Roles of Village Stakeholders on Immunization Program during Pandemic Outbreak in Central Java, Indonesia

Peran Stakeholder Desa dalam Program Imunisasi pada Era Pandemi di Jawa Tengah, Indonesia

Ayun Sriatmi*[1], Sutopo P. Jati[2], Wulan Kusumastuti[3]

[1, 2, 3] Department of Health Administration and Policy, Universitas Diponegoro, Semarang, Indonesia

DOI: 10.24252/al-sihah.v14i1.
Received: 4 January 2022 / In Reviewed: 14 April 2022 / Accepted: 1 June 2022 / Available online: 30 June 2022

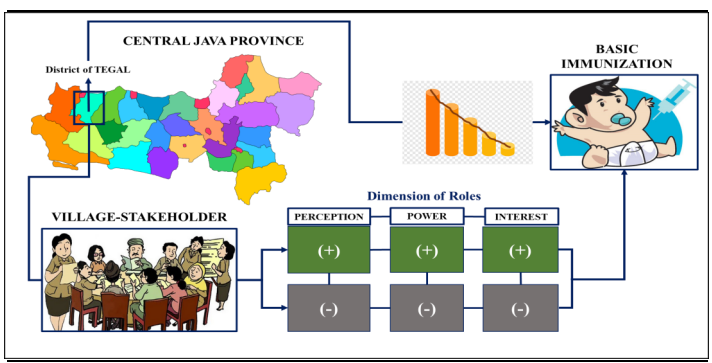
ABSTRACT

Tegal district is facing obstacles in achieving immunization targets during the Covid-19 pandemic as the declining number of children who have been immunized. The role and support of village stakeholders considerably play a very significant role in overcoming these obstacles. This current study aimed to analyze the dimensions of village stakeholders' roles in achieving basic immunization targets during the pandemic era. This study was conducted using a quantitative survey with a cross-sectional approach. The participants were all village stakeholders related to the immunization program. There were 300 people from 30 selected villages as samples chosen through a purposive technique sampling. The roles of stakeholders were found to be the dimensions of perceptions, powers, and respectively interests. The results were most of the stakeholders showed such positive dimensions of perception related to their roles in immunization as well as interest dimensions. All respondents, in addition, considered that their institutions have no power in implementing immunization programs in villages. The immunization success was the responsibility of PHC and health workers instead. There was a relationship between perceptions with strengths and interests, as well as a relationship between strengths with interests of village stakeholders in the immunization program ($p<0.05$). The weakest role of village stakeholders was in the power dimension as they rely highly on the local governments and health workers with a weak authority to make decisions. Thus, strengthening the role needs to be done through continuous socialization and dissemination with interactive coordination methods, and direct and personal communication.

ABSTRAK

Kabupaten Tegal terkendala dalam capaian target imunisasi di masa pandemi Covid-19 karena turunnya jumlah anak yang imunisasi. Peran dan dukungan stakeholder desa sangat penting mengatasi kendala tersebut. Tujuan penelitian menganalisis dimensi peran stakeholder desa dalam pencapaian target imunisasi dasar di masa pandemi. Merupakan penelitian survei kuantitatif dengan pendekatan cross-sectional. Populasinya semua stakeholder desa yang berkaitan dengan program imunisasi. Sampel 300 orang dari 30 desa terpilih menggunakan teknik *purposive sampling*. Data dikumpulkan melalui wawancara menggunakan kuesioner. Peran stakeholder dilihat melalui dimensi persepsi, kekuatan dan kepentingannya. Sebagian besar stakeholder menunjukkan dimensi persepsi yang positif terkait perannya dalam program imunisasi. Kondisi sama juga terjadi pada dimensi kepentingan. Semua responden menganggap institusinya tidak mempunyai kekuatan dalam pelaksanaan program imunisasi di desa. Keberhasilan imunisasi merupakan tanggung jawab Puskesmas dan petugas kesehatan. Terbukti ada hubungan persepsi dengan kekuatan dan kepentingan, serta hubungan antara kekuatan dengan kepentingan stakeholder desa dalam program imunisasi ($p<0,05$). Peran stakeholder desa paling lemah pada dimensi kekuatan karena tingkat ketergantungannya yang tinggi pada pemerintah daerah dan petugas kesehatan. Penguatan peran perlu dilakukan melalui sosialisasi dan diseminasi terus menerus dengan metode koordinasi dan komunikasi interaktif, langsung dan personal

GRAPHICAL ABSTRACT



Keyword
immunization during pandemic
immunization program
roles stakeholders
village stakeholders

*** Correspondence**
Jl. Emerald Asri Utama B1/11, Bukit Emerald Jaya, Meteseh, Tembalang, Semarang, 50271, Indonesia

Email: ayunsriatmi@gmail.com

ISSN-P : 2086-2040
ISSN-E : 2548-5334

INTRODUCTION

Children undoubtedly have basic rights to survive, grow, and develop, referring to their rights of getting protected from any dangers, such as diseases, through immunization. The government is obliged to provide complete immunization services to every infant. Immunization is the most effective prevention of infectious diseases (Mugali et al., 2017) through increasing immunity from the risk of contracting diseases that could actually be prevented by immunization or locally termed PD3I (*Penyakit yang Dapat Dicegah Dengan Imunisasi*).

The coverage of national complete basic immunization (CBI) is still fluctuating and has not yet reached the 95% target. The CBI coverage in 2018, for example, accounted for 81.99%, lower than in 2014 (86.9%) and 2017 (91.1%), although in 2019 increased to 86.8%. The CBI coverage in Central Java province also remained fluctuating. In 2013, there was 100.7%, 2014 falling down to 93.4%, but increased to 98.2% (2017) and 100.68% (2018). Tegal district is one of 35 districts in Central Java that showed a fluctuating trend in terms of CBI coverage. The data showed that CBI coverage in 2016-2019 comprised 103.6%; 90.7%; 105.5% and 96.4%, respectively. The infant mortality rate (IMR) in 2019 was 5.9 per 1000 KH (160 cases). The number of AFP (Acute Flaccid Paralysis) cases at the age of <15 years was 8 cases, and suspected measles was 19 cases exceeded in 2018 (8 cases).

