

The Relationship of the Role of Community Cadres with The Quality of Health Services in Children under five in Posyandu

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ABSTRACT

The quality of health services for children under five is an important determinant of the success of maternal and child health programs, particularly in growth monitoring, immunization, and malnutrition prevention. Posyandu cadres play a strategic role as a link between the community and health workers in providing basic health services. However, variations in cadres involvement may affect the coverage and quality of Posyandu services. This study aimed to analyze the relationship between cadre roles and the quality of health services for children under five at Posyandu in the working area of Puskesmas Pakuan Baru, Jambi City. This quantitative study used an analytical cross-sectional design and involved all seven Posyandu in the area. The population consisted of 35 active cadres, all of whom were selected using total sampling. Data were collected through structured interviews using a cadre role questionnaire and an observation sheet for service quality. Univariate analysis used frequency distributions, while bivariate analysis employed the Chi-Square test with $\alpha = 0.05$. The results showed that 20 cadres (57.1%) had good roles, while 15 (42.9%) had less good. Regarding service quality, 22 respondents (62.9%) reported good services, while 13 (37.1%) reported less good. The Chi-Square test showed a significant relationship between cadre roles and service quality ($p = 0.004$; OR = 8.5). Thus, stronger cadre roles were significantly associated with better Posyandu health service quality. Regular cadre training and supervision are recommended to improve cadre performance.

Keywords : The Role Of Cadres, Quality Of Service, Toddlers, Posyandu

INTRODUCTION

The health of children under five is one of the main indicators of the success of a country's health development, because the toddler period is a golden phase (golden period) that determines the quality of human resources in the future. An analysis of long-term trends from 2000-2021 at the global level found that child mortality rates still showed high disparities between countries, and the availability of health resources including immunization coverage and health spending had a significant effect on the decline. This study also confirms that differences in access and quality of basic health services are one of the main causes of the slow decline in child mortality in a number of regions, especially developing countries. The findings confirm that strengthening community-based health services is an important key in reducing morbidity and mortality in the toddler age group (Zang et al., 2025).

Children's health issues in Indonesia is still a big PR. Based on the results of the 2023 Indonesian Health Survey (SKI), the national prevalence of stunting in toddlers was recorded at 21.5%, or equivalent to about one in five toddlers in Indonesia experiencing stunting, with 23 out of 38 provinces (60.5%) being above the national average and East Nusa Tenggara occupying the highest position (37.9%) (Health Development Policy Agency of the Ministry of Health, 2024; Kompas, 2024). Keka (2025) in a follow-up analysis of the 2023 SKI data found that the prevalence of stunting in toddlers in Indonesia still varies greatly between provinces, with maternal education, access to sanitation, and basic immunization equipment as the main determining factors contributing to the incidence. In line with this, a study of SKI 2023 data on toddlers aged 0-59 months also found that the prevalence of stunting remained high, especially in the age group of 24-35 months with the highest prevalence reaching 25.8%, followed by the age group of 36-47 months (23.6%) and 12-23 months (22.7%), showing a pattern of increased risk as children kusumayati, 2024).

One of the community-based health efforts (UKBM) that plays a strategic role in answering these problems is the Integrated Service post (Posyandu). Posyandu provides five main services, namely maternal and Child Health (KIA), Family Planning (KB), nutrition, immunization, and Prevention and control of diarrhea, all of which are oriented to improving the health of mothers and children under five (Christina et al., 2025; Nainggolan et al., 2025a). The higher the community gets access to quality health services through posyandu, the higher the overall level of Public Health. Therefore, the success of posyandu in carrying out its functions is highly dependent on the quality of services provided to the target toddler (Suparto et al., 2022).

