

# PERFORMANCE OF HEALTH OFFICERS AND FAMILY SUPPORT IN MOTIVATING FOR THE UTILIZATION OF INTEGRATED NON-COMMUNICABLE DISEASES (POSBINDU PTM)

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## ABSTRACT

Integrated services for noncommunicable diseases (NCDs) are important public health services for the management and prevention of NCDs. However, lack of motivation to use these services remains a challenge. Factors such as health worker performance and family support may be associated with this problem. Therefore, this study aimed to examine the association of these factors with motivation to use integrated NCDs services (Posbindu PTM).

This study used an analytical survey with cross-sectional design, which included 380 samples from the general community around the working area of a Benteng public health centre, Palopo city, South Sulawesi, Indonesia. Sampling was selected using a purposive sampling technique. Data were analysed using chi-squared and multiple logistic regression tests.

The results show that there was an association between family support ( $p < 0.001$ ) and health officer performance ( $p < 0.001$ ) with motivation to use integrated NCDs services. In addition, health officer performance was the most influential factor in relation to motivation ( $\text{Exp}(B) = 18.209$ ,  $p < 0.001$ ). Motivation to use integrated NCDs services was more influenced by health officer performance. Health officers should sustainably improve their performance by focusing on service quality aspects related to integrated NCDs services.

## KEYWORDS

health officer performance, motivation, family support, integrated NCDs services, health services

## INTRODUCTION

One of the challenges facing health services is the prevention of noncommunicable diseases (NCDs), which have become highly prevalent in recent years [1-3]. NCDs are a global challenge that requires urgent attention. The high prevalence of NCDs contributes to 74% of all deaths worldwide, particularly in low- and middle-income countries [4].

The issue of health services for NCDs in low- and middle-income countries remains a significant challenge. Indonesia, as a country in this category, also reports a substantial prevalence of NCDs compared to other countries in the same category

[5]. Nevertheless, Indonesia has made efforts to improve NCD prevention through enhanced health services at the regional level by implementing integrated NCD services [6].

In 2018, the Directorate of Non-Communicable Disease Prevention and Control of the Ministry of Health Indonesia (P2PTM KEMENKES RI) recorded 38,486 integrated NCD services (*Posbindu PTM*) distributed throughout Indonesia [7]. Despite the long-standing use of many *Posbindu PTM* services, they continue to face various challenges in different regions. However, the utilization of these services remains low, primarily due to insufficient family support and unsatisfactory health worker performance [8].

The research by Zulkhairani and Gurning shows that the use of *Posbindu PTM* at Puskesmas is significantly related to family support. Individuals with high family support are four times more likely to use *Posbindu PTM* than those with less support [9]. Similarly, a study by Amanda et al. found that community participation in evaluating *Posbindu PTM* at public health centers was influenced by family support [10]. High family support serves as a strong motivator for family members to maximize the use of *Posbindu* services [11].

Additionally, health worker performance is expected to increase community motivation to use *Posbindu PTM*. Health workers play an essential role in making meaningful contributions through their professional expertise. Technically, health workers need to perform their duties to the best of their abilities, aiming to improve well-being and provide satisfaction [12,13]. However, some communities currently perceive NCD workers poorly, particularly regarding the quality of their services, friendliness, and inefficient working hours. Moreover, *Posbindu PTM* activities are often not tailored to the specific health needs and issues of the local community, which may affect the number of visits [14].

Research by Sari and Savitri indicates that the use of *Posbindu PTM* influences the performance of health workers [11]. The resources and work environment significantly encourage people to use *Posbindu PTM*, relying on health workers' skills and abilities, as well as their workload. According to Susanto and Hasan Basri's research, the utilization of health facilities is influenced by several factors, such as a decrease in people's purchasing power, reduced interest in seeking treatment due to dissatisfaction with services, dissatisfaction with the quality of medicines, dissatisfaction with service charges, and difficulty accessing health services geographically [15]. Additionally, this study found that wealthier communities use health services at twice the rate of poorer communities.

From the aforementioned, there is still a lack of specific details on how integrated NCD services like *Posbindu PTM* are being effectively implemented and their impact on reducing NCDs in Indonesia. Although family support and health worker performance are highlighted as key factors that may influence the use of *Posbindu PTM*, the exploration of how these factors enhance motivation is still lacking and needs further investigation. Additionally, there is a lack of data on the study of these factors and their potential effect on motivation to use *Posbindu PTM* in the research area. Therefore, the purpose of this study was to examine the relationship between family support and health worker performance on community motivation to use *Posbindu PTM* services.

