the number increased of new patients cervical cancer in a row in 1263, 1758 and 1691 the number of deaths 40 cases.<sup>5</sup>

Cervical cancer is preventable and treatable if it was found/detected at an early stage. WHO recommends that all women who are sexually active to early detection as the key to successful cancer control program is the effective screening and penanganan as early as possible. Methods of early detection of cervical cancer screening can be done through a Pap smear test and visual inspection with acetic acid (VIA). Provincial Health Office of East Java began moving examination of cervical cancer screening by health centers since 2007, but has not been implemented optimally, and then in 2010 City Health Office (DKK) Surabaya coordinate with related sectors as well as the networking of cancer to early detection program for cervical cancer according to Kepmenkes No. 796/Menkes/VII/2010 and assigned to

the entire parent community health centers. The program began in the city of Surabaya, Malang, Gresik and Kediri, then will be expanded to all districts/cities in East Java. Activities include outreach to the community and early detection of cervical cancer by the method of IVA.<sup>2</sup>

Based on preliminary surveys were obtained by the author through interviews with Primary Health Care Sie KIA DKK Surabaya as the holder IVA program and 4 people in primary IVA program officer, obtained in 2010-2011 dari 62 PHC parent, this program is only implemented by 23 (37%) health center inspection coverage of 20.4% of the target has been done counseling, instead of the entire target. In 2012 DKK Surabaya set the Minimum Service Standards (SPM) examination parent IVA to all health centers in Surabaya region that inspection coverage of at least 25 patients/month for each health center. In 2011-2012, these programs increased to 56 health centers but only three health centers that reach the target SPM while 53 health centers are below the minimum target coverage defined by an average of 7-8 people coverage/month/community health centers, community health centers and 6 others 0% coverage and has not carried out the search and follow-up of these achievements.<sup>2</sup>

Based on the background described above, the writer can formulate problem less optimal implementation of the program of early detection of cervical cancer in the clinic, it is evident from the lack of civic education activities as well as the low coverage in health centers IVA examination which is still far below the target of both the target SPM. Can be said that the implementation of the program for early detection of cervical cancer through examination IVA in the clinic is not optimal but not yet carried out a search and follow-up of these achievements, for it is important to analyze the factors which influence to the implementation of programs for early detection of cervical

cancer in Primary Healthcare Centers in Surabaya

## RESEARCH METHODS

Research conducted is observational analytic with cross sectional approach. Research analysis unit primary health centers that have been implementing the program IVA, population are executing program officer at the health center for 52 people with total sampling. The independent variable (independent) consisting of communication, availability of resources, health centers support characteristics, attitudes/disposition executor, an understanding of the standards and policy targets. The dependent variable (dependent) is the implementation of programs for early detection of cervical cancer through IVA examination.

Data collected through interviews and observation by using a structured questionnaire. Tests were carried out by using the program SEM (Structural Equation Modeling) with alternative models of structures using VPLS (Visual Partial Least Square) because the sample size is relatively small ( $n < 100$ ), using a significance level of 5% ( $p < 0.05$ ) through the analysis of the structural model (Inner Model) and the measurement model (Outer Model).

## RESULT AND ANALYSIS

### IVA Programme Implementation in Primary Health Center (PHC)

Implementation of cervical cancer early detection program conducted by health centers include the preparation, execution and reporting records.

Table 1. Implementation of the program IVA IVA program at primary health center in Surabaya, 2013

Implementation	Frequency	Percentage
Good	22	42,3
Less	30	57,7
total	52	100,0

Table 1 shows that the implementation of the health center in the early detection of

cervical cancer program largely unfavorable 57.7%.

Management of the implementation of cervical cancer early detection program includes the preparation (data collection, estimation-target mapping, the estimated needs), implementation (inspection scope extension and IVA), as well as recording and reporting.<sup>5</sup>

Preparation is an examination of needs analysis which includes the analysis starts from the needs of the target, the estimated needs, as well as mapping of target clients according region. Based on the interview respondents can be seen that 82.7% PHC has drawn up a budget plan based on estimated needs tools and means, even 90,3% has appointed executor who examinations and counseling before hand.

