



## Factors Related to the Activity of Posyandu Cadres in The Immunization Program of Sudirejo Village I

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### A B S T R A C T

At Posyandu, the role of cadres is crucial as they must actively participate in health programs, such as immunization. Posyandu Sudirejo I village is coordinated by Puskesmas Simpang Limun, with 11 (42.31%) active Posyandu. This study aims to identify factors associated with the activeness of Posyandu cadres in the immunization program in Sudirejo I village, Medan City. The study employed quantitative methods with a cross-sectional research design. Fifty-five cadres were sampled and analyzed using univariate and bivariate analysis with the chi-square test ( $p < \alpha 0.05$ ). The results indicated that 29 respondents (52.7%) were active, while 26 (47.3%) were inactive. Several variables were examined, including knowledge ( $p = 0.002 < \alpha 0.05$ ), motivation ( $p = 0.002 < \alpha 0.05$ ), infrastructure ( $p = 0.022 < \alpha 0.05$ ), interpersonal relationships ( $p = 0.875 > \alpha 0.05$ ), and incentives ( $p = 0.324 > \alpha 0.05$ ) in the Posyandu immunization program. The conclusion is that knowledge, motivation, and infrastructure are significantly related to the activeness of Posyandu cadres. In contrast, interpersonal relationships and incentives are not significantly related to their activeness in the Sudirejo I village, Medan City immunization program

## INTRODUCTION

Posyandu (Integrated et al.) is one form of Community-Sourced Health Efforts implemented by, from, and with the community to empower and provide convenience to the community to obtain health services for mothers, infants, and children under five (Andi Dianita et al., 2022). Posyandu is managed by cadres who understand management. The existence of posyandu and the active role of cadres are very influential because cadres are responsible for implementing the posyandu program (Pering et al., 2022). The role of the cadre itself is increasingly revealing its figure after the emergence and activation of several health programs that are being promoted, one of which is immunization. Health workers give immunizations during posyandu activities assisted by health cadres. Immunization is also provided at services within the puskesmas assisted by local posyandu cadres (Rahayu et al., 2021).

In its implementation, posyandu cadres have received training in various health issues, one of which is how to provide counseling to the community about immunization and assist health workers in the implementation of immunization at posyandu (Kurniati, 2020). In the Ministry of Health's 2020 performance report, there are performance indicators for strategic targets that reach a target of  $< 75\%$  or the category of difficult to achieve, namely first, the percentage of districts/cities implementing active posyandu guidance reached 6% of the target of 51% or the percentage of performance achievement of 11.76%, second, districts/cities that reached 80% of complete primary immunization reached 37.2% of

the target of 79.3% or the percentage of performance achievement of 46.9% (Ministry of Health RI, 2021). In 2020, the national complete basic immunization coverage was 83.3%. This figure has not met the 2020 strategic plan target of 92.9% (Ministry of Health, 2020). This low coverage is due to services at health facilities being optimized for COVID-19 pandemic control (Ministry of Health, 2022).

Based on the measurement of performance indicators in the P2P sector of the North Sumatra provincial health office in the performance agreement, from the 2020 target performance indicators, one of the program indicators was not achieved, namely immunization with the achievement of those who received Complete Basic Immunization of 75.5% with the achievement of the target of 92.9% (North et al. Office, 2020). According to data from the North Sumatra Provincial Health Office, the coverage of complete primary immunization in North Sumatra province in 2019 was 85.17%. This realization has not yet reached the target set in the 2019 strategic plan of the North Sumatra Provincial Health Office of 93% (North et al. Office, 2019).

In 2021, in three villages in the working area of Puskesmas Simpang Limun, the percentage of complete immunization coverage for infants in the Sudirejo I village posyandu was still low at 58.6%, compared to the achievement of Sudirejo II village at 67.5% and Sitirejo I achieving immunization coverage of 66.4%. The low immunization rate in the posyandu of Sudirejo I kelurahan is related to the lack of cadre activeness in carrying out their duties and roles during posyandu activities. Low coverage of primary immunization can result in the onset of certain diseases, such as the currently rampant diphtheria case, which has become an extraordinary event in several regions of Indonesia (Makarim, 2019).

Based on the research conducted, there are causal factors that affect the activeness of cadres in the implementation of immunization, namely the lack of cadre training or attending training proposed by the puskesmas, the limitations of cadres in understanding the material, and the development of evaluation of posyandu cadres. In addition, motivational factors such as the absence of encouragement for cadres in carrying out activities will have an impact on the lack of cadre activeness, such as getting awards, certificates, praise from the results of cadre performance, and encouragement from health workers, and support from parents in immunizing their children.

