

The role of management elements in achieving complete basic immunization in infants

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Abstract

Effective efforts to prevent sickness and death of children with Immunization. Immunization protects children from several diseases. The achievement of UCI Puskesmas is still below the national target of 100%. The availability of human resources, costs, facilities infrastructure, and functions management implementation immunization base influences the success of the immunization program base complete in babies. This study aimed to determine the role of management elements in achieving complete basic Immunization in infants.

Quantitative research type with *cross-sectional design*. The population of the study was 32 immunization program holders. The sampling technique used was *Total Sampling*. Data collection method by interview. Data analysis with Chi-Square Test. The results showed that the elements of poor management were 15 (46.9%), good management elements were 17 (53.1%), immunization coverage was not achieved by 13 (40.6%), and immunization coverage was achieved by 19 (59.4%). There is a relationship between management elements and immunization coverage with a *p-value* of 0.001. It is expected that there will be the development of immunization health workers in terms of number and competence and rewards for good health workers in the immunization program to achieve immunization coverage rates in each health center area.

Keywords: Immunization; Coverage; Management Elements; The Role; Infants

1. Introduction

A healthy Paradigm in development health prioritizes the improvement of health (promotive) and prevention of disease (preventive) over treatment (curative) and recovery[1]. Service efforts are very effective preventive measures. Immunization can give immunity specific to diseases that can be prevented with immunization 3]. Immunization can provide immunity to the body in a consistent, comprehensive, and appropriate standard to avoid disease transmission [2]. The purpose of Immunization for children is to give immunity so that it can prevent illness and death in children. Although facility immunization is available, not all babies are fully immunized base[3].

One of the sustainable Development Goals (SDGs) is to expand access to achievement immunization. In addition to helping reach national objectives like development, economy, and education, Immunization can reduce pain and death[4]. *Universal child immunology (UCI)* is a condition where complete basic immunology is achieved for all babies, and the UCI target for 2014 is 100% per village. UCI Village is a condition achievement immunization based in a way complete on all babies [5].

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Indonesia ranks 4th in the world after India, Nigeria, and the Democratic Republic of Congo for *under-vaccination of children* in DPT3 immunization coverage[6]. Indonesia is one of the priority countries to accelerate the achievement of the 100% Village UCI target. The basic immunization program is estimated to have reached 1.5 million toddlers in Indonesia [7]. Indonesia is one of the ten countries where children are not immunized, with around 1.3 million children [8]. Five years ago, the level immunization base completed in Indonesia was above 85% and did not yet achieve the target of 100% and the level coverage UCI village by 82.13%[9], [10].

Based on data from the Majalengka Regency Health Office, the 2021 Village UCI achievement results reached 82.2%, and non-UCI villages comprised 17.8% of 343 villages. Eighteen health centers did not achieve UCI (56.25%). The 2022 Village UCI achievement results reached 85.7%, while it reached 14.3% for non-UCI villages. Nineteen health centers did not achieve UCI (59.375%). The achievement of UCI Health Centers in Majalengka Regency during the 2021 and 2021 periods was still below the national target of 100% [12].

The availability of human resources influences the success of the immunization program based on *babi*; availability cost operational, availability means infrastructure, and functions management implementation immunization[11],[13]. Several constraints on coverage immunization base include: lack of immunization human resources, system online information not yet maximum, no existing procedure system information health, officer immunization Not yet followed training, and analysis of data that has not been maximum.

Management is a process to realize the desires that an organization wants to achieve. The management elements consist of 6 elements: *money, methods, materials, machines, and market*[14]. Human Resources health functions as a center of service health in the field, and it is good preventive, promotive, curative, and rehabilitative. They are components important in increasing Power competition service health. Availability means infrastructure immunization base among them place storage vaccines, safety boxes, and tools injection. There is a source of funds for activity immunization based on the APBN, APBD, and BOK[15]. Human resources is one reason for declining the immunization program's achievement [16].

Research results from Yuspi 2021 show that the availability of human resources is adequate due to the double burden Work double; there are several Health Centers that do Not yet own refrigerators to store vaccines, and implementation of monitoring and evaluation immunization Not yet walk maximum[11], [17]. Ovie Research (2018), Officer Health has not yet received training, and the shortage of vaccines and distribution task cadre is unclear [17]. There is a connection between implementation management and completeness of Basic Immunization for Babies[18].

This research is important because it can be used as evaluation material to improve the quality of basic immunization program services so that it can increase immunity. In babies, it is important to avoid disease and prevent death. Results study This can be made into input for taker policy, which can increase management element immunization program management to achieve the UCI target of 100% per village. So, based on identifying the problems above, this study aims to analyze the role of management elements in achieving complete basic Immunization in infants.

2. Research Design

Quantitative research type with *cross-sectional design*. Independent variables are management elements, and dependent variables are basic immunization completeness based on village UCI achievement. The population of 32 immunization program holders. The sampling technique used in Total Sampling sampling is a total population of 32 people. Primary data collection method through interviews with management element questionnaires.

Meanwhile, secondary data was obtained from the annual report of the Health Office's health profile on the completeness of basic Immunization in 2023. Analysis using *Chi-Square*. Research This requires permission to conduct an ethics study at the Institute for Research Development and Community Service, Cirebon Health Sciences College, with No: 94/B/STIKes Crb/III/2024.

