

# THE IMPLEMENTATION OF MEASLES IMMUNIZATION IN TELUK BATANG COMMUNITY HEALTH CENTER, KAYONG UTARA, WEST KALIMANTAN

Novy Maryana<sup>1)</sup>, Dian Ayubi<sup>2)</sup>

<sup>1)</sup>Health Service Quality Study Group, Faculty of Public Health, Universitas Indonesia

<sup>2)</sup>Department of Health Promotion and Behavioral Sciences,  
Faculty of Public Health, Universitas Indonesia

## ABSTRACT

**Background:** Measles incidence is increasing each year worldwide to reach 11,000 cases. In April 2017, there were 9 cases of measles in the Paduan river village, West Kalimantan. The cases increase to 33 cases with 10 positive measles and 2 serum damaged. This study aimed to investigate the implementation of measles immunization in Teluk Batang community health center, Kayong Utara, West Kalimantan.

**Subjects and Method:** This was a qualitative study using the Rapid Assessment Procedure (RAP). This study was conducted at the Community Health Center (Puskesmas) Teluk Batang in North Kayong, West Kalimantan, on June 2019. Five informants were selected in this study. Head of Puskesmas and main staff of immunization program in the health office were the key informants in this study, based on triangulation source. The data were collected using in-depth interview and analyzed descriptively.

**Results:** The implementation of measles immunization in Puskesmas Teluk Batang showed that: (1) Structure: human resources (HRs) were lack of quality (never attended training for immunization), facility and infrastructure for immunization activities were incomplete, funding was adequate, policies and SOP had been implemented suboptimal; (2) Process: the measles immunization activity plan and organization had been carried out well, the implementation of the SOP was not carried out to the maximum, monitoring had not been carried out in accordance with the guideline and the final stage i.e. evaluation had been routinely carried out every three months; and (3) Outcome had reached the target, however it was not in accordance with the field condition because the recording and reporting were not optimal.

**Conclusion:** The structure aspects of Puskesmas Teluk Batang including HRs, facility, fund, and infrastructure are good. The policy and SOP still need to be in accordance with Ministry of Health Regulation Number 12, 2017. In the process aspects, planning, organizing, implementing, monitoring, and evaluation are not optimal enough. The outcome shows an improved performance is needed between the Puskesmas and the Health Office.

**Keywords:** measles, immunization, program analysis, community health center

### Correspondence:

Novy Maryana. Health Service Quality Study Group, Faculty of Public Health, Universitas Indonesia, Depok, West Java. Email: novi\_pns@yahoo.co.id. Mobile: 082352541010.

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### BACKGROUND

An increase in the number of measles cases in the world each year reaches 11,000 cases of measles while from 2010 to 2015 there are around 23,164 cases of measles (Ministry of Health of the Republic of Indonesia, 2016). In the European region fourfold increase in measles cases from the previous year struck

21,315 people with 35 deaths (World Health Organization, 2018) About 110,000 people died from measles in 2017. Most of the children are under 5 years of age, despite the availability safe and effective vaccines (World Health Organization, 2019).

In Indonesia according to the riskesdas data the coverage of complete basic im-

munization for the 2017 IDHS is around 59.2% while in 2013 it increased to 57.9%. The increase in coverage is directly proportional to the cases that still exist in Indonesia. The proportion of measles immunization in 2013 was 82.1% and in 2018 decreased to 77.3% (Ministry of Health, 2018).

UCI coverage in West Kalimantan province in 2016 was 69.9%, if compared to the target to be achieved based on the MSS indicators, UCI in all Provinces in Indonesia must reach 100%, then the achievement of UCI Coverage in West Kalimantan is still relatively low. In the health profile of West Kalimantan Province in 2016, the highest UCI achievement was in Mempawah District (86.6), followed by Landak District (89.1%). The lowest achievement of UCI was in Singkawang City, which was 26.9%, followed by Kapuas Hulu District 45.5% for Kayong Utara Regency in rank 6, 65.1% of 14 districts in West Kalimantan (West Kalimantan Provincial Health Office, 2017).

In 2013 UCI North Kayong Regency 39.5% of the target of 65%, in 2014 the achievement of 74.4% with the target to be achieved was 70%, in 2015 81.4% with the achievement target was 75%, in 2016 65.1% with the achievement target was 80% and the year 2017 is 76.7% of the 85% target which means the target has not been reached. The details of the achievement of each puskesmas in the area consisting of eight puskesmas, three of which have reached the UCI coverage target of the village namely Siduk 100% Puskesmas, Matan Jaya Puskesmas 100% and Teluk Batang 85.7%.