Associated with the target, 69.1% had health centers estimate the number of its target audiences in the region that is the number of women aged 30-50 years who are married, but less preparation of which 80.9% health centers do not perform the mapping target, as well as for cooperation/coordination with cadre/public figures related counseling IVA obtained 69.2% did not do it during preparation. Mapping and cooperation, are two important things the preparation of the IVA program because of the large number of targets including in every region at Surabaya city with a high population density, to facilitate the access of women to achieve IVA inspection services by grouping the corresponding parts of the region began to extension up to examination. According to Azwar, preparation is a supporting factor that has important role in helping implementing organizing various activities that have been plan.<sup>16</sup>

Associated with the implementation of education and examination, targeted examination of almost all health centers (86.5%) had right that is not limited only to women in the region working alone and 55.8% health centers also do referrals for suspected cases of cancer to a more

complete facilities. But the number of IVA inspection coverage in the clinic is very far from their intended target because only six health centers that reach the target SPM, even 26 health centers (50%) had never achieve the set SPM target of DKK. It's also associated with the implementation of the extension of the inspection IVA, because there are 52 health centers only 32.7% of primary care clinics routinely conduct counseling and scheduling execution while others is nothing. Inspection of IVA is a relatively new thing for the community, for the efforts of extension and add insight is the main thing to be able to empower and mobilize people in order they want to do the inspection, and this should be done right on target, scheduled and involve cooperation with the volunteer/community leaders in order to reach the entire target.

Recording has been carried out, but not all of those use the same format, even the majority (36.5%) health centers say that there is no specific format for reports from health centers from official health center.

All health centers have reported the implementation of the IVA, but not exhaustive, including outreach activities that have been done, but rather focused on the coverage of the examination IVA, 55.8% health centers do not report regularly every month, when it should be recording and reporting regularly every month with the format that has been set,

Implementation of health centers in the program of early detection of cervical cancer 57.7% largely unfavorable, especially in the aspect of preparation (cooperation cadres and mapping targets), as well as the coverage extension and inspection activities.

The Target program of IVA is very large and bigger, therefore the preparation field includes mapping, advocacy and socialization, building atmosphere, mobilization of communities and partnerships across programs and across sectors is also needed, for the cadre of

health plays a role in motivation and mapping the client either to follow counseling and motivation in conducting the examination.

IVA examination is actually a long technique enough to find, but to set a new health center program in place since 2010, moreover, although required but this program is the flagship program so that most health centers are expected to prioritize the implementation of the main programs that can not be fulfilled.

### **Communication of Implementation in IVA Program**

Communication in this study is the delivery of information/dissemination of the IVA between DKK Surabaya to the Head of City Health Centre and implementing programs in the clinic include socialization (source, schedule, method), clarity and consistency.

Table 2 Communications of implementation IVA at primary health center in Surabaya, 2013

Communication	Frequency	Percentage
Good	27	48,1
Less	25	51,9
Total	52	100,0

The results showed that the communication program of early detection of cervical cancer 51.9% in health centers has not been implemented properly.

Communication in this study is the delivery of information/dissemination of the IVA between DKK Surabaya to the Head of Primary Health Center and implementing programs in the clinic include socialization (source, schedule, method), clarity and consistency.

The results showed that communication about cervical cancer early detection program in Primary Health Center 51.9% have not done well, especially in the aspect of clarity and operational guidelines for the program must be implemented by all the primary health centers. IVA program executive

coordinator at the health center has received information about IVA program either from the Head of the health center or from DKK, provision of implementation and the target remains unclear. Clarity of information is very significant in implementing a policy program in the clinic.

Communication is a vital factor that focus on standards and objectives clarity, accuracy and consistency of communication implementers (similarity) is communicated and various resources. program should be clearly understood by the executor, because of a vague understanding of the policy making implementation will not run as expected. Van meters and van horn states if the communication is delivered properly it will have an impact on the disposition/attitude of a midwife in implementing the program because the standard of clarity, consistency and accuracy goals.<sup>6</sup>

#### **Disposition/attitude implementor of IVA Programme**

Disposition/attitude in this regard is implementing in response to cervical cancer early detection program to the task and the response/support in the implementation of cervical cancer early detection programs, including the willingness and responsibility and tendency accept/support program implementation IVA or otherwise.

Table 3 The attitude of implementor IVA program at primary health center in Surabaya, 2013

Sikap	Frequency	Percentage
Positive/suport	29	55,8
Negative/ Not support	23	44,2
Total	52	100,0

Table 3 shows that the person in charge of the program/implementor majority (55.8%) positive support for early detection of cervical cancer program.

The attitude of implementor accepting reject of the executive program (Primary

health Cenrters/PHC) will greatly affect the success of public policies. Disposition maintain consistency between the goals set out what the policy makers and implementers. implementor 78.8% of respondents agreed that an IVA is an important program to reduce the incidence of cervical cancer and 53.8% agree that it is the duty and responsibility of health centers in particular respondent who is in charge IVA program in the clinic. Related finding to this run optimally 44.2% of respondents agreed that implementation depends heavily on the support and compensation of DKK, even 73% of respondents stated that the IVA program not required as long as there are no sanctions or rewards for the health centers linked to whether or not the implementation program. success of the program or policy implementation is the attitude of workers toward acceptance and support for the policies or the support that has been set.