Jambi province also faces these challenges, reflected in the fluctuation in the achievement of toddler health programs in the region. According to Latif (2025), the stunting rate in Jambi province experienced a worrying surge, from 13.5% in 2023 to 17.1% in 2024. This increase is considered to receive serious attention, considering that it indicates that the effectiveness of cross-sector interventions and the readiness of health infrastructure in the regions are not fully optimal. Although this figure is still much better than the initial condition in 2018 which reached 30.1%, the recurrence of the increase in 2024 shows that community-based toddler health service efforts have not been running consistently and still need continuous strengthening. Furthermore, Latif (2025)

reminded that the issue of stunting cannot be viewed solely as a nutritional problem, but is directly related to the quality of future generations, economic productivity, and overall regional competitiveness. Thus, it can be said that the issue of the quality of toddler health services in Jambi province is still volatile and has the potential to regress if the strengthening of community-based services does not continue to be carried out on an ongoing basis (Latif, 2025; Shoufiah et al., 2026).

Viewed from the administrative side, Jambi city actually shows the lowest prevalence of stunting when compared to other districts/cities in Jambi province. Based on data from the Indonesian Nutritional Status study (SSGI) in 2021, Pangaribuan, Napitupulu, and Kalsum (2022) revealed that Jambi city recorded a stunting rate of 17.4%, a figure that is much smaller than Muaro Jambi regency which actually reached 27.2% and placed it as the area with the highest proportion of stunting in the province. The study also underlines that the decrease in stunting numbers quantitatively from year to year was not followed by significant improvements in quality, even areas that originally had the best achievement had the potential to turn into the worst in the next period. This gives the impression that administrative achievements that look good in an area do not necessarily reflect the equitable distribution and consistency of the quality of health services for children under five in all areas of puskesmas work in it. The difference in achievement between Posyandu in one puskesmas working area is still very likely due to the performance gap of cadres in each posyandu, so this should be a concern for city-level health program managers to continue to strengthen community-based services (Pangaribuan, Napitupulu, & Kalsum, 2022).

Posyandu cadres occupy a very strategic position as the front guard in community-based health services, because they are the ones who play the role of motivators, facilitators, as well as communicators who Bridge health workers with target communities (Hadjo et al., 2025a; Nainggolan et al., 2025b). The task of cadres does not stop at weighing and recording the growth of toddlers alone, but also includes educational efforts, mobilizing citizen participation, to early detection of health problems in toddlers (Hadjo & Fadly, 2026). The success of the posyandu program in reaching all toddler targets in a region depends on how optimal the role played by cadres is. Therefore, the level of competence and activity of cadres becomes an integral part of the quality of Health Services obtained by the community (Harahap, Batubara, & Rosmega, 2024).

However, the problem of low activity of cadres in carrying out posyandu activities is still often found in various regions. One of the benchmarks that can describe this condition is D/S coverage, which is the ratio between the number of toddlers who attend and are weighed at the posyandu and the number of toddlers who have a healthy card (kms). A study in the working area of the Jeumpa Health Center in Bireuen regency revealed that the D/S coverage there only reached 53.4%, which is relatively low, and the role of cadres is strongly suspected to be one of the causes of this achievement. This finding further strengthens the assumption that the role of cadres that are not running optimally will have a direct impact on the low utilization and quality of services in posyandu (Winandar, 2023).

The quality of toddler health services in posyandu itself can be seen from various aspects, including the accuracy of service procedures, completeness of facilities, skills of officers and cadres, to the level of public satisfaction with the services they receive. The more optimally these

aspects are implemented, the greater the public's confidence to continue to use posyandu sustainably. Conversely, inadequate services have the potential to reduce the interest of community visits, so that the process of monitoring the growth and development of toddlers becomes less than optimal. The realization of consistently good service quality can only be achieved if the cadres carry out their roles actively and competently in every implementation of posyandu activities (Putri et al., 2023).

A recent study conducted by Harahap, Batubara, and Rosmega (2024) in Lubuk Dendang village revealed a significant link between the role of cadres and the level of participation of mothers of toddlers in posyandu activities, where mothers of toddlers who received active support from cadres proved to be more consistent in bringing their children to visit posyandu. These results show that the presence of cadres not only has an impact on increasing the number of visits, but also supports the sustainability of monitoring the health of toddlers from time to time. The empirical evidence confirms that strengthening the role of cadres can be used as an effective strategy to improve the achievement of toddler health programs at the posyandu level (Harahap, Batubara, & Rosmega, 2024).