Five other puskesmas have not yet reached the target but no cases were found. Of concern in this study were that of the five puskesmas that did not reach the uci target, no cases of measles were found, while in the puskesmas bay stem that had achieved the immunization coverage target, 9 cases of measles suspect were found. Then 33 cases of

measles suspect were reported in 2017. after the serum examination there were 12 of which 10 were positive for measles and 2 of the serum was damaged the results were unknown (Health Office and KB, 2017).

Based on the case above it is known that the process of implementing immunization has not run optimally in accordance with Permenkes No. 12 of 2017. This is the basis for researchers to find out more about the management of measles immunization program in the Batang Bay area with the Donabedian approach consisting of Structure, Process and Outcome.

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## SUBJECTS AND METHOD

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### 1. Study Design

This study is a qualitative research that aims to get a general understanding of social reality from the participant's perspective. It was conducted using the Rapid Assessment Procedure (RAP) design obtained from an understanding of the informant's perspective situation (Sutopo, 2002). Sources of data in this study are primary data and secondary data. Information was obtained through in-depth interviews using semi-structured interview guidelines.

### 2. Population and Research Samples

The sample in this study was implementing immunizations at the puskesmas as many as 5 people as the main informants. Then the triangulation of data is done by triangulating the source, which is the key informant, namely the Head of the puskesmas and the immunization program holder of the Health Office.

This study was conducted using the Donabedian theory, namely aspects of Structure (personnel, funds, facilities, policies and SOP). Then the aspects of the process (planning, organizing, implementing, Monitoring and Evaluation) and finally outcome (Donabedian, 1980). This research was conducted at the Teluk Batang Health Center, Kayong

Utara Regency, West Kalimantan in July 2019.

### 3. Data Analysis

The data collected is analyzed using an interactive analysis model (Interactive Model Analysis), which is an analysis process using four components of the process that starts from collecting data to get the desired information, reducing data by summarizing the information obtained, presenting data in the form of narrative text and ending with conclusion drawing or verification (Martha et al., 2016).

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## RESULTS

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### 1. Structure

#### a. SDM (Human Resources)

From 5, informant 3 of them said that HR was not enough this was seen from the results of the interview.

"For staff, it is not possible because I am also the program holder and I also work in the field, moreover I am still being given an assignment in the inpatient office" - Informant 1.

After being confirmed by the key informant, the results were obtained that "From the total number of staff at the Puskesmas Teluk Batang, all of them, if I remember there were 58 employees, well... for nurses there were 20 people with education, and for midwives there were 17 people with D3 education totaling 16 people and D4 are 1 person, I think it's enough with our village which is only 6"-Informant 5.

From the results of the interview, it was found that the human resources at the Teluk Batang Community Health Center were adequate, but the division of tasks was uneven so that the implementation of the program was not optimal. Based on the quality of human resources, all informants said that there had never been a training on immunization management in accordance with the statement of informant 2 which stated:

"Gini ma'am... the officers involved in immunization are not only just holders of the immunization program but other workers are also involved. But this is our obstacle, mom, there are midwives and nurses who have not yet participated in immunization training so it is impossible for us to teach one by one later, I am wrong again"-Informant 2.

This is supported by key informant questions that:

"Indeed, we annually conduct training for puskesmas but what we invite is the head of the puskesmas and program holders while for the implementation of immunizations such as midwives and nurses we do not do training" based on the results of the interview, it can be concluded that the quality of HR in the implementation of immunizations is only based on experience (never attended immunization specific training).

#### b. Fund

The following are the results of in-depth interviews obtained from all key informants, note that:

"As for logistics, we can get it directly from the Health Service, but for operational funding and distribution, it is borne by the Puskesmas. Even we can get the official trip from BOK... hemm... enough"-Informant 4. This is consistent with the statement of key informants who said that:

"For the immunization fund, we got it from BOK and for the case of immunization, the funds are in surveillance, here I am trying to make things go well" -Informant 5.

Based on the results of the above interview, measles immunization funding is sufficient.

#### c. Means

To support the implementation of immunization services at the Puskesmas, the availability of facilities and infrastructure is very important. Three out of five informants said that Cold chain at the puskesmas was already available, but its placement was still inadequate.

