

THE INFLUENCE OF THE COMMUNICATION PATTERN OF FAMILY ASSISTANCE TEAMS ON STUNTING PREVENTION BEHAVIOR IN FAMILIES WITH TODDLERS AND INFANTS IN WANGI-WANGI DISTRICT, WAKATOBI REGENCY

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ABSTRACT

The increase in the prevalence of stunting in Wakatobi Regency from 2021 to 2022 has a highly detrimental impact both on health and economic productivity. To prevent this condition, the Family Assistance Team plays a leading role in various preventive efforts through support activities that include counseling, facilitating referral services, and facilitating the reception of social assistance programs. This study aims to determine the extent of the influence of the communication patterns of the Family Assistance Team on stunting prevention behavior. Using a quantitative approach, this study was conducted in Wangi-Wangi District with a population of 981 families with infants and toddlers, spread across 20 villages/sub-districts. By applying proportional random sampling, a total of 100 respondents were obtained, with 5 samples selected from each village/sub-district. The results show a significant impact of the Family Assistance Team's communication patterns on stunting prevention behavior. The data analysis concludes that the more intense the communication patterns of the Family Assistance Team, the more it improves stunting prevention behavior among families with infants and toddlers in Wangi-Wangi District. The implication of this research is the need to increase the intensity of communication between the Family Assistance Team and families with infants and toddlers.

Keywords: Communication Pattern; Family Assistance Team; Stunting Prevention Behavior.

INTRODUCTION

Stunting is a significant issue in child health that remains a major concern, particularly for children in underdeveloped and developing countries. According to a report from the World Health Organization (WHO), it was estimated that around 149 million toddlers worldwide experienced stunting in 2020, while 45 million other children were estimated to be underweight or have low body weight (Edi et al., 2022). Meanwhile, based on the 2018 Basic Health Research (Riskesdas) data, the stunting rate among children under five in 2013 reached 37.2%, in 2018 the prevalence of stunting among children under five was 30.8% (Ministry of Health of the Republic of Indonesia, 2018), and in 2021 it decreased to 24.4% (SSGI, 2021). The opposite condition, however, occurred in Wakatobi Regency. The stunting prevalence data for Wakatobi Regency increased by 3.3%, from 26.0% based on Indonesian Nutritional Status Survey (SSGI) 2021 data to 29.9% according to SSGI in 2022. To prevent this situation, the Family Assistance Team (TPK) serves as the front line in carrying out various prevention efforts through guidance that includes counseling, facilitating referral services, and facilitating access to social assistance programs.

Considering the determining factors that influence the occurrence of stunting, addressing the issue of stunting must be done thoroughly, comprehensively, integratively, and in a multisectoral manner by intensifying assistance for families at risk of giving birth to babies at risk of stunting.

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This assistance is focused on the adolescent period and prospective brides, during pregnancy, and the postpartum period, and continues until the child is 5 years old (National Population and Family Planning Agency, 2024).

The main task of the Family Assistance Team is to provide support to families that are vulnerable to stunting. Family assistance is defined as a series of activities that include counseling, facilitating referral services, and facilitating the provision of social assistance aimed at increasing access to information and services for families and/or families at risk of stunting, such as pregnant women, postpartum mothers, families with children aged 0-59 months, as well as all prospective brides/prospective couples of childbearing age through a three-month premarital guidance program as part of marriage services. This aims to detect early stunting risk factors and make efforts to minimize or prevent the impact of these risk factors. Meanwhile, the expected behavioral changes in stunting prevention are the adoption of clean and healthy living behaviors, proper parenting practices, and adequate nutrition. The formation of these behavioral changes is greatly influenced by the individual's conditions and needs. Therefore, it is necessary to encourage the target groups by enhancing their understanding and knowledge so they can grasp the benefits of these new behaviors for themselves and their families. The main focus of this research is aims to examine the extent of the influence of the Family Assistance Team's communication patterns on stunting prevention behaviors in families with children under the age of two (infant) and children under the age of five (toddler).

