# Family Coping Mechanisms For Children Under Five Years With Low Birth Weight (LBW) Without Stunting In Mokdale Village, Lobalain District, Rote Ndao Regency Indonesia

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ABSTRACT

Pregnant women who experience chronic energy deficiency will give birth to babies with low birth weight (LBW) which has an impact on the incidence of stunting (February 2023: 21.7%). Measurement data from February 2023 shows that 414 LBW babies were born, of which 38 children experienced stunting and 12 children did not experience stunting. The research aims to examine the actions of families of toddlers whose children have a history of LBW but are not stunted in Mokdale Village, Lobalain subdistrict, Rote Ndao district, Indonesia. The results of the analysis found that the coping mechanism factors used by mothers of LBW children who were not stunted included: 1). Factors: Mothers of toddlers in the late adult age category

(36-45 years) who are able to make decisions regarding parenting patterns and have a stable emotional condition which has a positive influence on parenting patterns; 2). Factor allocation of caregiving time for mothers of toddlers is more than eight hours per day; 3). Behavioral factors (knowledge, attitudes and actions) related to stunting, causes and impacts; 4). Factors: family food consumption patterns have better quality and quantity (>7 types of food consumed per day) and do not have the habit of abstaining from food; 5). Factors including the availability of clean water and the family adopting a clean and healthy lifestyle, including having and using a healthy toilet; 6). Factors do not have a history of infectious diseases; 7). Factors: history of getting enough exclusive breast milk for up to six months; 8). Factors: history of regular and complete immunization; 9). Factor in the number of posyandu visits 8-12 times a year; and 10). Factors of toddlers' families' access to specific nutritional intervention programs such as programs for underweight toddlers who receive PMT; program for toddlers who receive Vitamin A and toddlers who suffer from diarrhea who receive Zinc Supplements in preventing stunting.

Keywords: stunting, low birth weight, maternal parenting patterns, behavior, infectious diseases.

**Introduction**

Stunting has become a major nutritional problem among children in Indonesia. Since 2007 until now, the problem of stunting has been detected in Flobamora, including Rote Ndao Regency. The results of measuring the nutritional status of children for the period February 2023 in Rote Ndao Regency showed that the prevalence of stunting was 21.7% (2,938 children), the prevalence of malnourished children was 1.2% (157 children) and the prevalence of undernutrition was 10.7% (1,455 toddler). The prevalence of stunting is still relatively high when compared with the total stunting prevalence in NTT Province (15.7%) and nationally.

Stunting is a form of growth failure (growth faltering) due to the accumulation of inadequate nutrition that lasts for a long time starting from pregnancy until the child is 24 months old [1] and as a result of repeated incidences of infectious

diseases [2]. Pregnant women who experience chronic energy deficiency will have an impact on the birth of babies with low birth weight (LBW). The results of the study found that children who had a history of LBW had a greater risk of stunting[3][4][5][6][7][6][8].

The incidence of LBW in Rote Ndao Regency from 2020 to 2022 is always fluctuating. Where, in 2020 there were 253 LBW children (9.9%). This figure increased to 312 LBW children (11%) in 2021. However, this presentation figure in 2022 decreased to 176 LBW children (7.3%). However, this reduction achievement is still much higher than the Ministry of Health's target for 2022, namely 3.8% (Rote Ndao Health Office, 2022; Not Publicaton). The 2022 KIA report shows that the incidence of LBW in Rote Ndao Regency is spread and varies from one sub-district to another. If this is related to the prevalence of stunting in Rote Ndao Regency which is still quite high (>20%), it can be concluded that the incidence of LBW also contributes to stunting in children.

However, the same data source shows that a history of LBW does not always pose a risk of stunting after the child is two (2) years old. Based on an analysis of the general situation in Rote Ndao Regency in 2022, there will be 72 (29.9%) children under five who have a history of LBW and will be free of stunting. In particular, the results of the situation analysis in Mokdale Village showed that of the 414 births of LBW babies, 38 children experienced stunting and 12 children under five had a history of LBW but did not experience stunting(Rote Ndao Health Office, 2022; Not Publicaton).

Maternal behavior is one of the factors that can influence the incidence of protein energy deficiency (KEP) and chronic energy deficiency (KEK) and its impact on the incidence of LBW in children born [9][10] and the incidence of stunting. The behavior in question is the mother's knowledge, attitudes and actions in aspects of food consumption patterns, adequate nutritional intake, mother's parenting patterns regarding eating habits such as food processing habits and taboo foods as well as personal and environmental hygiene ([11][12]. The Unicef framework[13]also explains that nutritional problems can be avoided directly by improving maternal behavior in terms of food consumption, parenting patterns and prevention of infectious diseases along with the opportunity to receive

regular health services. Apart from that, the mother's positive attitude in utilizing government program support in solving nutritional problems in the household such as support for specific and sensitive nutritional intervention programs[13][14][15][16]. The research question that is also novel in this research is, what factors can be identified by 12 mothers of child who were born with a history of LBW but not stunting. Therefore, this study aims to determine: the coping mechanisms of families of children under five years old with a history of LBW but not stunting in Mokdale Village, Lobalain District, Rote Ndao District.

