

The Evaluation Of *Universal Child Immunization* (UCI) Management In The Work Area Of Bah Kapul Health Center, Siantar Sitalasari District In 2023

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Abstract: Background: Immunization is the governments promise to get Sustainable Development Goals (SDGs), especially to decrease the number of infant death rates. Universal Child Immunization (UCI) is an indicator of success in basic immunization in babies immune against a disease. Purpose: To analyze the process of management in achieving UCI. Research Methods: The research used qualitative phenomenological methods. The objective of the research was to analyze the process of management in achieving UCI. The research used qualitative phenomenological methods. It was done in the working area of Bah Kapul Puskesmas. The data were gathered by conducting in-depth interviews with 8 Informantts from Surveillance and Immunization Section Head, the Heads of Puskesmas, participants of immunization program, and practice midwife. Result : The result of the research showed that human resources were inadequate since their qualification was not in accordance with the standards, training was only done by the participants, facility and infrastructure such as KMS preparation and the facility outside the building were inadequate, lacked of staff cars for immunization personnel, there was no counseling about immunization in the field, people were not interested in the program, there were ignorance and lack of involvement of cross-sectors, and there was no monitoring from the Heads of Puskesmas for immunization outside the building. Conclusion : The Heads of Puskesmas should monitor directly immunization service outside the building and not only monitor through the report. The management of Puskesmas should provide counseling about the importance of immunization for targeted parents before posyandu service is done. The cross-sectors should support the implementation of immunization, actively play and collaborate in its implementation.

Keywords : Immunization, implementation, management, UCI

INTRODUCTION

Immunization is a way to cause active individual resistance to disease, in other words, if exposed to disease, there will be mild illness. Immunization is the government's promise to obtain *Sustainable Development Goals* (SDGs), especially to reduce the number of child deaths. Basic Health Research (Riskesdas) 2018 reported that the percentage of children aged 12-23 months who received complete basic immunization reached 57.9%. It should be noted that this figure decreased slightly when compared to the 2013 Riskesdas of 59.2%. Meanwhile, routine immunization achievement continued to decline in 2020 with the latest data showing that until October 2021 complete basic immunization coverage had only reached 58.4% of the target of 79.1%. Referring to the Indonesian Health Profile, complete basic immunization coverage for infants aged 0-11 months is an indicator of the success of immunization program performance.

One of the results of activities to be achieved from the National Medium-Term Development Plan (RPJMN) for Health for the 2015-2019 period is that it is expected that all villages have received *Universal Child Immunization* (UCI) where UCI is an indicator of the success of the immunization program. UCI's achievement is a village/village sketch in which

there are at least 80 percent of infants (0-11 months) who have been evenly immunized with Complete Basic Immunization (IDL). Until now, based on routine reports submitted from districts/cities, the percentage of UCI villages/kelurahan in Indonesia is still relatively low (Ministry of Health of the Republic of Indonesia (Kemenkes RI), 2017).

The reach of UCI villages/villages in Indonesia in 2022 is 80.34 percent. There are two provinces in Indonesia that achieve 100 percent UCI, namely DKI Jakarta and DI Yogyakarta. However, the UCI coverage rate in 2022 has decreased compared to 2021, which was 81.82 percent. UCI village/village coverage in Indonesia in Indonesia has never reached the strategic plan target in the past year. The reach of UCI villages/villages in North Sumatra Province in 2022 is 75.41 percent. The reach of UCI villages/villages in North Sumatra has never reached the predetermined gains, due to access, service times that are not the same as community activities, lack of officers, absence of MCH books/immunization cards, lack of understanding of the usefulness, when of immunization, and the impact of immunization (Ministry of Health RI, 2017).