Studies revealed that non-adherence to immunization schedules was a constraining factor contributing to untimeliness and low CBI coverage. The Health Basic Research (Riskesdas) 2018 suggested that national CBI coverage was 57.9%, incomplete immunization was 32.9%, and not immunization was 9.2% (Sari & Nadjib, 2019). Triana's study in Padang indicated that 47.5% of incomplete infant immunizations were influenced by poor knowledge, attitudes, motivation, and dissemination of information, where motivation was the strongest influencing factor (Triana, 2016). A prior study by Senewe et al. in Manado showed that 83.3% of mothers gave basic immunizations, and family support, motivation, and maternal characteristics were related to compliance (Senewe et al., 2017). On the other hand, a study by Febriastuti et al. in Surabaya showed that 63.89% of mothers did not comply with their children's immunization schedules. Maternal attitudes, perceptions about immunization, subjective norms, and intentions contributed to these results (Febriastuti et al., 2014).

The coronavirus pandemic (Covid-19) has affected CBI coverage. The physical-distancing policy, working from home or staying at home, reducing travel, PSBB, PPKM, avoiding crowds, and various other policies oriented to "health protocols" have an impact on low immunization services and successfully decreased the number of children receiving immunizations (Felicia & Suarca, 2020; Irawati, 2020; Lyu et al., 2020). This condition is certainly dangerous because the potentially spreading of PD3I disease will increase. Although the governments have issued technical instructions for immunization services during the Covid-19 pandemic, its implementations have not met

expectations yet because there are such fear and reluctance of parents to immunize their children. The Covid-19 pandemic situation also affected the decline in visits to routine immunization services in Canada, especially for school children immunization. The challenges were mainly limited resources (such as lack of staff, shortage of PPE, limited infrastructure), restrictions on policies on public health services, and public doubts about taking immunizations in health facilities (Sell et al., 2021).

The data from the Ministry of Health showed that Indonesia's complete basic immunization coverage decreased significantly since the appearance of the Covid-19 outbreak from 84.2% (2020) to 79.6% (2021). The decline was mainly due to supply chain disruptions, activity restriction policies, and a lack of health workers due to their focus on handling covid-19. The consequence was the cessation of some vaccination services. A Survey by the Ministry of Health and UNICEF in 2020 showed that half of surveyed parents and caregivers were reluctant to immunize their children in health facilities for fear of contracting Covid-19 or fear that there were no proper health protocols. (Kementerian Kesehatan & UNICEF Indonesia, 2020).

The global survey conducted by WHO in 2020 suggested that 85% of respondents from 61 countries reported a decreasing downtrend in routine immunization coverage in May compared to January and February 2020 (Agócs et al., 2021; Sell et al., 2021). McDonald et al., a study in the UK, found a 19.8% reduction in the Measles-Mumps-Rubella (MMR) immunization rate three weeks after the social distancing policy was introduced. Similarly, Langdon et al. conducted a study in New York City showing a 62% reduction in immunization services for infants <2 years old in the early stages of the pandemic (March-April) compared to the same time period in 2019. (Sell et al., 2021).

One noticeable effort to overcome obstacles to health programs (including immunization) in the pandemic era was collaborating multi-stakeholders in their roles and support as the most basic form of social process, including the division of tasks and responsibilities for common goals achievement. Interaction and collaboration with stakeholders and understanding their perspectives was a strategy to improve immunization services (Singh et al., 2019). Partnerships and collaborations were important to stakeholders for a variety of reasons, including technical assistance, sharing of resources, and sharing of lessons learned or best practices (Fisher et al., 2019). The collaboration practices in health services are emphasized in optimizing roles of multi-stakeholders and joint responsibility to overcome various health problems. It must be admitted that the role and involvement of stakeholders in health program implementation were still relatively weak, especially for local government stakeholders, even though their attitudes and perceptions were positive and supportive (Iswarno et al., 2013). The role of regional policy implementers was also not good because of frequent mutations of implementers, and most of their replacements have not received further information (Purbani et al.,

2019). Measurement of role dimensions was often seen through attitudes and perceptions, strengths or power, and abilities, as well as the level of importance for the program.

A previous study conducted in India showed that lack of time, lack of awareness, fear of impact, risk of losing daily income, and status as a migrant population were the main reasons for not immunizing, as well as the behavior of health workers who were perceived as less supportive by caregivers as factors that prevented them from immunizing their children (Singh et al., 2019). A study in Cameroon also showed that poor immunization performance was caused by an inadequate health system, communication gaps in vaccination schedules, service opening hours that conflict with maternal working hours, poor service quality, and the large number of vaccinations types given which made parents or caregivers did not understand and were confused about the schedules (Nolna et al., 2018). Pakistan also experienced a situation where only 51% of children received the full dose of vaccination regardless of the time interval, and 31% of children only received partial vaccination due to remote location (23%). They did not realize the need for vaccination (17%), and did not believe in vaccination (16%)). Additionally, parents were busy (15%) and afraid of side effects (11%) (Mugali et al., 2017)

An understanding of the perceptions, strengths, and interests of stakeholders in achieving the complete basic immunization target was important because it synergistically provided support through sharing of resources, good practices, experience, and technical assistance needed to face all obstacles and challenges in implementing immunization (Fisher et al., 2019). The perception dimension was a stakeholders' perspective that influenced their attitudes, behaviors, and commitment. The strength or power was a situation that allowed actors to carry out their own social relations despite resistance. The power dimension refers to the ability of stakeholders to manage the organization based on the type of resources as well as the power to impose. Stakeholders' interests were demands for certain values that would be fulfilled or were the reasons to provide support and involvement.

