

**PREVALENCE RATE OF MALNUTRITION ON CHILDREN AGES 0-59 MONTHS OLD
IN LANTAWAN, BASILAN, PHILIPPINES****Luz Nielyne Villafranca*, Bonica Mae Genandoy, Annur Jhake Tingah, Gabriel Jalar, Rod Urban Velasco,
Roderick Vargas and Romanick A. Molina**

Senior High School Department, Zamboanga City State Polytechnic College.

***Corresponding Author: Luz Nielyne Villafranca**

Senior High School Department, Zamboanga City State Polytechnic College.

Article Received on 14/04/2021

Article Revised on 04/05/2021

Article Accepted on 24/05/2021

ABSTRACT

Malnutrition is one of the health issues revolving around the world. In the Municipality of Lantawan, Basilan, Philippines, malnutrition among children aged 0-59 months were registered. With this, the researchers aimed to determine the prevalence rate of malnutrition in Lantawan using the available secondary data from the Municipal Health Office. Data shows that there is a gradual decrease of malnutrition from 2013 onwards and a slight increase for the year 2017 and 2018. Since malnutrition cannot be totally eradicated, the Lantawan Health Office together with its stakeholders implement some programs to reduce the number of cases such as distribution of RUTF and conduct of lectures on proper diet and proper meal.

KEYWORDS: Malnutrition, Prevalence Rate, RUTF, Severe Acute Malnutrition, Moderately Acute Malnutrition.**INTRODUCTION**

Health issues revolving around the world is quite huge every year. It covers mental health, immunization, substance abuse, access to health care, overweight and obesity, and tobacco.^[1] Health issues can be manifested on adults and on young ones. Physical and mental health are interconnected to each other. A person with poor physical health has a risk of developing mental health problems like how mental health can also affect physical health.^[2]

One of the common health problems that most of the people experience is malnutrition. Malnutrition is known as “*poor nutrition*” can be referred to: 1.) under – nutrition, which means you are not getting the exact or the enough amount of nutrients, and; 2.) over – nutrition which means you are getting more nutrients than needed.^[3] Malnutrition is a serious condition that occurs when a person’s diet does not contain the right amount of nutrients needed. One main cause of malnutrition in a developing country is lack of food. More so, physical circumstances and conditions such as teeth in bad condition, difficulty on swallowing, severe head injury and physical disability may serve as contributory factors on malnutrition.^[4]

In the Philippines, 95 children dies from malnutrition each year and 27 out of 1,000 Filipino children do not get past their fifth birthday. It is also notable that Filipino children are stunted or their height does not meet the required height for their age. A child that is stunted after 2 years of age can be permanent, irreversible, and even

fatal.^[5] Malnutrition in the Philippines is caused by interrelated factors such as health, physical, social, and economic. Reports indicated that despite Filipinos have enough food supply, many were experiencing hunger and malnourished because of inadequate nutrients intake.^[6] In 2015, the national prevalence rate of under-five overweight is 3.9%, which has slightly decreased from 5% in 2013. While for the under-five stunting is 33.4%, which is greater than the developing country average of 25%.^[7] There are four (4) broad sub-forms of under-nutrition. These are wasting, stunting, underweight and deficiencies in vitamins.

Lack of micronutrients can be a major threat worldwide especially to pregnant women and children.^[8] It is quite obvious that this 2019 Novel Corona Virus Pandemic has worsened the plight of malnourished Filipino children. According to Dr. Amado Parawan, Health and Nutrition Advisor of Save the Children Philippines, the 2019 pandemic and the Enhanced Community Quarantine did not only posed a situation that possesses challenges to the health workers and nutrition programs for severely malnourished children. Worse, it resulted to the inability of families to meet their basic food requirements due to income losses.^[9]

The United Nations International Children's Emergency Fund (UNICEF) come together to save the lives of children who are suffering from severe acute malnutrition. Nutrition supply as ready – to – use therapeutic foods (RUTF), are finally being delivered to

the provinces to treat more or less 50,000 children that are severely malnourished.^[10]