Based on data from the Pematangsiantar City Health Office in 2022, there are eight sub-districts in Pematangsiantar City with 19 puskesmas in their work areas, there are three puskesmas with the lowest UCI achievement below 50 percent, one of which is the Bah Kapul Health Center at 33 percent, namely from the three total villages, only one village has become a UCI ward. According to the results of the 2023 Complete Basic Immunization Coverage report in Pematang Siantar City, the Bah Kapul health center is one of the puskesmas that has a fairly low UCI village coverage

Population	The Babies	Triwulan I			Triwulan II		
24589	365	6.5	12.2	19.0	24.9	33.6	42.0

Sumber : Laporan Cakupan UCI Dinas Kesehatan Kota Pematang Siantar Years 2023

Table 1 shows that the results of UCI's achievement for the provision of Complete Basic Immunization at the Bah Kapul Health Center are very far from the health RPJMN target for the 2020-2025 period, which is 93 percent. If left unchecked, it will increase infant mortality and increase the incidence of PD3I disease and decrease immunity in the community (*Herd Immunity*). To be able to increase UCI coverage, an analysis is needed which causes the lack of UCI in community health centers. Some ways are to look at the management of immunization programs related to UCI, where there is planning, *action*, supervision and evaluation.

Based on a preliminary survey in early July 2023, it was found that immunization has not run well, one of which is because immunization personnel have not received training regarding procedures for implementing the right immunization program, the head of the puskesmas only monitors from midwives' records so that problems in the field do not produce appropriate handling. One of the obstacles in implementing immunization activities is that not all families choose immunization at the puskesmas and are less optimal in terms of recording and reporting from other parties so that immunization data is not recorded and causes the target not to be achieved, there is a prohibition from the family side in immunizing as the basis for the lack of community participation for immunization actions.

Pratiwi's (2022) research on efforts to increase UCI coverage in the working area of the Gemuh 01 Health Center in Kendal Regency found that supervision, control and assessment have an important role in the immunization program, especially in the completeness of PWS data and assessment analysis. The success of UCI also depends on the human resources owned, in accordance with Murti's (2013) research on the analysis of immunization implementation management by village midwives in relation to UCI achievement which is an observational study with a *cross sectional* approach showing that immunization implementation management planning and mobilization affect UCI achievement.

METODE

This research is qualitative research with a phenomenological approach. This type of research aims to explore the reality experienced or the behavior of individuals or groups as well as the aspects underlying an event. This study aims to know clearly and more deeply about the implementation of immunization program management in an effort to achieve UCI. The number of Informantts in this study was 8 Informantts consisting of 1 Surveillance and Immunization Officer of the Pematangsiantar City Health Office, 1 Head of the Bah Kapul Health Center, 1 person in charge of the posyandu, 1 implementing midwife, 2 cadres, 1 mother who brought her child immunization, 1 mother who did not bring her child immunization at the posyandu. This research will be carried out in July 2023 at the Bah Kapul Health Center, Siantar Sitalarasi District, Pematangsiantar City. The data collected in this study came from Informantts in the field obtained by a continuous data collection process until the data was saturated and data analysis techniques while in the field based on the Miles and Huberman Model.

RESULT

Table 1. The Characteristic of The Informant

Informant	The Age	Education	Length of work	The position
1	48 years	Nursing	25 years	Kasi Surveilans dan Imunisasi
2	38 years	Medical	8 years	Head of Bah Kapul Health Care
3	42 years	Nursing	10 years	Program Holder of Immunization Program
4	32 years	Midwife	10 years	The Midwife of Bah Kapul Health Care
5	42 years	senior high school	5 years	Health worker
6	45 years	senior high school	3 years	Health worker
7	37 years	senior high school	-	The mother that did not brings the babies
8	30 years	senior high school	-	The mother that brings the babies

HR Availability

Human resources are *agents of change* who are expected to be able to work according to existing demands and standards, therefore training is needed so that officers are able to adapt and adopt in an effort to increase knowledge, skills and attitudes so that the quality and performance of officers increases.

Qualification standards for immunization officers

Based on the results of interviews regarding the qualifications of immunization officers at the Bah Kapul Health Center, it shows that all immunization officers come from midwives or nurses D3 and S1 and already have an STR. As for the results of interviews with Informantts:

Informant	Informant Opinion	Theme	Sub-Theme
1	"...holders of D3 or S1 immunization programs, midwives or nurses are now at least D3 and are qualified..."	Immunization officers come from midwives or nurses D3 or S1 and already have an STR.	Qualification standards for immunization officers
2	".....holders of D3 or S1 immunization programs..."		
3	".... The program holder is S1 and must be a midwife or nurse..."		