#### **Characteristics Supports of Primary Health Center for Implementation in IVA Program**

Characteristics of support include how big the carrying capacity of an organization to the implementation of the program, among others include the bureaucratic structure, the rules in the form of standard operating procedures (SOP) and patterns of organizational structure includes the arrangement and implementers responsible IVA program and the details of the task.

Table 4 Characteristics of support of IVA program at the health center in Surabaya, 2013

Characteristics PHC	Frequency	Percentage
Positive/suport	24	46,2
Negative/ Not support	28	53,8
Total	52	100,0

Implementation of this program relatively lack of supporting, evidenced in 57.7% of City Health centre there is no specific agenda for monitoring the

implementation and increase efforts to improve the coverage, and 82.7% said there was no direct supervision of DKK and supervision only based on reports alone.

### **Implementor understanding about Standards and targets of IVA Program**

Implementor understanding about standards and targets in this study is the understanding and the tendency of the implementor of the standards and policy targets to be achieved by the IVA program. Table 5 Implementor understanding of the standards and targets IVA program in PHC Hospital Surabaya, 2013

understanding	Frequency	Percentage	tage
Good	23	44,2	2
Less	29	55,8	3
Total	52	100,0	0

The table shows that the standards and targets of the program of early detection of cervical cancer is 55.8% less understood.

The results showed that the standards and program goals early detection of cervical cancer is 55.8% less understood. It was Obtained that 88.5% of respondents consider/approve that IVA program is not a program but the principal is an excellent program, so it does not have to be done by all health centers. 34.8% of them feel that the target number is too big and difficult to achieve by the clinic, even 50% do not agree that this program is charged on all health centers, it is thought to be due to the many existing programs in health centers and community health centers program targets are still subject has not been achieved.

IVA program officer at the health center has a different perception and less precise about IVA program, especially concerning the status and targets to be by the achieved health centers linked to the program objectives. understanding of the policy objectives IVA program.

According to Van Meter and Van Horn, standards and policy targets must be clearly and correctly understood by the

person in charge of the program, to the precision and clarity of communication become an important factor in understanding improper information because it can affect the attitudes/disposition implementor in implementing a program.<sup>8</sup>

### **Resources (personnel/HR, funds, facilities and infrastructure) in the IVA Program**

Resources are anything that is used to facilitate the implementation of cervical cancer early detection program in order to be effective, include financial resources (funds) and non-financial resources, personnel (HR), facilities and infrastructure.

Table 6 Categories availability of resources at IVA program in City Health Centre area of Surabaya, 2013

Resources	Frequency	Percentage
Good	27	51,9
Less	25	48,1
Total	52	100,0

Resources in the implementation of IVA program in PHC Surabaya majority (51.9%) complies with the standards that exist in the IVA service guide implementation IVA program.

Resources in the implementation of IVA program in PHC Surabaya largely complies with the standards that exist in the IVA service guidelines IVA program implementation, particularly in human resources and infrastructure is needed. Infrastructures that are in the form of equipment and material health advocates such as speculum, bed gynecology, stick Watten and so on are all available adequate and feasible because the tools and materials that are standard are already to be there in the clinic regardless of the program IVA, but for infrastructure activities counseling is still very minimum, only 21.3% health center that has a banner on IVA and 34.7% when the leaflets that provide counseling.

The achievement of policy objectives must also be supported by the availability

of human resources, funding and infrastructure. In IVA program with optimal GCC is not yet available due to the absence of funds from the special fund operasional maing DKK for each clinic. According Winarto resource availability is a decisive factor performance of a policy. Implementor must obtain the proper resources for the program to run smoothly. Although the policy has clear standart and target, but if resources are not adequate or are not used properly, the policy will not be implemented.

**The Influence of Communication, Attitude of implementor, Characteristics suport of the Executing Program, Resources and Understanding of Implementor about Standard and Targets With Implementation of IVA Program**

Model testing done in 2 stages, based on test results obtained from the first phase, there are several indicators that are not valid on each variable, then the invalid indicator aren't allow in testing model stage II and obtained the following results.

