

The Evaluation of Needs and Weaknesses of The Immunization Program in Kodingareng and Barranglompo Island, Makassar City, South Sulawesi, Indonesia

Asni Hasanuddin¹, Jurnal Syarif², Ricvan Dana Nindrea³

^{1, 2} Universitas Indonesia Timur

³ Universitas Andalas

ABSTRACT

Objectives: This study evaluates the needs and weaknesses of the immunization program in the Kodingareng Island and Barranglompo Islands, Makassar City, South Sulawesi, Indonesia. **Materials & Methods:** This research is qualitative research at the Center Health Service islands Kodingareng and Barranglompo Makassar City. Research informants were the head of the Sub-Health Service, immunization officers, immunization cadres Kodingareng Islands and Barranglompo Makassar City. The data analysis was done by triangulation. **Results:** The results showed that there was still a lack of immunization executors on the input component, vaccines were not available on the island because they were constrained by electricity intake to maintain the stability of the vaccine storage temperature. Funding support has not been able to support the operation of the immunization program. Apart from that, community empowerment is still not optimal. Infrastructure is constrained by the storage area for vaccines on the island which is not supported by adequate electricity intake. Vaccines cannot be stored in the area closest to the island because there are no storage facilities and also limited electricity intake. This causes officers after visiting the immunization site to immediately carry out vaccination activities. **Conclusions:** The needs and weaknesses in the immunization program in the Kodingareng and Barranglompo Island areas of Makassar City are the need for immunization implementing officers, the availability of vaccines on the island by strengthening funding support, and the availability of facilities through the provision of generators to support vaccine storage. Apart from that, the community is still lacking in terms of community empowerment.

Keywords: Immunization, Program, Evaluation, Island.

Received: 16.11.2022	Revised: 18.11.2022	Accepted: 28.11.2022	Available online: 10.12.2022
-------------------------	------------------------	-------------------------	---------------------------------

Suggested citations:

Hasanuddin, A., & et al. (2022). The Evaluation of Needs and Weaknesses of The Immunization Program In Kodingareng and Barranglompo Island, Makassar City, South Sulawesi, Indonesia. *International Journal of Community Service*, 01 (02), 173-181. DOI: 10.55299/ijcs.v1i2.208

Open Access | URLs:

<https://ejournal.ipinternasional.com/index.php/ijcs/OpenAccessPolicy>

INTRODUCTION

The immunization program in Indonesia has been implemented since 1956. This effort is a public health effort that has proven to be the most cost-effective. With immunization efforts, it was proven that smallpox had been eradicated and Indonesia was declared free from smallpox since 1974. This program continued to be developed intensively starting in 1973 with BCG immunization, 1974 with TT immunization for pregnant women, and in 1976 DPT immunization was carried out. Polio vaccination was given starting in 1980, measles starting in 1982, and hepatitis B immunization in 1997. (*Pedoman Pelaksanaan Immunisasi.*, 2020) At the end of 1990, the immunization program in Indonesia had reached Universal Child Immunization (UCI). If this condition can be maintained and increased, it will be able to reduce the morbidity and mortality from diseases that can be prevented by immunization (PD3I). Immunization services in Indonesia are carried out by health centers, auxiliary health centers, medical centers, mother and child services, and other government and private service units to achieve the goal of disease prevention, various efforts have been made, including developing the range of immunization services, equitable distribution of services, maintaining the quality of vaccines, sterilizing tools and developing immunization technology. (Oktafiana Manurung, 2020) In Makassar District, all health centers have provided immunization services using all types of antigens developed in the immunization program in Indonesia, including BCG, DPT, TT, Polio, Measles and Hepatitis-B. The service provider factor is one of the factors whose role can be identified in supporting the quality of service. Apart from that, the factor of the officers also contributed significantly to the whole series of processes for achieving the objectives of the immunization program (Hasanuddin, 2020).

In 2022 the implementation of the immunization program in the Makassar City Islands region, especially the Kodingareng and Barranglompo Islands, has never been evaluated, starting from vaccine security to administration of the immunization program in the field. Therefore it is necessary to carry out and evaluate the implementation of the immunization program at the health center and in the field. Thus, problems can be identified in the implementation of the immunization program and ways to overcome them. (*Makassar Health-at-a-Glance_Bahasa.*, 2018)

METHOD

This research is qualitative research at the Center Health Service islands Kodingareng and Barranglompo Makassar City. Research informants were the head of the Center Health Service, immunization officers, immunization cadres Kodingareng Islands and Barranglompo Makassar City. The data analysis was done by triangulation.