The Fund

The results of research on funds related to the immunization program at the Bah Kapul Health Center found that the source of funds was obtained that financial support for the dominant Puskesmas from BOK funds was used for data collection, sweeping, transport, and MR programs. As for the Informantt's statement:

Informant	Informant Opinion	Theme	Sub-Theme
1	"..... <u>funds</u> from the state budget for the procurement of equipment, there continues to be BOK funds in the puskesmas for accommodation to bring vaccines from the health office to the target area..."	The source of funds	Funds
2	".....from BOK funds, if one day BOK funds are not enough, take them from JKN funds like there was a PIN yesterday, we lack spet from JKN funds..."		

Availability of facilities and infrastructure.

The results of interviews regarding the availability of facilities and infrastructure at the Bah Kapul Community Health Center that support the immunization program showed that the infrastructure related to the immunization program was complete and suitable for use. However, supporting facilities such as official vehicles are not yet available. As for the Informant's statement:

Informant	Informant Opinion	Theme	Sub-Theme
3	".....Our official vehicles do not yet have to serve the community, if for others, vaccine carriers, safety boxes and so on are enough to fulfill..." (Informant 3)	All equipment for immunization is not complete yet	Facilities and infrastructure
4	"...all of our tools are complete and suitable for use of tools ranging from refrigerators, freezers, vaccine carriers, safety boxes, cool packs		

There are still other infrastructure needed, namely the Card for Health (KMS), the 5 posyandu desk system which is not complete, the posyandu weighing pole is not available and the application for vehicles from the health service for services outside the building is not realized.

The Obstacle of Immunization Program

Informant	Informant Opinion	Theme	Sub-Theme
1	the public awareness must be that we are health people who promote it..."	Community participation and enthusiasm for coming to receive services is still low.	The obstacle
4	"...the obstacle is that many of our people are workers so their children don't take them to the posyandu, so that's why we do sweeping..."		

Monitoring dan evaluasi program imunisasi di Kota Pematangsiantar *Monitoring.*

Informant	Informant Opinion	Theme	Sub-Theme
1	"... For monitoring every three months I come to supervise the field and there is a check list paper, for evaluation every three months attended by us Dinkes people and puskesmas program managers sometimes the same kapus too...."	Evaluation at the Health Office is carried out every 3 months which is attended by the program manager	
2	"...at the beginning of every month because the department recapitulates again the results of all puskesmas, we evaluate together at the minilok meeting at the puskesmas and evaluate the results of activities that have been carried out what is lacking, what are the difficulties and what are the solutions so..."		

Monitoring is an activity to find out whether the program made is running well as it should be as planned, whether there are obstacles that occur and how the program implementers overcome these obstacles. Monitoring of an ongoing planning result is a good control tool in the entire implementation process (Suryana, 2013). This is also in line with

Kiswanto's research (2016) on the implementation of the basic immunization program in the Meranti Bandul Islands District, namely the low number of immunized babies, one of which is due to monitoring and evaluation not routinely carried out every month, the midwife on duty only provides monthly reports on immunization activities to the head of the puskesmas.

Evaluation in the immunization program is carried out by looking at coverage per year through PWS, coverage charts per year can provide an overall picture of the trend in achieving immunization coverage, indications of problems and references to improve and plan what strategies need to be taken for the next year. While the evaluation at the Health Office is carried out every 3 months which is attended by program managers who aim to explain the results of achieving immunization coverage to be able to follow up because so far the Health Office assesses the success of a program from the results of monthly and annual reports. Monitoring and evaluation activities are very important in a program, namely to assess the extent to which the program can run and achieve its goals, as is the case in this immunization program to achieve predetermined coverage or targets.

DISCUSSION

Human resources in the Pematang Siantar City Health Office area are in accordance with the policy of the Minister of Health of the Republic of Indonesia concerning the implementation of immunization part four Number 42 of 2012 Article 20 concerning personnel managing paragraphs (3) and (4). Paragraph (3) namely Management personnel as referred to in paragraph (1) and paragraph (2) must meet certain qualifications obtained from education and training. While paragraph (4) namely the Government, provincial regional governments and district/city regional governments are responsible for the implementation of training as intended in paragraph (3). And in accordance with Chapter IV concerning the implementation of immunization services article 27 paragraph (4), namely In the event that there is no doctor in the puskesmas as referred to in paragraph (3), midwives and nurses can carry out immunization injections in accordance with the provisions of laws and regulations.

