



## POSITIVE DEVIANCE IN FEEDING AMONG CHILDREN WITH GOOD NUTRITIONAL STATUS IN POOR FISHERMEN'S FAMILY IN THE PUBLIC HEALTH OF BELAWAN

Ramadhani Syafitri Nasution<sup>1</sup>, Khairi Che Mat<sup>2</sup>, Marhazlina  
Mohamad<sup>3</sup>

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### Abstract

Positive deviance describes children who grow and develop well in underprivileged families and communities, where there are many malnourished children. They are children with positive deviance raised by families with positive deviance. Malnutrition at the beginning of life will affect the growth and development of children and the quality of life thereafter. The high child mortality rate indicates serious health and nutrition problems. Malnutrition is caused by low consumption of energy and protein from daily food and occurs for a long time. Undernutrition limits based on standards are less than -2SD to -3SD. The purpose of this study was to identify positive deviance in feeding (type of food, food processing, mealtime and feeding method) among two children who experienced good nutrition in poor fishing families in the region of Belawan Health Center Work in 2021. This study is a qualitative research with a narrative approach. The informants in this study were 5 key informants, namely mothers who had good nutrition children, aged 6-24 months from poor fishing families, as well as supporting informants as many as 5 husbands 2 people from health cadres and midwife coordinators. The results of the study found that there was a positive behavior in feeding among under two children with good nutrition by utilizing marine products that had a high nutritional value and snakehead fish capsules as vitamins supplementation. How to feed actively and a pleasant eating atmosphere by coaxing and seducing children by carrying or singing. It is recommended that parents be more intensive and proactive in paying attention to each child's growth and development in order to prevent undernutrition. Positive deviance in feeding that relates with good nutrition can be promoted as examples for other children in other regions.

**Keywords:** *Positive Deviance, Nutritional Status, Under-Two Children*

<sup>1</sup>Faculty of Medicine, Universiti Sultan Zainal Abidin, Malaysia

<sup>2</sup>Unit of Psychological Medicine, Faculty of Medicine, Universiti Sultan Zainal Abidin, Malaysia

<sup>3</sup>School of Nutrition and Dietetics, Faculty of Health Sciences, Universiti Sultan Zainal Abidin, Kuala Nerus, 21300, Malaysia

Corresponding Email: [ramadhanisyafitri90@gmail.com](mailto:ramadhanisyafitri90@gmail.com)

### 1. Introduction

The main challenge in the development of a nation is to build quality, healthy and productive human resources. An important role in this development is improving the nutrition of children under-five, thus improving nutrition is needed in the entire life cycle from early life to old age (Acne 2018). Under-two children experience the fastest growing phase of brain development known as the golden period as well as the critical period. This period cannot be

repeated and will provide maximum results for what has been instilled and given to children both physically and psychologically. The golden period starts from the fetus until the child is two years old, if the nutritional needs are not met then the golden period will turn into a critical period that will disrupt the child's growth and development process, the impact is permanent and cannot be repaired (Alhamda 2017).

Good nutrition in children under-two can be seen from body weight and age, according to

the standard reference of the World Health Organization National Center for Health Statistics (WHO-NCHS) the limit of good nutrition is  $-2SD$  to  $+2SD$ . Good nutritional status occurs because there is a balance in the amount of food eaten and what the body needs (Suchelen, 2020).

According to The United Nations Children's Fund (UNICEF), the World Health Organization, WHO and the world bank in 2020 at a conference in Switzerland, about 6.6 million children died before reaching the age of five. The main causes of death among children under five are pneumonia, prematurity, asphyxia, diarrhea and malaria. According to the conference, about half of under-five deaths occur in just five countries, namely China, the Democratic Republic of the Congo, India, Nigeria and Pakistan. Globally, WHO says about 45% of under-five deaths are due to nutritional problems (Suchelen, 2020).

Malnutrition is directly caused by inadequate food intake or children often get infections. Good food intake for children is a balanced diet. A balanced diet contains the nutrients needed both in terms of quality and quantity according to age. Children aged 1-6 months are only given breast milk and after that it is continued with complementary foods to soft food and family food (Ayu & Marenda, 2018).

The stages of proper feeding of baduta affect their health and growth. Baduta is very easy to manage, baduta's diet depends on what his mother gives him. Good feeding behavior and the introduction of food diversity in children must be introduced early on. The role of the mother in the supervision and development of feeding, very demanded in order to maintain the correct diet in children so that children do not lack food intake (Tuti, 2019).

