

Phenomenology Study: Factors Affecting Positive Deviance Families to Increase Toddlers Nutritional Status in Ngumpakdalem Bojonegoro East Java

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ABSTRACT

Background: The nutrition problem still becomes a severe problem in many countries. Positive Deviance is a family-based approach that has positive behavior enabling them to find better ways to prevent malnutrition.

Aim: The study reveals the factors affecting Positive Deviance families in efforts to improve the nutritional status of under-fives.

Method: The study employed a qualitative method with a descriptive phenomenology design in which the primary informants were Positive Deviance families, and the supporting informants were non-Positive Deviance families, nutrition officers, and midwives who were taken through purposive sampling. The data were collected through interviews, FGD, observations, and documentation.

Results: Five primary informants had participated in this study. The researchers held the interview, and then the results were recorded. The results revealed that the factors affecting the Positive Deviance family in improving nutrition were mothers' role as primary caregiver, knowledge, education, family income, social environment factor, exclusive breastfeeding culture, and motivation to become healthy and smart children.

Conclusion: The study results imply that education and low income do not hamper the efforts to improve child nutrition if positive family habits support it. It is necessary to increase family empowerment and share Positive Deviance family experience.

Keywords: Family, Factors, Positive Deviance, Nutritional Status, Childhood

INTRODUCTION

Nutrition problems in children still become a problem in some countries. It is recorded that one among three children dies every year due to low nutrition quality. A study showed that at least 3.5 million children die each year due to malnutrition and low food quality, supported by starvation during pregnancy. Public health problems become severe when the prevalence of hunger and nutrition is less than 20.0% to 29.0%, and the incidence is very high if it is \geq 30% [1].

In 2013, the proportion of undernourishment and malnutrition in Indonesia had increased from previous years in which the percentage of undernourishment was 13.9%, higher than in 2010, which amounted to 13.0%. Likewise, the proportion of malnutrition in 2013 increased by 5.7% compared to 2010, which increased by 4.0%. Indonesian province with the highest percentage of toddlers malnutrition in 2010 was Gorontalo province with a portion of 11.2%. The highest percentage of children malnutrition cases in Java Island in 2010 occurred in East Java province with 4.8% [2].

The impact of malnutrition disrupts children's physical and mental growth and development and reduces the level of intelligence, creativity, and productivity of the population. The incidence of malnutrition does not occur acutely. Still, it is characterized by a child's insufficient weight gain for a couple of months before, which can be measured every month. Most insufficient nutrition and malnutrition cases can be recovered by malnutrition management in Puskesmas (Primary Health Centre) or hospitals [3].

Nationally, short-term malnutrition prevention efforts are implemented by early intensive awareness systems,

case tracking, and new cases finding and handling malnutrition cases with care at Puskesmas and Posyandu (Health Centre) by activating preventive and promotional activities. In the long run, it is done by integrating the program to improve the nutritional status and food security in the poverty reduction program and family empowerment to implement healthy consciousness behavior [4].

Positive Deviance (PD) in the nutrition center is a nutrition program based on household and community for children at risk of protein-energy malnutrition in developing countries. The program uses a particular behavior-positive approach to identify mothers or caretakers of well-nourished children from disadvantaged families and transfer such positive practices to other families with malnourished children in society [5]. Positive Deviance is a faith-based approach believing that specific individuals have unique or unusual habits and behavior in every community, enabling them to find better strategies for preventing malnutrition compared to their neighbors who share the same resources and face similar risks [6].

Positive Deviance is an approach that is based on community resources. PD programs have a simple classification by investigating positive deviant behavior, community mobilization through active participation, reflection, planning, and behavioral change through skills transfer through practice [7]. Positive Deviance can improve the nutritional status of toddlers from poor into good standing. Moreover, the approach's success is successfully developed in more rural areas experiencing malnutrition [8].

Research conducted by Bullen[8] at Walden University, Minneapolis, USA, concluded that Positive

Deviance using the hearth approach to reduce child malnutrition was effective. Positive Deviance Studies in various countries, such as Guatemala and Costa Rica, showed that some women had a proper technique on the practice, traditions, and beliefs regarding food preparation, child feeding, children's nurture at the time of illness healing. Mothers who have this excellent technique are not mothers from high education. The trials' results are similar to those in West Bengal, suggesting that Positive Deviance is a vital strategy to reduce the risk of nutritional disorders [9].

Positive Deviance family effort in improving children's nutritional status is considered essential to support the Government in addressing nutrition problems in toddlers. By looking at the family experience making Positive Deviance approach, a variety of factors affecting families in improving the nutritional status of children is revealed and is informed and practiced by other community members

METHODS

By the focus of the research, the study was categorized as qualitative research. The research design used phenomenology design. According to Frauenberger, phenomenology studies' primary focus is how people experience a life experience and how people interpret their experiences [10].

Respondents as informants of the study were selected based on specific goals or predetermined criteria, and thus, the research used aimed sampling techniques or purposive sampling [11]. The subjects of analysis used in this study consist of Key informants and supporting informants. Key informants were Positive Deviance families with the following criteria of needy families; they had children with proper nutrition and had more than one under-five-year-old child. The supporting informant were non-Positive Deviance Families with the following standards of affluent families; they had a stunting or poor child and did not have more than one under-five-year-old child. Also, midwives and nutrition officers in *Ngumpak Dalem Bojonegoro* were included as supporting informants.

