

The Factors Related to Cadres' Competency in Integrated Health Service Post during Pandemic

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Abstract: The competence of Posyandu (Integrated Service Post) cadres played a crucial role in response to the pandemic. They were responsible for raising awareness about COVID-19 and implementing preventive measures. The impact of their competence cannot be overstated and highlights the importance of investing in health worker training. This study aims to determine the factors related to the competence of Integrated Health Service Post cadres during the pandemic in the Samarinda Primary Healthcare working area. Observational research was employed with stratified random sampling, and primary data was collected from five Primary Healthcare in Samarinda. This study employed three steps to examine the effect of competency cadres: univariate analysis, bivariate analysis using the Spearman Rank test, and multivariate analysis with Multiple Linear Regression. The bivariate analysis results showed that supervision had a very strong correlation with the cadres' competency, and social environment had a strong correlation with the cadres' competency. At the same time, the organization had a moderate correlation with cadres' competency. The multivariate test results showed that the social environment contributed 0.165 times to the competence of cadres, organizational support contributed 0.211 times in cadre competence, and supervision support contributed 0.652 times to cadre competence. It provides them with the necessary resources, training, and recognition for their work.

Keywords: competency; social environment; integrated health service post

INTRODUCTION

Health services are the maintenance or improvement of health status through prevention, diagnosis, therapy, recovery, or healing of diseases, injuries, and other physical and mental disorders.¹ High health care is the goal that hospitals and patients always expect. With the development of understanding and standards regarding the quality of health services, it is expected that health services can be encouraged by routine patient safety data for the community.² Integrated health service post, commonly named *Posyandu*, is managed and coordinated from, by, and for the community in the application of health development to empower and facilitate access to essential health services. It strives to enhance the reduction of maternal and infant mortality.³ Implementation of the *Posyandu* program by selected health cadres who have received education and training from the Community Health Centers (*Puskesmas*) regarding essential health services.⁴

The spearhead of *Posyandu* health services is the cadres. The *Posyandu* cadres are the surrounding community and have the will, ability, and time to organize *Posyandu* activities.^{5,6} The *Posyandu* implementers have contributed to reducing maternal mortality and toddler. The knowledge and skills of cadres need to be improved through coaching so that they can lead *Posyandu* activities according to their abilities. In this case, the role of cadres as implementers of *Posyandu* activities, especially in preparation and implementation, is necessary to improve both through basic training for cadres.³

Integrated Health Service Post (*Posyandu*) is a strategic step in developing the quality of human resources. Health cadres have a significant role in improving the community's ability to help themselves achieve optimal health status. In addition, the role of cadres is to participate in fostering the community in

the health sector through activities carried out at Integrated Health Service Post.⁷ Based on data in 2019, there were 298,058 *Posyandu*, and only 65.42% were active. This figure is still far from the national target of 80%. In 2020, coverage was expected to decrease because, during the pandemic, most of the activities at *Posyandu* were stopped.⁵ The widespread regulation of large-scale social restrictions is also the cause of the limitation or even the lack of health services at the Integrated Health Service Post to avoid crowds because there will be the potential for re-infection.⁸ The cessation of health services at the Integrated Health Service Post impacts pregnant women and children under five prone to the disease.⁹ As a result, monitoring the growth and development of toddlers is delayed. In improving the quality of health services, cadres must have competence. It is the workability of cadres, including aspects of knowledge, skills, and work attitudes, that follow the expected standardization.^{10,11} Another definition states that competence relates to individual abilities and skills to achieve the expected results. Cadre competence is also defined as an individual that can be measured and identified to show the individual's specific behavior and abilities in particular jobs.¹²

There are several factors related to competence, including Social Environment, one of the factors supporting individuals in realizing a goal based on behavior. The social environment is reflected in the acceptance of others in individuals who carry out their duties well. To improve the quality of *Posyandu* services to reach all levels of society, improving the service quality of cadres is an important milestone that must be considered.¹⁰ It plays an essential role in building knowledge and is the most meaningful contributor to external motivation. Humans, as social beings, always tend to need other people to establish relationships. They want to live in groups for self-actualization.¹³ Thus, the benefits of *Posyandu* needs to be strengthened as a means of exchanging opinions and experiences, one of which is external factors that make *Posyandu* activities more comfortable.