3. Result

Table 1 shows that the distribution of poor management elements is 15 (46.9%), while the distribution of good management elements is 17 (53.1%). Immunization coverage is not achieved by 13 (40.6%), while the distribution of Immunization Coverage is achieved by 19 (59.4%).

Table 1 Frequency Distribution of Immunization Coverage Management Elements

Variables	Frequency	Percentage (%)
Management Elements		
Not good	15	46.9
Good	17	53.1
Immunization Coverage		
Not achieved	13	40.6
Achieved	19	59.4
Total	32	100

Table 2 Relationship between Management Elements and Immunization Coverage

Variables	Immunization Coverage				Total		P-Value
Management Elements	Not achieved		Achieved				
	N	%	N	%	N	%	
Not good	1	73.3	4	26.7	15	100	0.001
Good	12	11.8	15	88.2	17	100	
Total	13	40.6	19	59.4	32	100	

Based on Table 2, it was found that the elements of poor management and immunization coverage were not achieved by 11 (73.4%), and the elements of good management and immunization coverage were achieved by 15 (88.2%). A *p-value* of 0.001 was obtained, and a relationship exists between management elements and complete basic immunization coverage.

4. Discussion

The analysis results show a relationship between management elements and complete basic immunization coverage with a *p-value* (0.001), which aligns with the results. In a study by Diamond et al. (2017), there is a connection between implementation management and completeness of Basic Immunization for Babies[18]. There is a connection between officer health and record-keeping reporting with coverage immunization[19], [20].

This study found that in the poor management element, most of the immunization coverage was not achieved as much as 11 (73.4%). The good management element, most of the immunization coverage was achieved as much as 15 (88.2%), by previous studies which stated that there were several obstacles to the implementation of complete basic Immunization, namely the availability of human resources was still lacking and not up to standard, the implementation of the Immunization schedule was carried out simultaneously with the KIA program[20], [21].

The elements of management consist of human resources that will affect the effectiveness and efficiency of management in implementing goals, funds needed to achieve goals, methods to achieve goals, materials required to achieve goals, machines used to process available materials, and markets, namely places to offer production results[21].

Achievement immunization is based in a way complete on all babies known As UCI, several factors influence including health workers, access, and infrastructure[22]. Officers' health is the main factor in the immunization of advanced toddlers [19]. One factor in the program's success is the availability of adequate health. The lack of skilled health workers is one reason objective No was achieved optimally. The program's implementation must own the source power required For operating program activities, one of which is funding. Funds must be allocated appropriately to ensure the program runs smoothly, and providing and using it must walk smoothly. If not, There is support and a systems funding base For immunization complete basics, basic program immunization complete No will success[17]. Good, full, quality,

and in-depth facilities and infrastructure sufficient quantity are some of the components that can influence results from the immunization program.

The study's results showed that 15 (46.9%) elements of poor management and 13 (40.6%) immunization coverage were not achieved. Based on interviews in the field, this was due to several circumstances, namely that immunization officers were still limited, the role of officer health immunization burden Work doubled, socialization to the public was Not yet maximum, and implementation of Immunization simultaneously with other programs. Still, there are health centers that do not own book guidelines, and there is a lack of support from the family and society so that matters. This can affect immunization coverage rates.

The role of health workers in providing immunization services in the good category is 67.4%, and basic immunization coverage is complete in the less category at 1.7%[23]. The Human Resouces immunization program is already enough; only program holders who receive training in Immunization still lack a vaccine that is deficient for immunization program activities. There are none. Book or instruction about immunizations owned by the officer health center and cadres Posyandu in progress work[8], [17].

To reach the complete coverage of the immunization base, officer health is very important. Officers' health should be improved, and counseling should be interactive, with posters and brochures about the importance of immunization bases[8]. The recommendation to give training for immunization program management is very important for achieving coverage immunization [16]. The Health Center is expected to always provide vaccines for toddlers, so other toddlers must wait for vaccination, and the Health Center can help its cadres with sharing tasks [17].

5. Conclusion

The research results concluded that the elements of poor management were 15 (46.9%), and the elements of good management were 17 (53.1%). Immunization coverage was not achieved by 13 (40.6%), and immunization coverage was achieved by 19 (59.4%). There was a relationship between management elements and immunization coverage in immunization officers with a *p-value* of 0.001. For the Health Center, it is hoped that there will be development related to adequate Immunization of health workers in terms of quantity and quality, including the availability of complete immunization program facilities and infrastructure and sufficient numbers. There are work awards in the form of *rewards* for health workers who are good at immunization programs to achieve immunization coverage rates in each health center area.

Compliance with ethical standards

Disclosure of conflict of interest

The authors declare no conflicts of interest.

Statement of ethical approval

This research has received ethical permission from the Research Institute for Development and Community Service, Cirebon College of Health Sciences, with Ethical Permit Number 094/B/STIKes Crb/III/2024.

Statement of informed consent

Ensure the confidentiality of research samples, provide information about the purpose and benefits of the research. After the explanation is given, the subjects understand and are willing to be respondents. After that, they receive a letter of consent and sign the informed consent.

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