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The Efforts to Control and Prevent Cervical Cancer through Early Detection Using the VIA Test in the East Java Provincial Health Office

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ABSTRACT

Introduction: Cervical cancer is cancer that affectthe cervix and mostly (99,7%) caused by oncogenic Human Papilloma Virus (HPV). This cancer affect women who is multipara and lack of maintaining of their reproductive health. Cervical cancer cases in East Java Province in 2017 was still high and there were about 3,013 cases. This cervical cancer requiredcontrol and prevention such as screening, finding and following-up the cervical cancer cases, increasing the life quality, and decreasing mortality rate. One of cheap and quick early detection methods for screening of cervical cancer was utilizing of the VIA test method (Visual Inspection of Acetic Acid). **Objective:**This research aimed to analyze and solve the problem on early detection program for cervical cancer through IVA test method in Health Office of East Java Province- Indonesia. **Method:**The data of cervical cancer program in 2017 was collected. The data of early detection program for cervical cancer through VIA test method was analyzed and interview was conducted on health program officer and manager of the cervical cancer program to acquire the health program issues. Afterwards, the priority of the issues found on cercival cancer program was determinedusingthe Capability Accessibility Readiness Leverage (CARL) method and the alternative problem solving was determined using NGT (Nominal Group Technique) method. **Conclusion:**In order to achieve the early detection of cervical cancer case through VIA test method targets/indicators, Health Office of East Java Province needed to conduct network and collaboration with all of related units on the existing cervical cancer program. Health Office of East Java Province also needed to take role actively in increasing the motivation of District Health Office so that they collected and reportedthe record of non-communicable disease surveillance datawell and on time.

Keywords: Control, Prevention, Cervical Cancer, CARL, NGT

INTRODUCTION

Background

The public health wellness is one of important aspects in welfare because it implicated against citizen's absolute basic rights which had to be fulfilled. Therefore, effort for achieving optimal health was conducted through improvement of coverage, quality, and access to health service, improvement of health facilities and infrastructures, empowerment of health workers, encouraging society's participation to have healthy life, controlling disease for either infectious disease or non-communicable disease, and environmental health. Besides, in order to achieve the high grade of public health,the integrated health efforts completely and continuously in a form of activity with promotive, preventive, curative and rehabilitative health service strategy approach are required. Every improvement effort of public health also means a national development investation[8,9].

It is projected that it will occurs epidemiology transition from infectious disease to be non-communicable disease globally, regionally, and nationally in 2030. The increase of non-communicable disease correlated with the increase of risk factor due to the change of life style along with the development of modern world. Non-

communicable disease (*Penyakit Tidak Menular (PTM)*) had already become public health problem world wide, including in Indonesia. The problem was not only the morbidity and mortality but also economic losses either individually/ family or nationally[8,9].

The change of global situation caused the change of disease from communicable to non-communicable disease. The non-communicable diseasewas a serious disease, including cervical cancer[7]. Cervical cancer is one of the most dangerous cancer that was suffered by women aged over 30 years old. Cervical cancer mostly (99.7%) caused by oncogenic Human Papilloma Virus (HPV)affected the cervix. This mostly affect multipara and women with lack of reproductive health.Behavior of multiple sexual partner is the most influential factor in transmission of this virus[13].

Cervical cancer was the second place of the cause of woman's death after breast cancer with incident rate in 17 per 100.000 women. Total of new cases of cervical cancer was in 13% with total of mortality rate in 10.3% every year from all cancer cases which were suffered by women in the world[14]. In Indonesia, the prevalence of cervical cancer was 8 per 10.000 women. Based on data of Globalcan (IARC) 2012, cervical cancer was in second place from all cancers which were suffered by women in the world with the incident rate in 17 per 100.000 women, new cases were in 13% with total of mortality in 10.3% per year[8,9].

Total of cervical cancer case in East Java in 2017 was still high which was in 3013 cases. Along with the high cervical cancer cases in East Java, it required to be conducted prevention and control for the cervical cancer by increasing early detection, finding and following-up the cervical cancer case, increasing cancer sufferer's life quality, and decreasing mortality rate due to cervical cancer.

Finding the cervical cancer case by early detection was one of control efforts for the cervical cancer in Indonesia and this early detection program was directed for the healthy population and risk of cancer population. One of early detection programs for cervical cancer was by VIA test method (Inspeksi *Visual Asam Asetat*in English is Visual Inspection of Acetic Acid).According to Regulation of Minister of Health in Republic of Indonesia or *Permenkes RI*Number.34 in 2015, national target of VIA coverage was in 30% WUS in time period from 2015 until 2019 from the woman population who had risk of it[10].