RESULTS AND DISCUSSION

Based on the research results it can be seen as follows:

Tabel 1. Research Informants

Informants	Informants Number
Head of Kodingareng Health Center	Informant 1
Immunization Specialist Kodingareng Island	Informant 2
Kodingareng Island Immunization Cadre Kodingareng Island	Informant 3
Immunization Cadre	Informant 4
Head of Barrang Lompo Health Center	Informant 5
Barrang Lompo Island Immunization Officer	Informant 6
Barrang Lompo Island Immunization Cadre Barrang Lompo	Informant 7
Island Immunization Cadre	Informant 8

Source: Secondary data 2022

1. Input Components

The input components in this study were personnel, vaccines, funds, equipment, and technical guidelines.

a. Medical personnel

Medical personnel in implementing the immunization program in the Kodingareng and Barranglompo Island areas of Makassar City based on the results of the interviews can be described as follows:

".....The sub-health service only has one immunization officer and is assisted by several cadres in the field. In assisting the implementation of the duties of the immunization interpreter, training has been given regarding the implementation of immunization... .."(Informant 1)

".....experiencing being overwhelmed in the implementation of the immunization program due to difficult geographic areas... .."(Informant 2)

".....In terms of quantity, the health centers are still short on immunization officers, only 1 person has been provided, and on the quality side, training has been carried out related to the implementation of tasks in supporting the immunization program ... "(Informant 5)

".....the geographical conditions of the work area of the sub-health service are an obstacle in carrying out the immunization program tasks. Apart from that, the target is also high, while implementing officers are still lacking... .."(Informant 6)

Based on in-depth interviews, it was found that immunization officers were still lacking in quantity, this was because the sub-health service only had one immunization officer. This is not supported due to the difficult geographic area of the sub-health service. In terms of quality, officers have been given training related to the immunization program.(Dewi Mulfiyanti et al., 2022)

b. Vaccine

Vaccines in the implementation of the immunization program in the Kodingareng and Barranglompo Island areas of Makassar City based on the results of the interviews can be described as follows.

".....Vaccines are not possible to be available in the Kodingareng Island area, because they are not supported by vaccine storage facilities due to limited electricity supply and blackouts from 6 am to 6 pm... .."(Informant 1)

".....enough vaccines are available at center health service, but available on the island is not possible, because there are no storage facilities... .."(Informant 2)

".....the availability of vaccines on the island is constrained by storage facilities because they are not supported by electricity intake... .."(Informant 5)

".....In terms of quantity, there is no shortage of vaccines and sufficient availability at the health center, but the availability on the island is not supportive because it is hampered by limited electricity intake to maintain the stability of the coolant temperature of the storage area... .."(Informant 6)

Based on in-depth interviews, it is known that vaccines are not available on the island because they are constrained by electricity intake to maintain the stability of the vaccine storage temperature. (*Makassar Health-at-a-Glance_Bahasa.Pdf*, n.d.)

c. Funds

Funds to support the operation of the immunization program in the Kodingareng Island and Barranglompo Islands, Makassar City based on the results of the interviews can be described as follows:

"..... .. the operation of the immunization program comes from Health Operational Assistance funds, but the funding does not fully cover activity financing. However, the existing conditions did not prevent the activities... .."(Informant 1)

".....Funding comes from support the operation, but not all operational activities are covered by Health Operational Assistance funds... .."(Informant 2)

".....cadres try to empower the community in implementing activities... .."(Informant 3)

".....implementation of program operations sourced funds from the state budget, Health Operational Assistance and the existence of community empowerment, but for the community, empowerment is still lacking ... "(Informant 5)

".....Program operational funds are still insufficient for the implementation of activities because there several geographical conditions that require additional operations but the available funds are insufficient... .."(Informant 6)

Based on in-depth interviews it is known that the operational implementation of the program comes from the state budget, Health Operational Assistance. However, this funding does not fully cover activity financing. Apart from that, there is also community empowerment. However, community empowerment is still lacking. (*Ln_hew_hlth_plng_final.Pdf*, n.d.)

d. Tools

Equipment to support the operation of the immunization program in the Kodingareng Island and Barranglompo Islands, Makassar City based on the results of the interview can be described as follows:

".....support for facilities and infrastructure can be accommodated, but the island does not have vaccine storage facilities due to inadequate electricity intake... .."(Informant 1)

".....sufficient equipment and capable of supporting program implementation... .."(Informant 2)

".....support for facilities and infrastructure is sufficient, both in terms of the number of vaccines and syringes... .."(Informant 5)

".....facilities and infrastructure are available and able to support the implementation of the program... .."(Informant 6)

Based on in-depth interviews, it is known that the support for facilities and infrastructure can be accommodated, but the island does not have vaccine storage facilities due to inadequate electricity intake. (*Pengaruh Promosi Jurnal Manajemen Islam.Pdf*, n.d.)