The village was the smallest government area directly related to the implementation of various national programs, including health programs, because the target program was the people who lived in this area. Law No. 6 of 2014 concerning villages explicitly states that villages have local authority to regulate and manage their territory regarding village development and empowerment of village communities through their rights and authority in village-level planning and budgeting. The strengthening empowerment model certainly includes how the role of village stakeholders contributes to health development, especially in the immunization program. Although the roles of stakeholders were large in the success of the health program, their roles in the immunization program have not been identified, especially those living at the village level. This study was to analyze the dimensions of multi-stakeholder roles at the village level achieving the target of the basic immuniza-

tion program, especially during the Covid-19 pandemic outbreak, which includes perceptions, strengths, powers, and interests.

METHODS

This study was conducted through a cross-sectional method, which was conducted in the Tegal district, a district affected by the Covid-19 pandemic. It is reported that its' BCI coverage was low in Central Java. The research population was multi-stakeholders at the village level who were related to the implementation of immunization in the village both directly and indirectly, including the Village Head, Village Secretary, Village Legislative Bureau (locally known as BPD or Badan Permusyawaratan Desa), other village officials, Village Health Forum (locally known as FKB/FKK Forum Kesehatan Desa/ Kelurahan), Family Welfare Development-Unit 4 (locally known as Pembinaan Kesejahteraan Keluarga or PKK/Pokja-4), regional village apparatus (RT/RW/Dukuh/ Dusun), religious and community leaders, youth organizations, village associations, village midwives, health cadres, and so on. Samples were taken using stratified sampling technique, from 5 sub-districts were selected 5-7 villages (varies for each sub-district based on the number of villages, namely: 3 sub-districts six villages were chosen, one sub-district was chosen five villages and one other sub-district were chosen seven villages) and for each sub-district selected 30 villages. The total samples were 300 respondents selecting ten stakeholders from each selected village.

In addition, the data were collected by interview using structured questionnaires that had met the validity and reliability requirements. The variable was the dimension of village stakeholders' roles, which include the dimension of perception, power, and interest to succeed in achieving the CBI target during the Covid-19 pandemic. Good or positive (+) and poor or negative (-) categories on each stakeholder role dimension were determined based on the median value. According to the Kolmogorov-Smirnov normality test, it was shown that the data was abnormal distribution. Descriptive analysis was conducted by describing categories of stakeholder roles in each dimension (perceptions, powers, and interests). Descriptive bivariate analysis using cross tables and statistical analysis were to determine the relationship between role dimensions using the Chi-Square test. This research was declared as having to meet ethical standards by the Health Research Ethics Committee, Faculty of Public Health, Diponegoro University under registration number 424/EA/KEPK-FKM/2021

RESULTS

Based on the characteristics, it was known that 50.7% of stakeholders were males ranging from 41-50 years old (43%), followed by 31-40 years old (24.7%), respectively. Respondents' educational background was mainly high school graduates (52.3%), although there were still around 3% who earned primary school degrees. The positions at the village level were quite varied, with 34.7% of village officials, 6.7% as the BPD members, 11.7% of re-

Table 1
Analysis of the Village Stakeholders' Roles from Perception Dimension

No	Indicators		Sub Indicators	Score	Sign
1.	Institutional participation and roles	a	Institution plays an important role in achieving target of immunization program in the village	3.19	+
		b	Achievement of work targets in village can only happen if institution was directly involved	2.84	-
		c	The support of institution was a key success factor in achieving immunization targets	3.09	+
2.	Building a coherent policy	a	All regulations, guidelines and rules for achieving immunization target were completed, detailed and clear (from national level, province, district/city and village)	3.06	+
		b	All policies, regulations, guidelines and rules in the immunization program do not overlap and remain consistent	3.09	+
		c	All policies, regulations, guidelines and rules in immunization program were in accordance with village needs	3.03	+
3.	Building implemented programs	a	Programs and activities carried out by the village in immunization program were in accordance with expected goals	2.97	-
		b	Programs and activities carried out by the village in immunization could be implemented and run smoothly	3.02	+
		c	Institution must be involved in supporting the success of immunization program in the village	3.13	+
4.	Resources and financial support	a	All potential resources and financing must be allocated from various sources (including allocation from village funds) in immunization program	3.18	+
		b	Institution has to allocate resources (manpower, infrastructure and funds, including budget) to support immunization program in the village.	3.10	+
		c	The target of immunization program could be successful if all parties were willing to facilitate necessary resources and budget	3.05	+
5.	Developing cooperation and building an alliance	a	The success of immunization program in the village can only be achieved through the cooperation of all relevant parties (stakeholders)	3.19	+
		b	Ability to build alliances and multi-stakeholder partnerships in networks must continue to be pursued by every institution in immunization program	3.22	+
		c	Building a collaboration, alliances and partnerships across programs and sectors was the responsibility of all parties in immunization	3.23	+
6.	Assurance of sustainability and quality of commitment	a	Achievement of immunization program was through a gradual process and must be continuously	3.27	+
		b	Institution was obliged ensuring the immunization program sustainability in the village	3.08	+
		c	Commitment in immunization program must be realized in real forms and activities	3.17	+

gional officials (locally known as RW/RT/ Dusun/Dukuh), FKD members (3.7%), PKK/Pokja-4 (10%), religious and community leaders (6.7%), Karang Taruna (6.7%), Village Midwives (6.3%), and 13.7% with other occupations/positions. Their main occupations were traders (41%) and farmers (21.7%). Only 49.7% of respondents knew that their village was a UCI village, 17% were not a UCI village, and 33.3% did not know.