The incentive factor is that cadres who get sufficient incentives will be more active in implementing posyandu compared to cadres getting inadequate incentives, which will affect cadres' activeness and the inaccuracy of time in providing incentives. The interpersonal relationship factor in posyandu immunization activities is miscommunication between cadres, which leads to misunderstandings. Completeness, adequate facilities, and infrastructure are essential to conducting immunization programs and other posyandu activities. Inadequate facilities certainly cause immunization services not to run well. In addition, the lack of buildings available for posyandu is also an obstacle to posyandu activities.

The effectiveness of immunization campaigns depends on the efforts of the cadres. The behavior of posyandu cadres is critical to the success of posyandu initiatives. They are considered active if they can carry out their responsibilities. They are called inactive if they cannot carry out their responsibilities effectively (Rolanda, 2018). How actively they perform the tasks will determine the outcome (Afrida, 2019). Thus, this study was conducted to investigate factors that are thought to be associated with the activeness of posyandu cadres in the immunization program in Sudirejo I village, Medan City.

## METHOD

This research method is quantitative research with a cross-sectional research design. The population was taken directly to the posyandu cadres in Sudirejo I village. Medan City is the working area of the Simpang Limun health center, and the sample in this study were all posyandu cadres in the Sudirejo I village, totaling 55 cadres. Data collection techniques were obtained through primary data, namely by obtaining data directly, and secondary data, namely data indirectly, such as puskesmas data, posyandu work reports, health profiles, research journals, and other related data. The research instrument was a questionnaire about knowledge, motivation, infrastructure, interpersonal relations, incentives, and activity. Data analysis techniques use univariate and bivariate analysis to describe each variable and know the relationship between variables. For research that uses tools and materials, it is necessary to write down the specifications of the tools and materials. This study has received ethical approval from the Faculty of Medicine, North Sumatra State Islamic University.

## RESULT

This analysis was carried out to find out the distribution of the characteristics of the respondents based on the variables that have been studied as follows, namely:

Table 1. The Characteristics of Respondents

| Characteristics    | Frequency (n) | Percentage (%) |
|--------------------|---------------|----------------|
| Age (years old)    |               |                |
| 56-65              | 1             | 1,8            |
| 46-55              | 23            | 41,8           |
| 36-45              | 17            | 30,9           |
| 26-35              | 14            | 25,5           |
| Last education     |               |                |
| College            | 12            | 21,8           |
| Senior High School | 38            | 69,1           |
| Junior High School | 4             | 7,3            |
| Elementary School  | 1             | 1,8            |
| Work               |               |                |
| Teacher            | 10            | 18,2           |
| Housewife          | 33            | 60,0           |
| Trader             | 5             | 9,1            |
| Self Employed      | 4             | 7,3            |
| Entrepreneurs      | 3             | 5,5            |

|                |    |      |
|----------------|----|------|
| Length of work |    |      |
| >5 Years       | 33 | 60.0 |
| <5 Years       | 22 | 40.0 |

Table 1 shows the frequency distribution results based on the number of respondents from 55 (100%) respondents. In the highest classification, namely at the age of 46-55 years, 23 (41.8%) respondents; the last education classification, namely senior high school, as many as 38 (69.1%) respondents, the classification of respondents work, namely housewives as many as 33 (60.0%) respondents, and the classification with the length of work obtained for more than five years (> five years) as many as 33 (60.0%) respondents.

Table 2. Factors Associated with the Activeness of Cadres in the Immunization Program