Detection through VIA test method had many advantages, which were it was effective and efficient for eitherthe time aspect, method, or fee aspect. VIA test method was the method of early detection for cervical cancer on simpler primary service centerrather thanpapsmear with accurate sensitivity and specificity. The advantages if using VIA test method had not become WUS choice to conduct early detection for cervical cancer. Thoroughly and continuously movement were needed in order to increase society awareness against cancer, particularly for cervical cancer, thus, if there was abnormal cell, it could be known as early as possible[10].

The government of East Java Province gave full support against the funding for implementation of early detection of cervical cancer activity that was obtained from State Budget and examination was supported by Indonesian National Health Insurance System *(BPJS Kesehatan).*The implementation of early detection for cervical cancer program through IVA test method was as a prevention and control for cervical cancer disease. In Health Office of East Java Province was conducted by referring to regulation of Health Minister Number 34 in 2015 regarding Prevention of Breast Cancer and Cervical Cancer, and also technical guideline of target for early detection of cervical cancer program[11].

Furthermore, this research aimed at analyzing and prioritizing health problem of cervical cancer through IVA test method that including for the effort of prevention and control for cervical cancer disease in Health Office of East Java Province by utilizing CARL method.

Purpose

This research aimed at analyzing, prioritizing, and solving the problem of early detection program for cervical cancer through IVA test method in Health Office of East Java Province- Indonesia.

METHODS

The method used in this research were data observation in the profile of Health Office of East Java Province, particularly for the data in non-communicable disease (*Penyakit Tidak Menular (PTM)*) program, especially for cervical cancer in 2017, conducting interview to the manager of cervical cancer program, and conducting discussion with the manager of cervical cancer program inHealth Office of East Java. These data were either primary data or secondary data. The primary data was obtained by conducting direct interview with the manager of the cervical cancer program and direct discussion with the manager. Meanwhile, the secondary data was obtained from the document in 2017, including the profile of Health Office of East Java, recapitulation of the implementation of early detection for cervical cancer program through VIA test method in East Java for quarterly I-IV 2017 and monthly report for the cancer report in sentinel hospital for either inpatient or outpatient in 2017.

After conducting data collection, it was found several problems in Health Office of East Java. Regarding, there was a limitation of ability in solving the problem together, there was a relevancy between one problem to

the other problems, and actually, it required to be chosen the problem priority that needed to be prioritized first. Determination of problem priority against a problem that had been identified was conducted by utilizing *Capability Accessibility Readiness Leverage* (CARL) method. CARL method was used in order to determine the problem priority if the program implementer faced barrier and limitation in solving the problem. The use of this method emphasized the ability of program implementer, thus, it was expected that it could ease the program implementer to determine problem priority that could be conducted. Moreover, CARL method was not conducted by the leader himself, instead of involving his staffs who were believed to understand the problem that was faced by the organization. Implementation of CARL for cervical cancer program by utilizing VIA test method involved 3 participants to be distributed questionnaire. In this case, the participants who were believed to understand cervical cancer problem were: Head of P2PTM & Keswa section, Head of manager for cervical cancer program, and secretary of the manager of cervical cancer program.

After being found the problem priority by utilizing CARL (Capability Accessibility Readiness Leverage), it was conducted alternative for problem solving by utilizing NGT (Nominal Group Technique). NGT was a good method that was utilized in obtaining group consensus which had different background, such as staff of health program, stakeholders, society who had several scientific knowledge background and different insight in which if using conventional discussion, it was concerned that it could cause debate without any solution or there was domination from one of discussion participants who felt that he/ she was the most competent. The implementation of NGT in the program of early detection for cervical cancer involved 7 participants for discussion, who were consisted of Head of P2PTM section, Manager of Cervical Cancer program, and staffs of P2PTMKJ section in Health Office of East Java Province.

Before conducting the implementation of NGT, it was described first the participants' duty. Furthermore, the participants' duty were writing self their idea, they were not allowed to affect each other, they were allowed to write more than one problem, and discussion was only allowed to be conducted in the end of the session. The implementation of NGT technique was consisted of 4 steps, which were each discussion participants noted the idea of the problem that would be solved. The result of idea that had been written by the participants was collected. After being collected, the problem would be listed. Afterwards., the idea was clarified together and was led by moderator, and finally, it was conducted scoring/ voting by giving the best until the worst ranking, hence, it was obtained final result of discussion which was alternative solution insolving the problem and later on, it would be followed-up or solved for overcoming the problem[4].