Table 1 depicts that most of the indicators for the dimension of stakeholder perception had a mean score >3.0 except for indicators of participation and roles of institutions (sub-indicators of achieving immunization targets in villages, which could only occur if there was the direct involvement of institution) with score 2.84 and indicators for developing implemented programs (sub-indicator that programs and activities were carried out by village in immunization were in accordance with expected goals) with score 2.97. Furthermore, village stakeholders had a positive perception of the immunization program. The highest positive perception was on the understanding of stakeholders that guarantees sustainability and quality of commitment in immunization, which must go through a gradual and continuous process. In addition, some efforts of developing cooperation and building alliances were also a shared responsibility that must be pursued. However, it was acknowledged by stakeholders that the role of involvement in immunization was still lack-

Table 2
Analysis of the Village Stakeholders' Roles from Power Dimension

No	Indicators		Sub Indicators	Score	Sign
1.	Institutional participation and roles	a	Institutions have an ability to strengthen their role in supporting success of immunization in the village	2.65	-
		b	The ability of institution in influencing other sectors to be directly involved immunization program in village	2.60	-
		c	Institutional capability was a reinforcement in sustaining other cross-sectoral participation in immunization programs	2.68	-
2.	Building a coherent policy	a	Ability of institution to make & develop various policies and regulations related to immunization programs at the village level within legality of authority	2.60	-
		b	Ability of institution to maintain or control all policies and regulations in immunization program to be consistent and did not overlap	2.70	-
		c	Ability of institution to regulate various policies in immunization according to health program needs	2.62	-
3.	Building implemented programs	a	Ability of institution to develop various innovative activities in the village contributing to immunization program	2.68	-
		b	Ability of institution to encourage and strive for all immunization service activities in the village to be carried out by relevant parties	2.84	-
		c	Ability of institution to maintain and ensure that various programs/activities carried out by the village in immunization run well and smoothly as expected	2.76	-
4.	Resources and financial support	a	Ability of institution to provide the resources and financing needed for a successful immunization program in the village	2.47	-
		b	Ability of institution to allocate resources (manpower, infrastructure, budget) to routinely support immunization in the village according to their ability	2.50	-
		c	Ability of institution supporting implementation of immunization activities from various sources (including village funds and community-based budgeting)	2.75	-
5.	Developing cooperation and building an alliance	a	Ability of institutions to cooperate and partnership with other sectors in achieving immunization program targets in the village	2.89	-
		b	Ability of institution to build multi-stakeholder alliances and collaborations networking (partnerships) in immunization program	2.74	-
		c	The strength of institution regulates the form and rhythm of multi-stakeholder cooperation developing various immunization programs in the village	2.61	-
6.	Assurance of sustainability and quality of commitment	a	Institution was authorized to guarantee implementation of various immunization program activities in village	2.61	-
		b	Institutional ability maintaining other multi-stakeholder commitments at village level to focus on achieving immunization targets	2.65	-
		c	Ability of institution guarantees the success and follow-up immunization program activities in the village	2.65	-

ing, and an assumption related to village activities had not been in accordance with the expected goals, especially in immunization.

Table 2 moreover describes the role of village stakeholders in basic immunization programs from the power dimension. The results showed that all indicators and sub-indicators of the power dimension had a score <3.0. It indicated that all stakeholders considered that they had no power (weak position) in the immunization program. Indicators for developing programs had been implemented, and indicators for developing cooperation and alliances had higher strength than other indicators, especially in the sub-indicator to cooperate and to partner with other cross-sectors in achieving immunization program targets in the village (score 2.89). The ability of institutions to encourage and strive for all immunization service activities in the village had been carried out by related parties (score 2.84). Additionally, the ability to maintain and ensure various programs/ activities carried out by villages in immunization had been running well and smoothly as expected (score 2.76).

The power of village stakeholders was considered as the lowest indicated by resource support and financing, especially on the sub-indicator of ability to provide

Table 3
Analysis of the Village Stakeholders' Roles in from Interest Dimension

No	Indicators		Sub Indicators	Score	Sign
1.	Institutional participation and roles	a	Institutions have an interest in success of immunization program in the village	3.13	+
		b	Institutions have an interest in influencing or inviting other sectors in village-level to be directly involved in immunization program	3.04	+
		c	Institutions have an interest as reinforcement to maintain other cross-sectoral participation to be active in immunization program	3.08	+
2.	Building a coherent policy	a	Institutions have an interest to develop various policies, regulations and rules in immunization programs in villages according to its legal authority	3.05	+
		b	Institutions have an interest to control all policies, regulations and rules in immunization program to be consistent and do not overlap	3.05	+
		c	Institutions have an interest in regulating various policies, regulations and rules in immunization according to the needs of program and community	3.00	+
3.	Building implemented programs	a	Institutions have an interest to develop various innovative village-level activities that contribute achieving immunization targets	3.06	+
		b	Institutions have an interest to make all target-oriented of immunization activities carried out by all relevant parties (stakeholders)	3.08	+
		c	Institutions have an interest to maintain and ensure that various programs/activities in achieving immunization targets in the village run well	3.11	+
4.	Resources and financial support	a	Institutions have an interest to provide resources and financial needed by the village for the success of immunization program	2.87	-
		b	Institutions have an interest in allocating resources on a regular basis supporting immunization program according to its capabilities	2.87	-
		c	Institutions have an interest to maintain implementation of immunization activities through various sources (village funds and community-based budgeting)	3.08	+
5.	Developing cooperation and building an alliance	a	Institutions have an interest in collaborating and partnering with cross-sectors to implement immunization programs in villages	3.07	+
		b	Institutions have an interest to build multi-stakeholder alliances and partnerships with its networks in immunization programs	3.00	+
		c	Institutions have an interest in regulating the form and rhythm of village stakeholder collaboration to develop immunization programs/activities in the village	2.91	-
6.	Assurance of sustainability and quality of commitment	a	Institutions have an interest to ensure various immunization program activities be carried out	2.95	-
		b	Institutions have an interest to maintain commitment of village stakeholders to focus on priority immunization programs in the village	3.00	+
		c	Institutions have an interest to ensure success and follow-up of the immunization program activities in villages that were currently being carried out	3.00	+

resources and financing needed for success immunization program in the village (score 2.47) and sub-indicator of ability to allocate resources (i.e., manpower, infrastructure, and budget) routinely to support immunization program in the village according to its ability (score 2.50). These results indicated the weakness of the village to facilitate the need for resources in order to achieve the targets of the immunization program.