METHOD

Previous Studies and Hypothesis

Several previous studies related to the influence of communication patterns on stunting prevention behaviors include those conducted by Muslimin and Rahim (2023). The research findings concluded that pregnant women's knowledge improved after receiving education through an Android-based assistance method, but there was no change in attitude. Therefore, intensive approaches to pregnant women need to be carried out, especially to change their attitudes towards stunting prevention efforts. Meanwhile, the research conducted by Sari et al. (2023) shows that therapeutic communication conducted in groups will affect behavior changes in managing mothers with stunted children. Meanwhile, the research conducted by Prayoga et al. (2024) concludes that the communication between healthcare workers and parents has a close relationship with the eradication and reduction of stunting rates, particularly in the Koto Tangan sub-district, Padang City.

Based on several previous studies, a theoretical framework can be proposed as the basis for formulating the hypothesis that the communication patterns of the Family Assistance Team will influence stunting prevention behaviors. Therefore, the hypotheses to be tested in this study are:

H0: The communication patterns of the Family Assistance Team do not have a significant effect on stunting prevention behaviors in families with children under two (infant) and children under five (toddler).

H1: The communication patterns of the Family Assistance Team have a significant effect on stunting prevention behaviors in families with children under two (infant) and children under five (toddler).

Population and Sample of the Study

This study was conducted across all villages/sub-districts in the Wangi-Wangi sub-district of Wakatobi Regency, Southeast Sulawesi Province in May-July 2024. The target population includes all families in the Wangi-Wangi sub-district with children under the age of two and under the age of five, totaling 1,081 families.

According to Umar (2010), to determine the sample size, Slovin's formula is used with a margin of error percentage of 10%, which is:

n: Sample size
N: Population size
e: Margin of error

$$n = \frac{N}{1 + Ne^2}$$

The calculation using Slovin's formula with a population of 1,081 families with children under the age of two and under the age of five is as follows:

$$n = \frac{1081}{1 + 1081 (0,10^2)}$$

$$n = \frac{1081}{11,81}$$

n = 91,53 people or rounded up to 100 respondents

Instruments / Data Collection Tools

The data collected for this study include the perceptions of families with children under the age of two (infant) and children under the age of five (toddler) regarding the communication patterns conducted by the Family Assistance Team and stunting prevention behaviors among these families. Both variables are obtained using a questionnaire distributed to all respondents or samples.

In collecting the data, the author employed the following methods:

1. Measurement of the Family Assistance Team's Communication Patterns

The communication patterns of the Family Assistance Team are measured based on the classifications proposed by DeVito (2011) and Bartels et al. (2010), which define interpersonal communication as interactions in delivering messages to others that have influence, impact, and opportunities for feedback, thus establishing a relationship. The indicators used to measure the communication patterns of the Family Assistance Team are:

- Openness
- Empathy
- Supportive Attitude
- Positive Attitude
- Equality Attitude

2. Measurement of Stunting Prevention Behavior Variables

Stunting prevention behavior is measured based on the classification proposed by Notoatmodjo (2012), where behavior is defined as what the organism does, whether observable directly or indirectly. The indicators used to measure stunting prevention behavior are:

- Improvement in dietary patterns
- Improvement in parenting practices
- Improvement in sanitation and clean water

Data Analysis Techniques

In order for a concept to be empirically researched, it must be operationalized by converting it into variables or something with variable values. In this study, to test the formulated hypotheses, the author performed analysis using simple regression equations. To carry out the analysis, the necessary variables were first determined.

The measurement scale used in this study is the Likert scale, where each question provides the opportunity for 5 (five) possible answers. Each answer is assigned a score ranging from 5 to 1. Furthermore, to assess the quality (accuracy and reliability) of the data collection instrument (research questionnaire), this study first conducted validity and reliability tests on the instrument to be used. To convert ordinal data to an interval scale, data transformation is first performed using the successive interval method (Al Rasyid, 1994). Subsequently, to test the effect of the independent variable (Family Assistance Team's Communication Patterns) on the dependent variable (Stunting Prevention Behavior), statistical analysis is conducted using SPSS (Statistical Package for the Social Sciences) version 26.0.

RESULTS AND DISCUSSION

1. Validity Test and Reliability Test

From the testing results using SPSS Version 26 (Statistical Package for the Social Sciences Version 26), the validity test values for each question item on the Family Assistance Team's Communication Patterns variable are greater than the table value of r . With the largest calculated r value being 0.751 and the smallest value being 0.219, it can be stated that all question items on the Family Assistance Team's Communication Patterns variable are valid. Similarly, the reliability test results, with a Cronbach's alpha value of 0.871, indicate that the question items on the Family Assistance Team's Communication Patterns variable are reliable. Therefore, all these question items can be used for further research.

