



Impact of Complementary Food Among Malnourished Children of the Municipality of Tobias Fornier, Antique, Philippines

Marie Ann J. Raymaro, PhD

Associate Professor V
University of Antique, Sibalom, Antique, Philippines

Abstract : This descriptive study was conducted to determine the impact of complementary food among malnourished children of the municipality of Tobias Fornier, Antique, Philippines. Specifically, it sought to determine the proportion of malnourished children rehabilitated after availing the complementary food. It also sought to determine the significant proportion of more than 30% malnourished children who were rehabilitated using complementary food. The respondents of the study were the 236 malnourished children identified in the different barangays of the municipality of Tobias Fornier, Antique. The data utilized in this study were taken from the baseline-endline result of the 120 days of Complementary Feeding Program implemented by the Barangay Nutrition Scholars (BNS) and monitored, supervised and evaluated by the members of the Municipal Nutrition Committee of the municipality of Tobias Fornier, Antique, Philippines. The statistical tools used in this study were frequency, percentage and z-test of a proportion. Alpha level was set at 0.05. The study revealed that 37% of malnourished children were rehabilitated after availing the complementary food. It also revealed that there was a significant proportion of more than 30% of malnourished children who were rehabilitated after availing the complementary food. There is a positive result after availing the complementary food among malnourished children in the Municipality of Tobias Fornier, Antique, Philippines. Their nutritional status has improved.

Index Terms - Complementary food, malnourished children, nutrition.

INTRODUCTION

Growing up in poverty and poor health, exposed to family, environmental stress, and violence, and other risk factors lead to social and economic consequences that stand in the way of achieving prosperity and economic development [1]. In developing countries, where 92% of the world's children live, one in 20 does not survive beyond the first 5 years [2]. By 2030, this proportion is expected to improve to 1 in 40 children [3]. It is estimated that over 200 million children under 5 are not reaching their developmental potential based on indicators of poverty and early childhood stunting [4]. The actual number of at-risk children may be even higher [5].

Complementary food can be adopted in the feeding programs of the government and non-government agencies to address the malnutrition problem among infants and young children. The municipality of Tobias Fornier, Antique allocated funds for a complementary food project to improve the nutritional status of their malnourished

children. Moreover, the extent of the impact after availing the complementary food can be given emphasis to promote the positive findings of implementing complementary feeding program utilizing the complementary food produced by the University of Antique, Sibalom, Antique, Philippines. Thus, the researchers believe that there is a need to look into the impact of the complementary food among malnourished children of the municipality of Tobias Fornier, Antique, Philippines to determine whether or not their nutritional status has improved.

NEED OF THE STUDY

This study was conducted to determine the impact of complementary food among malnourished children of the municipality of Tobias Fornier, Antique, Philippines. Specifically, it sought answers to the following questions: (1) What is the proportion of malnourished children who were rehabilitated after availing the complementary food? (2) Is there a significant proportion of malnourished children who were rehabilitated after availing the complementary food?

Hypothesis

The study hypothesized that there is no significant proportion of malnourished children who were rehabilitated using complementary food.

Significance of the Study

The result of the study will be beneficial to the following:

Local Government Unit (LGU). The result of this study will give the LGUs a picture of the impact of complementary food among malnourished children which will serve as the basis for provision of funds for the purchase of complementary food feeding activities to succeed in overturning their state of malnutrition.

University of Antique. This study will be beneficial to the University of Antique to continuously expand and promote complementary food for feeding activities to address malnutrition through strong linkage and partnership with the LGU, and other government and non-government units.

Definition of Terms

The following terms used in the study are defined operationally:

Complementary Food. It refers to the mungo, rice and sesame (MORISE) product produced by the University of Antique through the MORISE project.

Malnourished Children. It refers to 6 to 71 months old pre-schoolers from the different barangays of the municipality of Tobias Fornier, Antique who were identified as undernourished.

RESEARCH METHODOLOGY

This study made use of the descriptive research design. The study described the proportion of malnourished children rehabilitated after availing the complementary food. This study further described whether or not a significant proportion of malnourished children were rehabilitated after availing the complementary food. The respondents of the study were the 236 malnourished children identified in the different barangays of the Municipality of Tobias Fornier, Antique, Philippines. The data utilized in this study were taken from the baseline-endline result of the 120 days of Complementary Feeding Program implemented by the Barangay Nutrition Scholars (BNS) and monitored, supervised and evaluated by the members of the Municipal Nutrition Committee of the municipality of Tobias Fornier, Antique, Philippines. Frequency, percentage and z-test for a proportion were the statistical tools used in this study. Alpha level was set at 0.05.