Another study by Fidorova and Febriani (2023) carried out at Mawar Posyandu Tuntungan village I Medan also found that the quality of maternal and Child Health Services (KIA) is greatly influenced by the extent to which cadres actively carry out their roles in daily activities. The better the role performed by cadres, the higher the level of trust and satisfaction of the community to the services provided. This finding further reinforces the evidence that the role of cadres is a crucial determining factor in realizing the quality of community-based health services, and not only applies to one particular region. The consistency of the results from the various locations of this study confirms that the relationship between the role of cadres and service quality is general and deserves further study in various geographical contexts (Fidorova & Febriani, 2023).

A similar thing was also found in a study published in the Journal of Human asylum nursing (2024), which emphasized the importance of the contribution of posyandu cadres in encouraging the participation of mothers under five in posyandu activities, with almost 70% of respondents saying that cadres in their environment were actively carrying out their duties. The study also highlights that family support and policies that support community participation can further strengthen the effectiveness of the role of cadres in the service of toddlers. These various findings consistently lead to a common thread that the role of cadres is an important variable that continues to be relevant to be studied in efforts to improve the quality of toddler health services in various puskesmas working areas (Juwita & Ediyono, 2023).

Looking at the data and the results of previous studies, it is clear that studies on the relationship of the role of cadres with the quality of health services for under-five children have been conducted in various regions in Indonesia, but similar studies specifically targeting posyandu in the working area of Pakuan Baru Puskesmas Jambi city are still very rare. In fact, as one of the puskesmas in Jambi city that plays a role in accelerating the reduction of stunting and improving health services for under five children, the study of the role of cadres in this region is important to ensure that the program has been running in accordance with the expected target. The emptiness

of this study confirms the need for empirical studies that focus specifically on the context of the working area of Puskesmas Pakuan Baru. Without the support of adequate data and scientific evidence, efforts to improve the quality of posyandu services in the region are feared not to be on target (Harahap, Batubara, & Rosmega, 2024).

Departing from these considerations, the researchers were interested to examine further the relationship of the role of community cadres with the quality of health services in children under five in posyandu working area Puskesmas Pakuan Baru Kota Jambi. This interest arises in view of the importance of the position of cadres as the forefront of community-based health services, while scientific evidence that specifically describes the condition in this region is still very limited. Through this study, it is expected to obtain an objective picture of the condition of the role of cadres and the quality of services running at this time, as well as the basis for recommendations for local health program managers. Researchers hope that the results of this study can make a real contribution to efforts to strengthen the capacity of cadres and improve the quality of health services for children under five in a sustainable manner in the working area of Puskesmas Pakuan Baru Kota Jambi.

METHODS

This study aims to analyze the relationship of the role of community cadres with the quality of health services in children under five in the Working Area of Posyandu Puskesmas Pakuan Baru Kota Jambi. This type of research is a quantitative study with cross sectional analytical design, where the measurement of the independent variable (the role of cadres) and the dependent variable (the quality of health care for children under five) is carried out in one observation at a time without any follow-up. The study was conducted in February 2026, the study was conducted in all posyandu (7 posyandu) in the working area of Puskesmas Pakuan Baru Kota Jambi. The population in this study is all active posyandu cadres in the region as many as 35 people. The sampling technique used is total sampling, that is, all members of the population who meet the criteria are used as research respondents (n=35). The sample inclusion criteria include: cadres who are officially registered and recorded to be active in carrying out cadre duties for at least the last 6 months, willing to become respondents by signing the approval sheet, and in good health and able to communicate well during the interview. Meanwhile, the exclusion criteria included cadres who were on leave or not actively performing their duties during the study period, cadres who were sick or unable to attend, and cadres who resigned as respondents before the data collection process was completed.