## METHODS

### RESEARCH DESIGN

This study was an observational study using a quantitative approach with a cross-sectional design. A cross-sectional study is an observational study that analyzes data from a population at a single point in time [16].

### LOCATION AND PARTICIPANTS

This study was conducted in Benteng Health Center, Palopo City, South Sulawesi, Indonesia. Based on data from the South Sulawesi Provincial Health Office, the prevalence of NCDs in Palopo City was high [17]. There are 12 health centers in Palopo City, with the highest number of NCD cases found in the Benteng health center area [16]. There are four *Posbindu PTM* units in the Benteng health center area, located in Malatunrung Village, Benteng Village, Surutanga Village, and

Salekoe Village, respectively. The number of community visits to Posbindu PTM in 2023 was 7,543 (49.48%) people out of a target population of 12,681 people or 80% of the total population (N=15,851 people).

Participants in this study enrolled the community in Benteng Public Health Center area. Data in 2023, there were 7,543 people who accessed *Posbindu PTM* services [16]. To calculate the required sample size, the Slovin formula was applied as follows:

$$n = \frac{N}{1 + N(e)^2}$$

n = number of samples

N = number of populations

e = estimated error (e=0.05; according to 95% CI)

Therefore, the required sample was 380 people. The sample was selected using purposive sampling method with the inclusion criteria: residents in Benteng Public Health Center area, actively visit or use the *Posbindu PTM* services, had no relative relationship with the health officer, and live with family. The sample that did not meet the inclusion criteria would be automatically excluded from the study.

## INSTRUMENTS AND PROCEDURES

This study used questionnaires from previous studies to assess family support, health worker performance, and community motivation to use *Posbindu PTM* services [9-11]. Family support refers to the assistance provided by family members living in the same household, which can be received by respondents in the form of informational, evaluative, instrumental, and emotional support. Health worker performance refers to respondents' perceptions of health workers' behavior in providing NCD screening services to the community. Meanwhile, community motivation to use *Posbindu PTM* services refers to the internal or external factors that encourage respondents to utilize these services within the *Puskesmas* Benteng work area.

Data were collected using a Likert scale (1-5 points), consisting of 18 items on family support (e.g., "My family suggests attending *Posbindu PTM* activities"), 16 items on health worker performance (e.g., "While waiting for their turn to be examined, PTM officers conducted group counseling and provided interview sheets for participants to fill out"), and 10 items on community motivation to use *Posbindu PTM* services (e.g., "I use *Posbindu PTM* services because I want to know about my health condition"). The questionnaires passed validity testing with  $r_{\text{count}} = 0.480-0.988$  ( $r_{\text{table}} = 0.413$ ) and reliability testing with Cronbach's alpha ( $\alpha$ ) = 0.761-0.783 ( $r_{\text{table}} = 0.60$ ).

Before participation, individuals were asked to voluntarily participate in the study. Upon agreeing, they were required to sign a written informed consent form and were given a self-administered questionnaire to complete in 10-15 minutes. The response rate was 100%. Participants were informed that they could withdraw from the study at any time.

The data collected from the participants were then quality checked to ensure that they met the data quality standards. After the quality check, the data was entered into the software with coding, then the final procedure was cleaning, organizing and storing the data for further analysis.

## DATA ANALYSIS

Data were analyzed univariately to determine the frequency (n and %) distribution of respondent characteristics and each research variable. Chi-squared test was used in bivariate analysis to examine the association between family support and health worker performance with community motivation to use *Posbindu PTM* services. Meanwhile, logistic regression analysis was used to examine the factors that has impactfull affect to the dependent variable. The fitness of model and estimated power of the model were accessed using Hosmer and Lemeshow and the Negelkere R-squared tests. All the analysis performed using IBM SPSS version 22 with 95% level of confidence and 5% error ( $\alpha=0.05$ ).

## ETHICAL CONSIDERATIONS

This research has been approved by the Ethics Committee of the Faculty of Public Health with approval number: 1428/UN4.14.1/TP.01.02/2024.