Family support is a process that occurs throughout life and affects the family life cycle stage.¹⁴ Meanwhile, the organization provides organizational support to the activities of *Posyandu* cadres, namely funds, community support (support system), praise, positions, prizes, etc.¹⁰ An individual workforce is expected to have a good relationship with the organization or company. Good relationships will help individual performance as they will feel comfortable and safe at work.¹⁵ Financial support is funds provided by parties to meet health development, especially those managed by primary health care or Integrated Health Service Post, which are guided by community cadres. Financial support can be a form of appreciation given to cadres that aim to increase enthusiasm or satisfaction so that later it can improve their work competence.¹⁶

MATERIAL AND METHOD

This study utilized an observational research design with survey data. It was conducted in the city of Samarinda. The samples were selected using stratified random sampling technique, and primary data was collected. The sample included *Posyandu* cadres from 5 Primary Healthcare centers in Samarinda. The population in this study was 89 *Posyandu* cadres in the working area of Samarinda Primary Healthcare. The Ethical clearance was received from Ethical Clearance Committee No. 345/KEPK-STIKES-MM/X/2022. The instrument was a questionnaire from Aprana John (2012) containing questions used to collect data from respondents.¹⁷

In this study, the competency of cadres was measured in three parts: not competent when the value is below 20, competent when the value is between 21 and 40, and extremely competent when the value is between 42 and 60. Cadre competency is the knowledge or ability of every employee in a position.¹⁰ The social environment is an area for activities or behaviors that foster a sense of self-worth in cadres (self-esteem).¹⁸ It was categorized not supportive when it falls below 15, moderately supportive when it falls between 16 and 30, and extremely supportive when it falls between 31 and 45. Organizational support is a belief in the workplace that might increase cadres' impressions of how much the organization regards cadres' contributions.¹⁹ Supervision is an activity carried out by a professional to assist cadres in improving materials, methods, and evaluation by carrying out stimulation.²⁰ It was categorized into 3 parts, namely 'not supportive' when it is below 15, less supportive when it is in the 16-30 range, and very supportive when it is at 31-45. The CI used 95%, and the p-value was significant if <0.05.

This research employed three steps: univariate analysis, bivariate analysis using the Spearman Rank test, and multivariate analysis using Multiple Linear Regression. The dependent variable of the multivariate analysis was cadres' competency, while the independent variables were social environment, organizational support, and supervision. This research used the multiple linear regression model below:

$$COMP = \beta + \beta_1 SEV + \beta_2 OGS + \beta_3 SPV + \varepsilon , \quad (1)$$

COMP represents the competency of integrated health service cadres, SEV denotes social environment, OGS denotes organizational support, SPV denotes supervision, and ε represents the error term.

RESULT

The cadres who participated in this study lived in the Samarinda city area. Below is the distribution of socio-demographic characteristics of study subjects, stratified by Competency cadres.

Table 1. Subject Characteristics

	Competency									Total	
	not competent			competent			very competent			N	%
	mean	N	%	mean	N	%	mean	N	%		
Age (year)	40.1			37.4			39.4				
Gender	Female	14	15.70%	19	21.30%	56	62.90%	89	100		
	Male	0	0.00%	0	0.00%	0	0.00%	0	0		
Education Level	Graduated vocational/bachelor	4	18.20%	6	27.30%	12	54.50%	22	100		
	High school	3	11.50%	7	26.90%	16	61.50%	26	100		
	Elementary School	2	18.20%	1	9.10%	8	72.70%	11	100		
Occupation	Employee	2	7.40%	5	18.50%	20	74.10%	27	100		
	Retired	1	50.00%	0	0.00%	1	50.00%	2	100		
	Unemployed	11	18.30%	14	23.30%	35	58.30%	60	100		

Based on Table 1, out of 89 participants are entirely female. The very competent respondents were at a mean age of 39.4 years, and those who were competent were at a mean age of 37.4 years. 16 respondents who were very competent had a high school education (61.5%), while very competent respondents who were unemployed were 35 (58.3%).