| Cadre Activity          | Liveliness       |    |        |    | Total |    | <i>p-value</i> |       |
|-------------------------|------------------|----|--------|----|-------|----|----------------|-------|
|                         | Not Active       |    | Active |    | n     | %  |                |       |
|                         | n                | %  | n      | %  |       |    |                |       |
| Knowledge               | -Poor            | 16 | 29,1   | 6  | 10,9  | 22 | 40.0           | 0.002 |
|                         | -Good            | 10 | 18,2   | 23 | 41.8  | 33 | 60.0           |       |
| Motivation              | -Poor            | 17 | 30,9   | 7  | 12,7  | 24 | 46,3           | 0.002 |
|                         | -Good            | 9  | 16,4   | 22 | 40.0  | 31 | 56,4           |       |
| Infrastructure          | -Inadequate      | 17 | 30,9   | 10 | 18,2  | 27 | 49,1           | 0.022 |
|                         | -Adequate        | 9  | 16,4   | 19 | 34.5  | 28 | 50,9           |       |
| Interpersonal Relations | -Poor            | 14 | 25.5   | 15 | 27,3  | 29 | 52,7           | 0.875 |
|                         | -Good            | 12 | 21,8   | 14 | 25.5  | 26 | 47,3           |       |
| Incentive               | - Unsatisfactory | 16 | 29,1   | 14 | 25.5  | 30 | 54.5           | 0.324 |
|                         | - Satisfactory   | 10 | 18,2   | 15 | 27,3  | 25 | 45.5           |       |

Based on Table 2, this study shows the results obtained from 55 respondents, namely based on poor knowledge with inactive activity by as many as 16 (29.1%) respondents and poor knowledge with active activity by as many as 6 (10.9%) respondents. Good knowledge with inactivity was obtained by as many as 10 (18.2%) respondents, and good knowledge with active activity by 23 (41.8%) respondents, based on the results of the chi-square statistical test, obtained a *p-value* of 0.002 ( $p < 0.05$ ). In the frequency distribution of poor motivation with inactive activeness, as many as 17 (30.9%) respondents and poor motivation with active activeness, as many as 7 (12.7%) respondents and also obtained good motivation with inactivity obtained as many as 9 (16.4%) respondents and good motivation with active activeness as many as 22 (40.0%) respondents and the results of the chi-square statistical test obtained *p-value* 0.002 ( $p < 0.05$ ).

In the frequency distribution of inadequate infrastructure with inactive activeness, as many as 17 (30.9%) respondents and inadequate infrastructure with active activeness, as many as 10 (18.2%) respondents and also obtained adequate infrastructure with inactive activeness obtained as many as 9 (16.4%) respondents and adequate infrastructure with active activeness as many as 19 (34.5%) respondents and the results of the chi-square statistical test obtained *p-value* 0.022 ( $p < 0.05$ ). In the frequency distribution of poor interpersonal relationships with inactive activeness, as many as 14 (25.5%) respondents and poor

interpersonal relationships with active activeness, as many as 15 (27.3%) respondents, and the results of good interpersonal relationships with inactive activeness as many as 12 (21.8%) respondents and good interpersonal relationships with active activeness as many as 14 (25.5%) respondents and the results of the chi-square statistical test obtained p-value 0.875 ( $p > \alpha 0.05$ ).

In the frequency distribution of unsatisfactory incentives with inactive activeness, as many as 16 (29.1%) respondents and unsatisfactory incentives with active activeness, as many as 14 (25.5%) respondents and the results of satisfactory incentives with inactive activeness obtained as many as 10 (18.2%) respondents and satisfactory incentives with active activeness as many as 15 (27.3%) respondents and the results of the chi-square statistical test obtained a p-value of 0.324 ( $p > \alpha 0.05$ )

## DISCUSSION

This study shows that the knowledge factor in cadres is due to experience and the desire of cadres to get information about posyandu in addition to the knowledge gained from reading cadre books and following counseling from health workers and seminars that have been given. Although Puskesmas health workers carry out immunization health services, cadres should know about immunization knowledge because the cadre is the closest person to the baby's parents. The better the level of knowledge of a cadre, the better the activity level in implementing posyandu (Afrida, 2019).

Based on the results of this study, it can be seen that from the results of the chi-square statistical test in this study, it shows a p-value of  $0.002 < \alpha 0.05$ , so it can be interpreted that there is a relationship between knowledge and the activeness of posyandu cadres in the immunization program of Sudirejo I village, Medan City. This research is in line with research by Hermawan (2019) with the results of the chi-square test p-value  $0.048 < \alpha 0.05$  that there is a relationship between knowledge and the activeness of posyandu cadres where if cadres have good knowledge, cadres can carry out their duties properly. Moreover, in line with the results of research by Elisabeth et al. (2022), the results of the chi-square test p-value  $0.023 < \alpha 0.05$ , there is a relationship between knowledge and cadre activeness, stated that without good knowledge, a cadre will not understand the duties and functions of the posyandu.