Provinces in the Philippines tend to have the highest rate of malnutrition in the country, especially in some parts of Mindanao. According to the National Nutrition Survey, the Bangsamoro region has the highest prevalence rate of stunting in the Philippines at 45.2%, which has an estimation of 230,000 children or at least 1 in every 2 children under 5 are stunted and deprived of achieving their full potential in life.^[11] The Department of Budget has allocated a funding of ₱1.97 billion for the Department of Social Welfare and Development (DSWD) to address the malnutrition in the ARMM, of which, ₱370 million is allotted for the supplemental feeding project that targets 200,000 malnourished children from Maguindanao, Basilan and Lanao Del Sur.^[12]

Basilan is one of among the provinces in Mindanao with 11 municipalities: Akbar, Albarka, Hadji Mohammad, Ajul, Hadji Muhtamad, Lantawan, Maluso, Sumisip,

Tabuan-Lasa, Tipo-Tipo, Tuburan, and Ungkayapukan.^[13] These municipalities recorded number of malnutrition cases.

Among these municipalities, Lantawan, a 4th class municipality with a total population of 20,087 and the locals are mostly engaged in fishing and farming.^[14] In this study, a review of data was made to establish the prevalence rate of malnutrition among the children who are 0-59 months old in Lantawan, Basilan. In addition, this study can serve as a basis in strengthening the preventive measures on malnutrition in the municipality such as using infographics or promotional video in social media.

MATERIALS AND METHODS

Study site

The Municipality of Lantawan is situated at approximately 6° 38' North, 121° 50' East, in the island of Basilan. Elevation at these coordinates is estimated at 34.0 meters or 111.5 feet above mean sea level. The municipality consists of 25 barangays.^[17]

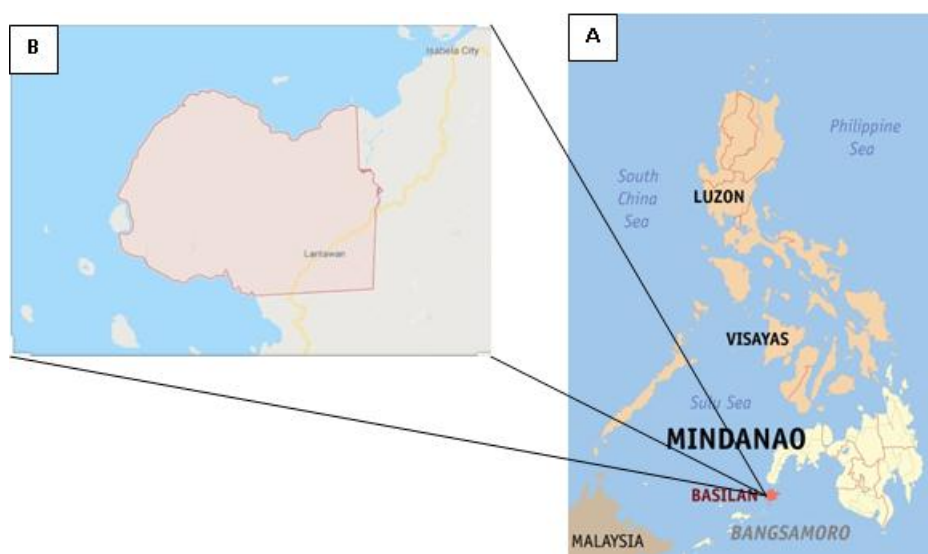


Figure 1: The study site A. Philippine Map and B. Lantawan, Basilan.

Data gathering procedure

To answer the posted objectives in the study, the researchers utilized a secondary data analysis. The secondary data were requested from the Lantawan Health Office through a request letter submitted to the Municipal Mayor's Office.

RESULTS

Malnutrition cases of children aged from 0-59 months were recorded in Lantawan, Basilan. Table 1 shows the total number of malnutrition in Municipality of Lantawan from 2013 to 2019.

Table 1: Number of malnourished children ages 0-59 months old in Lantawan, Basilan (2013 - 2019).