## RESULTS

TABLE 1. RESPONDENT CHARACTERISTICS

Characteristics	n	%
<b>Gender</b>		
Male	83	21.8
Female	297	78.2
<b>Age (Years)</b>		
20-30	80	21.1
31-40	69	18.2
41-50	110	28.9
51-60	121	31.8
<b>Education</b>		
None	3	0.8
Elementary school	39	10.3
Junior high school	60	15.8
Senior high school	173	45.5
Bachelor	95	25.0
Magister	9	2.4
PhD	1	0.3
<b>Occupation</b>		
Civil servants	41	10.8
Private	27	7.1
Fisherman	6	1.6
Labor	30	7.9
Housewife	174	45.8
<b>Total</b>	<b>380</b>	<b>100</b>

Table 1 shows that most of the respondents found in the working area of Benteng Health Center, Palopo City are female (78.2%), the dominant age group is 51-60 years (31.8%). In the distribution of education, it was found that the respondents had the highest level of education was senior high school (45.5%), while the distribution of occupations was known to be mostly housewives (45.8%)

TABLE 2. DISTRIBUTION OF HEALTH OFFICER PERFORMANCE, FAMILY SUPPORT, AND MOTIVATION TO USE *POSBINDU PTM*

Variables	n	%
<b>Health officer performance</b>		
Good	303	79.7
Less	77	20.3
<b>Family support</b>		
High	221	58.2
Low	159	41.8
<b>Motivation to use <i>Posbindu PTM</i></b>		
High	256	67.4
Low	124	32.6
<b>Total</b>	<b>380</b>	<b>100</b>

Most respondents received high category family support (58.2%). In the distribution of health worker performance, it was found that most were in the good performance category (79.7%), while motivation to use *Posbindu PTM* was found to be high (67.4%, Table 2).

TABLE 3. THE ASSOCIATION BETWEEN HEALTH OFFICER PERFORMANCE AND MOTIVATION TO USE *POSBINDU PTM* SERVICES

Health officer performance	Motivation to use <i>Posbindu PTM</i> services						p-value
	High		Low		Total		
	n	%	n	%	n	%	
Good	234	80.2	60	19.8	303	100	<0.001
Less	13	16.9	64	83.1	77	100	
<b>Total</b>	<b>256</b>	<b>67.4</b>	<b>124</b>	<b>32.6</b>	<b>380</b>	<b>100</b>	

Table 3 shows that respondents who indicated that health worker performance was in the good category mostly had high motivation to use *Posbindu PTM* services (80.2%). Conversely, respondents who indicated that health worker performance was in the poor category mostly had low motivation to use *Posbindu PTM* services (83.1%). There is a significant relationship between health worker performance and community motivation to use *Posbindu PTM* services ( $p < 0.001$ ).

TABLE 4. THE ASSOCIATION BETWEEN FAMILY SUPPORT AND MOTIVATION TO USE *POSBINDU PTM* SERVICES

Family support	Motivation to use <i>Posbindu PTM</i> services						p-value
	High		Low		Total		
	n	%	n	%	n	%	
High	185	83.7	36	16.3	221	100	<0.001
Low	71	44.7	88	55.3	159	100	
<b>Total</b>	<b>256</b>	<b>67.4</b>	<b>124</b>	<b>32.6</b>	<b>380</b>	<b>100</b>	

Table 4 shows that respondents who received high category family support mostly had high motivation in using *Posbindu PTM* services (83.7%), while respondents who received low category family support had more low motivation (55.3%) than high motivation (44.7%) in using *Posbindu PTM* services. Statistical test results showed that there was a relationship between family support and community motivation in using *Posbindu PTM* services ( $p < 0.001$ ).

**TABEL 5. MULTIVARIATE LOGISTIC REGRESSION ANALYSIS**

Variables	Sig. (H & L Test)	Sig.	Exp (B)	N.R Square	O.P (%)
Family support		<0.001	5.766		
Health officer performance	0.69	<0.001	18.209	0.456	80.8

H & L = Hosmer and Lemeshow test. N.R square = The Negelkere R-squared. O.P = Overall percentages

Table 5 shows that in terms of the fit of the analysis model to the observed data, the sig. (Hosmer and Lemeshow test) = 0.69 (sig. > 0.05), which means that the binary logistic analysis model is suitable for use. Of the two variables tested, family support and health worker performance were significantly associated with community motivation to use *Posbindu PTM* services. Health worker performance had the greatest impact on motivation to use the service. The Negelkere R-squared value shows the magnitude of the relationship between all independent variables and the dependent variable. The results of the analysis show a value of 0.456 (45.6%), which means that the independent variables in this study have a relationship of 45.6% with the dependent variable. In addition, the total percentage value in the binary logistic test results obtained a result of 80.8%, which means that the accuracy of the analysis model in this study is 80.8%.