**Formulation of the Problem**

A. The data shows that Rote Ndao District has :

1. Good food security (natural resources for agriculture, fisheries and livestock are available, affordable and consumed)
2. Availability of clean water to ensure good PHBS practices
3. The specific and sensitive nutrition intervention program is sufficient and supported by a number of Rote Ndao regional government innovations

B. The general problems that can be formulated include:

1. The trend of decreasing stunting prevalence in Rote Ndao Regency is very slow.
2. There are still other nutritional problems besides stunting, such as underweight and wasting, which have not been fully addressed

C. The specific problem formulated is :

What are the coping mechanisms for families of toddlers who have a history of low birth weight (LBW) but are not stunted in Mokdale Village, Lobalain SubDistrict, Rote Ndao District?.

**Research Objectives**

This study aims to examine the coping mechanisms of families of children under five years old who have low birth weight (LBW) so that they do not become stunted in Mokdale Village, Lobalain District, Rote Ndao District.

**Research Novelty**

This research is useful for providing information and recommendations in the process of adopting innovative

measures for caring for and assisting families of children under five who have low birth weight (LBW) so that they do not become stunted in Mokdale Village, Lobalain subDistrict, Rote Ndao Regency.

## Research Methods

### Research Types and Designs

The type of research that will be used in this research is descriptive qualitative. This type of research was chosen with the consideration of describing existing phenomena or realities, both natural and human-engineered in an observed population. The aim of descriptive research is to create a systematic, factual and accurate description, picture of the facts, characteristics and relationships between family phenomena of children under five with a history of LBW but not stunting. Apart from that, this type of descriptive research can make predictions regarding coping risk factors in families of children under five with a history of LBW but not stunting [17]–[19].

Qualitative descriptive research does not provide treatment, manipulation or changes to the variables studied, but rather describes a condition as it is. The only treatment provided is the research itself, which is carried out through observation, interviews and documentation[20]. This research also uses the same research design, namely a qualitative descriptive design to describe and analyze the phenomenon of coping with families of toddlers with a history of LBW but not stunting in Mokdale sub-district, Lobalain District-Rote Ndao Regency.

### Location and Time of Research

The research was conducted in Mokdale Village, Lobalain District, Rote Ndao Regency in June - August 2023.

### Research subject

Research subjects as people who are observed as research targets. Meanwhile, [17]describes research subjects as informants, which means people in the research setting who are used to provide information about the situation and conditions of the research setting. In this research, the

researcher determined the research subjects based on considerations from parties who could provide the information and data needed in this research and parties who participated in the study of coping mechanism factors for families of children under five who had a history of LBW but were not stunted in Mokdale District, District. Lobalain, Rote Ndao Regency. Those who will be key informants in this research include the following :

1. Mothers of toddlers or individuals who are fully responsible for the growth and development of LBW children under five years old but not stunted (12 mothers) and stunted children under five (12 mothers)
2. Traditional leaders or community leaders and religious leaders
3. Nutrition Assistance Personnel in the Lobalain Community Health Center Working Area
4. Posyandu cadres in the Mokdale Village area
5. Person in charge of the program at the Rote Ndao District Health Service
6. Program person in charge at the Women's Empowerment and Family Planning Service (DP2KB) Rote Ndao Regency
7. Person in charge of the program at the Rote Ndao Regency Social Service
8. Person in charge of the program at the Rote Ndao Regency PUPR Service
9. Person in charge of the program at the Rote Ndao Regency Food Security Service

Furthermore, for the descriptive study, samples will also be selected from 12 LBW children experiencing stunting who will previously be matched for the same age and gender.

**Types of Data and Data Collection Instruments**

According to[21] research instruments are tools for researchers to collect data so that it is easier to process. Sugiyono[22]said that in qualitative research, the research instrument or tool is the researcher himself. In the research process, researchers use observation guidelines in field observations to obtain supporting data that is relevant to the research problem. Apart from that, researchers used data collection tools, namely notebooks, interview guides and other observation tools during the research process. This research requires data or

information and information. In general, there are two data sources used in this research, namely primary and secondary data sources. The details are as follows:

**Primary data**

Primary data is data obtained directly at the research location. This data can be obtained through an interview and observation process regarding: (Table 1).

The interview technique used in this research uses semi-structured interviews, namely interviews to find problems in a more open manner, where the party being interviewed is asked for their opinions and ideas[22]. Interviews were conducted in a structured manner according to the description of the research questions. From the research questions outlined, it will become more specific research according to the main points in this research which will make it easier for researchers to obtain detailed and complex information regarding the coping mechanism factors of families of children under five who have a history of LBW but are not stunted in the sub-district. Mokdale, Lobalain District, Rote Ndao Regency.

Explains the observation method, namely making direct observations of the research object to look closely at the activities being carried out. If the research object is human behavior and actions, natural phenomena, work processes, and the use of small respondents[21]. In this research, the researcher carried out non-participatory observation, where the researcher only made observations using observation guidelines without involving himself in the existing phenomenon. Observations in this study were carried out to determine the coping mechanism factors of families of children under five who had a history of LBW but were not stunted in Mokdale Village, Lobalain District, Rote Ndao Regency.