Data collection in this study was conducted using questionnaires and observation methods. Data on the role of community cadres were collected through structured questionnaires by respondents, which included four dimensions of the role of cadres, namely as motivators, facilitators, educators, and community movers. Meanwhile, data on the quality of children's health services were collected through observation using observation sheets that assess aspects of input (availability of facilities and resources), process (implementation of Posyandu service activities), and output (achievement of children's health services). Before being used in the study, both

instruments have been tested for validity and reliability (Hadjo et al., 2025b). Validity test was conducted using product moment correlation with significance level 5%, with item criteria declared valid if the value of R count $>$ R table. Based on the results of the validity test, all items on the cadre role questionnaire have a calculated r value ranging from 0.432 to 0.781, while the items on the service quality observation sheet have a calculated R value ranging from 0.451 to 0.824, with a table r value of 0.361. Thus, the entire item of the instrument is declared valid. Reliability test was conducted using Cronbach's Alpha coefficient, with the results of Cronbach's Alpha value of 0.876 for the cadre role questionnaire and 0.903 for the observation sheet of the quality of toddler health services. The value is greater than 0.60 so that both instruments are declared reliable and feasible to use in research. Data analysis was carried out in a univariate manner using frequency distribution to describe the characteristics of each research variable, while bivariate analysis using Chi-Square test with the degree of significance $\alpha = 0.05$ in order to determine whether there is a relationship between the role of cadres and the quality of health care for toddlers in posyandu (Purba et al., 2026). This study has paid attention to research ethics, where before being included, each prospective respondent was first given an oral and written explanation of the objectives, benefits, procedures, and rights of respondents during the study, and only cadres who expressed their willingness voluntarily by signing informed consent were included as respondents.

RESULTS

1. Characteristics of Respondents

The characteristics of the respondents in this study include age, education level, length of cadre, and job status of posyandu cadres in the working area of Puskesmas Pakuan Baru Kota Jambi. A complete description of the characteristics of the respondents is presented in the following table.

Table 1. Distribution Characteristics of Posyandu Cadre Respondents in The Working area of Puskesmas Pakuan Baru Jambi City (n=35)

Characteristics	Categories	Frequency (n)	Percentage (%)
Age	20-35 years old	12	34,3
	36-50 years old	18	51,4
	>50 years	5	14,3
Education	Elementary/junior high school (elementary)	8	22,9
		21	60,0
	High school / equivalent College	6	17,1
Long Time To Be A Cadre	<5 years	14	40,0
	- 5 years	21	60,0
Employment Status	Not working / IRT	25	71,4
	Works	10	28,6

Total	35	100
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Based on Table 1, it is known that most of the respondents are in the productive age group of 36-50 years (51.4%), with the majority of high school education level/equivalent (60.0%). More than half of the respondents (60.0%) have been cadres for five years or more, which shows that the majority of cadres have sufficient experience in carrying out cadre duties in posyandu. Most of the respondents (71.4%) do not work or are housewives.

2. Variable Frequency Distribution of the Role of Cadres and the Quality of Toddler Health Services in Posyandu.

Univariate analysis was conducted to determine the distribution of variable frequency distribution of cadre roles and the quality of health services for children under five in posyandu.

Tabel 2. Variable Frequency Distribution of the Role of Cadres and the Quality of Toddler Health Services in Posyandu (n=35)

Variable	Categories	Frequency (n)	Percentage (%)
The Role Of Cadres	Good	20	57,1
	Less Good	15	42,9
Quality Of Service	Good	22	62,9
	Less Good	13	37,1
Total		35	100

Table 2 shows that more than half of the respondents (57.1%) have a cadres role in the good category, while the other 42.9% are still classified as not good at carrying out their role in posyandu. In the service quality variable, as many as 62.9% of posyandu have provided toddler health services with good categories, while 37.1% are still classified as not good. This picture indicates that although the majority of posyandu cadres and services are in the good category, there is still a considerable proportion that requires further attention and guidance to improve the quality of health services for toddlers evenly.

3. The Relationship Between the Role of Cadres and the Quality of Health Services for Children Under Five in Posyandu Working area of Puskesmas Pakuan Baru Kota Jambi

Bivariate analysis was conducted to determine the relationship between the role of cadres and the quality of health care for children under five using Chi-Square test with the degree of significance $\alpha = 0.05$.