## DISCUSSION

This study demonstrates that the performance of health workers has a substantial and statistically significant influence on community motivation to utilize *Posbindu PTM* services. Individuals who perceive health workers' performance as competent tend to exhibit higher motivation to engage with *Posbindu PTM* services. Effective performance among health workers is directly linked to the provision of high-quality health services, which, in turn, elevates community satisfaction and drives increased utilization of these health facilities [18,19]. The provision of quality health services satisfies both service providers and recipients, fostering a positive feedback loop in which increased satisfaction leads to greater service use [20,21]. The achievement of high-quality health services at *Posbindu PTM* is contingent upon the health workers' ability to perform their duties efficiently and effectively. This study corroborates findings by Oktarianita et al. [10], which indicate that community participation in the *Posbindu PTM* evaluation is strongly influenced by the perceived performance of health workers.

Furthermore, the professional demeanor and attitude of health workers significantly shape public perceptions of *Posbindu PTM* services. As Walgito suggests, external elements, including the attitude of service providers, can influence how communities assess health services [22]. Several factors, such as the attitude and behavior of health workers, the availability of appropriate health infrastructure, cost considerations, and the overall treatment environment, act as stimuli for health service utilization [19]. Therefore, the conduct of health workers is critical in shaping public perceptions and in motivating individuals to engage with *Posbindu PTM* services. When health workers' behavior meets community expectations and provides satisfaction, it generates a positive service experience, reinforcing continued engagement.

According to Azwar [23], delivering quality health services requires that health workers consistently align their performance with established standards of care. High productivity among health workers enhances community interest in utilizing these services, a conclusion supported by Zulfianti et al. [24], who identified a positive relationship between health worker performance and *Posbindu PTM* service utilization. Similarly, research by Yanti et al. [20] highlights the importance of health workers' adherence to technical guidelines as a key factor influencing community engagement with *Posbindu PTM* services.

In addition to health worker performance, this study identifies family support as a critical determinant of community motivation to utilize *Posbindu PTM* services. Family support plays a pivotal role in educating and encouraging family members to recognize the importance of regular health check-ups at *Posbindu PTM*. Consistent family involvement

increases individual motivation to engage with these services. This finding aligns with research by Zulkhairani & Gurning [9], which illustrates a significant correlation between family support and the utilization of *Posbindu PTM* services.

Family support is defined as the provision of tangible and emotional assistance to family members, and it serves as a key motivating factor in health-seeking behaviors. Forms of family support may include reminders about scheduled check-ups, accompanying individuals to health facilities, or assisting in overcoming barriers to access [25-28]. Research conducted by Sari & Savitri [11] further emphasizes the influential role of family members—such as parents, siblings, and close relatives—in guiding individuals toward seeking medical care. Accordingly, strong family support fosters a conducive environment that promotes the active use of *Posbindu PTM* services.

This study has several limitations. The study design cannot draw a causal effect relationship between the independent variable and the outcome. This method also cannot address the possibility of confounding effect. Although the response rate is good, a self-administered questionnaire may be subject to response bias or inaccurate answers.

The study highlights the critical role that health worker performance and family support play in driving the utilization of *Posbindu PTM* services. This finding implies that strengthening health worker capacity through continuous training, performance monitoring, and promoting patient-centered attitudes is essential for improving service quality and community trust in healthcare systems. Additionally, fostering family support and educating communities about the importance of preventive health services can significantly boost engagement with *Posbindu PTM* services. Public health initiatives that integrate these elements—by enhancing the professional conduct of health workers and promoting family involvement—are likely to increase service utilization, contributing to better health outcomes and more effective prevention of non-communicable diseases.

## CONCLUSION

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The study concludes that there is an association between community motivation to use *Posbindu PTM* services with health worker performance and also family support. Motivation to use integrated NCD services was more influenced by health worker performance. Health workers should sustainably improve their performance by focusing on service quality aspects related to integrated NCD services. It is recommended that health systems implement integrated strategies that combine the role of family support with the performance of health workers to increase community motivation to use *Posbindu PTM* services. This can be achieved by promoting family-centered health education programs that empower families to support regular health check-ups, while simultaneously enhancing the training of health workers to deliver patient-centered care with professionalism and empathy. Health workers should also be trained to engage families actively in the care process, fostering a collaborative approach that maximizes both family involvement and service quality. By aligning the efforts of health workers with the influence of family support, public health programs can create a more supportive environment that encourages the regular use of preventive health services like *Posbindu PTM*.

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## CONFLICT OF INTEREST

None to declare.

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