**Secondary Data**

Secondary data is data that supports primary data and is complementary to primary data. Data obtained through second parties and so on. This means that the researcher will pass through one or more parties who are not the researcher himself. Secondary data in this research are:

1. Data on the nutritional and health status of sample children under five (LBW without stunting and LBW stunting)

2. National strategy program coverage data (20 specific and sensitive intervention programs and 5 regional intervention programs)
3. Articles related to the problem being researched from social media/internet

**Data Presentation and Processing**

Data presentation or data display is the description of a collection of structured information that provides the possibility of drawing conclusions and taking action. The presentation of qualitative data is presented in the form of narrative text[22][21]. The presentation can also be in the form of matrices, diagrams, tables and charts to explain the processes that occur in the coping mechanism factors of families of toddlers who have a history of LBW but are not stunted in Mokdale Village, Lobalain District, Rote Ndao Regency.

Data presentation begins by providing a description of the research results that have been previously classified. The data that has been presented is then discussed and interpreted based on the theories chosen by the researcher to obtain a clear picture of the efforts made by mothers of children who have a history of LBW so that they can be stunting free or no longer stunted.

**Data Analysis and Conclusion**

Drawing conclusions is the final activity of data analysis. Drawing conclusions takes the form of interpretation activities, namely finding the meaning of the data that has been presented. Between data display and drawing conclusions there are existing data analysis activities. In this sense, qualitative analysis is a continuous, iterative and ongoing effort.

Data will be processed in two types. Qualitative data from the group of LBW children who are not stunted will be processed descriptively so that it is hoped that it can reveal positive forms of deviance. Meanwhile, quantitative data taken from the case and control groups will be analyzed statistically non-parametrically to see the influence of independent variables on preventing stunting in LBW children[22][21].

**Table 1. Distribution of informants according to data type and data collection method at the research location**

| No | Informant | Data Type | Method |
|---|---|---|---|
| 1 | Mothers of toddlers or individuals who are fully responsible for the growth and development of stunted and non-stunting LBW children (@12 mothers of children) | 1. Level of understanding of mothers of children under five years about stunting, the causes and impacts of stunting<br>2. Mother's behavior (knowledge, attitudes and actions) related to adequate food and nutrition<br>3. The mother's parenting style is related to food consumption habits (abstinence food culture)<br>4. Mother's parenting style regarding personal and environmental cleanliness<br>5. Frequency of visits to posyandu<br>6. Access and distance to health service centers<br>7. History of infectious disease<br>8. Ownership of healthy toilet facilities<br>9. Access for families of children under five to 10 specific nutritional intervention programs in preventing stunting<br>10. Access for families of children under five to 8 sensitive nutrition intervention programs in preventing stunting<br>11. Access of families of children under five to 5 coverage indicators for NTT Province | Snow Ball, Indepth Interview, Observation |
| 2 | Traditional leaders or community leaders and religious leaders | 1. Data on cultural taboos<br>2. Community or community service programs | Snow Ball dan Indepth Interview |
| 3 | Nutrition Assistance Personnel in the Lobalain Community Health Center Working Area | 1. Nutrition education outreach program<br>2. Assistance with PMT service programs for pregnant women, | Snow Ball, Indepth Interview, Observation |

| No | Informant | Data Type | Method |
|---|---|---|---|
| | | breastfeeding mothers and babies/children | |
| 4 | Posyandu cadres in the Mokdale Village area | 1. Nutrition education outreach program (especially Table 4)<br>2. Assistance with PMT service programs for pregnant women, breastfeeding mothers and babies/children | Snow Ball, Indepth Interview, Observation |
| 5 | Person in charge of the program at the Rote Ndao District Health Service | 1. Nutrition education program<br>2. Assistance with specific nutritional intervention programs<br>2.1. Coverage of underweight children under five who receive PMT<br>2.2. Coverage of attendance at posyandu (ratio of attendance to total target)<br>2.3. Coverage of children 6-59 months who receive Vit A<br>2.4. Coverage: Children aged 0-11 months have been fully immunized<br>2.5. Coverage of children under five with diarrhea who receive zinc supplementation<br>2.6. Coverage of services for postpartum mothers<br>2.7. Coverage for babies who are exclusively breastfed<br>2.8. MP ASI counseling coverage<br>2.9. Coverage of malnourished children under five who are handled/receiving care<br>2.10. Number of children under five with pneumonia | Indepth Interview, Observasi |
| 6 | Person in charge of the program at the Women's Empowerment and Family Planning Service (DP2KB) Rote Ndao Regency | 1. Class coverage for pregnant women (mothers attend nutrition and health counseling) | Indepth Interview, Observation |

| No | Informant | Data Type | Method |
|---|---|---|---|
| | | 2. Coverage of families participating in Family Development for children under five years old | |
| 7 | Person in charge of the program at the Rote Ndao Regency Social Service | 1. Household coverage of JKN/Jamkesda participants<br>2. Coverage of KPM PKH who receive FDS on nutrition and health<br>3. Coverage of 1000 HPK poor group families as BPNT recipients | Indepth Interview, Observation |
| 8 | Person in charge of the drinking water and sanitation program (PUPR/PAMSIMAS) | 1. Coverage of households that use adequate drinking water sources<br>2. Coverage of households using proper sanitation | Indepth Interview, Observation |
| 9 | Person in charge of the program at the Rote Ndao Regency Food Security Service | The scope of villages implementing KRPL/P2L includes agriculture, fisheries and livestock | Indepth Interview, Observation |

**Results**

A. Family characteristics of children under five years

The results of the analysis show that on average children under five with normal nutritional status, a history of LBW without stunting, and a history of LBW stunting are cared for by biological parents ranging in age from 24 years to 52 years. The age of mothers under five is grouped according to the Indonesian Ministry of Health[11], [23]–[25]. Where, the majority of children under five with a history of LBW and not stunting (50%) are cared for by mothers who are in the late adult age group. Furthermore, Table 1 shows that 43.75% of mothers with a history of LBW are not stunted as government employees and some (40%) are only housewives. With the length of time spent caring for children of more than eight (8) hours every day.