RESULTS

There were many problems which were faced in the effort of handling and prevention the cervical cancer by utilizing VIA test method to the society. The existing problems were analyzed and prioritized by utilizing CARL method. The problem priority through CARL method could be seen in table 1 below:

Table 1: Result of problem priority by using CARL Method (Capability Accessibility Readiness Leverage)

No	Problem	C		A		R		L		Total of Value	Rank
		Respondent		Respondent		Respondent		Respondent			
		1	2	1	2	1	2	1	2		
1.	Report of early detection for cervical cancer program by utilizing VIA test method from the City/ District that had not been integrated in cross-program and not been on time.	4		4		4.5		4.5		252	I
2.	Had not been achieved the Province target based on conducted program coverage.	3.5		3		3		4		126	III
3.	Determination of Province target, which was 2% under national target, which was 10% every year.	3.5		3.5		3.5		4		171.5	II

According to the result of data observation that was obtained and interview that was conducted with the manager of cervical cancer program regarding list problems which would prioritize by utilizing CARL method. Report of early detection for cervical cancer program by utilizing VIA test method from City/ District that had not been integrated in cross-program and not been on time due to lack of cooperation among cross-sector, either from Health Office in District or City in East Java. Thus, the report system from Health Office of District/ City was not well and was not reported in time.

Furthermore, it had not been achieved Province target based on program coverage that was conducted because the active role from health workers to socialize VIA test program to the society so that the society would be motivated to do VIA test. Because the VIA test was still not in good condition, the implementation of VIA test did not achieve the target, and finally, the report that was delivered to Health Office of East Java Province was not in time. However, in order to realize the target, it required the cooperation between the government party and society in District/City of East Java Province.

Determination of Province target, which was in 2% under national target, which was in 10% every year had not been achieved because the level of Public Health Center had not been able to apply or implement the target that had been determined by the Province. Hence, the report was not well, there was health worker who did double-up the job from the program of early detection for cervical cancer, and lack of health socialization or health promotion from the health workers regarding VIA test in scheme of prevention cervical cancer in East Java Province.

After conducting problem priority by utilizing CARL method, it was obtained the problem priority, which was report of early detection for cervical cancer program by utilizing VIA test method from the District/ City that had not been integrated in cross-program and not been on time. Moreover, it was conducted alternative solution for solving the problem by utilizing NGT (*Nominal Group Technique*).

Based on the problem priority, it could be explained that the alternative solution for solving the problem that became the cause of the report of early detection for cervical cancer program by utilizing VIA test method from District/ City had not been integrated in cros-program and not been on time. It could be seen in table of NGT (Nominal Group Technique) below:

Table 2: Result of Alternative Solving Problem by Utilizing NGT Method (Nominal Group Technique)

No	Alternative Solving Problem	Respondent					Total	Rank
		1	2	3	4	5		
1.	There was cooperation in cros-program, particularly in documenting and reporting aspect, thus, the data was same between one another.	2	1	2	3	1	9	I
2.	There was limitation for report from the Puskesmas(public health centre) in 10thof date for the following month.	5	3	3	4	2	17	II
3.	It needed to be improved the program development to the several region, either directly or indirectly, such as socialization and technical guidance.	6	7	1	6	4	24	VI
4.	Coordination of cross/inter programbecause there was the person in charge of the report in District/ City who was not in P2PTMKJ section.	1	6	5	2	6	20	V
5.	The officers of documenting and reporting must be active to check the report.	3	2	6	5	3	19	IV
6.	Routine feedback for once in three months (quarterly) from Health Office of East Java Province.	4	4	4	1	5	18	III
7.	Giving reward for the District / City which was on time (being evaluated in 1 year).	7	5	7	7	7	33	VII

Based on table 2, it could be seen that alternative solving the problem against the report of early detection for cervical cancer program through IVA test method from District/ City that had not been integrated in cross-program and not been on time that became health problem, hence, it was obtained the result of alternative solving the problem as followed:

a. There was cooperation in cross-program, particularly in documenting and reporting aspect, thus, the data would be same.
b. There was limitation for report from the Puskesmas in 10thof date for the following month.
c. Routine Feedback for once in three months from East Java Province.
d. The officers of documenting and reporting must be active to check the report.
e. Coordination of cross/inter program because there was the person in charge of the report in District/ City who was not in P2PTMKJ section.
f. It needed to be improved the program development to the several region, either directly or indirectly, such as socialization and technical guidance.
g. Giving reward for the District / City which was on time (being evaluated in 1 year).

DISCUSSION

Based on the result of identification for the cause of the related problem with report of early detection for cervical cancer program through IVA test method from District/ City that had not been integrated in cross-program and not on time in Health Office of East Java Province was obtained 3 causes of main problem:

There was Cooperation in Cross-Program, Particularly in Documenting and Reporting Aspect, Thus, The Data Would be Same

Documenting and reporting were indicator of success for the activity. Without any documenting and reporting, the activity or program that was conducted would not be seen its essense. Output from this documenting and report was a precious data and information if it utilized appropriate and correct method. Furthermore, data and information were the most important things in an organization because data and information showed about the success or development of the organization[14].