"The cold chain is already in us but there is no special room for immunization. We still keep it in the back warehouse mixed with other tools, if for logistics and vaccines we have to take service once a month using a private motorcycle, or ambulance to Sukadana, we all entrust"-Informant 2.

This is in line with the results of key informant interviews stating that" indeed for the special cold storage and vaccine carrier storage room still participate in the rear warehouse because there is no place anymore while for the program holder vehicles are not there so they still use private vehicles" –Informant 5 Then, it can be concluded that the facilities and infrastructure for immunization activities are incomplete.

#### d. Policy or SOP

Information obtained from the results of in-depth interviews with all key information states that:

"All immunization SOPs are complete, ma'am -Informant 1.

This is in line with the key informant's statement, "Yes, we have an SOP for immunization... but... because the one who holds this immunization is also a jurim, so he shares his tasks with surveillance, but surveillance does not yet have a surveillance program SK and the SOP has become who hold the measles surveillance report"-Informant 5.

From the results of the interview it was found that the SOP for the immunization program was complete but was not carried out optimally.

## 2. Process

### a. Planning

The results of in-depth interviews with 3 informants 2 stated that the planning was carried out by the puskesmas.

"Usually we are told to make RUK, after that we work in the ministries after that, later we make a posyandu immunization schedule compiling the names of those who go down

the posyandu... well, the target is usually from the Health Office, then we divide the village according to the large number of population...."- Information 3.

This was confirmed by key informants who stated:

"At the end of each year, we hold a meeting regarding the implementation of activities for next year such as RUK and RPK, especially for immunization, we adjust the combination of immunization and measles targets so that in the following year our coverage of measles is achieved" - Information 5.

Based on the above interview, it can be concluded that the process of proposing measles immunization activities has been carried out well, that is done with a bottom-up mechanism. However, in the planning process the actual data targets in the Village are not used.

### b. Organizing

The results of in-depth interviews with 3 of 2 informants stated that:

"Well... the officer divides the tasks of who is assigned to do this and this... which locations are there... let alone posyandukan a lot so for example the A is placed in masbangun, meaning he is responsible in the posyandu. There is also a section on recording and reporting, there is a section that prepares vaccines and there is also a section that injects into patients... doctors are less directly involved... let's go, ma'am, if there is a KIPI in the field".

his statement was supported by the Head of the Puskesmas who stated that before going down to the field, the person in charge divided each task into the posyandu so that the implementation in the field went well according to the existing procedures. Based on the information above it is known that the organizing has been done well.

### c. Implementation

The following are the results of in-depth interviews with informants about the imple-

mentation of immunization activities, namely “yes... in the distribution of tasks, we carry out according to schedule, we prepare the needs as usual, most vaccines and syringes and ordinary drugs. if I want to hurry I don't wear gloves because in my opinion it's better... for regulations, I just found out that we have to refer to the Minister of Health, which is what mom says because we usually use SOPs, we only read it once haha ”- Informant 3.

After that the researcher confirmed to the key informant and found that:

"In terms of immunization, we must refer to existing guidelines, sometimes these officers are lazy to see the SOP, but it is better to ask what kind of friendship they should carry, to reach coverage, additional activities such as sweeping are needed" - Information 5.

Based on interviews, it can be concluded that there are indications that SOP is not carried out to the maximum, routine immunizations are conducted every month, to achieve sweeping immunization coverage.

#### d. Monitoring

From the results of the interview, it can be seen that the monitoring of the implementation of immunization is carried out by two parties, the first from the Puskesmas quality team and from the Health Office. This is known from the informant's question which states that:

"Ooo..for supervision, we are not from the puskesmas, most are only asked whether the report has been completed or not..but, if from the office, they come not sure, and only check the achievement report while checking the cold chain report, logistics and cold chain have never been done"-Informant 5. Therefore we confirm the key informants again:

"Yes, of course... surveillance must be done... it is part of our duty to ensure that the puskesmas is really down or not." From these questions it is known that the supervisory

function has not been carried out because supervisors only check performance reports and do not check other parts such as cold chain conditions and vaccines by checklist, work procedures are not in accordance with Permenkes No. 12 of 2017.

#### e. Evaluation

Of the evaluations conducted at the Batang Batang Public Health Center, most of the informants said”The evaluation is done every three months. Those attending were the puskesmas staff and the health department... but... yes, we know that the service is rarely present. We discuss what achievements are in accordance with the targets set, and we continue to be asked about the obstacles... well from the evaluation, we can get a solution... hemm... my hope is that this evaluation will be carried out every month. We have good records and reporting, all right... but if there are still cases we don't know, ma'am”-Informant 4.