**Table 1. Crosstab Analysis of Respondent Characteristics and Indicators of Coping Mechanisms for Stunting Incidents in Mokdale Village, Lobalain District, Rote Ndao Regency, 2023**

| No | Indicator | Nutritional Status of Children Under Five | | | | | | Total | |
|---|---|---|---|---|---|---|---|---|---|
| | | Normal | | Children under five with a history of LBW are not stunted | | Children under five with a history of LBW are stunted | | | |
| | | n | % | n | % | n | % | n | % |
| A | **Respondent Characteristics** | | | | | | | | |
| 1 | Person in Charge of Care | | | | | | | | |
| | 1. Biological Parents | 10 | 34.48 | 10 | 34.48 | 9 | 31.04 | 29 | 100 |
| | 0. Other Family Members | 1 | 25.00 | 1 | 25.00 | 2 | 50.00 | 4 | 100 |
| 2 | Types of Work for Mothers of Children | | | | | | | | |
| | 2. State civil apparatus/civil servants | 5 | 31.25 | 7 | 43.75 | 4 | 25.00 | 16 | 100 |
| | 1. Farmers/Fisheries/Private | 2 | 28.57 | 0 | 0.00 | 5 | 71.43 | 7 | 100 |
| | 0. Housewife/Not Working | 4 | 40.00 | 4 | 40.00 | 2 | 20.00 | 10 | 100 |
| 3 | Age of mothers of children under five according to reproductive age (Ministry of Health of the Republic of Indonesia, 2009) | | | | | | | | |
| | 3. Late Teenagers < 25 years | 1 | 100.00 | 0 | 0.00 | 0 | 0.00 | 1 | 100 |
| | 2. Early Adult 26 – 35 years | 4 | 40.00 | 1 | 10.00 | 5 | 50.00 | 10 | 100 |
| | 1. Late Adult 36 - 45 years | 6 | 30.00 | 10 | 50.00 | 4 | 20.00 | 20 | 100 |
| | 0. Early Elderly 46 – 55 Years | 0 | 0.00 | 0 | 0.00 | 2 | 100.00 | 2 | 100 |
| 4 | Time allocation in child care | | | | | | | | |
| | 1. > 8 hours/day | 11 | 45.83 | 11 | 45.83 | 2 | 8.34 | 24 | 100 |
| | 0. < 8 hours/day | 0 | 0.00 | 0 | 0.00 | 9 | 100.00 | 9 | 100 |
| **B** | **Indicators of Family Coping Mechanisms for Children** | | | | | | | | |
| 1 | Maternal Behavior related to Stunting (Definition, Causes and Impact) | | | | | | | | |
| | 2. Good (If: Knowledge value + Attitude + Action is Good) | 10 | 45.45 | 11 | 50.00 | 1 | 4.55 | 22 | 100 |
| | 1. Enough (If: Bad action value) | 1 | 25.00 | 0 | 0.0 | 3 | 75.00 | 4 | 100 |
| | 0. Bad (If: Knowledge + Attitude + Action Value is Bad) | 0 | 0.0 | 0 | 0.0 | 7 | 100.00 | 7 | 100 |
| 2 | Mother's Behavior Related to Toddler Food Consumption Patterns | | | | | | | | |
| | 2. Good (If: Knowledge value + Attitude + Action is Good) | 11 | 50.00 | 11 | 50.00 | 0 | 0.0 | 22 | 100 |
| | 1. Enough (If: Bad Action Value) | 0 | 0.0 | 0 | 0.0 | 4 | 100 | 4 | 100 |

| No | Indicator | Nutritional Status of Children Under Five | | | | | | Total | |
|---|---|---|---|---|---|---|---|---|---|
| | | **Normal** | | **Children under five with a history of LBW are not stunted** | | **Children under five with a history of LBW are stunted** | | | |
| | | **n** | **%** | **n** | **%** | **n** | **%** | n | % |
| | 0. Bad (If: Knowledge + Attitude + Action Value is Bad) | 0 | 0.0 | 0 | 0.0 | 7 | 100.00 | 7 | 100 |
| | Diversity of Food Consumption of Children | | | | | | | | |
| | 1. Carbohydrate Food Group | 1. Rice<br>2. Porridge | | 1. Rice<br>2. Skinny toddler biscuits<br>3. Regal biscuits<br>4. Purple sweet potato<br>5. Sweet corn | | 1. Rice | | | |
| | 2. Protein/Animal Fat Food Group | 1. Fish<br>2. Eggs<br>3. Milk | | 1. Fish<br>2. Eggs<br>3. Milk | | 1. Fish | | | |
| | 3. Protein/Vegetable Food Group | 1. Chinese cabbage vegetables<br>2. Marungga vegetable<br>3. Spinach | | 1. Spinach<br>2. Mustard greens<br>3. Moringa vegetables<br>4. Water spinach vegetables<br>5. Marungga Vegetables<br>6. Carrots<br>7. Tempeh<br>8. Know, | | 1. Mustard greens<br>2. Water spinach vegetables<br>3. Tempeh | | | |
| | 4. Kelompok Pangan Vitamin | Milk | | Milk | | - | | | |