Lack of food intake is caused by many factors, including children not getting enough balanced nutritious food, wrong feeding and the unavailability of adequate food due to poverty. The poverty rate in Indonesia was 28.28 million people (11.25%), the highest was in the province of West Papua at 36.80% while the poverty rate in North Sumatra reached 1.4 million people (9.85%).<sup>6</sup> The poverty criteria according to the Central Statistics Agency (BPS) can be seen from the amount of

expenditure per person per day: (1) Not poor, those whose expenditure per person per month is more than IDR 350,610. (2) Almost Poor, with monthly expenses per head between Rp. 233,740.- to Rp. 280,488.- or around Rp. 7,780.- to Rp. 9,350.- per person per day. (3) Poor, with expenses per person per month per head of Rp. 233,740.- and below or around Rp. 7,780.- and below per person per day (Central Bureau of Statistics. Poverty criteria, 2020).

Poverty has a reciprocal relationship with undernutrition, because poor nutrition will lead to low productivity and resources. According to the Basic Health Research (RISKESDAS) the prevalence of undernutrition and malnutrition in Indonesia is a health problem approaching a high prevalence, ranging from 21.2% to 33.1%. (WHO standards: 5-9% low, 10-19% medium, 20-39% high). There are 19 provinces that have malnutrition problems, 1st is East Nusa Tenggara, 2nd is West Papua, 3rd is West Sulawesi and North Sumatra is 16th with a 20.2% malnutrition rate.

Based on the results of screening that has been carried out in poor fishing families in the Belawan Health Center Work Area the number of under two children as many as 125 people with good nutritional status as many as 77 people (61.6%), undernutrition as many as 33 people (26.4%), over nutrition as many as 15 people (12%) (Frisda, 2017).

Positive deviance is a state of positive deviation related to the health, growth and development of certain children with other children in families and communities who are equally poor.<sup>11</sup> Previous research conducted by Hapitra on positive deviance on the nutritional status of children in Astana Japura District, Cirebon Regency that in poor families with good nutritional status, in feeding behavior to children, use fish caught by the family as animal protein for consumption in addition to soybean cake and tofu, and consumption of oyong vegetables (Hapitra, 2011). An interesting phenomenon from the problems above is that there are children with good and healthy nutritional status in the midst of families who have the potential for malnutrition, this is a positive deviance that distinguishes the success of families in caring for their children in the same economic and environmental status. Positive deviance in

feeding can be seen from the type of food provided, food processing, feeding time and feeding method.

## 2. Methods

This type of research is a qualitative research with a narrative approach. Researchers studied the lives of individuals by asking one or more individuals to tell their lives related to positive deviance in feeding good nutrition (Creswell, 2013; Moleong, 2013).

The purpose of this study is was to examine positive deviance in feeding among children with good nutritional status in poor fishing families in the public health center of Belawan. The informants in this study were 5 main informants, namely mothers who had good nutrition children with good nutritional status (identified from weight, BMI?), who had children aged 6-24 months from poor fishing families, supporting informants as many as 3

husbands and 1 person, namely health cadres and better understanding of the situation and environment in the public health center of Belawan.

## 3. Result and Discussion

In the research results, two domains emerged, namely 1) children with poor nutritional status in poor fishing families and 2) well-nourished children in poor fishing families. The domain is described based on the transcription of the interview data analysis and participant observation.

### Characteristics of Informants

Informants in this study amounted to five people, namely mothers who have well-nourished and healthy toddlers in poor fishing families.

### Characteristics of Main Informants

Table 1. characteristic of main informants.

Informans Name	Age	Education	Child's Age	Child Weight (WHO-NCHS - 1SD +1SD )
informan 1	38 years	Elementary school	1.6 years	10.8 kilogram
informan2	40 years	Junior high school	10 months	9.1 kilogram
informan3	30 years	Junior high school	1,2 years	10.1 kilogram
informan 4	35 years	Junior high school	1,3 years	10.5 kilogram
informan 5	37 years	Elementary school	12 moths	8.9 kilogram

All of the main informants in this study are the poor, where it is very difficult for them to make ends meet. Especially in terms of food and clothing. The respondent's family consumes meat during a celebration and milk consumption is not necessarily every day. Sources of income entirely from the head of the family are fishermen whose income is not fixed, the respondent also does not have savings

or goods that are easy to sell at least Rp. 500,000. The respondent's education only finished elementary and junior high school. In addition, the respondent's house has a floor area of less than 8 m<sup>2</sup>, the respondent's house is still made of planks, and some of the houses are boarding houses (not contracts). This is in accordance with the BPS criteria for measuring family poverty.