This is contrary to the results of interviews with key informants who said that: "Evaluation must be very important for a program to see the extent to which the program is going well, judging by the results of its achievements, it is indeed good, especially for the bay stem health center. But I saw the notes per service at the posyandu. I calculated the results were not in accordance with the overall achievements”- Information 7. From the results of the interview it can be concluded that a routine evaluation is carried out every three months at the Puskesmas of Teluk Batang to see the extent of the success of the immunization program in the field.

### 3. Outcome

Information obtained from in-depth interviews with key informants stated that immunization had reached the target in 2017. As in the statement of one informant who said that:

"The output obtained is good immunization coverage according to the target. It is a

matter of pride for us, hopefully in the future it will also be like that... for PWS activities, such as analyzing if coverage decreases or monthly targets are not achieved, then a visit to the home is recommended”-Informant 2. However this is not in line with information submitted by immunization program holders in the Health Service which states that:

"It's hard to say... the report that we received is in line with the reality in the field, in the Batang Batang Public Health Center it is included as one of the immunization scopes that reaches the target. - this is good coverage but there are cases... it's a bit strange..."- Information 6.

Based on the results that the immunization at the Teluk Batang Health Center has reached the target but from the results of the report there are cases of measles reported by outpatients based on patient visits. So it can be concluded that the implementation of immunizations including sweeping, as well as recording and reporting and PWS (Local Area Monitoring) is not optimal.

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## DISCUSSION

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The interview results above show that the structure in this case is HR and Facilities and Infrastructure, in quantity it is adequate but in reality there are still workers doing two jobs so it is not optimal according to previous research that high workloads can result in low performance as well as the availability of facilities and infrastructure (Kusmiyati, Maartha Irene Kartasurya, 2013).

This is in line with research that states that good, complete, quality and adequate facilities and infrastructure conditions will assist officers in carrying out their work (Rahmawati, 2007) and training is needed to improve the quality of immunization implementers according to Permenkes No 12 of 2017. Funds it is adequate but the availability of these funds is not enough to be a major success factor if the SOP is not carried out

properly, in accordance with Permenkes number 12 of 2017.

The results of the interview at the stage of the process are divided into planning, organizing, implementing, monitoring and evaluating. At the planning stage, as a whole has been carried out well, one thing that has not been maximized is the determination of the number of targets that are not in accordance with the field so that the achievements obtained do not reflect the actual situation.

This is supported by previous research which states that planning in the immunization program is related to UCI coverage (Beladinasisti, 2012) Furthermore, in the organizing section, it has been carried out well by carrying out clear and even distribution of tasks so that the implementers can carry out their duties in accordance with their respective roles - in order to achieve what has been determined or has become the initial goal of the plan. This is consistent with the results of research that states that there is a relationship between organizing, mobilizing, monitoring and coverage of measles immunization carried out by the Head of Puskesmas (Sugito, 1998).

At the implementation stage, adherence to service standards is one of the main causes of quality problems, due to the non-compliance of officers with the process elements, and it can even be said that service quality is perfection to satisfactory standards on the part of patients because standard services are provided by officers (Suyitno et al., 2011). SOPs have not been implemented well even though SOPs were made to improve effectiveness, efficiency, consistency, and in the context of improving service quality through meeting applicable standards according to Permenkes number 12 of 2017.

At the monitoring stage, this function has not been carried out properly (not in accordance with Permenkes No. 12 of 2017) even though it is not intended to find faults

but to solve problems and provide solutions if there are problems encountered during the implementation of immunization (Fauziah, 2012). Finally, the evaluation phase. This stage has been carried out routinely to find out the extent of the success of the program being carried out such as the suitability of targets and achievements, suitability of planning and implementation.

However, the high performance obtained was not in accordance with actual conditions. This happens because the recording and reporting process is not accurate. Evaluation is important to know the extent of the success of the planned program. Which is not much different from the results of the analysis of the performance of health services in the Batua Makassar health center (Mu'rifah, 2012). Where the evaluation is also carried out to find out the deviations that occur that are not desirable and then corrected so that the objectives can be achieved as expected.

It is seen from the outcome that achieving high immunization coverage in the area of Teluk Batang Health Center does not guarantee that no cases arise. Therefore better management is needed especially in terms of recording and reporting. Recording and reporting in accordance with the standard format and carried out in stages and continuously (Permenkes, 2017).

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