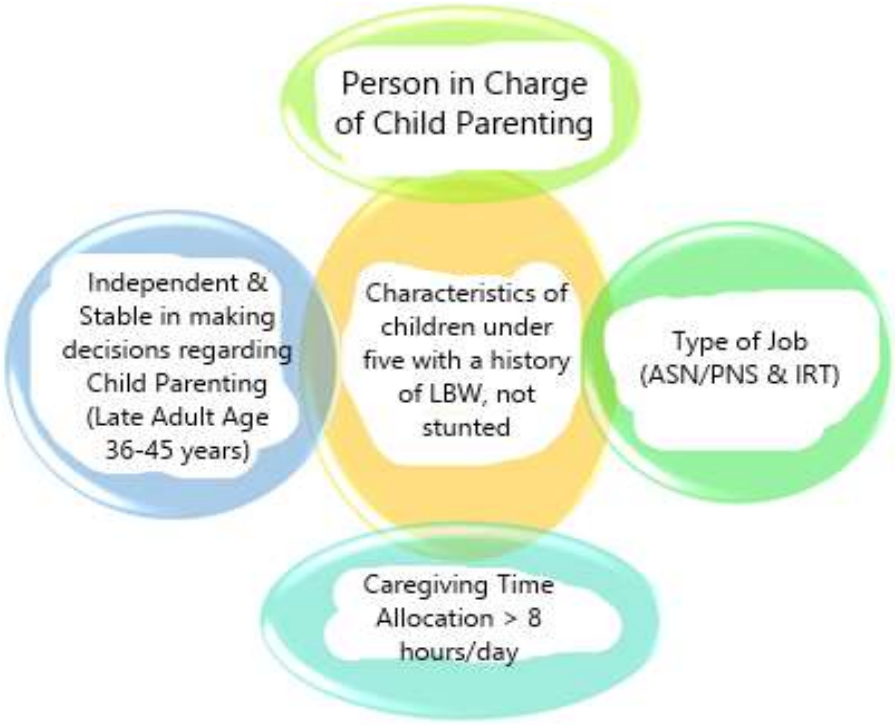
| No | Indicator | Nutritional Status of Children Under Five | | | | | | Total | |
|---|---|---|---|---|---|---|---|---|---|
| | | **Normal** | | **Children under five with a history of LBW are not stunted** | | **Children under five with a history of LBW are stunted** | | | |
| | | **n** | **%** | **n** | **%** | **n** | **%** | n | % |
| | 5. Kelompok Pangan Mineral | 1. Banana and milk | | 1. Dragon fruit<br>2. Bananas | | 1. Bananas | | | |
| 3 | Mother's parenting style is related to personal and environmental cleanliness | | | | | | | | |
| | 1. OK | 11 | 45.83 | 11 | 45.83 | 2 | 8.34 | 24 | 100 |
| | 0. Poor | 0 | 0.0 | 0 | 0.0 | 9 | 100 | 9 | 100 |
| 4 | History of Infectious Diseases (last 3 weeks) | | | | | | | | |
| | 1. No history of illness | 11 | 50.00 | 11 | 50.00 | 0 | 0.0 | 22 | 100 |
| | 0. There is a history of illness | 0 | 0.0 | 0 | 0.0 | 11 | 100.0 | 11 | 100 |
| 5 | EXCLUSIVE breastfeeding history | | | | | | | | |
| | 1. Children under five receive complete/sufficient exclusive breast milk | 11 | 33.33 | 11 | 33.33 | 11 | 33.33 | 33 | 100 |
| | 0. Childrens who receive incomplete/sufficient exclusive breast milk | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 6 | Immunization History | | | | | | | | |
| | 2. Complete without delay | 11 | 50.00 | 11 | 50.00 | 0 | 0.00 | 22 | 100 |
| | 1. Complete but often delayed | 0 | 0.00 | 0 | 0.00 | 11 | 100.00 | 11 | 100 |
| | 0. Incomplete | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.0 |
| 7 | Posyandu visit | | | | | | | | |
| | 1. ≥ 8 times | 7 | 35.00 | 11 | 55.00 | 2 | 9.09 | 20 | 100 |
| | 0. < 8 times | 4 | 36.36 | 0 | 0.00 | 9 | 81.81 | 11 | 100 |
| | Realization of Specific and Sensitive Nutrition Intervention Programs at the Family Level | | | | | | | | |
| | 2. Good (If: The intervention program was obtained and used on target) | 11 | 50.00 | 11 | 50.00 | 0 | 0.00 | 22 | 100 |
| | 1. Not Good (If: The intervention program was obtained but was not used on target) | 0 | 0.0 | 0 | 0.0 | 3 | 100.00 | 3 | 100 |

| No | Indicator | Nutritional Status of Children Under Five | | | | | | Total | |
|---|---|---|---|---|---|---|---|---|---|
| | | Normal | | Children under five with a history of LBW are not stunted | | Children under five with a history of LBW are stunted | | | |
| | | n | % | n | % | n | % | n | % |
| | 0. Bad (If: the family does not receive the intervention program) | 0 | 0.0 | 0 | 0.0 | 8 | 100.00 | 8 | 100 |