Table 3 describes the role of village stakeholders in the basic immunization program from the interest dimension. It showed that most respondents considered their institutions as having no interest in succeeding in their immunization program. There was a strong interest, especially in indicators of participation and role of institutions, indicators of building coherent policies, and indicators of developing implemented programs. For other indicators, there were several sub-indicators that had a low level of stakeholder interest (score <3.0), including providing resources (infrastructure) and financing needed by the village for success immunization program (score 2.87), allocating resources (i.e., manpower, infrastructure, and funds/budget) routinely to support immunization programs according to its ability (score 2.87), and the ways of regulating the form and rhythm of village stakeholder collaboration in developing immunization programs in the village (score 2.91), as well as sub-indicators to ensuring imple-

Table 4
Analysis on Perception, Power and Importance Dimension

No	Indicators	Perception		Power		Interest	
		Score	Sign	Score	Sign	Score	Sign
1	Institutional participation and roles	8.74	-	7.93	-	9.25	+
2	Building a coherent policy	9.19	+	7.92	-	9.10	+
3	Building implemented programs	9.12	+	8.28	-	9.25	+
4	Resources and financial support	9.33	+	7.73	-	8.82	-
5	Developing cooperation and building an alliance	9.64	+	8.24	-	8.99	-
6	Assurance of sustainability and quality of commitment	9.52	+	7.91	-	8.95	-

mentation of various immunization program activities (score 2.95). These results illustrated the perception of stakeholders that they were not interested in providing routine resource and financing support, developing various activities related to immunization programs, and further ensuring implementation of these activities.

Based on the recapitulation, in the perception dimension, village stakeholders are perceived positively for all their roles in building coherent policies, developing various programs that could be implemented, providing resource and financing support, developing cooperation, and building alliances, as well as ensuring sustainability and quality commitments. Especially for indicators of participation and the role of institutions, it was still perceived as not good (see Table 4). From the power dimension, village stakeholders had revealed that all indicators on this dimension were not in a strong condition. In a sense, they regarded that their institution was low or even did not have enough authority to implement immunization programs, including its facilitation capacity. In the interest dimension, village stakeholders assumed that their institutions had such noticeable interest in immunization programs, especially for 3 (three) indicators, namely participation and the role of institutions, building coherent policies, and developing implemented programs. As for the other 3 (three) indicators, stakeholders considered the level of importance to be low, namely in supporting resources and financing, developing cooperation and building alliances, as well as in ensuring sustainability and quality of the commitments of parties (among stakeholders).

Table 5 moreover showed that respondents with less power, who had a less (negative) perception, was greater than those who had a good (positive) perception. Likewise, respondents with a low level of interest had less proportion than those with a good perception. The cross-relationship between power and interest also showed in the same picture, where respondents with less interest actually had a greater proportion of power than those with high power. To describe such a relationship among the dimensions role of village stakeholders, including perceptions, power, and interests, the statistical Chi-Square test was used. The results indicated that there was a noticeable relationship between perceptions and power of village stakeholders ($p=0.002$), the relationship between perceptions and interests ($p= 0.000$), and the relationship between the power of village

Table 5
Relationships Analysis between Dimensions Role of Village Level Stakeholders

Variable	Power					Interest				
	Low		High		*p-value*	Low		High		*p-value*
	n	%	n	%		n	%	n	%	
Perception										
Low	65	63	38	37	0.002*	60	58	43	42	0.000*
High	86	44	111	56		35	18	162	82	
Power										
Low						72	48	79	52	0.000*
High						23	15	126	85	

Note: * = Chi-Square Test with significancy p<0.05

stakeholders and their importance to the immunization program with p=0.000 (see Table 5). There were interrelationships between all dimensions of roles. This interaction also proved that stakeholders' perceptions of the immunization program would manifest in how they have defined their power and level of importance to the success of the immunization program in their village.

DISCUSSION

The results showed some dimensions of stakeholder perceptions related to immunization. It could be clearly seen from six indicators that there was one negative indicator (-), namely the indicator of participation and the role of institutions. They perceived although their institution had an important role in the immunization program in the village and their institution's support was a key success factor, some efforts to achieve basic immunization targets in the village were not fully supported. In fact, they did not consider it their duty and responsibility. Direct involvement in the implementation of the immunization program was still relatively lacking. This result indicates that village stakeholders acted only as supporting elements for the implementation of various health programs. This result was also reinforced by the fact that in dimensions of power and ability, village stakeholders had a negative score (-) for all sub-indicator items. These results are in line with Namazzi et al. study in Uganda, stating that although support of district and community level stakeholders was very high in the intervention of care for pregnant women, mothers in labor, and newborn babies, they were not a leading factor. High support was illustrated by an opinion that intervention provided positive benefits for the community (Namazzi et al., 2013). Ayiko et al. studied the perspective of local stakeholders in maternal and child health programs, which also illustrated similar results, where they admitted that the support rate was still low in delivery and provision of health facilities and postpartum care services even though they regarded themselves as an effective key factor (Ayiko et al., 2015).

The predisposing factor in the behavioral model was a factor related to personal motivation or intention to do something. Weak motivation had implications for low intention to take certain actions or practices that were expected as evidence of support,

as well as trigger behavior change. This distinguished it from supporting elements which tended to be more oriented towards the strengthening function and not as a driving force. Realizing the roles as a driving force for all stakeholders, it could be done through a partnership system because it could guarantee the effectiveness and sustainability of health programs in the future, including the achievement of immunization targets. A study held by Arifada and Rochmah proved that community roles in the immunization program partnership system were influenced by perception, participation, and communication. Meanwhile, the ongoing partnership process was influenced by common perception, evaluation monitoring was carried out, and the results of the partnership were influenced by synergies that existed between partner groups (Arifada & Rochmah, 2015).