Table 2. Distribution of Participant's Competency Level Based on Variables

Variables	Category	Competency						Total	
		not competent		competent		very competent		n	%
		n	%	n	%	n	%		
The role of the social environment	not supportive	8	53.30%	4	26.70%	3	20.00%	15	100
	less supportive	4	19.00%	7	33.30%	10	47.60%	21	100
	very supportive	2	3.80%	8	15.10%	43	81.10%	53	100
Organizational support	not supportive	8	61.50%	4	30.80%	1	7.70%	13	100
	less supportive	2	14.30%	4	28.60%	8	57.10%	14	100
	very supportive	4	6.50%	11	17.70%	47	75.80%	62	100
Supervision	less supervised	13	81.30%	0	0.00%	3	18.80%	16	100
	quite supervised	0	0.00%	18	94.70%	1	5.30%	19	100
	very supervised	1	1.90%	1	1.90%	52	96.30%	54	100

In the social environment variable (see Table 2), 43 respondents received a very supportive social environment categorized as competent cadres. 47 respondents had very supportive organizational support categorized as very competent cadres. 52 respondents received very high supervision categorized as very competent cadres.

Table 3. Spearman rank correlation based on cadres' competency

Variable	p-Value	r	Correlation Strength
Social environment	<0.001	0.701	Strong
Organizational Support	<0.001	0.418	Moderate
Supervision	<0.001	0.949	Very strong

The results of the Spearman Rank coefficients in table 3 show that social environment has a strong correlation with cadres' competency ($r= 0.701$). Based on the analysis of the support of the social environment for Posyandu cadres, it was revealed that cadres received support from the social environment so that the performance of cadres increased during the pandemic that there was a close relationship between competence and the role of the social environment. The same study's results showed that the role of the social environment of health cadres increased the competence of cadres.²¹

On the organizational support variable, as a result of the Spearman Rank coefficient value, it can be seen that the relationship strength between organizational support and cadres' competency was moderate ($r=0.418$). The analysis of organizational support for Posyandu cadres found that cadres received organizational support to increase cadres performance competence while working during the pandemic.

Furthermore, the supervision variable had very strong correlation with cadres' competency ($r=0.948$). Based on the analysis of supervision support for Posyandu cadres, it was found that cadres received supervision support. Hence, cadres' performance competence increased while working during the pandemic. Research results showed a strong relationship between supervision and cadres' performance competence. This study concludes that the better the quality of supervision is, the better the performance competence of the cadres will be.

The direction of a positive relationship with a positive value revealed that the relationship was positive. An increase in the role of the social environment, organizational support, and supervision will also increase the level of competence.²²

Table 4 shows the correlation relationship (R) value equals 0.875. Based on the output, the coefficient of determination (R Square) was 0.765, indicating that 76.5% of the dependent variable can explain the independent variables, while other variables outside this model explained 23.5%.

Table 4. Multiple linear regression results stratified by competency cadres

	Coefficients		Coefficients		Collinearity Statistics		
	B	Std. Error	Beta	T	Sig	R ²	VIF
Cons	-.050	.169		-.290	.768		
Social environment (SEV)	.165	.061	.168	2,721	.008	.726	1.378
Organizational Support (OGS)	.211	.062	.206	3.408	.001	.753	1.328
Supervision (SPV)	.652	.058	.675	11.210	.000	.762	1.312
R	.875		Adjusted R Square		.757		
R Square	.765		Std. Error of the Estimate		.372		

a. Dependent Variable: competency

Based on table 4, the model of multiple linear regression can be written as follow:

$$\text{COMPETENCE} = -0.050 + 0.165 \text{ SEV} + 0.211 \text{ OGS} + 0.652 \text{ SPV} + \varepsilon$$

The constant value of -0.050 indicates that when other variables are zero, the dependent variable of cadres' competency will decrease by 0.050 times. The social environment contributes 0.165 times to the competence of cadres. While organizational support contributed 0.211 times in cadre competence, supervision support contributed 0.652 times in cadre competence. Therefore, to increase the dependent variable (cadre performance competence), it is necessary to jointly improve the role of the social environment, organizational support, and supervision support.