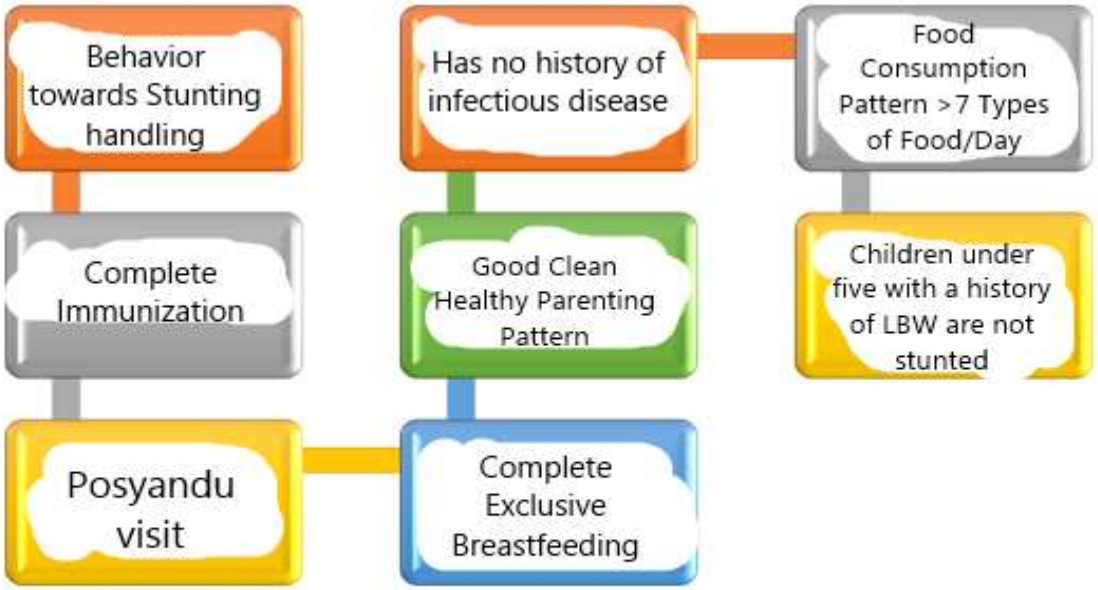
Table 1 also shows that the behavior of mothers of childrens with LBW history who are not stunted regarding the definition of stunting, causes and impacts of stunting. Most (50%) are in the good category. Likewise with the behavioral factors of mothers of childrens related to food consumption patterns. Where, the majority (50%) of mothers of childrens with a history of LBW who are not stunted have good food consumption patterns in terms of knowledge, attitudes and actions compared to the group of children under five with a history of LBW who are stunted. This can be seen from the diversity of types of food consumed by children under five with a history of LBW without stunting who are much more diverse (>7 types of food) compared to the diversity of consumption patterns of children under five with a history of LBW with stunting (<5 types of food).

The results of the analysis also show that the majority (45.83%) of mothers of childrens with a history of LBW without stunting have better parenting patterns regarding personal hygiene and their children's environment than children with a history of LBW with stunting. This is in line with the results of other analyzes which show that children under five with a history of LBW who are not stunted have no history of illness or infectious diseases (50%) compared to children under five with a history of LBW who are stunted (Table 1). This condition is further strengthened by a sufficient history of exclusive breastfeeding so that children under five with a history of LBW can graduate or avoid stunting. Furthermore, more than half of the LBW children with a history of LBW, no stunting, have a history of complete immunization without delays and the frequency of posyandu visits is very good, starting from eight