Puskesmas (Public Health Center) was the main source of health data, particularly for Health Office in the City/ District and Integrated Documenting and Reporting System of Public Health Center was also a foundation from the health data. Hence, it was expected to be created an accurate, representative, and reliable information that could be become as a guidance in organizing health plan. Every program would result data and the data needed to be noted, analyzed, and made a report. The presented data was an information regarding the implementation program and development of health problem for the society. The existing information needed to be discussed, coordinated, and integrated so that it became knowledge for all staffs of the Public Health Center[14].

The report of early detection of cervical cancer program through IVA test method from the Health Office of District/ City in East Java Province had not been integrated and not been on time. However, a thing that needed to be conducted, particularly for documenting and reporting aspect of early detection of cervical cancer program through IVA test method was the result of the activity was noted in registration books, then, it was recapitulated in format of SP3 (*sistem pencatatan dan pelaporan Puskesmas* or documenting and reporting system of Public Health Center) that had been documented in book.. Coordinator of SP3 (*sistem pencatatan dan pelaporan Puskesmas* or documenting and reporting system of Public Health Center) in Public Health Center accepted reports in book format in 2 copies, which were one copy was for archive and another was for being delivered to the coordinator of SP3 in Health Office of District / City. The coordinator of SP3 managed and analyzed again the result from the Publc Health Center. After it was managed and analyzed to be delivered to coordinator of SP3 in Health Office of Province and then, it was continued to the process for its use.

There was Limitation for Report from the *Puskesmas* in 10th of Date for the Following Month

It needed to have limitation of date to collect the report against Public Health Center in every 10th of date for the following month, thus, the coordinator of recording and reporting of Public Health Centers was more active in conducting the duty and function **well** against the report of early detection for cervical cancer program through IVA test method from Health Office of District/ City in East Java Province so that it had been integrated in cross-program and reported on time. These were the things which required to be noticed more in writing report that would be delivered to Health Office in the District/ City :

a. Writing the data of the implementation of every activity for the health workers who did the job in Public Health Center and reported the data to Health Office of District/ City that then, it was continued to be delivered to Health Office of Province in complete report of the implementation of activity by utilizing settled format.
b. Making data notation for all activities in once of quarterly and reporting the data in recapitulation form of quarterly activities to the Health Office of District/ City, that then, it would be continued to be delivered to Health Office of Province by utilizing settled format.
c. Making data notation for all of activities in once in quarterly and one year and reporting the data in recapitulation form of quarterly activities and annual activities to the Health Office of District/ City, that then, it would be continued to be delivered to Health Office of Province by utilizing settled format.

Routine Feedback for Once in Three Months (Quarterly) from Health Office of East Java Province

The feedback from either Health Office of East Java Province or Health Office of District/ City against the management of Public Health Center program was a feedback regarding the implementation of the program through collecting information, validation, until recommendation of following-up or solving problem. The feedback that was from either Health Office of East Java Province or Health Office of District/ City against the management of Public Health Center program was such as suggestion, constructive critique, and many more which aimed at revising the report of early detection of cervical cancer program through IVA test method from

Health Office of District/ City in East Java Province that had not been integrated in cross-program and not been on time for collecting the report.

CONCLUSION

According to the determination problem priority of non-communicable disease in Office Health of East Java Province regarding cervical cancer disease by utilizing CARL method with the problem priority of the report of early detection for cervical cancer program through IVA test method from District/ City had not been integrated in cross-program and for the collecting report had not been on time.

The alternative solution in solving the problem by utilizing NGT regarding the report of early detection for cervical cancer program through IVA test method from District / City that had not been integrated and not been on time in collecting it was there should a cooperation among cross-programs, particularly for documenting and reporting aspect, thus, the data would be same. Besides, there should be limitation time for collecting report from the Puskesmas for every 10th of date for the following month and it required to conduct routine feedback in once for quarterly from Health Office of East Java Province.

After learning illustration of cervical cancer case and illustration of its control program, in order to obtain better report and realization from the early detection of cervical cancer program through IVA test method and could achieve target that was determined by either region or center, the Health Office of East Java Province needed to conduct a network and collaboration with all of related institutions with cervical cancer programso that achievement of finding the cervical cancer case increased more and more.Besides, the Health Office of East Java Province also needed to have active role to increase motivation for Health Office of District/ City so that they conducted documenting and reporting of non comunicable diseases surveillance well and on time so that the quality of data that was obtain was also well. Hence, it could determine policy steps well too.

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