Table 3. The Relationship Between the Role of Cadres and the Quality of Health Services for Children Under Five in Posyandu Working area of Puskesmas Pakuan Baru Kota Jambi

The Role Of Cadres	Good Service Quality n (%)	Less Good Quality Of Service n (%)	Total n (%)	p-value	OR (95% CI)
Good	17 (85,0)	3 (15,0)	20 (100)	0,004	8,5 (1,8–39,9)

Less Good	5 (33,3)	10 (66,7)	15 (100)
Total	22 (62,9)	13 (37,1)	35 (100)

Based on Table 3, it is known that of the 20 respondents with good cadres roles, as many as 17 people (85.0%) provide posyandu services with good categories, while only 3 people (15.0%) are classified as less good. In contrast, of the 15 respondents with less good cadre roles, the majority of 10 people (66.7%) provide less good, and only 5 people (33.3%) are classified as good. Chi-Square test results showed a value of $p = 0.004$ ($p < 0.05$), which means there is a statistically significant relationship between the role of cadres with the quality of health care in children under five in posyandu working area of Puskesmas Pakuan Baru Kota Jambi. The value of Odds Ratio (OR) of 8.5 (95% CI: 1.8–39.9) shows that cadres with good roles have an 8.5 times greater chance of providing good quality health services for children under five compared to cadres whose roles are less good.

DISCUSSION

1. Variable Frequency Distribution of the Role of Cadres and The Quality of Toddler Health Services in Posyandu.

In terms of education, the level of education is one of the factors that can affect the cognitive capacity of cadres in understanding, receiving, and applying health information. A better level of education can support cadres ability to understand health materials, communicate with the community, and carry out their duties and responsibilities in Posyandu activities. This is in line with research that shows that the characteristics of cadres, including education level, are related to the performance of Posyandu cadres. Thus, the level of education can be one of the factors that support the ability of cadres to understand and apply health information to the target community (Sodikin, 2025).

On the aspect of the service period as a cadre, it was found that more than half of the respondents (60.0%) had served in this role for five years or more. The length of this service period can describe the level of mastery of experience and technical skills in carrying out various activities in Posyandu. Experience is one of the factors related to the performance of health cadres (Gunawan & Ayubi, 2023). This indicates that the experience gained during the performance of duties can help cadres become more skilled in carrying out various Posyandu activities in the field.

In terms of employment status, the majority of respondents (71.4%) were not working or had the status of a housewife, while the rest (28.6%) had a permanent job. Employment status that is not tied to formal economic activity tends to provide greater time flexibility for a person to be actively involved in social activities, including Posyandu activities. The activeness of Posyandu cadres is influenced by various factors related to the condition of the cadres and the environment for carrying out their duties (Herlinawati & Pujiati, 2019). In the context of this study, the dominance of cadres who do not work formally can be one of the conditions that support the availability of time to run Posyandu activities more actively.

When examined thoroughly, the combination of characteristics of respondents in this study, namely productive age, adequate secondary education level, long work experience, and job

status that supports flexibility of time seems quite ideal to support the implementation of the regeneration task. The combination of various demographic characteristics is thought to contribute to the high proportion of cadres classified in the category of good roles in this study. This combination of complementary characteristics is estimated to be one of the optimal supports for the implementation of cadre tasks in the working area of the Pakuan Baru Health Center in Jambi city.

The findings showed that more than half of the respondents (57.1%) were in the category of good cadre roles, while the rest (42.9%) were still in the less good category. The large proportion of cadre roles with good categories indicates that most of the cadres at the research site have performed their functions as motivators, facilitators, and communicators according to expectations in the implementation of Posyandu programs. Cadre performance can be influenced by various internal and external factors, including knowledge, motivation, experience, training, and support from the work environment (Gunawan & Ayubi, 2023). Thus, the high proportion of cadres with good roles in this study can reflect the existence of supporting factors that help cadres in carrying out their duties.

However, 42.9% of respondents were found to have a poor role category, which reflects that efforts to strengthen the capacity of cadres in this region have not fully reached all cadres evenly. This can be triggered by various factors, ranging from lack of continuous training to low internal motivation of some cadres in carrying out their duties. There are various factors that influence the active role of cadres in the implementation of Posyandu (Indilria et al., 2022). Therefore, capacity building through coaching, training, and strengthening the motivation of cadres is important to improve the consistency of the implementation of cadre tasks in the field.