The six indicators on interest dimensions showed a positive sign (+), namely participation and role of institutions, building coherent policies, and indicators for developing various programs that were implemented. These results proved that village stakeholders had high awareness that a successful immunization program ought to involve all partners in the village to strengthen the active involvement of all elements of society, developing various regulations, supporting rules, identifying various steps, and to provide appropriate actions according to regional characteristics. On the other hand, it turned out that village stakeholders showed a negative sign (-) when it came to indicators of resource support and financing, their ability to build cooperation and alliances, and ensuring sustainability and quality commitment.

This result proved some weaknesses of village stakeholders' roles who were likely afraid of making decisions, high dependence on local governments in the implementation of various health programs, as well as weaknesses in their bargaining position to ensure the sustainability of various important health programs. In implementing immunization programs, this condition illustrated that village stakeholders had relied heavily on the Health Office, PHC, village midwives, and even health cadres in determining all activities that are needed and must be carried out in achieving the target of CBI. High dependence ultimately had an impact on the tendency of passive and apathetic attitudes. This condition clearly showed the interest of village stakeholders in achieving immunization targets had not been optimal. As a result, a study conducted by Kartini et al. investigating the role of stakeholders in nutrition programs for toddlers showed a linear description (Kartini et al., 2020). Another major obstacle was related to limited linkages between stakeholders involved in financing and budgeting, so which created a passive attitude and apathy. This is in line with a study by Buccini et al., that study regarding breastfeeding was a friendly environment in Mexico (Buccini et al., 2020).

High dependence on local governments in the implementation of health programs occurs in all regions. A study by Sriatmi et al. also proved that there was high dependence of stakeholders on health technical agencies in implementation as

well as accountability for health programs because they tend to be passive (Sriatmi et al., 2021). The villages have no authority to decide and choose programs and activities that must be carried out, including determining its indicators of success. Village stakeholders considered that the authority given to villages was still not strong, including in managing village fund allocations as mandated by Law No. 6 of 2014. As mentioned in point 18, the village authority is responsible for administering village governance, implementing village development, and empowering village communities based on community initiatives, origin rights, and customs, including managing village institutions. One of the reasons was lacking experience and adequate information in managing village funds, as well as the fear of making wrong decisions which had implications for legal problems.

It was in line with a study conducted by Noviyanti et al. that most village officials still depend entirely on the village leader to manage village finances because they did not have sufficient understanding related to village financial management (Noviyanti et al., 2018). Another study proposed by Ismawati et al. in Blitar Regency showed the village head's role was very decisive in determining all activities and programs type to be financed, although sometimes was only as a signer because all had been carried out by other village officials. (Ismawati et al., 2017). On the other hand, a similar study by Fisabililah et al. proved that the higher the role capacity of village-level stakeholders will result in a higher level of community participation. It also would show the high level of independence of the village (Fisabililah et al., 2020).

Some noticeable reason behind the village's independence in immunization programs was the local government which has not an optimal commitment yet to managing health resources and strengthening the potential for community health empowerment. According to Iswarno et al., the local government's political commitment to MCH program was still low, as evidenced by minimal budget allocation for the MCH program though all stakeholders agreed and supported the program. The involvement of local stakeholders in the program planning and budgeting process was still lacking too. The coordination of health officers with key stakeholders for planning and budgeting was not going well, so there were often differences in understanding.

Another obstacle was related to the quality of activity planning which was considered low, as well as the weak advocacy of the health office (Iswarno et al., 2013). Such weak coordination among stakeholders had also caused unoptimal village independence in implementing health programs. Ineffective coordination was caused by a lack of authority and skills, as well as communication barriers for sharing information and creating mutual understanding among stakeholders (Ismawati et al., 2017). It was in line with a study conducted by Ayiko et al., where stakeholders identified various obstacles in the utilization of health services, including the low capacity of local governments in localizing national policies and strategies as well as formulating local policies, inadequate interaction among local

stakeholders, frequent misunderstandings, inadequate resources, lack of trust, and confidence (Ayiko et al., 2015).

Other obstacles to implementing policies in regions, especially human resource capacity, were not optimal. The frequent occurrence of job mutations contributed to the weaknesses, capabilities, and skills of local implementers both directly and indirectly. Another study by Purbani et al. in the Grobogan district showed a related implementation of HIV/AIDS program policies. It showed that stakeholders' roles in the implementation of regional policies have not been going well because many members of the formulation team, who were currently no longer in the same position or have changed positions (or mostly new officials), had not received further information. Although budgeting for socialization and mobilization of human resources in services increased from the sub-district level, the budget allocation sourced from government funds in Grobogan district continued to decline, and there was no solution of definite replacement. The regional government's strategic planning for HIV-AIDS prevention efforts in the Grobogan district was still at the level of policy agenda, thus proposing an exit strategy (Purbani et al., 2019). This illustration proved the commitment of local government, which had not fully met the expectations of local stakeholders in health programs.

According to Iswarno et al., there were three indicators assessing the government's political commitment, namely: 1) how many statements of support from leaders, bureaucratic officials, politicians, and decision-makers in the regions related to certain health policies, 2) how many regulations issued to support health programs implementation, and 3) what kind of resources were prepared in supporting program implementation, especially resource support, including adequate infrastructure and budgeting (Iswarno et al., 2013). Study Kapiriri et al. proved that politicians were the most prominent stakeholders in setting national health priorities, which emphasized their legitimacy and urgency as decision-makers. Politicians have the opportunity to simultaneously assess the three attributes of participation (i.e., strength, legitimacy, and urgency) in setting priorities for health programs (Kapiriri & Razavi, 2021).

Various efforts could be undertaken to build and increase village stakeholder capacity to achieve CBI targets through strengthening roles in continuous socialization and dissemination of information until a complete understanding and perception of the immunization program were obtained. A positive attitude and perception it was believed to create a sense of interest in the program and foster an intention to participate actively and contribute in order to achieve success. The capacity of local stakeholders could also be increased by creating a learning process and developing the concept of leaders and teams, creating stimulus for change, creativity, and innovation, promoting local ownership, and involvement in assessing the impact of a program. On the other hand, it turned out that the opportunity for mutual collaboration among stakeholders was also greater when there was more frequent interaction among them

(Ekirapa-Kiracho et al., 2017). Therefore, it is necessary to establish both coordination and communication mechanisms that are interactive, direct, and interpersonal.