### Characteristics of Supporting Informants

Table 2. characteristic of supporting informants

Name of Supporting Informant	Informant's age	Education	Profession
Supporting informants 1 (husband informant 1)	45 years	Primary School	Fisherman
Supporting informants 2	41 years	Primary School	Fisherman
Supporting informants 3	47 years	Primary School	Fisherman
Supporting informants 4 (candre health)	38 years	Diploma	Cadre health

### Interview Results on Positive Deviance in Feeding children Good Nutrition to Poor Fisherman Families

deviance of feeding underprivileged children with good nutrition to poor fishing families in the Belawan Health Center can be seen in the matrix below :

The results of the interview on the positive

Table 3. Matrix of Positive deviance Research in Feeding Good Nutrition to Poor Fisherman Families in Belawan Health Center Work Area

No	Feeding Variable	Findings of Positive Deviance
1	Feeding	<p>Informant I</p> <p>Seafood ingredients: snapper and krapu, giant prawns, renjongan crab and squid that have not been given preservatives every day.</p> <ul style="list-style-type: none"> <li>- Vegetable protein: none</li> <li>- Types of tubers: potato.</li> <li>- Type of vegetables: toge</li> <li>- Type of fruit: citrus fruit</li> <li>- Giving snacks to children between meals</li> </ul> <hr/> <p>Informant II</p> <ul style="list-style-type: none"> <li>- Ingredients for seafood: any fish that has not been given fish preservatives.</li> <li>- Animal protein ingredients: half-cooked chicken eggs, chicken claws</li> <li>- Vegetable protein: tofu and tempeh as a snack</li> <li>- Types of tubers in the form of potatoes.</li> <li>- Types of vegetables: carrots, gambas.</li> <li>- Type of fruit: orange</li> <li>- Children are not allowed to eat outside</li> <li>- Provide terrace</li> </ul> <hr/> <p>Informant III</p> <ul style="list-style-type: none"> <li>- Seafood ingredients: krapu, snapper, tukam, squid and octopus.</li> <li>- Vegetable protein: Tofu, tempeh</li> <li>- Types of tubers in the form of potatoes</li> <li>- Type of vegetables: gambas</li> <li>- Children are not allowed to eat outside</li> <li>- Provide snacks (processed fish) between meals.</li> <li>- Provide terrace</li> </ul>

No.	Feeding Variable	Findings Of Positive Deviance
		<p>Informant IV</p> <ul style="list-style-type: none"> <li>- Seafood ingredients: krapu fish, giant prawns, renjongan crab, squid that have not been given preservatives every day.</li> <li>- Vegetable protein: tofu</li> <li>- Types of tubers: potato.</li> <li>- Types of vegetables: bean sprouts, kale, gambas, long beans, carrots.</li> </ul>
		<p>Informant V</p> <ul style="list-style-type: none"> <li>- Seafood ingredients: fish and shellfish</li> <li>- Animal protein: eggs and chicken claws</li> <li>- Vegetable protein: tofu and tempeh</li> <li>- Types of tubers: potato.</li> <li>- Types of vegetables: pumpkin, gambas, carrots</li> </ul>
2.	Food Processing	<p>Informant I</p> <ul style="list-style-type: none"> <li>- Food processing: According to the age of the child, children aged 18 months are given regular and slightly mushy food and food that is cut into smaller pieces.</li> <li>- Process of processing food from the sea: in soup</li> <li>- Vegetable processing: washed first then cut</li> </ul>
		<p>Informant II.</p> <ul style="list-style-type: none"> <li>- Food processing: Adjusted to the child's age, children aged 10 months are given filtered rice.</li> <li>- The process of processing food from the sea: in soup and boiled.</li> <li>- vegetable processing: cut into freshly washed.</li> </ul>
		<p>Informant III</p> <ul style="list-style-type: none"> <li>- Food processing: Adjusted to the child's age, children aged 14 months are given plain rice which is slightly softer</li> <li>- The process of processing food from the sea: steamed and in soup</li> <li>- Processing of fruit and vegetable food ingredients: washed and cut</li> </ul>
		<p>Informant IV</p> <ul style="list-style-type: none"> <li>- Food processing: Adapted to the child's age, children aged 15 months are given slightly mushy rice.</li> <li>- The process of processing food ingredients from the sea: boiled and in curry</li> <li>- Vegetable processing: cut into freshly washed</li> </ul>
No.	Feeding Variable	Findings Of Positive Deviance
		<p>Informant V</p> <ul style="list-style-type: none"> <li>- Food processing: Adjusted to the child's age, children aged 12 months are given slightly soft rice.</li> <li>- Process for processing shellfish and boiled eggs.</li> <li>- Processing of chicken claw soup</li> </ul>