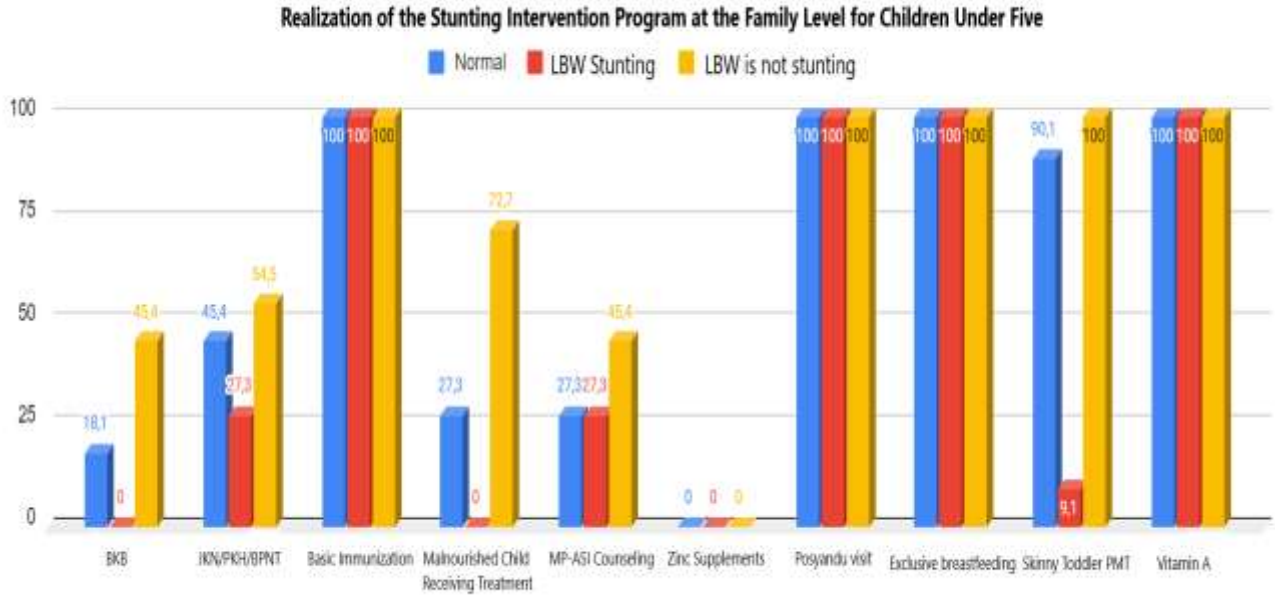
(8) to 12 visits a year. Based on the results of the crosstab analysis in Table 1, model 1 of the family coping mechanisms for childrens with a history of LBW without stunting according to the characteristics of the children's mother is as follows :




Profile of Characteristics of Mothers of Toddlers with a history of LBW without Stunting in Mokdale Village, Lobalain District, Rote Ndao Regency




Model 2 Family Coping Mechanisms for Toddlers with a History of LBW Not Stunting in Mokdale Village, Lobalain District-Rote Ndao Regency



This picture shows that mothers of toddlers in the three sample groups think that so far they have received good support from specific nutritional interventions such as: complete basic immunization, Vitamin A; posyandu visits; and exclusive breastfeeding. Compared to other programs such as the program for Providing Supplementary Food for Skinny Toddlers, Development of Toddler Families (BKB); Basic Health Insurance-Family Hope Program-Non-Cash Food Assistance (JKN/PKH/BPNT); Malnourished Toddlers receiving care; Pneumonia; MPASI counseling and zinc supplements.

Based on the results of interviews with religious leaders, posyandu cadre coordinators and heads of community health centers, it is known that these three non-OPD institutions have different opportunities to support the process of accelerating stunting reduction in Rote Ndao Regency.

## Discussion

### A. Family Characteristics of Children Under Five

The parenting style of the mother and other family members also shapes the nutritional and health status of children. This research describes the family profile of children under five using indicators including the factors of the party responsible for caring for children under five (mother or other person given this responsibility), the type of work of the mother/caregiver, the age of the mother/caregiver according to reproductive age, and the allocation of time used in childcare (Table 1).

Parenting patterns are the best way to educate children as an embodiment of a sense of responsibility towards children, including parenting patterns for healthy eating and living [26][27]. The results of the analysis show that on average children under five with normal nutritional status, a history of LBW without stunting, and a history of LBW stunting are cared for by biological parents ranging in age from 24 years to 52 years. The age of mothers under five is grouped according to the Indonesian Ministry of Health [24]. Where, most of the children under five with a history of LBW who are not stunted are cared for by mothers who are in the late adult age group. Furthermore, the Ministry of Health of the Republic of Indonesia [25] explains that late adulthood is an age group that

is relatively emotionally stable and has a better level of knowledge in making decisions about parenting and family patterns compared to mothers of toddlers with a history of LBW stunting (Table 1).

Table 1 shows that 43.75% of mothers with a history of LBW are not stunted as government employees and some (40%) are only housewives. With the length of time spent caring for children of more than eight (8) hours every day. The results of previous research found that the longer the allocated parenting time, the better the child's diet and personal hygiene sanitation compared to toddlers with a history of LBW stunting. The results of the interview explained that before the toddler's mother went to work, all the toddler's needs had been properly prepared, including food that had to be given according to meal times. Apart from that, the proximity of the house to the workplace allows mothers of toddlers to still control their children's activities while at home. Mindel [28] stated that there are three (3) factors that can influence a mother's parenting style, namely 1). Adequate economic status, opportunities and facilities provided as well as a supportive material environment tend to direct parental parenting towards certain treatment that parents consider appropriate. 2). The factor of a parent's talent and ability to communicate and relate in the right way with their child tends to develop a parenting pattern that suits the child. And 3). Community lifestyle factors in villages and big cities tend to have different variations and ways of managing parent-child interactions.

**B. Indikator Coping Mechanism Keluarga Balita**

The research results found that the behavior of mothers of toddlers with a history of LBW who were not stunted regarding the definition of stunting, the causes and impacts of stunting was mostly in the good category (Table 1). Good parental behavior plays a very important role in raising children. Therefore, children really need parental attention and support in facing very rapid growth and development. To get good nutritional intake, parents need good knowledge so they can provide a menu of choices that are diverse, nutritious, balanced and safe. Stunting in children under five is a lack of adequate nutritional intake which is caused by several factors including

lack of knowledge, lack of parenting patterns, unclean environment, limited access to food and poverty and is followed by the frequent frequency of infectious infections such as diarrhea, worms, malaria and ARI.