CONCLUSIONS

The role of village stakeholders in the basic immunization program was considered the weakest in the power dimension, followed by interest and perception dimensions, respectively. The indicators of the role that were regarded as the most difficult in implementing immunization program in the village were in providing resource and financial support, developing cooperation and building an alliance, as well as ensuring sustainability and commitments quality. There were interrelationships between all dimensions of roles partially, between perceptions and power, perceptions and interest, and also between power and interest. Weak authority in making decisions in the health sector was the main reason given by village stakeholders. Therefore, there was a high dependence on Health Office, PHC, Village Midwives, and even Health Cadres in its implementation, including in the basic immunization program. The lack of clarity and low understanding of village stakeholders towards basic immunization programs was an obstacle to developing positive roles in their power dimensions. For this reason, it was necessary to increase the capacity of village stakeholders through continuous socialization and dissemination of their roles in the health sector, as well as to strengthen the patterns and mechanisms of interactive, direct, and interpersonal coordination and communication. Strengthening advocacy by Health Office to Regional Government is necessary to be carried out in order to prepare regulations and rules that describe more clearly indicators of community empowerment in development budgeting priorities through optimizing village funds. The village stakeholders, in addition, need to strengthen the comprehensive community empowerment through the principle of mutual cooperation, especially in anticipating the risk of transmission of new infectious diseases in the future, such as omicron, acute hepatitis, and so on.

ACKNOWLEDGMENT

Special gratitude to the Faculty of Public Health Universitas Diponegoro for providing financial support for this research through the state university with a legal entity (locally known as Perguruan Tinggi Negeri Berbadan Hukum or PTNBH). The research scheme was based on the approval of the Dean of Public Health Faculty of Universitas Diponegoro with a registration number 065/UN7.5.9.2/HK/2021 on April 20th, 2021. This gratitude extends to the Management Health Office of Tegal District in Central Java for site licensing and providing required data.

REFERENCES

Agócs, M., Ismail, A., Kamande, K., Tabu, C., Momanyi, C., Sale, G., Rhoda, D. A., Khamati, S., Mutonga, K., Mitto, B., & Hennessey, K. (2021). Reasons why children miss vaccinations in Western Kenya; A step in a five-point plan to improve routine immunization. *Vaccine*, *39*(34), 4895–4902. https://doi.org/10.1016/j.vaccine.2021.02.071

Arifada, A. Y., & Rochmah, T. N. (2015). Analisis Sistem Kemitraan dalam Program Imunisasi Berdasarkan Peran Perangkat Desa, Bidan

Desa dan Masyarakat. *Jurnal Administrasi Kesehatan Indonesia*, *3*(2), 139–150. https://doi.org/10.1145/3132847.3132886

Ayiko, R., Basheka, B., Kareija, G., Pontious, A., Nelson, D., Anguyo Onzima, R., Sreeramareddy, C., Govule, P., Rogers, A., Benon, B., Gerald, K., Robert Onzima, A., Chandrashekhar, S., & Philip, G. (2015). Perspectives of Local Government Stakeholders on Utilization of Maternal and Child Health Services; and Their Roles in North Western Uganda. *International Journal of Public Health Research*, *3*(4), 135–144. http://www.openscienceonline.com/journal/ijphr

Buccini, G., Harding, K. L., Eguiluz, I. F., Safon, C. B., Hromi-Fielder, A., De Cosio, T. G., & P rez-Escamilla, R. (2020). An analysis of stakeholder networks to support the breastfeeding scale-up environment in Mexico. *Journal of Nutritional Science*, *9*(10), 1–10. https://doi.org/10.1017/jns.2020.4

Ekirapa-Kiracho, E., Ghosh, U., Brahmachari, R., & Paina, L. (2017). Engaging stakeholders: Lessons from the use of participatory tools for improving maternal and child care health services. *Health Research Policy and Systems*, *15*(Suppl 2), 17–28. https://doi.org/10.1186/s12961-017-0271-z

Febriastuti, N., Arif, Y. S., & Kusumaningrum, T. (2014). Kepatuhan Orang Tua dalam Pemberian Kelengkapan Imunisasi Dasar pada Bayi 4-11 Bulan. *Pediomaternal Nursing*, *031*, 1–15. https://ojs2.e-journal.unair.ac.id/PMNJ/article/view/11793

Felicia, F. V., & Suarca, I. K. (2020). Pelayanan Imunisasi Dasar pada Bayi di Bawah Usia 12 Bulan dan Faktor yang Memengaruhi di RSUD Wangaya Kota Denpasar Selama Masa Pandemi COVID-19. *Sari Pediatri*, *22*(133), 139–145.

Fisabililah, F. F. N., Nisaq, A. R., & Nurrahmawati, S. (2020). Pengelolaan Dana Desa dalam Pemberdayaan Masyarakat. *JIAP (Jurnal Ilmu Administrasi Publik)*, *8*(1), 208. https://doi.org/10.31764/jiap.v8i1.1932

Fisher, M. P., Gurfinkel, D., Szilagyi, P. G., Saville, A., Albertin, C., Breck, A., Valderrama, R., & Kempe, A. (2019). Supporting and sustaining centralized reminder/recall for immunizations: Qualitative insights from stakeholders. *Vaccine*, *37*(44), 6601–6608. https://doi.org/10.1016/j.vaccine.2019.09.055

Irawati, N. A. V. (2020). Imunisasi Dasar dalam Masa Pandemi COVID-19. *Jurnal Kedokteran Universitas Lampung*, *4*(2), 205–210. https://juke.kedokteran.unila.ac.id/index.php/JK/article/view/2898/