		- Processing of fruit and vegetable foodstuffs: washed and cut.
3.	Eating time	Informant I - according to meal schedule
		Informant II - not according to meal schedule
		Informant III - according to meal schedule
		Informant IV - according to meal schedule
		Informant V - not according to meal schedule
4.	How to give food	Informant I - Fun atmosphere for children to eat by coaxing and singing - Wash your hands without soap - Active feeding
		Informant II - Fun atmosphere for children to eat by seducing and coaxing. - Don't wash your hands only on a rag. - Active feeding.
		Informant III - Children's dining atmosphere is not pleasant. - Not washing hands - Inactive feeding
		Informant IV - Fun dining atmosphere - Washing hands with soap - Active feeding
		Informant V - Fun dining atmosphere - Never wash your hands. - Inactive feeding.

### **Positive deviance in Feeding under two children Good Nutrition to Poor Fisherman's Families in Belawan Health Center Work Area**

Based on the results of interviews conducted with all informants, mothers who have good nutrition children in poor fishing families in the Belawan Health Center Work Area in feeding have positive deviance. They think that to get out of the shackles of malnutrition, they must make the best use of marine products, because they understand that only fish and other marine products can provide them with nutritious food.

### **Identification of Positive Deviance Types of Good Nutrition children Food in Poor Fisherman's Families in Belawan Health**

### **Center Work Area**

From the results of the study said the first informant, mother has positive deviance in feeding in the form of giving fish and other marine products (fish, shrimp, crab, squid) as the main menu for children. The mother understands that fish and other marine catches that are pristine are sufficient to meet the nutritional needs of the child, so the mother does not feel the need to introduce other foods to the child, because this is also driven by the family's economic difficulties.

The second informant said that his family consumed chicken claw for generations, they thought that his family was always healthy because he was used to consuming chicken



claw and eggs. Potato and carrot vegetables, gambas are never out of everyday dishes, because they are foods that are easy to get and are liked by children. Soyabean cake and tofu as a snack substitute for snacks. Mother does not give children to snack outside.

the third informant said that the mother often gave her catch in the form of fish, squid, prawns and carbuncles. Mother creates food in a form that is liked by children. The type of food consumed does not vary due to circumstances that require the mother to provide food as is, economic factors and access to buy groceries that are far away.

The fourth informant gave fish, squid, crab shrimp, this was very liked by his son. Mother gave this with the reason that her child would become a smart and clever child and be able to work better.

the fifth informant said that his child consumed shellfish, eggs, chicken claws and vegetables, rarely consumed fish, because the only catch from the sea was shellfish. They get eggs from a Chinese boss who specializes in selling eggs at the market by exchanging them for shells.

Based on the results of the research, the statements from the first, third and fourth informants were the same, namely they consumed types of food originating from the sea such as grouper and snapper, giant prawns and tiger prawns, renjongan crab, squid and crab as a mandatory dish in the family. The marine products that are obtained are marine products that are still fresh and have not been contaminated. They think that the marine products they use can reduce spending on food needs and for healthy children because the nutrients contained in marine products are very beneficial for children's intelligence.

Differences can be seen from the third and fifth informants who used marine catches in the form of shellfish, moka and fish of all kinds, eggs, chicken feet as the main family menu, while the vegetables consumed were the same as the second and fourth informants (potatoes, carrots, squash, pumpkin). jipang and bean sprouts).

The results of another study conducted by Nilawati<sup>15</sup>, namely the cognitive development of children in Palembang City, it is known that children's cognitive development is energy

intake and protein intake. Consuming fish more than one serving per week was associated with a reduction in a person's cognitive function decline.

Fish is a food ingredient that contains a lot of essential nutrients for the body, both macronutrients and micro-nutrients. The average protein content in fish is 18-20%, while the fat value in fish reaches 5-15%. Protein in fish is useful for increasing growth and maintaining tissue for the body. Fat in fish serves as a highly concentrated source of energy contributing 9 kcal/g and as a carrier for the intake and absorption of fat-soluble vitamins (Live, 2001).