The idea of the role of cadres as the forefront of community-based health services is aligned with various studies on the role of cadres in the implementation of health services at the community level. Health cadres have a role in supporting efforts to improve maternal and child health in the Puskesmas work area (Yuliawati & Galaupa, 2026). The high proportion of cadres with good role categories in this study can be seen as a positive signal to the readiness of human resources non-health workers in supporting the health program of children under five in the working area of Puskesmas Pakuan Baru.

In the service quality variable, it was found that 62.9% of Posyandu had run toddler health services in the good category, while 37.1% were still in the less good category. The high number of good category services indicates that the majority of Posyandu in the study area have been able to meet basic service standards for toddlers, although some still require further attention. There is a relationship between the performance of cadres and the level of satisfaction with Posyandu services (Indrayani et al., 2022). In addition, Posyandu cadres have an important role in improving the nutritional status of toddlers through growth monitoring, education, and family assistance. Optimizing the role of cadres can support improving the nutritional status of toddlers, although in practice there are still various obstacles related to knowledge, skills, motivation, and facilities and infrastructure (Saleha & Cahyati, 2026).

On the other hand, the proportion of 37.1% Posyandu with poor service categories indicates that there are still gaps in the fulfillment of toddler health service standards in some Posyandu working areas. The gap can be influenced by various things, ranging from limited facilities and infrastructure, lack of technical skills of cadres, to low community participation in utilizing Posyandu services on a regular basis (Hadjjo & Rasyada, 2026). Various supporting factors for the implementation of cadre activities need to be considered so that cadre activity can be maintained and Posyandu services can run optimally (Herlinawati & Pujiati, 2019).

The researcher considered that the relationship between the demographic characteristics of cadres such as age, education, and length of cadre with a high proportion of well-categorized cadre roles in this study also contributed to the achievement of overall Posyandu service quality. Cadres with a longer service period tend to have more honed technical skills in carrying out service activities, so they are able to provide more standardized services to the target toddler. In addition, the dominance of non-working cadres allegedly contributed to the consistency of their presence and involvement in every Posyandu agenda held.

When compared with similar studies in other locations, the achievement of good service quality in this study is comparable to the findings of several previous studies, which also showed that the majority of respondents were in the category of good service although still leaving a considerable proportion in the category of poor. There are various factors that affect the performance of Posyandu cadres, so strengthening these factors is important in supporting the optimization of the implementation of Posyandu services in the Puskesmas work area (Kartika, Nuraini, & Asriwati, 2024).

Referring to the overall results of the univariate analysis, it appears that there is a consistent pattern of linkages between the characteristics of respondents, the level of cadre roles, and the achievement of posyandu service quality in the working area of the Pakuan Baru Health Center in Jambi city. The dominant proportion of cadres in the good role category is in line with the high proportion of posyandu in the good service category, thus leading to the suspicion of a unidirectional relationship between the two variables. This pattern is an important basis for follow-up through bivariate testing to confirm the statistical significance of the relationship. Although the majority of posyandu cadres and services have been classified as good, it is still necessary for continuous coaching efforts so that cadres and posyandu who are still in the less good category can be lifted, so that the equitable distribution of the quality of health services for under-five children can be realized in the entire working area of the puskesmas.

2. The Relationship Between the Role of Cadres and the Quality of Health Services For Children Under Five in Posyandu Working area of Puskesmas Pakuan Baru Kota Jambi

Chi-Square test results in this study showed a statistically significant relationship between the role of cadres with the quality of health care in children under five in the Working Area of Posyandu Puskesmas Pakuan Baru Kota Jambi. This finding indicates that the optimal role of cadres, both as motivators, facilitators, and communicators, contributes directly to the implementation of higher quality Posyandu services. The value of the Odds Ratio obtained

reinforces the picture, namely that cadres with good roles have a much greater tendency to produce good quality services than cadres with less optimal roles. This is in line with the concept that cadres are the front guard in the implementation of Posyandu activities, so that their competence and activeness in carrying out their functions also determine the quality of services received by the target toddlers. Conversely, the finding of some cadres with less good roles who are still able to provide good quality services shows that the quality of Posyandu services does not entirely depend on the role of cadres alone, but can also be influenced by other factors such as facilities and infrastructure support, the involvement of accompanying health workers, and the characteristics of the Posyandu working area itself. Thus, strengthening the role of cadres remains one of the important strategies, but needs to be accompanied by attention to other supporting factors so that the quality of Posyandu services can be improved more thoroughly and evenly.