Chart 1. Model influence between variables (inner model) and a significance test to test T

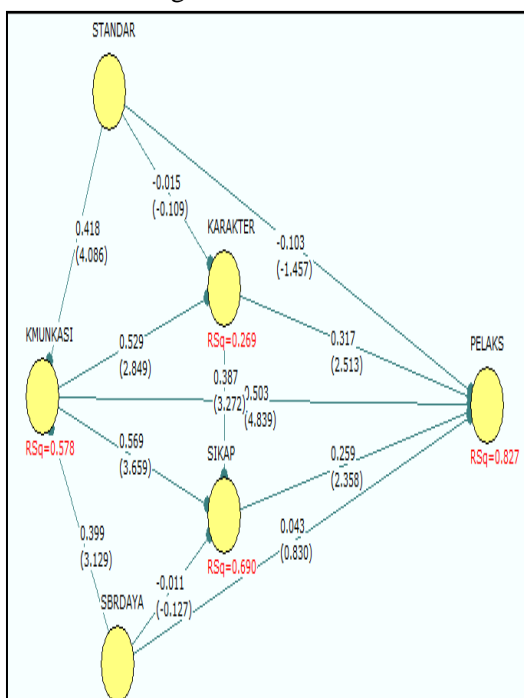


Table 7 Analysis of independent variables affect the implementation of the results of the t test based on the model

independent variables	t statistic	Result
Communication	4,83	significant
Attitude implementor characteristics	2,35	significant
suport of the PHC	2,53	significant
Resources	0,83	Not significant
Understanding of Implementor	1, 45	Not significant

Based on the structure of the model can be analyze the effect of each variable on the implementation. Chart 1 and table 7 shows that of 5 variables associated with implementation of the obtained three variables direct and significant impact on the implementation of that row is communication with a correlation coefficient of 0.529 characteristics executing agencies with correlation coefficient of 0.317 and attitudes with correlation coefficient 0.259 three significant because the test value T > 1.96, while the standard variable and objectives and resource variables do not directly affect the implementation because of the value of T < 1.96.

In the path analysis using VPLS obtained no free variables (exogenous) of implementation can be a dependent variable (endogenous) for other variables. On such models are based on a theoretical framework van meters obtained models with 3 endogenous variables (variables that are subject arrows) that is communication, attitudes, characteristics and implementation of executing agencies with R2 respectively as follows.

On the theory of Van Meter and Van Horn, not only the variables that can affect the implementation, but also between independent variables affect each other and it can not be ignored.

Table 8 Analysis affecting factors for the implementation of the results of the t test based on the model

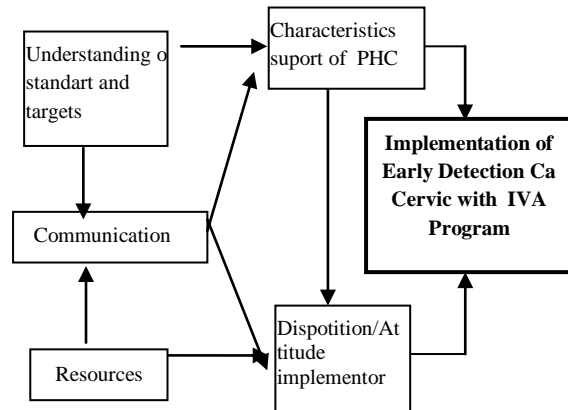
Variable Eksogen (independent)	Variable Endogen (dependent)	R-Square (R2) model
- Communication - Disposition/Attitude implementor - Characteristics suport of PHC - Resources - Understanding of Implementor about standart and targets	Implementation	0,82
- Resources - Communication - Characteristics suport of PHC	Attitude implementor	0,69
- Resources - Understanding of Implementor about standart and targets	Communication	0,57
- Resources - Communication	Characteristics suport of PHC	0,26

The independent variable that does not directly affect the implementation of the IVA program can not be ignored because these variables can affect other independent variables, in other words independent variables affecting the implementation either directly or indirectly.

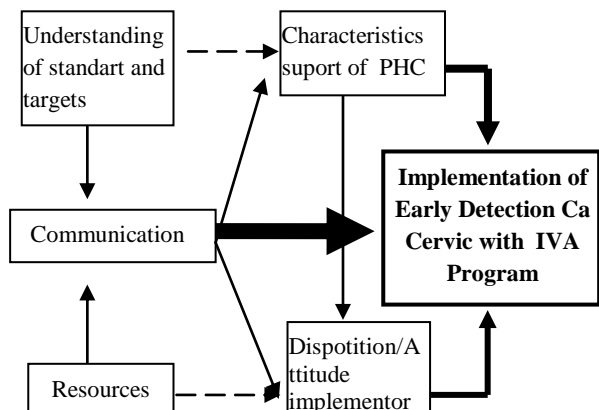
Communication, community health centers and support characteristics together attitudes directly influence IVA program implementation, in addition to the standard target resources and indirect effect on the implementation by the attitude and communication. Implementation model on the total value of R square = 0.827 donation means all the factors together affect the implementation of 82.7%, while 17.3% are influenced by other factors not examined. The results showed that of the 5 variables 3 variables obtained direct and