### **Identification of Positive Deviance of children Food Processing with Good Nutrition in Poor Fisherman Families in the Work Area of the Belawan Health Center**

From the research results, the food processing of all informants is doing the same thing, it can be concluded that in the processing of food ingredients for children, the informant provides food according to the child's age. The process of processing food ingredients in the form of vegetables is first washed and then chopped and cut with the reason that it makes it easier for the mother to do it and no food is wasted and added by the husband's statement (first supporting informant) the fish is given by shredding it so it's easy to swallow. The same thing was conveyed by the health cadres who often pay attention to the activities of the third informant and often teach mothers that the catch should be processed into a different form, so that children are still enthusiastic about consuming it.

The process of heating and cutting plays an important role in maintaining the nutrients contained in these foods. The process of processing fish is by steaming and in soup, besides that fish is processed into another form in the form of fish balls but this is done at certain times when the amount of fish you get is more than usual. Other marine products are also cooked at a moderate temperature and vegetables are added to processed fish so that the vitamins and protein of the fish are well preserved.

The process of processing food using too high a temperature can make chemical changes to carbohydrates and proteins that are harmful by reducing the value of these nutrients.

Mudjajanto (in sumarti) stated that using a temperature of 180oC - 3000C as in frying and roasting fish, the existing protein will experience considerable damage or racemization will occur. Protein that undergoes racemization will lose its biological function or the digestibility of the protein will decrease and also have a different flavor (Supariasa, 2001).

Food ingredients are cut, chopped or even mashed, the cells become damaged and nutrients come out of the cells, so they are easily exposed to oxygen-containing air and can damage certain substances. Enzymes can also come out of their bags and mix with nutrients and result in breaking them down. To reduce damage to these nutrients, food ingredients should not be left exposed to the outside air for too long, if they have been chopped or mashed before further cooking.

#### **Identification of Positive Deviance When Feeding children with Good Nutrition to Poor Fisherman Families in the Work Area of the Belawan Health Center**

From the results of interviews with all informants that the first informant gave food at irregular times, the second informant gave food when the child asked because children like to eat. the different things with the third, fourth and fifth informant's children that the time to eat on time. the same thing was confirmed by the health cadre (supporting informant fourth) that mealtimes should be given at regular times.

Whatever my child eats, the important thing is to eat, ma'am, if he wants to give it, he doesn't need to use a schedule for eating everything, the important thing is that he is healthy and strong, like now, your children are proud, they have never been sick, thank God, their brothers and sisters have never been sick either. even though his father is like this...(Husband of the fifth informant/supporting fifth).

Scheduled meals that are not on time will make the children cry from hunger, if the baduta feels full, don't force him to finish his food. A good and correct eating schedule given early on can help children grow and develop quickly. If the schedule and time for feeding is right, don't give snacks or snacks before mealtime, because this is to avoid a big appetite. If you want to keep giving snacks, preferably one hour before mealtime, fruit or vegetables can be

given. Research conducted by Rosadi on the relationship between toddler diet and toddler nutritional status shows that there is a relationship between diet and children's nutritional status. Toddlers who have a regular eating pattern according to a predetermined schedule, namely eating 3 times a day and adding 2 to 3 snacks, have a good and healthy nutritional status (Kartika et al., 2000).

#### **Identification of Positive Deviance on How to Feed children with Good Nutrition to Poor Fishermen's Families in the Working Area of the Belawan Health Center**

The results showed that there were positive deviance in the way of feeding children, namely mothers actively providing food in a pleasant eating atmosphere by coaxing, singing, taking children to places that children like, inviting children to play while eating so that children forget that they are eating, besides In terms of feeding, mothers don't keep their hands clean when eating because the water source is far from home.

The findings of this study are in accordance with Soenardi's statement which says that creating a comfortable eating atmosphere can increase a child's appetite. Choose a room that has good air circulation, is

not noisy, and has a cool temperature. If necessary, feed it while listening to your favorite song or while telling a story. Make eye contact and communicate. Persuade and seduce children to want to try the food. Invite the child to talk and then try again, if you still refuse, stop for this time then try the next day, if the child refuses, postpone giving the same food for the next few days then try again. Let the child learn to eat on his own, because without realizing it, his eating skills will develop.

Research conducted by Core on positive deviance as a model for overcoming malnutrition says that feeding children is influenced by a pleasant eating atmosphere, a way of giving meaning that is full of affection and variety of menus (Zeatin 1990);

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