Furthermore, it is also known that the majority of mothers of toddlers with a history of LBW who are not stunted have good food consumption patterns in terms of knowledge, attitudes and actions compared to the group of children under five with a history of LBW who are stunted. This can be seen from the diversity of types of food consumed by children under five with a history of LBW without stunting who are much more diverse (>7 types of food) compared to the diversity of consumption patterns of children under five with a history of LBW with stunting (<5 types of food). Relationship between maternal attention or support for children in feeding and the incidence of stunting in children aged 2-5 years[25], [26]. Therefore, it can be said that mothers who provide more attention or support to their children in feeding them will have a positive influence on the nutritional status of the child. This means that feeding toddlers and children is an important foundation in children's growth and development. Or in other words, children will have good growth even in poor conditions. If the mother provides good parenting patterns in providing daily food [27].

The results of the analysis in table 1 show that the majority of mothers of toddlers with a history of LBW who are not stunted have better parenting patterns regarding personal hygiene and their children's environment than children with a history of LBW who are stunted. This is in line with the results of other analyzes which show that children under five with a history of LBW without stunting do not have a history of illness or infectious diseases compared to children with a history of LBW with Stunting. According to UNICEF [28], [29], the factors that influence the nutritional status of children under five and the causes of malnutrition among children under five in the community are: direct and indirect causes. Food and disease can directly cause malnutrition. Meanwhile, there are three indirect causes, namely: a) food security, b) parenting patterns, c) health services and the environment. Child care patterns consist of the attitudes and behavior of the mother or other caregivers in terms of their closeness to the child, how to feed

them and knowledge about the types of food that should be given according to age and needs, giving love and so on [1], [30]–[32].

This condition is further strengthened by sufficient data on the history of exclusive breastfeeding so that children under five with a history of LBW can graduate or avoid stunting. Apart from that, the results of the analysis also show that more than half of the children under five with a history of LBW without stunting have a more complete history of immunization without delays and the frequency of posyandu visits is very good, starting from eight (8) to 12 visits a year. Based on these indicators, it is known that families of toddlers with a history of LBW and not stunting have a better understanding of the importance of children's personal hygiene behavior factors and the environment around the children's play area every day so that they are not easily attacked by viruses that are the source of infectious infectious diseases. Apart from that, mothers of toddlers with a history of LBW and not stunting also understand the importance of exclusive breastfeeding and complete immunization and are diligent in controlling their health at the posyandu.

The research results of Nur Afiah Ismy and Marjan Wahyuni [28]–[31] show that mothers of toddlers in Mesjid Village, Samarinda Sebrang District give more attention or support to their children in terms of exclusive breastfeeding and feeding which has a very good effect on the child's nutritional status. Exclusive breastfeeding for babies and children is important in children's growth and development. Knowledge about nutrition helps to improve children's nutritional status to achieve normal growth and development of children with stunting which easily occurs both physically and psychologically. Therefore, not all children can grow and develop according to their age, and children who experience obstacles and abnormalities. According to research [27], [30] that the role of the family is very important in caring for children which determines the child's growth and development. The mother's behavior in breastfeeding and feeding, healthy eating methods, providing nutritious food and controlling the portions consumed will improve the child's nutritional status [32]–[36]. The results of research [36]–[38] strongly support the research results that cleanliness is a factor

that has a very important influence on the incidence of stunting in toddlers aged 2-5 years. The results of the analysis show that if mothers of toddlers wash their hands before eating, wash their hands when serving food, wash their hands after defecating and wash their hands after handling animals, there are more children with positive nutritional status than mothers in the stunting group. This is in line with what was conveyed by the Ministry of Health of the Republic of Indonesia that steps to prevent stunting really need to be taken, including: 1) meeting nutritional needs since pregnancy, 2) giving exclusive breast milk until the baby is 6 months old, 3) accompanying exclusive breast milk with healthy MPASI 4) Continue to monitor children's growth and development 5) Always keep the environment clean [11], [25], [39].

**Conclusion**

Coping mechanism factors used by mothers of child with a history of LBW but not experiencing stunting" include: 1). Factors: Mothers of children who are in late adulthood (36-45 years) who are able to make decisions regarding parenting patterns in the family, including children, and have a more stable emotional condition so that they can have a positive influence on the child-rearing process; 2). Factors: mothers of children who have allocated parenting time of more than eight hours per day; 3). Behavioral factors (knowledge, attitudes and actions) related to stunting, causes and impacts of stunting; 4). Factors: family food consumption patterns have better quality and quantity (>7 types of food consumed per day) and do not have the habit of abstaining from food; 5). Factors including the availability of clean water and the family adopting a clean and healthy lifestyle, including having and using a healthy toilet; 6). Factors do not have a history of infectious diseases; 7). History of getting enough exclusive breast milk for up to six months without additional food; 8). Factors: history of regular and complete immunization; 9). Factor in the number of posyandu visits 8-12 times a year; and 10). Factors of childrens' families' access to specific nutritional intervention programs such as programs for underweight childrens who receive PMT; program for childrens who receive Vitamin A and toddlers who suffer from diarrhea who receive Zinc Supplements in preventing stunting.

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