significant impact on the implementation of the large influence of successive communications, health centers support characteristics and attitudes. Communications 57.8% influenced by the resources and understanding of standards and policy targets, the characteristics of the support of 26.9% was influenced by the health centers as well as the communication standards and targets, while the attitude of 69% is jointly influenced resources, communication and executive support characteristic.

This follows implementation of the theoretical framework proposed by Van Meter and Van Horn :



Based on this antarakomunikasi influence, attitudes, characteristics of the implementing agencies, resources and standards and targets for program implementation IVAoleh health center in the city of Surabaya can be described as follows :



Results of this study confirm the theory of the theory implementation according to Van Meter and Van Hornyang



describe the implementation of a policy directly influenced by the attitudes and karakteristik executing agency, it is in line with that obtained in IVA program implementation in Surabaya. While communication is described in theory as an indirect factor proved to have a significant direct effect on the implementation, and even have the most influence over the implementation of which is 50.3%. This is because communication is an important factor that can affect the tendency of the character and attitude of the implementing health center where both factors are important factors in implementation. Van Meter and Van Horn explained that the policy can be implemented properly if there is effective communication between the executive program with the target group.<sup>6</sup>

Communication plays a role in the implementation of the program the largest in Surabaya IVA. Results of research on the respondent's answer, IVA program is perceived not as a program that should be undertaken by all health centers, but the target SPM 25orang/month only focused on areas awareness/high risk of cervical cancer are health centers in the areas they are regional localization. It describes the differences in perception between DKK and health centers on whether compulsory IVA program, the target set and the target goal IVA program.

According to George Edward, the information is not given or received clearly and consistently will lead to differences in perception/ understanding between regulators with the implementor of policy objectives. This difference in perception ineffectiveness impact on performance in the first implementation in a relatively new program is set, therefore communication is the first step of the success of a policy.<sup>11</sup>

Attitude formation and increased support for community health centers which are important factors that directly influence the implementation and both are also influenced by communication. understanding will create a resistant

implementing the program and this can make implementations will not run as expected.<sup>11</sup>

According Taibi Kahler (Kahler Communications), communication is not just information delivery activities, but efforts to influence and reinforce perceptions and attitudes in accordance with the desired objectives. Communication is an important factor, especially on the clarity of standards and goals, the implementers of communication accuracy and consistency (similarity) is communicated and various resources. Understanding by individuals who are responsible for policy implementation is crucial, hazy understanding will create a resistant implementing the program and this can make implementations will not run as expected.<sup>9</sup>

Resources and understanding of the standard target funds also affects the implementation of the policy. Attitudes and support for community health centers for IVA program less than the maximum because of the absence of clear provisions as well as compensation for the provision of adequate resources. Unavailability of funds allocated specifically for programs IVA as well as the absence of compensation for follow-up in the form of reward for Primary Health Center successful and panishment for those who do not implement creates a perception that the target program is not mandatory to achieve, especially targeted program targets a very wide so that the necessary cooperation with various parties and it requires optimal resources.

Standards and targets vague/unclear whether its programs are required or not, and what the target standards to be achieved will lead to barriers in communication. Neither of resources, provision of resources not only on the infrastructure and human resources, but rather what is needed in the implementation of the program including funding. Unavailability of resources as well as the optimal standard and targets

vague/unclear about a program and cause distortion/barriers both in the communication process and the implementation of a policy.<sup>6</sup>

## CONCLUSION

1. Communication on the implementation of the program IVA majority less well, especially in terms of clarity of information, responsible for majority of positive attitude/support IVA program, characteristic of most of the health centers majority less support in the organizational structure, understanding of the standards and program goals majority less particular about state statutes and program targets to be achieved.
2. Implementation IVA program by Primary Health Center in Surabaya, majority less than in the mapping target, counseling and scope of the examination.
3. Communication, characteristics and attitudes support health centers responsible for their respective programs directly affect the implementation of IVA program.
4. Resources and understanding of the target standard indirect effect of the implementation of IVA program.
5. Communication, attitude, characteristic of the support of community health centers, resources and understanding of the target standard jointly IVA affect the implementation of the program with a prediction of 80.7% which is the most influential variable communication.

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