The trend pattern found in this study, where cadres play a dominant role in producing good quality services, is in line with the findings of previous research that shows the importance of the role of cadres in the implementation of services and monitoring the health of toddlers in Posyandu. Reslanto et al. (2026) explained that the optimization of the role of Posyandu cadres is an important part in supporting the improvement of the growth and development status of toddlers. This reinforces the picture that the role of cadres is one of the important factors in supporting the achievement of toddler health services in Posyandu. Thus, the more optimal the cadres carry out their duties, the greater the chance of service activities and health monitoring of toddlers can be implemented effectively (Reslanto et al., 2026).

The relationship between the role of cadres and service quality can be explained through the concept of social roles in community-based health services, where cadres who perform their functions optimally as motivators, facilitators, and communicators will be better able to create a service process that is structured and responsive to target needs. Gunawan and Ayubi (2023) in their literature review on the determinants of health cadre performance emphasized that cadre performance is influenced by various factors, both internal and external factors, which can ultimately support the optimization of the implementation of health service activities in the community. This conceptual framework is relevant to explain why the role of good cadres in this study is directly proportional to the high proportion of good quality services (Gunawan & Ayubi, 2023).

The or value of 8.5 in this study describes the contribution of cadres to the achievement of Posyandu service quality. This finding can be attributed to herlinawati and Pujiati's (2019) research on factors related to the activeness of Posyandu cadres. The activeness of cadres is one of the important aspects in the continuity of Posyandu activities, because active cadres are more likely to be consistently involved in various service activities. Although the context and magnitude of the relationship in the two studies can be different, both show that optimal cadre involvement is one of the important factors in supporting the implementation of Posyandu activities (Herlinawati & Pujiati, 2019).

Another study conducted by Fidorova and Febriani (2023) at Mawar Posyandu Tuntungan village I Medan also showed the importance of the role of cadres in the implementation of

maternal and Child Health Services (KIA). The role of cadres in service activities can support the smooth implementation of activities and help bridge the needs of the community with available health services. The similarity of these patterns shows that strengthening the role of cadres can be one of the strategies in efforts to improve the quality of community-based health services (Fidorova & Febriani, 2023).

In the group of respondents with less good cadre roles, it was found that the majority (66.7%) produced services that were also less good. This condition illustrates that the weak role of cadres in carrying out the function of motivation, facilitation, and education to the community can be related to the lack of optimal quality of services provided to target toddlers in Posyandu. The low ability of cadres in organizing activities, providing proper education, and monitoring the health of toddlers can be factors that need to be considered in an effort to improve the quality of Posyandu services (Adriani et al., 2026).

However, there are still a small number of cadres with less good roles (33.3%) who are still able to produce good category services. This phenomenon can be explained by the existence of other supporting factors outside the role of individual cadres, such as active support from Puskesmas health workers, the availability of adequate Posyandu facilities and infrastructure, and the role of the community in supporting the sustainability of Posyandu activities. This condition shows that the success of Posyandu services is not only determined by the role of cadres, but also influenced by the synergy between cadres, health workers, the community, and the support of available facilities (Kasenda & Yudhanto, 2026). Indilria et al. (2022) showed that there are various factors that influence the active role of cadres in the implementation of Posyandu, so strengthening these supporting factors is important in improving the sustainability of services (Indilria et al., 2022).

The concept of health service quality can be further analyzed using the Donabedian theoretical framework that divides service quality into three dimensions, namely structure (input), process, and result (output). The role of cadres in this framework can be categorized as part of the structure and process dimensions, because the competence and activeness of cadres also determine how the service process is carried out to produce outputs in the form of Service Quality received by the community. In line with this, Sodikin (2025) in his research on the relationship of characteristics with the performance of Posyandu cadres shows the importance of cadre characteristics in supporting the implementation of tasks and performance of cadres. This theoretical framework reinforces the conceptual basis for the significant findings in this study (Sodikin, 2025).