RESULTS AND DISCUSSION**Proportion of Malnourished Children Rehabilitated After Availing the Complementary Food**

To determine the proportion of malnourished children rehabilitated after availing the complementary food, frequency and percentage were used. Out of 236 identified malnourished children, 87 or 37% malnourished children were rehabilitated after availing the complementary food. Table 1 presents the data.

Table 1: Proportion of Malnourished Children Rehabilitated After Availing the Complementary Food.

Category	Frequency	Percentage
Malnourished children before availing the complementary food	236	100%
After availing the complementary Food Malnourished	149	63%
Rehabilitated	87	37%

Significant Proportion of Malnourished Children Rehabilitated After Availing the Complementary Food

To determine the significant proportion of malnourished children rehabilitated after availing the complementary food, z-test (of a proportion) was used. Alpha level was set at 0.05. As shown in Table 2, there was a significant proportion of malnourished children who were rehabilitated after availing the complementary food, $z=2.30$, $p<0.05$. Thus, the null hypothesis was rejected. The proportion of 36.86% or 87 in 236 malnourished children rehabilitated after availing the complementary food implies that significantly there are more than 30% malnourished children who were rehabilitated.

Table 2: z-Test (of Proportion) Result on Significant Proportion of Malnourished Children Rehabilitated After Availing the Complementary Food.

Rehabilitated	N	\bar{p}	$\mu_{\bar{p}}$	$\sigma_{\bar{p}}$	z-value	p-value
87	236	0.37	0.30	0.03	2.30	0.02

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

The findings of the study are summarized as follows: (1) Thirty-seven percent (37%) of the malnourished children were rehabilitated after availing the complementary food. (2) There was a significant proportion of more than 30% of malnourished children who were rehabilitated after availing the complementary food.

The following conclusions were drawn: (1) After availing the complementary food, there is a decrease in the number of malnourished children in the municipality of Tobias, Fornier, Philippines. (2) There is a positive result after availing the complementary food among malnourished children in the Municipality of Tobias Fornier, Antique, Philippines. Their nutritional status has improved.

It is recommended that the LGU of the Municipality of Tobias Fornier, Antique, Philippines should have follow-up feeding activities utilizing the complementary food for their remaining malnourished children. The LGU of other municipalities in the Province of Antique should provide funds for the purchase of complementary food for feeding activities to succeed in overturning their state of malnutrition. The University of Antique should continuously expand and promote complementary food for feeding activities to address malnutrition through strong linkage and partnership with the LGU, and other government and non-government units.

REFERENCES

- [1] Consultative Group on Early Childhood Care and Development and Sustainable Development Solutions Network. 2014. Appeal to the Member States of the United Nations. Early Childhood Development: The Foundations of Sustainable Human Development for 2015 and beyond. Retrieved from <http://unsdsn.org/w-content/uploads/2014/05/ECDandSHDv5-050314-2.pdf>
- [2] Wang, H., Liddell, C.A., Coates, M.M., Mooney, M.D., Levitz C.E., Schumacher, A.E., et.al. 2014. Global, Regional, and National Levels of Neonatal, Infant, and Under -5 Mortality during 1990-2013: A systematic Analysis for Global Burden of Disease Study 2013. *The Lancet* 384 (9947): 957-79
- [3] Gates, B. and Gate, M. 2015. 2015 Gates Annual Letter: Our Big Bet for the Future. Retrieved from <http://www.gatesnotes.com/2015-annual-letter?page=0&lang=en>
- [4] Grantham-McGregor, S., Cheung, Y.B., Glewwe, P., RItcher, L., Strup, B. and International Child Development Steering Group. 2007. Development Potential in the First 5 Years for Children in Developing Countries. *The Lancet* 369: 60-70
- [5] Engle, P.L., Fernald, L.C., Alderman, H., Behrman, J., O’Gara, C., Yousafzai, A., et.al and the Global Development Steering Group. 2011. Strategies for Reducing Inequalites and Improving Developmental Outcomes for Young Children in Low-Income and Middle-Income Countries. *The Lancet* 378 (9799): 1339-53