Year	Moderate Acute Malnutrition (MAM)	Severe Acute Malnutrition (SAM)	Total
2013	85	11	94
2014	25	19	44
2015	63	28	91
2016	57	11	68
2017	128	19	147
2018	134	38	172
2019	63	18	81

It be seen in table1 that the highest number of malnutrition was recorded in 2018 with 172 cases, wherein, there were 134 cases of MAM and 38 cases of SAM. More so, 2017 obtained the second highest malnutrition cases (total = 147) with 128 cases of MAM and 19 cases of SAM. On the other hand, 2014 has the lowest malnutrition cases (total = 44) with 25 cases of MAM and 19 cases of SAM.

Prevalence rate were determine by dividing the number of malnourished children with the total number of children assessed. Table 2 shows the prevalent rate of malnutrition cases from 2013 to 2019.

Table 2: Prevalence rate of malnourished children ages 0-59 months old in Lantawan, Basilan (2013 – 2019).

Year	Number of Children Assessed	Number of Malnourished Children	Prevalence
2013	2, 813	94	3.34 %
2014	3, 252	44	1.35 %
2015	2, 742	91	3.32 %
2016	2, 802	68	2.43 %
2017	2, 956	147	4.19 %
2018	2, 873	172	5.99 %
2019	2, 180	81	3.72 %

It can be seen that since 2018 has the highest malnutrition cases followed by 2017, thus both years obtained the highest prevalent rate (5.99% and 4.19% respectively). Meanwhile, the lowest prevalent rate was recorded in year 2014 (1.35%).

DISCUSSION

Malnutrition cases is the sum of Severe Acute Malnutrition (SAM) and Moderate Acute Malnutrition (MAM) recorded in a city or municipality based on the assessment conducted by the Health Officer. Severe Acute Malnutrition (SAM) is defined as a person with very low weight for height, visible severe wasting, or by the presence of oedema.^[18]

Meanwhile, Moderate Acute Malnutrition (MAM) is defined as a person with weight-for-height indicator between -3 and -2 z-scores of the international standard deviation or by a mid-upper arm circumference (MUAC) between 11 cm and 12.5 cm.^[20]

For the year 2013 – 2019, there were 697 malnutrition cases recorded among children aged 0 – 59 months old in Lantawan, Basilan. The data shows that from the year 2013 to 2016, the prevalence rate of malnutrition among children in Lantawan gradually decreases. However, there was a slight increase for 2017 and 2018. The increase of malnutrition in 2017 and 2018 happened because of poverty, teenage marriage, and lack of knowledge on proper food handling. Meanwhile, the decrease of malnutrition was due to the continuous info

drive on the first 1000 days of life, reproductive health, and weight monitoring of children aged 0-59 months regularly. According to National Family Health Surveys (NFHS), malnutrition is not the result of a single cause, hence, it involves complex factors such as combination of poverty, health care system and programs, ignorance on nutrition and health education, female illiteracy and social convention.^[21]

Since malnutrition among children is a main concern, the World Health Organization (WHO) in partnership with UNICEF, recently developed a home-based treatment which is the Ready – to – Use Therapeutic Food (RUTF) – a peanut butter paste that is rich in vitamins and energy contained in a package that will help in improving one's nutritional status.^[22,23] The RUTF is being distributed in Lantawan through its health workers. More so, Municipal Health Office conducts lecture on proper diet and proper meal. Since malnutrition cannot be totally eradicated in Lantawan, implementing such programs will reduce the malnutrition cases in the municipality.

ACKNOWLEDGEMENT

The researchers would like to express their deepest thank to the Lantawan Municipal Health Officer Lucy T. Villafranca, and to the Municipal Mayor of Lantawan, Hon. Nursiya I. Ismael.