The funds used for transportation accommodation purposes to go to the venue by officers are sourced from the BOK. To be able to carry out the activities of an existing program, implementers must get the resources needed so that the program runs smoothly, one of which is in the form of money.

Funds as a condition for the smooth running of a program must be allocated appropriately, as well as the smooth process of providing and using it. Strong, stable, and sustainable health financing plays an important role in the delivery of health services in order

to achieve goals. The goal of development in a country is equitable distribution of health services and access and quality services. Therefore, health policy in a country should give an important focus to health financing policies to ensure the adequacy, equity, efficiency and effectiveness of health financing itself (Efendi, 2019).

The facilities needed in implementing the immunization program in the Pematang Siantar City Health Office area are complete. According to Rahmawati (2017), the availability of supporting facilities and infrastructure is one of the factors that can affect the results of immunization officer activities. The condition of good facilities and infrastructure, including complete, modern, quality, and sufficient quantities will provide employee satisfaction which can then improve their performance. The availability of facilities and infrastructure is one of the factors that can affect the results of immunization activities. The condition of good, complete, quality facilities and infrastructure will help officers in carrying out their work.

Research conducted by Edi Rachman, et al (2017) on the Evaluation of Measles Immunization Program Planning at the Ibrahim Adjie Health Center in Bandung City in 2017, found that the stock of measles immunization vaccine still depends on the local Health Office and the facilities and infrastructure are complete.

Recording and Reporting Reporting of immunization programs in the Pematang Siantar City Health Office area using the ASIK (Sehat Indonesialisasi) application which is connected to the province to the health office reporting using excel online (speedsheet), obstacles in reporting ASIK, because not all babies have a NIK, reporting is carried out without a NIK first, it is hoped that parents will immediately make a Certificate and KK and so will excel reports to the Health Office for those who do not have a NIK emptied first.

Output is the level of success of the program quantitatively measured by comparing the targets that have been set with the outputs (service coverage) of program activities. The UCI achievement target by District/City is 80% while the national UCI coverage target is 100%. Pematangsiantar City with 19 puskesmas in its work area, there are 3 puskesmas with the lowest UCI achievement below 50%, namely Kahean Health Center with UCI coverage of 33%, Bah Kapul Health Center with UCI coverage of 33% and Simarimbun Health Center with UCI coverage of 25%. This happens because of low public awareness to immunize and lack of cross-sectoral efforts in overcoming these obstacles.

Planning of UNIVERSAL CHILD IMMUNIZATION (UCI) at Puskesmas Bah Kapul

Based on the results of the study, it shows that the planning for *Universal Child Immunization* (UCI) at the Bah Kapul Health Center has not been maximized, as can be seen

from the UCI target that has not been achieved, which is 100%. UCI's achievement every quarter is still far from the plan that has been prepared, such as the number of targets, the number of vaccines needed, all aspects are not as planned. In addition, the gap between the projected number and the actual population is an obstacle in determining the number of targets. Another factor that becomes an obstacle is babies born outside the handling of the puskesmas (PWS) work area such as private midwives, doctors and others. The involvement of Bah Kapul Health Center officers in planning activities, preparation stages, preparation of RUK and RPK is good. However, the implementation of monthly planning is not routinely carried out.

Regulation of the Minister of Health number 12 of 2017, planning is a very important activity so it must be carried out correctly by professional officers. Planning in determining the number of goals is very necessary for the achievement of UCI, where careful planning will support future plans. Conformity in determining the number of targets is very important because it is used as a basis for planning, implementing and monitoring and evaluating the implementation of immunization.

The results of this study are in line with the results of research conducted by Mestika et al., (2020), which showed that planning for *Universal Child Immunization* (UCI) at the Tanjung Rejo Health Center, Percut Sei Tuan District has not been optimally implemented, where target planning was not implemented by the Tanjung Rejo Health Center, so that UCI achievements were not on target.