e. The operational guidelines/technical guidelines

The operational guidelines/technical guidelines in supporting the operation of the immunization program in the Kodingareng Island and Barranglompo Island areas of Makassar City can be described as follows:

".....Juklak / technical guidelines have been prepared based on standards from the ministry of health and implemented based on the existing Standard Operational Procedures" (Informant 1)

".....the implementation of activities has been based on the existing operational and technical guidelines" (Informant 2)

"... the operational and technical guidelines are following the standards of the ministry of health" (Informant 5)

"....The implementation of activities has been based on existing Standard Operational Procedures, both in terms of vaccine storage, immunization implementation and so on...." (Informant 6)

Based on in-depth interviews, it is known that the operational guidelines / technical guidelines have been prepared based on standards from the ministry of health and are implemented based on existing Standard Operational Procedures. (*Pedoman Pelaksanaan Imunisasi.Pdf*, n.d.)

2. Process Components

The process components in this research are planning for vaccine needs, vaccine security, equipment utilization, implementation of immunization, recording, and reporting.

a. Vaccine Needs Planning

Planning for vaccine needs in the implementation of the immunization program in the area of Kodingareng Island and Barranglompo, Makassar City based on the results of the interview can be described as follows:

"..... the targeting is based on data on the number of targets for infants and pregnant women ..." (Informant 1)

"..... the targeting of vaccines is carried out by taking into account the targets of infants and pregnant women ..." (Informant 2)

".....The targeting is based on data on the number of babies and pregnant women..." (Informant 5)

".....The target calculation is based on the number of pregnant women and babies...." (Informant 6)

Based on in-depth interviews, it was found that the targeting and planning of vaccine needs were based on data on the number of targets for infants and pregnant women.

b. Vaccine Safeguards

Vaccine security in the implementation of the immunization program in the Kodingareng and Barranglompo Island areas of Makassar City based on the results of the interviews can be described as follows:

"....In the implementation of vaccine immunization is stored in a refrigerator at a temperature of 7-8 degrees Celsius".. (Informant 1)

"..... Vaccines have been stored in the ideal storage SOP for vaccines in the refrigerator ..."(Informant 2)

"..... Vaccines are stored properly and at an ideal temperature in the refrigerator..." (Informant 5)

"..... Vaccines before use are stored in a refrigerator at ideal temperature... .." (Informant 6)

The results of in-depth interviews from several informants and observations can be concluded that the implementation of vaccine immunization is stored based on the SOP for storing vaccines in a refrigerator at the ideal temperature. However, conditions in the field found that the temperature of the storage place was not observed and monitored every day.(Leo et al., 2011)

c. Utilization of Equipment

Utilization of equipment in the implementation of the immunization program in the Kodiangareng and Barranglompo Island areas of Makassar City based on the results of the interviews can be described as follows:

"... in the implementation of immunization, the number of needles and syringes for each patient who gets immunization is one syringe ..."(Informant 2)

"... in terms of the number of syringes is sufficient and one patient is used for each patient ..."(Informant 6)

Based on in-depth interviews, it was found that in the implementation of immunization using a sufficient number of needles and needles for each patient who received immunization using a different syringe.

d. Implementation of Immunization

The implementation of immunization in the implementation of the immunization program in the Kodiangareng Island and Barranglompo Islands, Makassar City based on the results of the interviews can be described as follows:

"... .. the implementation of immunization can be done directly at the health center, where the community is visiting. While the implementation of immunization on the island, officers bring vaccines from the health center to the immunization site, which is 30 minutes away by sea.... .."(Informant 1)

"... .. the implementation of immunization can be done at the health center or by visiting service posts on the island by bringing vaccines from the health service... .." (Informant 2)

"..... for the implementation of immunization on the island, officers bring vaccines which are stored at the health center and stored in a coolbox, the journey takes 30 minutes. Vaccines cannot be stored in the area closest to the island because there are no storage facilities and also limited electricity intake.... .."(Informant 5)

".....The implementation of immunization is hampered by the absence of vaccine storage facilities on the island, so vaccines are brought from the health service, which is 30 minutes away. This causes officers after visiting the immunization site to immediately carry out vaccination activities.."(Informant 6)

Based on in-depth interviews, it is known that the implementation of immunization can be carried out directly at the health center, where the community visits. Meanwhile, for the immunization on the island, officers carry the vaccine from

the health center to the immunization site, which is 30 minutes away by the sea. Vaccines cannot be stored in the area closest to the island because there are no storage facilities and also limited electricity intake. This causes officers after visiting the immunization site to immediately carry out vaccination activities. (*Petunjuk-Teknis-Surveilans-Penyakit-Tidak-Menular.Pdf*, n.d.)

e. Recording and Reporting

Recording and reporting in the implementation of the immunization program in the Kodongareng Island and Barrang lombo Islands, Makassar City based on the results of the interviews can be described as follows:

"... recording and reporting based on the Health Towards Card and each activity implementation is reported as well as recapitulated through monthly reports and at the city level based on the recapitulation of health service activities and program achievement is calculated based on predetermined targets .." (Informant 1)

"..... reporting based on Local Area Monitoring (PWS)... .." (Informant 2)

"... ..Recording and reporting through the Health Towards Card and reported on each activity implementation... .." (Informant 5)

"... ..The report on the implementation of activities is recorded through the activity report and on the Health Cards and is recapitulated every month... .." (Informant 6)

Based on in-depth interviews, it is known that recording and reporting are based on the Health Towards Card, and each activity implementation are reported as well as recapitulated through monthly reports and at the city level based on the recapitulation of health center activities and program achievement is calculated based on predetermined targets.

Based on the researcher's analysis, advocacy should be carried out in stages to the authorized institutions as policymakers, namely the Regional People's Representative Assembly and the local government regarding support for the availability of power plants and alternative power plants to support the storage of vaccines that require electricity intake, re-evaluate the availability of resources (Human Relation, funds, facilities) for the implementation of the immunization program. The shortage of immunization personnel can be procured through the management of the Regional Public Service Agency, by increasing the number of personnel as immunization personnel. (Hasanuddin, 2020) What can be done is that there is also a need for increased monitoring and special evaluation of the immunization program, at least once every three months and more focused regularly and there is feedback on the findings during monitoring and evaluation or supervision so that the objectives of the immunization program can be achieved. (Hasanuddin et al., 2020)

Actions that can be taken by the Head of Center Health Service are monitoring and evaluating the implementation of the immunization program directly in the field to assess the performance of officers and can be followed up if there are findings during monitoring evaluation so that immunization program implementers are more responsible for their duties. Propose and plan resources (human resources, funds, facilities) that are still lacking and conduct socialization with related sectors in the region to get political support in implementing activities at the public health center, particularly the implementation of the immunization program.



Figure 1. Discussion about vaccine with stakeholder



Figure 2. Focus Grup Discussion with partisipant

CONCLUSION

The needs and weaknesses in the immunization program in the Kodingareng and Barranglompo Island areas of Makassar City are the need for immunization implementing officers, the availability of vaccines on the island by strengthening funding support, and the availability of facilities through the provision of generators to support vaccine storage. Apart from that, the community is still lacking in terms of community empowerment.

Thank-you note

The researchers thank you for the funding support from Head of D3 Health Analysis Universitas Indonesia Timur, and Doctor Ricvan Dana Nindrea and all student.

REFERENCES

- Dewi Mulfiyanti, Fitrah Ramadani, Andi Satriana, & Andi Bintang. (2022). Patient Safety in Primary Care Socialization and Discussion. *International Journal of Community Service (IJCS)*, 1(1), 105–110. <https://doi.org/10.55299/ijcs.v1i1.182>
- Hasanuddin, A. (2020). Analysis of Epidemiological Characteristics Associated with Non-Adherence to Treatment Leprae Paucibacillary Patients in Jeneponto District, South Sulawesi, Indonesia. *International Journal of Pharmaceutical Research*, 12(sp2). <https://doi.org/10.31838/ijpr/2020.SP2.452>
- Hasanuddin, A., Djais, A. I., Dwiningsih, A., & Yuswatiningsih, E. (2020). *Malnutrition Screening in Pangkep District, South Sulawesi, Indonesia*. 6. <https://doi.org/10.31838/ijpr/2020.SP2.546>
- Leo, O., Cunningham, A., & Stern, P. L. (2011). Vaccine immunology. *Perspectives in Vaccinology*, 1(1), 25–59. <https://doi.org/10.1016/j.pervac.2011.05.002>
- Ln_hew_hlth_plng_final.pdf*. (n.d.).
- Makassar Health-at-a-Glance_Bahasa.pdf*. 2018. BPS Kota Makassar
- Oktafiana Manurung. (2020). Relationship of Competency of Midwife with Management Management of Newbirth Asphyxia in the RegionService Work Health Deli Serdang. *International Journal of Community Service (IJCS)*, 1(2), 91–102. <https://doi.org/10.55299/ijcs.v1i2.168>
- Pedoman pelaksanaan imunisasi.pdf*. (2020). Depkes RI
- Pengaruh promosi jurnal manajemen islam*.(2022).
- Petunjuk-Teknis-Surveilans-Penyakit-Tidak-Menular*(2018). Depkes RI

Copyright and License



This is an open access article distributed under the terms of the Creative Commons Attribution 4.0 International License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

© 2022 Asni Hasanuddin¹, Jurnal Syarif², Ricvan Dana Nindrea³

Published by IPI Global Press in collaboration with the Inovasi Pratama Internasional Ltd