Ismawati, L., Sriatmi, A., & Fatmasari, E. Y. (2017). Analisis Peran Pemerintah Desa dalam Penyusunan Anggaran dana Desa untuk Pengembangan Kesehatan di Posyandu Kecamatan Srengat Kabupaten Blitar. *Jurnal Kesehatan Masyarakat*, *5*(1), 75–84. https://ejournal3.undip.ac.id/index.php/jkm/article/view/14875/14391

Iswarno, I., Hasanbasri, M., & Lazuardi, L. (2013). Analisis Untuk Penerapan Kebijakan: Analisis Stakeholder Dalam Kebijakan Program Kesehatan Ibu Dan Anak Di Kabupaten Kepahiang. *Jurnal Kebijakan Kesehatan Indonesia*, *2*(02), 77–85. https://jurnal.ugm.ac.id/jkki/article/view/3218

Kapiriri, L., & Razavi, D. S. (2021). Salient stakeholders: Using the salience stakeholder model to assess stakeholders' influence in healthcare priority setting. *Health Policy OPEN*, *2*(May), 1–7. https://doi.org/10.1016/j.hpopen.2021.100048

Kartini, E., Kiswanto, Hanafi, A., Nurmaimun, & Rany, N. (2020). The Analysis of Stakeholders Role ' s in the Children Under-five Years Nutrition Program in Kampar. *Jurnal Kesehatan Komunitas*, *6*(2), 243–247. https://jurnal.htp.ac.id/index.php/keskom/article/view/541

Kementerian Kesehatan & UNICEF Indonesia. (2020). *Imunisasi Rutin Anak Selama Pandemi COVID-19 di Indonesia: Persepsi Orang tua dan Pengasuh* (pp. 1–16). https://www.unicef.org/indonesia/media/6071/file/

Lyu, J., Miao, T., Dong, J., Cao, R., Li, Y., & Chen, Q. (2020). Reflection on lower rates of COVID-19 in children : Does childhood immunizations o ff er unexpected protection ? *Medical Hypotheses*, *143*(109842), 1–6. https://doi.org/10.1016/j.mehy.2020.109842

Mugali, R. R., Mansoor, F., Parwiz, S., Ahmad, F., Safi, N., Higgins-Steele, A., & Varkey, S. (2017). Improving immunization in Afghanistan: results from a cross-sectional community-based survey to assess routine immunization coverage. *BMC Public Health*, *17*(1), 1–9. https://doi.org/10.1186/s12889-017-4193-z

Namazzi, G., Kiwanuka, S. N., Peter, W., John, B.,

Olico, O., Allen, K. A., Hyder, A. A., & Ekirapa, K. E. (2013). Stakeholder analysis for a maternal and newborn health project in Eastern Uganda. *BMC Pregnancy and Childbirth*, *13*(58), 1–12. https://doi.org/10.1186/1471-2393-13-58

Nolna, S. K., Bonono, C. R., Moncher, M. N., Bindé, T., Nolna, D., & Zogo, P. O. (2018). Factors influencing the performance of routine immunization in urban areas: A comparative case study of two cities in Cameroon: Douala and Yaoundé. *Vaccine*, *36*(49), 7549–7555. https://doi.org/10.1016/j.vaccine.2018.10.048

Noviyanti, Gamaputra, G., Lestari, Y., & Utami, D. A. (2018). Pengidentifikasian Pendapatan dan Prioritas Penggunaan Dana Desa. *PUBLISIA*:*Jurnal Ilmu Administrasi Publik*, *3*(2), 112–121.

Purbani, R. K., Mahendradhata, Y., & Subronto, Y. W. (2019). Analisis Stakeholder dalam Penanggulangan HIV-AIDS di Kabupaten Grobogan. *Jurnal Kebijakan Kesehatan Indonesia*, *08*(03), 136–141. https://jurnal.ugm.ac.id/jkki/article/view/37538

Sari, W., & Nadjib, M. (2019). Determinan Cakupan Imunisasi Dasar Lengkap pada Penerima Program Keluarga Harapan. *Jurnal Ekonomi Kesehatan Indonesia*, *4*(1), 1–9. https://doi.org/10.7454/eki.v4i1.3087

Sell, H., Assi, A., Driedger, S. M., Dubé, È., Gagneur, A., Meyer, S. B., Robinson, J., Sadarangani, M., Tunis, M., & MacDonald, S. E. (2021). Continuity of routine immunization programs in Canada during the COVID-19 pandemic. *Vaccine*, *39*(39), 5532–5537. https://doi.org/10.1016/j.vaccine.2021.08.044

Senewe, M. S., Rompas, S., & Lolong, J. (2017). Analisis Faktor-Faktor yang Berhubungan dengan Kepatuhan Ibu dalam Pemberian Imunisasi Dasar di Puskesmas Tongkaina Kecamatan Bunaken Kotamadya Manado. *Jurnal Keperawatan*, *5*(1), 1–12. https://ejournal.unsrat.ac.id/index.php/jkp/article/view/14732

Singh, S., Sahu, D., Agrawal, A., & Vashi, M. D. (2019). Barriers and opportunities for improving childhood immunization coverage in slums: A qualitative study. *Preventive Medicine Reports*, *14*(March), 100858. https://doi.org/10.1016/j.pmedr.2019.100858

Sriatmi, A., Jati, S. P., Suryoputro, A., & Fatmasari, E. Y. (2021). Stakeholder Mapping Analysis on the Scaling-Up Nutrition Movement during the 1000 Days of Life between the Urban and Rural Government Areas. *Unnes Journal of Public Health*, *10*(1), 68–77. https://doi.org/10.15294/ujph.v10i1.38029

Triana, V. (2016). Faktor yang Berhubungan dengan Pemberian Imunisasi Dasar Lengkap pada Bayi Tahun 2015. *Jurnal Kesehatan Masyarakat Andalas*, *10*(2), 123–135. http://jurnal.fkm.unand.ac.id/index.php/jkma/article/view/196/182