Implementation of *UNIVERSAL CHILD IMMUNIZATION* (UCI) at Bah Kapul Health Center

The implementation of immunization activities consists of officer preparation, vaccine preparation and vaccine chain, *Auto Disable Syringe* (ADS) preparation, community preparation and immunization service delivery. The preparation of officers includes determining the targets of immunization activities. Before carrying out immunization in the field, midwives must prepare the vaccine to be brought. The number of vaccines is calculated based on the number of targets to be immunized. In addition, you also have to prepare cold chain equipment such as thermos and liquid cold boxes.

The implementation of posyandu involves various parties such as cadres. The role of cadres before posyandu day is to disseminate posyandu opening day, prepare posyandu implementation sites, prepare posyandu facilities, distribute cadre duties and prepare supplementary feeding materials (PMT). During the implementation of the posyandu, the role of cadres is to register posyandu visitors, carry out weighing of toddlers and pregnant women

visiting the posyandu, record the results of weighing in the MCH or KMS book and help health workers provide health and family planning services according to their authority.

The implementation of immunization carried out by the Bah Kapul Health Center in achieving UCI standards is through Posyandu activities in each village. This Posyandu activity is a monthly activity carried out on weekdays. Every baby who comes to the immunization service is examined before being given immunization services. The examination or screening carried out aims to avoid the occurrence of Post-Immunization Follow-up Events (KIPI) Immunization.

The obstacle faced during the immunization implementation at the Posyandu working area of the Bah Kapul Health Center is the long distance of the village because there are several villages including remote villages and the next obstacle is the arrival of the baby's parents, where the baby's parents do not allow their children to be immunized. The results of this study are in line with the results of research conducted by Andani (2020) which shows that obstacles in the basic immunization program are the long distance traveled by health workers when taking vaccines at the puskesmas, lack of maternal knowledge, and indirect target determination data from the puskesmas because the data is sent directly by the health office so that the target data is different from the data in the field

RESULT AND RECOMMENDATION

The result of the research showed that human resources were inadequate since their qualification was not in accordance with the standards, training was only done by the participants, facility and infrastructure such as KMS preparation and the facility outside the building were inadequate, lacked of staff cars for immunization personnel, there was no counseling about immunization in the field, people were not interested in the program, there were ignorance and lack of involvement of cross-sectors, and there was no monitoring from the Heads of Puskesmas for immunization outside the building.

The Heads of Puskesmas should monitor directly immunization service outside the building and not only monitor through the report. The management of Puskesmas should provide counseling about the importance of immunization for targeted parents before posyandu service is done. The cross-sectors should support the implementation of immunization, actively play and collaborate in its implementation.

REFERENCES

- American Academy of Pediatrics. (2021). Immunization Schedules. Diakses dari: <https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/immunizations/Pages/Immunization-Schedule.aspx>
- Centers for Disease Control and Prevention. (2021). Vaccines & Immunizations. Diakses dari: <https://www.cdc.gov/vaccines/index.html>
- Ministry of Health Malaysia. (2021). National Immunization Program (NIP). Diakses dari: <http://www.moh.gov.my/index.php/pages/view/219>
- National Institute of Allergy and Infectious Diseases. (2021). Understanding Vaccines. Diakses dari: <https://www.niaid.nih.gov/research/understanding-vaccines>
- SAGE Working Group on Vaccine Hesitancy. (2014). Report of the SAGE Working Group on Vaccine Hesitancy. Diakses dari: https://www.who.int/immunization/sage/meetings/2014/october/1_Report_WORKING_GROUP_vaccine_hesitancy_final.pdf?ua=1
- Ministry of Health, Labour and Welfare - Japan. (2021). Immunization. Diakses dari: https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/kenkou_iryou/kenkou/kekaku-kansenshou/index_00013.html
- World Health Organization. (2019). Immunization, Vaccines and Biologicals: Data, statistics and graphics. Diakses dari: https://www.who.int/immunization/monitoring_surveillance/data/en/
- World Health Organization. (2021). Immunization. Diakses dari: https://www.who.int/health-topics/immunization#tab=tab_1