The validity and reliability test results for the Stunting Prevention Behavior variable show that the validity test values for each question item, with the largest calculated r value being 0.833 and the smallest value being 0.282, indicate that all question items on the Stunting Prevention Behavior variable are valid. Similarly, the reliability test results, with a Cronbach's alpha value of 0.855, indicate that the question items on the Stunting Prevention Behavior variable are reliable. Therefore, all these question items can be used for further research.

Based on the above description, it can be stated that all question items in the questionnaire for this study are valid and reliable for use as instruments in further research. Furthermore, since the number of respondents in the study is 100, which is the same as the number used in the validity and reliability testing, the respondents' answers based on these test results can be used for regression analysis calculations."

2. Simple Regression Analysis

After the data has been collected in its entirety, and since the collected data is in the form of ordinal data, it is necessary to first transform the ordinal data into interval data using the successive interval method before conducting further analysis with regression analysis. Once the data has been converted to interval data, simple regression analysis is then performed. Simple regression analysis is used to calculate the effect of the Family Assistance Team's Communication Patterns variable on Stunting Prevention Behavior. Using SPSS Version 26, the results are presented in the following table.

Table 1 Results of Simple Regression Analysis.

		Coefficients ^a				
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.972	1.306		.744	.458
	Family Assistance Team's Communication Patterns	.340	.054	.525	6.103	.000

a. Dependent Variable: STUNTING PREVENTION BEHAVIOR

Source: Researcher's Data, 2024.

Based on the Table 1, the regression coefficient values from the independent variable to the dependent variable can be determined. Using the values obtained from the unstandardized coefficients column as presented in the Table 1, the regression equation can be formulated as follows:

$$Y = 0.972 + 0.340X_1$$

This equation represents the coefficient of the effect of the Family Assistance Team's Communication Patterns variable on the Stunting Prevention Behavior variable.

3. Analysis of the Coefficient of Determination (R^2)

Analysis of the coefficient of determination is conducted to show the proportion of the dependent variable explained by the independent variable. Thus, R^2 provides information about the variation in the dependent variable that can be explained by the regression model used. The R^2 value obtained from the calculations is presented in Table 2 below:

Table 2 Coefficient of Determination Value.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.525 ^a	.275	.268	1.87853

a. Predictors: (Constant), Family Assistance Team's Communication Patterns"

Source: Researcher's Data, 2024.

The coefficient of determination value, as presented in the Table 2 above, is 0.275. This means that 27.50% of the variation in the Stunting Prevention Behavior variable is explained by the variation in the Family Assistance Team's Communication Patterns variable. The remaining 72.50% is explained by other variables not included in the model.

4. Classical Assumption Testing

To ensure that the parameters in the model are valid, the study must test the classical assumptions of the regression model to avoid deviations from normality, multicollinearity, and heteroscedasticity. To detect deviations from classical assumptions, the SPSS Version 26 software program is used.

- Normality Test

The purpose of the normality test is to determine whether the data distribution approximates or follows a normal distribution. The normality test is conducted using the Kolmogorov-Smirnov test, with the test results displayed in the Table 3 below.

Table 3 Kolmogorov-Smirnov Test Results.

One-Sample Kolmogorov-Smirnov Test		
N		100
Normal Parameters^{a,b}	Mean	.0000000
	Std. Deviation	1.86901370
Most Extreme Differences	Absolute	.069
	Positive	.058
	Negative	-.069
Test Statistic		.069
Asymp. Sig. (2-tailed)		.200 ^{c,d}

a. Test distribution is Normal.

Source: Researcher's Data, 2024.

The criterion for determining whether the data follows a normal distribution is to compare the Asymptotic value obtained with the Asymptotic value in the table. Based on the Table 3 above, the Asymp. Sig. (2-tailed) value is 0.2, which is greater than 0.05. Therefore, it can be concluded that the data is normally distributed.

- Heteroscedasticity

Heteroscedasticity testing aims to determine whether the variance of variables in the model is unequal (non-constant). The heteroscedasticity test in the study is performed by comparing the significance value α with the obtained significance value. The results of the heteroscedasticity test are presented in the following Table 4:

Table 4 Heteroscedasticity Test Results.