REFERENCES

1. University of Rochester Medical Center. *Top Ten Common Health Issues*, 2020. Retrieved from <https://www.urmc.rochester.edu/senior-health/common-issues/top-ten.aspx>
2. Mental Health foundation. *Physical and Mental Health*, 2016. Retrieved from <https://www.mentalhealth.org.uk/a-to-z/p/physical-health-and-mental-health>
3. NSH. *Malnutrition*, 2020. Retrieved from <https://www.nhs.uk/conditions/malnutrition/causes/>
4. HSE our health service. *Causes of Malnutrition*. Retrieved from <https://www.hse.ie/eng/health/az/m/malnutrition/causes-of-malnutrition.html>
5. UNICEF Philippines| for every child. *Child Survival*. Retrieved from <https://www.unicef.org/philippines/child-survival>
6. Food and Agriculture Organization. *Philippines Nutrition Profile*. Retrieved from http://www.fao.org/ag/agn/nutrition/phl_en.stm
7. Global Nutrition Report. *Philippines Nutrition Profile*, 2019. Retrieved from <https://globalnutritionreport.org/resources/nutrition-profiles/asia/south-eastern-asia/philippines/>
8. World Health Organization, 2020. *Fact sheets/detail/Malnutrition*. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/malnutrition>
9. Senator Atty. Lina, J.D. Manila Bulletin-Opinion-Editorial News, 2020. *Malnutrition in the Philippines is worse than pandemic*. Retrieved from

- <https://mb.com.ph/2020/07/27/malnutrition-in-the-philippines-is-worse-than-pandemic/amp/>
10. UNICEF Philippines| for every child. *DOH delivers Ready- to- Use Therapeutic Food for severely malnourished children to priority provinces*, 2017; Retrieved from <https://www.unicef.org/philippines/press-releases/doh-delivers-ready-use-therapeutic-food-severely-malnourished-children-priority>
 11. UNICEF Philippines| for every child. *Stunting and malnutrition pose health and economic burden in Bangsamoro*, 2017. Retrieved from <https://www.unicef.org/philippines/stories/stunting-and-malnutrition-pose-health-and-economic-burden-bangsamoro>
 12. Official Gazette. *billion for day care, nutrition, livelihood, and shelters in ARMM*, 2011; 1: 97. Retrieved from <https://www.officialgazette.gov.ph/2011/10/28/p1-97-billion-for-day-care-nutrition-livelihood-and-shelters-in-armm/>
 13. Wikipedia, the Free Encyclopaedia *Basilan*, 2020. Retrieved from <https://en.m.wikipedia.org/wiki/Basilan>
 14. Basilan Gov. Ph. *Cities and Municipalities*, 2020. Retrieved from <http://www.basilan.gov.ph/basilan/about-us/municipalities>
 15. Lantawan. Gov. Ph. *Municipal government of Lantawan*, 2019. Retrieved from <http://www.lantawan.gov.ph/lantawan/>
 16. Wikipedia, the Free Encyclopaedia *Lantawan*, 2020. Retrieved from <https://en.m.wikipedia.org/wiki/Lantawan>
 17. PhilAtlas. *Lantawan, Province of Basilan*, 2020. Retrieved from <https://www.philatlas.com/mindanao/armm/basilan/lantawan.html>
 18. World Health Organization. *Severe Acute Malnutrition*, 2020. Retrieved from https://apps.who.int/nutrition/topics/severe_malnutrition/en/index.html
 19. Action Against Hunger. *Types of acute malnutrition*, 2020. Retrieved from <https://actionagainsthunger.ca/what-is-acute-malnutrition/types-of-acute-malnutrition/>
 20. Thakur, R. Dr. Rajesh. *Shodh Gangotri Research Proposal. Growth and Nutritional Status among boys and girls oh Hathin block of district Palwal, Haryana*, 2018. Retrieved from <https://shodhgangotri.inflibnet.ac.in/jspui/bitstream/123456789/5623/1/research%20proposal.pdf>
 21. World Health Organization. *Maternal, Newborn, Child, and Adolescent Health, Malnutrition*, 2020. Retrieved from https://www.who.int/maternal_child_adolescent/topics/child/malnutrition/en/
 22. Active for Good Ready to Use Therapeutic Food. *What is RUFT?*, 2020. Retrieved from <https://activeforgood.com/story/rutf/>