

Maternal Knowledge Description About the Importance of Micronutrient Powder for Children Aged 6-23 Months in Public Health Center 2023

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Article Information *Abstract*

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Introduction: Knowledge of nutrient both macronutrient and micronutrient is very important. In this modernization era children still suffer for nutritional deficiency, such as micronutrient deficiency of iron, vitamin A, zinc, and others nutritional deficiency. One of the common factors is, the parents have less knowledge about the importance of micronutrient for their children's development. UNICEF Timor-Leste had done research in 2020 to collect the data of the children that suffer for micronutrient deficiency, and it shows that the prevalence of micronutrient deficiency is 18% around Timor-Leste. **Objective:** To describe the knowledge of maternal about the importance of micronutrient powder for children aged 6-23 months in Public Health Center Metinaro, administrative post Metinaro, Díli municipality in 2023. **Method:** The researcher uses quantitative method with the type of description. The sampling technique uses non-probability with type of accidental sampling. The data analysis technique uses statistic univariate test. **Result and Discussion:** Through this research the researcher found out that most of the mother have sufficient knowledge and 100% they apply MNR for their children. **Conclusion:** The researcher conclude that these mothers have enough knowledge about MNR and ready to apply it to their children.

Keywords: Knowledge; Importance of MNR; Micronutrient Powder; Children Aged 6-23 Months;

Introduction

Micronutrient deficiency of children under 5 years is a global health issue that really needs attention from relevant sectors such as health sector, agriculture, education, sanitation, clean water, and etc. Some of vulnerable group that always suffer for micronutrient deficiency are children, pregnant women, and women that in their puberty period. However, deficiency in children under 5 years is the one that has higher number compare to other group (World Health Organization, 2020), (Braunstein et al., 2020), (Cappellini et al., 2017), (Clark et al., 2020), (Darsini, Fahrurrozi, & Cahyono, 2019)

Normally there is a lot type of micronutrient deficiency but the one that children under 5 years suffer the most is micronutrient deficiency of Iron, from this condition will causes children suffer for Anemia. Micronutrient deficiency has a big negative impact for development of a country if the victims are children, as we know that children is the future of a nation, for this we need to take care of the children and let them grow normally without any disease (World Health Organization, 2020), (Debelo, Novotny, & Ferruzzi, 2017), (Field & Stover, 2018), (Khamis, Mwanri, Ntwenya, & Kreppel, 2019), (Piccolo et al., 2019)

Based to the global data from Our World in Data collaborate with World Health Organization shows that in 2020 the prevalence of children under 5 years that suffer for micronutrient deficiency is 39.80%. However, there is also prevalence from South East Asia nation such as Singapore 13%, Cambodia 49%, and Indonesia 38%. Focus to our nation Timor-Leste there is research that shows the prevalence of micronutrient deficiency of children under 5 years with percentage of 18%. However, due to the result from local Public Health Center in Metinaro Dili Timor-Leste found that there are 20 children that suffer for micronutrient deficiency in year 2023 (Scipion & Teruaki, 2023), (Sempos et al., 2018), (Tam, Keats, Rind, Das, & Bhutta, 2020), (Yu et al., 2019)

The main causes of micronutrient deficiency are, the parents do not have much knowledge about the importance of micronutrient for their children's growth, and they get less supply of micronutrient for their body. Children less than 5 years really need an extra attention from their parents, with this young age they still do not know how to eat right, take shower, and they do not know about the benefits of food for their body. Based to this, the researcher held research to know about maternal knowledge of micronutrient powder for children aged 6-23 months in Public Health Center Metinaro, and the result shows that from 165 mothers 84,2% of them have medium level of **knowledge (knowing)**, and 80.6% of mothers also have medium level of **comprehension** of micronutrient for their kids, and 100% of mothers apply the micronutrient powder for their children based on instruction of health professional.

Method

This research used investigation method of quantitative with descriptive type because the main purpose of this research is to find out or to know mother's knowledge about the importance of micronutrient powder for their children development and growth in Metinaro Public Health Center.

This research method is a quantitative analytical method of quantitative with descriptive type because the main purpose of this research is to find out or to know mother's knowledge about the importance of micronutrient powder for their children development and growth in Metinaro Public Health Center. The sample for this research consisted of a total of 165 mothers. The sampling technique uses non-probability with type of accidental sampling. The data collection instruments were questionnaires. The data analysis technique uses statistic univariate test. (Herdayati, Pd, & Syahrial, 2019), (Kusumastuti, Khoiron, & Achmadi, 2020)

Result and Discussion

Result

Table 1

Respondents Aged

Aged	Frequency	Percentage %
16-20	29	17.5%
21-25	55	33.4%
26-30	52	31.5%
31-35%	18	10.8%
36-40	7	4.4%
41-47	4	2.4%
Total	165	100%

Based on the table above shows that from 165 mothers that brought their children to do a health treatment at CHC Metinaro, majority with aged of 21-25 respondents were 55 with (33%), and minority with aged of 41-47 respondents were 4 (2%).

Table 2

Respondents Profession

Profession	Frequency	Percentage %
House wife	106	64.2%
Public employee	19	11.5%
Businesswoman	11	6.7%
Agriculture	29	17.6%
Total	165	100%

Based on the table above says that majority of mother (respondents) with profession of house wife were 106 with (64%), and minority with profession of businesswoman were 11 with (6%).

Table 3

Respondents Education Level

Level of Education	Frequency	Percentage %
Primary School	35	21.3%
Pre-Secondary	39	23.6%
Secondary	57	34.5%
University	1	0.6%
Undergraduate	33	20.0%
Total	165	100%

Due on the above table shows that majority of respondents with education level of secondary with total of 57 (34%), and minority in university with total of 1 (0.6%).