DISCUSSION

Based on the table above, the results of this study revealed the influence of the role of the social environment, organizational support, and supervision on the performance competence of Posyandu cadres. In improving the quality of health services, cadres must have competence. Competence means the activity capacity of an Integrated Health Service Post candidate, which includes the knowledge, abilities, and actions on duty, following the required standardization.²¹ Another definition states that competence is a matter of individual abilities and skills to achieve the desired goals. Cadre competence is also defined as a particular

aspect that can be measured and identified to prove individuals' behavior and specific abilities in certain jobs.²³

Furthermore, the social environment is one of the supporting factors for individuals in realizing a goal based on behavior.¹⁸ This social environment is reflected in the acceptance of others in individuals who carry out their duties well, including Increased insight in the Integrated Health Service Post quality improvement chart to reach the entire population composition. Hence, improving the service quality of *Posyandu* candidates becomes a significant pillar that must be observed.²⁴ It indicates that the social area has a positive and significant influence on the competence of cadres.

According to Pereira, the concept of organizational support describes the interaction of individuals with organizations that specifically identifies how the organization treats its subordinates. Perceived organizational support is defined as cadres' perceptions of the extent to which the organization values cadres' contributions and cares about their well-being.²⁵ Organizational support is seen as very important for the workers' behavior. This support may take the form of attention from the leadership to their subordinates. It can include adequate facilities and infrastructure to support the performance of their employees.¹⁹ Organizational support refers to subordinates/cadres' perception of how the organization values contributions, provides support and cares for their welfare.²⁵

Moreover, supervision is an effort to assist the development and improvement of the capacity of the supervised party so that they can carry out the assigned tasks or activities efficiently and effectively. Besides, supervision is a monitoring and coaching activity carried out on an ongoing basis by supervisors, which considers the problem of service and equipment so that patients or clients always receive quality service.²⁰

This study's findings indicated a correlation between each variable, namely the role of the social environment, organizational support, supervision support, financial support, and family support, and the competency performance of *Posyandu* cadres during the pandemic in the primary healthcare of Samarinda City. Moreover, the results of this study also revealed that, in general, the independent variables, namely the role of the social environment, organizational support, supervision support, financial support, and family support, affect the performance competence of *Posyandu* cadres. However, when viewed separately, the variables of financial support and family support had no significant effect on the performance competence of *Posyandu* cadres. Hence, not all cadres received support from their families. After all, cadres assumed some of them received fewer benefits and, as volunteers, may not receive rewards from related parties.

When viewed separately, the independent variables of the role of the social environment, organizational support, and supervision support significantly influenced the performance competence of *Posyandu* cadres. Based on the research results obtained from the relationship between the Social Environment and the performance competence of *Posyandu* cadres, it proved that the social area had a positive and significant influence on the cadres' competence. Competence is the power possessed by a person to carry out the profession assigned to him.²⁶ People must be able to carry out their duties and work well well. Competence allows a person to fulfill professional-related obligations needed to achieve goals.

Gigliotti *et al.* stated that the support obtained by employees from the organization where they work is an internal environmental factor that can affect employee performance.²⁷ Mustafa *et al.* revealed that one of the crucial factors influencing cadres' work behavior is the support from their organizations.²⁸ Vita *et al.* explained that supervision involves planning, directing, guiding, observing, and encouraging improvement.¹⁰ Trust and evaluation should always be carried out continuously with patience, fairness, and wisdom so that they can provide good training for cadres, following the abilities and limitations of cadres.

CONCLUSION

Based on the study results, the cadre's competency was influenced by the social environment, organizational support, and supervision of competence during the pandemic in Samarinda primary healthcare. Further, to enhance the cadre's competency, it is crucial to simultaneously improve the role of the social environment, organizational support, and supervisory support.

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CONFLICT OF INTEREST

All authors declare that they have no conflicts of interest.

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