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	.459	.836		.549
	Family Assistance Team's Communication Patterns	.040	.034	.117	1.165
					.247

a. Dependent Variable: ABS_RES

Source: Researcher's Data, 2024.

Based on the Table 4 above, the significance value obtained is greater than $\alpha = 0.05$ ($0.247 > 0.05$). Thus, it can be concluded that there is no indication of heteroscedasticity in the data used in the study.

5. Hypothesis Testing

Hypothesis testing in this study is conducted by examining the results using partial statistical tests (t-test). Using SPSS Version 26, the results of the test are as follows:

This partial test is used to determine the extent of the effect of the independent variable (Family Assistance Team's Communication Patterns) on Stunting Prevention Behavior individually.

The steps for conducting a partial test are as follows:

Determine the null and alternative hypotheses:

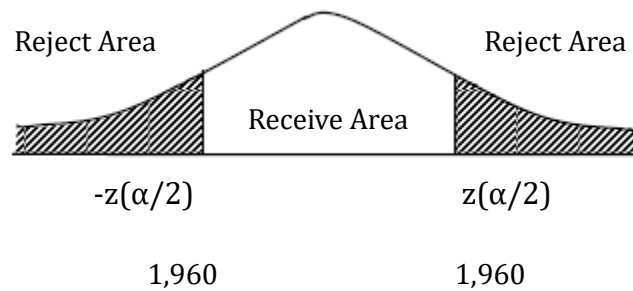
H₀: $\beta = 0$: The independent variable does not have a significant effect on Stunting Prevention Behavior.

H_a: $\beta \neq 0$: The independent variable has a significant effect on Stunting Prevention Behavior.

Level of significant $\alpha = 5\%$

Testing criteria (role of test)

Figure 1 Normal Curve of the t-Test.



Source: Djarwanto and Subagyo, 1993.

6. Z Value

The calculated z value, using SPSS Version 26, is as follows:

Table 5 Calculation of Z Value.

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	.972	1.306		.744	.458
Family Assistance Team's Communication Patterns	.327	.054	.525	6.103	.000

a. Dependent Variable: STUNTING PREVENTION BEHAVIOR

Source: Researcher's Data, 2024.

The Table 5 above can be explained as follows:

At a significance level of 0.05, the calculated z value for the Family Assistance Team's Communication Patterns variable (X) is 6.103, and the critical z value is 0.025; $50\% - 2.5\% = 47.5\%$ ($= 0.4750$). This value is located at row 1.9 and column 0.06, so $Z_{0.025}$ is 1.96 (z calculated $> z$ table). Alternatively, the ANOVA table shows that the t significance value is 0.000 (sign $t < 0.05$). Therefore, the Family Assistance Team's Communication Patterns variable (X1) is found to have a significant effect on the Stunting Prevention Behavior variable (Y).

DISCUSSION

Based on the results of the testing, it was found that the Family Assistance Team's Communication Patterns significantly influence Stunting Prevention Behavior. Thus, referring to the definition of Family Assistance Team's Communication Patterns as proposed by DeVito (2011) and Bartels et al. (2010), which involves interaction in delivering messages to others with influence, impact, and opportunities for feedback leading to a relationship. This study demonstrates that an improvement in Family Assistance Team's Communication Patterns will enhance Stunting Prevention Behavior among families with infants under two years and children under five in the Wangi-Wangi District, Wakatobi Regency. If families with infants under two years and children under five perceive an improvement in the elements of Family Assistance Team's Communication Patterns, such as openness, empathy, supportive attitudes, positivity, and equality, this will enhance Stunting Prevention Behavior in the form of improvements in dietary patterns, caregiving practices, and sanitation and clean water conditions. This research results also support several previous studies that concluded the influence of interpersonal communication on stunting prevention behavior. However, the low coefficient of determination indicates that there are many other factors influencing Stunting Prevention Behavior that were not included in this study's mode.

CONCLUSION

Based on the data analysis conducted, the conclusion of this study is that an increase in the intensity of communication patterns by the Family Assistance Team will enhance stunting prevention behavior among families with infants under two years and children under five in the Wangi-Wangi District. With this effect size, the implication of this research is the need to increase the intensity of communication between the Family Assistance Team and families with infants and young children. Another implication is the need for further studies on factors influencing stunting prevention behavior beyond the communication patterns of the Family Assistance Team.

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