Unvaried Analysis

Table 4

Respondents Knowledge (knowing) about Micronutrient Powder

Knowledge (knowing)	Frequency	Percentage %
Good	21	12.7%
Medium	139	84.2%
Minus	5	3.1%
Total	165	100%

Based on the table above shows that these respondents (mothers) knowledge (knowing) range is in the medium with total of 139 (84.2%), and minority in good with total of 21 (12.7%).

Table 5

Respondents Knowledge (comprehension) about Micronutrient Powder

Knowledge (Comprehension)	Frequency	Percentage %
Good	10	3.9%
Medium	100	80.6%
Minus	55	15.5%
Total	165	100%

Based on the above table shows that these respondents (mothers) knowledge (Comprehension) range is in the medium with total of 100 (80.6%), and minority in good with total of 10 (3.9%).

Table 6

Respondents Application of Micronutrient Powder for Their Children

Application	Frequency	Percentage %
Apply	165	100
Not apply	0	0
Total	165	100%

Based on the above table shows that these 165 respondents' majority with 100% apply the micronutrient powder for their children based to the instruction from health center especially nutrition unit.

Discussion

Based on the table 1 about **respondents age** shows that 165 respondents that come to CHC Metinaro majority with aged of 21-25 with frequency 55 (33%), aged 26-30 with frequency 52 (31%), aged 16-20 with frequency 29 (17%), aged 31-35 with frequency 18 (10%), aged 36-40 with frequency 7 (4%), and minority aged 41-47 with frequency 4 (2%).

Relate to the research of (Briggs, 2014) said that with increasing of age will have impact or transformation of psychology aspect (mental). If the age of a person increases each year automatically this person will gain more experiences from life lesson in every daily activity.

Based on the table 2 about **profession of respondents** shows that majority of respondents with profession of house wife were 106 (64%), agriculture was 29 (17%), public employee was 19 (11%), and minority with profession of businesswoman with frequency of 11 (6%).

Basically, people need to work to get any income to survive, and buy any necessary things, such as food, clothes, house things etc. People also need income to invest to their children's bright future, from these reason that push people to work hard to get their financial, (BD, Rosso 2010). Based on the table 3 about **respondent's education level** shows that majority of respondent education level were secondary with frequency of 57 (34%), pre-secondary with frequency of 39 (23%), primary with frequency of 35 (21%), undergraduate with frequency of 33 (20%), and minority in university with frequency of 1 (0.6%).

Education is a key to improve more people's knowledge in all of aspect, education have a power to transform characteristic of people to be better than before. Education also have power to bring people to a brilliant future career, (Saykili, 2018).

Based to the table 4 about **respondents' knowledge (knowing) of Micronutrient Powder**, the researcher finds out that from 165 respondents there is 139 (84.2%) have medium knowledge (knowing), 21 (12.7%) respondents have good knowledge (knowing), and 5 (3.1%) respondents have minus knowledge (knowing). Compare to the research of (Aregash Samuel, 2021) in Ethiopia countryside, said that the mothers have less knowledge (knowing) about micronutrient with 50% of the mothers that being their sample of research.

Due to the theory of (Notoatmodjo, 2018) said that knowledge is a result from hearing or getting any information in our daily life activity. However, knowledge is important for any individual, beside from these two comparisons the researcher want to gather the information of mother's knowledge to create a plan to increase mothers' knowledge to help reduce nutrition problem especially in children.

Based to the table 5 about **respondents' knowledge (comprehension) of Micronutrient Powder**, shows that from 165 respondents (mothers), 100 (80.6%) of them have medium knowledge (comprehension), 55 (15.5%) have minus knowledge (comprehension), and 10 (3.9%) of them have good knowledge (comprehension).

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Compare to the research of (Aregash Samuel, 2021) in Ethiopia countryside still shows that 48% of mothers have minus knowledge (comprehension) of micronutrient for their children's growth. The theory of (Notoatmodjo, 2018) said that to get comprehension we need to gather more information from our daily life, and mothers' comprehension of micronutrient is essential, because it will help the growth of their children every day.

Based to the table 6 about **respondents' application of micronutrient powder for their children**, the research shows that from 165 mothers said that 100% apply the micronutrient powder for their children due to the instruction from health center especially from nutrition unit. Compare to the research of (Emily Tam and the team, 2020) in the nations such as (Africa, Indonesia, India, etc.), shows that only 80% of parents that apply micronutrient powder for their children. The theory of (Emily Tam and team, 2020) said application of micronutrient for children is a must that every parent should do. Micronutrient have a big benefit for children development and growth, not all children get complete nutrient through the food that they eat, for this they need to get supply of micronutrient from health center and hospital, to complete any nutrients that the body does not get from food.

Conclusion

In the final of the research the researcher concludes that from 165 respondents (mothers) that bring their children to attend a health treatment in Public Health Center Metinaro, Majority have knowledge (knowing) in the medium level which is with frequency 139 (84.2%). And their knowledge (Comprehension) also in the medium level with frequency of 100 (80.6%). Their application of micronutrient powder for their children is 100% they apply with the best instruction from health professional.

Due to the theory of (Notoatmodjo, 2018) said that knowledge is an important part in an individual life, with a good knowledge people will develop their life better to the future. Knowledge come from the first time you born to this world, and develops each day of your life until the end of your life. From this research the researcher already knows mothers' knowledge about how important the micronutrient powder for their children development and growth. And through this research also help the mothers to improve their knowledge of benefits of micronutrient powder for the body of the kids.

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