The results of this study are also in line with the findings of Harahap, Batubara, and Rosmega (2024) in Lubuk Dendang Village which show a relationship between maternal knowledge and the role of cadres with the participation of under-five mothers in Posyandu activities. Support and involvement of cadres in Posyandu activities can help increase community participation in utilizing available services. The consistency of the findings shows that the role of cadres is not only related to aspects of service implementation, but also can contribute to the

utilization of health services by the community under five children more broadly (Harahap et al., 2024).

Compared with the research conducted in the Uptd Puskesmas Sidodadi work area, the results of this study showed a similar pattern, namely the relationship between factors related to cadres and the achievement of Posyandu service quality. Kartika, Nuraini, and Asriwati (2024) show that there are various factors that affect the performance of Posyandu cadres. The findings reinforce the view that improving the quality of cadre resources through various coaching and capacity building efforts is an important part in supporting the optimization of Posyandu services. The similarity of the pattern of results at various locations of this study reinforces the notion that the cadre factor is one of the important components in supporting the quality of community-based toddler health services (Kartika et al., 2024).

The linkage between cadre performance and the level of community satisfaction with Posyandu services was also strengthened by the findings of Indrayani, Sholeha, Oktavia, and Amalia (2022) who examined the relationship between cadre performance and Posyandu service satisfaction levels in Susukan Village, Cipicung District. The study showed that the performance of cadres is related to satisfaction with Posyandu services. These findings support the results of research that the more optimal cadres perform their duties, the greater the chance of Posyandu services can provide a good service experience for the community (Indrayani et al., 2022).

The researcher is of the view that the results of this study provide strong empirical evidence on the importance of strengthening the role of cadres as one of the main strategies in improving the quality of health services for toddlers at the posyandu level. The magnitude of the OR value obtained indicates that interventions that focus on increasing the capacity and activeness of cadres have the potential to have a significant impact on improving the overall quality of service in the working area of Puskesmas Pakuan Baru Kota Jambi. This condition further confirms that efforts to improve the quality of posyandu services cannot be separated from attention to sustainable development and empowerment of cadres.

Overall, the results of bivariate analysis in this study confirmed that there is a significant relationship between the role of community cadres with the quality of health services in children under five in posyandu working area of Puskesmas Pakuan Baru Kota Jambi. These findings are an important foundation for the formulation of program recommendations, especially related to increasing the capacity of cadres through continuous training, regular assistance by health workers, and strengthening support systems at the community level to ensure optimal and equitable toddler health services throughout the posyandu region.

CONCLUSIONS

The results showed that most of the respondents have the role of cadres in the good category, as many as 20 respondents (57.1%), while 15 respondents (42.9%) have the role of cadres in the category of less good. In the Posyandu service quality variable, as many as 22 respondents (62.9%) stated that Posyandu services were in the good category, while 13 respondents (37.1%) stated that services were in the less good category. The results of bivariate analysis showed a

significant relationship between the role of cadres with the quality of health services for children under five in Posyandu with a value of $p = 0.004$ ($p < 0.05$) and $OR = 8.5$. These findings indicate that optimizing the role of cadres is one of the important components in improving the quality of health services for children under five in Posyandu.

Operationally, the results of this study indicate the need for Pakuan Baru Puskesmas to strengthen cadre development through regular refresher training, mentoring, and routine supervision at the Posyandu level, especially in the aspects of communication, education, monitoring the growth and development of toddlers, and the implementation of cadre tasks in a standardized manner. This study has several limitations, including the relatively limited number of respondents and the scope of research conducted only in the working area of Pakuan Baru Health Center, so the results of the study need to be interpreted carefully and can not be generalized to a wider area. In addition, the measurement of the role of cadres and service quality using data on a period of time so that it has not been able to describe the changes in the relationship between variables longitudinally. Further research is suggested to involve a wider number and area of research and consider other factors, such as training, motivation, experience, availability of facilities and infrastructure, support of health workers, and community participation, so as to provide a more comprehensive picture of the factors that affect the quality of Posyandu services.

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