Motivational factors in cadres always try to provide the best service for babies in immunization and are responsible according to their duties. There is encouragement for cadres from within and outside, such as providing appreciation, support, and praise from fellow cadres, baby parents, health workers, and so on. The emergence of positive support will affect the activeness of cadres. Motivating cadres will help them carry out their duties and advance the posyandu program (Indrilia et al., 2022).

From the chi-square statistical test results in this study, showing a p-value of  $0.002 < 0.05$ , it can be concluded that motivation is significantly related to the activeness of posyandu cadres in the immunization program of Sudirejo I urban village, Medan City. This research is in line with research by

Hermawan (2019) on factors related to the activeness of cadres in posyandu activities. The chi-square test shows a  $p$ -value of  $0.000 < \alpha 0.05$ ; it is concluded that there is a relationship between motivation and cadre activeness.

Completeness of adequate facilities and infrastructure factors related to the continuity of immunization in posyandu such as posyandu place, parking lot, weighing tool/dancing, KMS, cadre handbook, leaflets, posters, tables, and chairs, thus increasing the performance impetus in the continuity of posyandu. The activeness of cadres is related to adequate infrastructure; cadres tend to be active when adequate facilities and infrastructure are complete. On the contrary, cadres tend to be inactive if the infrastructure is inadequate. The results of the chi-square statistical test in this study show that the  $p$ -value is  $0.022 < 0.05$ ; it can be concluded that the infrastructure is significantly related to the activeness of posyandu cadres in the immunization program of Sudirejo I village, Medan City.

This research is in line with research by Agnes Indrilia et al. (2021), based on the results of the study, which showed a  $p$ -value of  $0.000 < \alpha 0.05$ , that the completeness of infrastructure facilities affects the activeness of posyandu cadres in East Simeulue District, Simeulue Regency. The availability of facilities and infrastructure can support the smooth implementation of posyandu (Profita, 2018).

Based on the results of statistical tests on interpersonal relationship factors, it was found in this study that there was no relationship with liveliness, which could be caused by bad interpersonal relations not making all cadres inactive, one of the reasons being professional attitudes at work or a sense of responsibility that has been carried and straightened out or discuss these issues outside the posyandu immunization activities when the posyandu is finished. To carry out work properly, fellow employees, superiors, and subordinates must support an atmosphere of harmonious working relationships (Siregar, 2019). The attitude of working in a team with such sacrifices, if manifested among humans, will undoubtedly produce high-quality work (M.AB, 2021).

The chi-square statistic in this study shows the  $p$ -value  $0.875 > 0.05$  from the test results. It can be concluded that interpersonal relationships are not significantly related to the Posyandu cadre's activeness in the immunization program in Sudirejo I village, Medan City. This research is in line with research by Rolanda (2018), that statistical analysis of multiple linear regression obtained a  $p$ -value of  $0.415 > \alpha 0.05$  so that it can be interpreted that there is no interpersonal relationship with the activity of psychiatric cadres.

Based on the results of the statistical test of the Incentive factor show that there is no relationship with the activeness of cadres; according to researchers in the analysis obtained by the incentives received by cadres, most of the cadres have activeness because they understand the meaning of a cadre itself to provide services voluntarily and sincerely to the community. Cadres realize their responsibility for each task assigned despite dissatisfaction with the wages or rewards received from their work. Notoatmodjo

(2010) and Andi Dianita et al. (2022) state that cadre participation is voluntary. However, cadres need both material and non-material rewards to maintain their sustainability.

The results of the chi-square statistical test in this study show a p-value of  $0.324 > \alpha 0.05$ ; it can be concluded that there is no relationship between incentives and the activeness of posyandu cadres in the immunization program of Sudirejo I urban village, Medan I City. This study is in line with research by Aome (2022). The results show that the p-value is 0.697 ( $p > 0.05$ ), stating that the active role of posyandu cadres is not related to incentives; a cadre is required to provide voluntary and sincere service to the community selflessly. However, a cadre is also an individual with the same need as others in fundamental and financial needs.

## CONCLUSION

Based on the research findings, this study concludes that there is a relationship between knowledge and infrastructure facilities and posyandu cadres' activeness in the posyandu immunization program. At the same time, no significance was found between interpersonal relationships and incentives with the activeness of posyandu cadres. It is also necessary for the head of the neighbourhood and puskesmas to complete the feasibility of infrastructure facilities and conduct training or coaching posyandu cadres on an ongoing basis. Improve cadre communication techniques in interacting with the community, especially parents of babies and the existence of rewards and appreciation to posyandu cadres.

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