The variables in the study were: Factors affecting Positive Deviance family including people who played a role, the characteristics of toddler's parents (knowledge, education, income), environmental factors or society, culture, and motivation. These variables were measured using FGD, in-depth interviews, observation, and documentation studies. Measuring instruments used the FGD guides, interview guides, observation guides, and other tools to support the research, such as camera, voice recorder, and stationery.

Data validity used source triangulation and method triangulation. Triangulation of sources was done by comparing the results of PD family interviews with non-PD families, midwives, and nutrition officers of Puskesmas. The triangulation method was done by comparing the interview result with observation results, FGD, and documentation.

Analysis of the data was done by adopting Miles and Huberman's model, which consists of three activities, namely: data reduction, data presentation, conclusion, and verification [12].

RESULTS

A. Factors are affecting positive deviance families in their efforts to improve the nutritional status of children.

Based on the results of in-depth interviews with core informants, some factors were affecting positive deviance families in their efforts to improve children's nutritional status.

1. People who played a role

The primary purpose was the mother. The primary function of the mother was as a caregiver to perform positive habits such as frequent verbal interaction with the child, care and affection for the children, as well as task management to make sure that the duty of control and child care runs appropriately and the active participation of fathers in childcare.

The role of health personnel. The existence of information sources from health workers, both village midwives and nutrition officers of Puskesmas, and other information sources such as KIA books, television, and radio helped the mother improve children's nutrition status.

"The information is from the midwife, like giving counseling in the Posyandu from health center officer, Madani radio (a radio station that often broadcasts health information of under-fives), television, a Maternal Health Book (KIA), and counseling in village hall ..." (IF1)

2. Characteristics of Parents

Mother's knowledge about healthy food for toddlers. Mother's knowledge of healthy food serving affected the feeding pattern to toddlers:

"Nutritious food consists of rice, eggs, fish, chicken, vegetables, tofu, fruit, and milk.... Given every day ... because the food is good for kids..." (IF5)

Mother's Knowledge of Religion. As a primary caregiver, the mother also had an excellent religious understanding that was, and the mother understood her role as the first and the leading educator for a child. Mother assumed the child was a gift (*Amanah*) from God, so the mother gave initial religious values to the child, such as getting used to reading *Sholawat* (praise for prophet Mohammed) before the child slept, bringing children to pray to the mosque, and teaching children to study at home.

Mother's knowledge of religion was by adhering to the teachings of *Al-Quran* and *Hadith*:

"At pengajian (religious studies) we are often given lectures by ustadzah, to raise children according to the contents of Al-Quran and hadith" (IF2)

Efforts to keep children healthy maternal knowledge in health care, including immunization, were part of health behavior. The whole mothers (informants) considered vaccination as essential, so all children got a complete vaccination. Various efforts made by the mother to maintain children's health in addition to the whole vaccine were the provision of nutritious food, a routine visit to Posyandu, exclusive breastfeeding, vitamins intake, and traditional herbal medicine intake:

"Routine visit to Posyandu... Complete Immunization ... Nutritious food ... taking herbal medicine once a month ..." (IF2)

The Priority of Feeding was The Child The priority of feeding was the child since all the informants assumed that

the children were in the growth period. They had to get precedence over the other family members.

"Certainly my children Because they are in growth period" (IF5)

Education and Family Income Level Interviews results showed that all of the informants had a background in primary education (primary and secondary) and have income under the regional minimum wage of Bojonegoro.

3. The Influence Of Health Services On Nutritional Status

Environmental factors in this study were the social environment where informants lived. Institutions that often play a role in health problems were *Puskesmas*, *Ponkesdes*, and *Posyandu*.

"We can get information about the nutrition of children ... good food for children *Posyandu* gives us many benefits .. weighed, immunized, given green bean porridge, given vitamins, then sometimes taught to cook children's food ... also counseling from the *Puskesmas*" (IF5)

4. Community Culture Related To Exclusive Breastfeeding

Culture in the study was a habit in society that supported or inhibited children's nutritional improvement. Tradition in the community that supported children's nutritional status was mentioned by some informants, such as fishing *Mujair* Fish in the reservoir, which could be used as a side dish. All informants said that most residents gave exclusive breastfeeding to their children, so this habit was widely an imitation by PD's family.

"The men here often fish *Mujair* in the reservoir it can make quite a side dish Kids love to eat " (IF1)

"Here, we all give breast milk only ..not give formula .. so I follow it... it turns out a lot of benefits ... " (IF 4)

5. Motivation For Having Healthy and Smart Children

Motivation or encouragement within the informants to improve the nutritional status of children under five was revealed in which all informants answer that their cause was to grow healthy and intelligent children, or healthy child who did not get sick easily like was the first child such as in the following quote:

"to have smart and healthy children, did not easily get sick like her brother" (IF2)

B. Supporting Information from Supporting Informants

Improving children's nutritional status could not be separated from village midwives and nutrition officers of *Puskesmas*. Both supporting informants were directly involved in the efforts to improve children's nutritional quality. Both supporting informants described that the positive behavior of the PD family such as exclusive breastfeeding, visiting health officer if their children were sick, and a routine visit to *Posyandu* affected under-fives nutritional status, as mentioned by the village midwife about the implementation of *Posyandu*:

"So far, I think it is okay, many of them come, only one or two who do not come ... its activities are weighing the toddler, immunization, counseling. Sometimes I give counseling ..sometimes from *Puskesmas*, Head of Subdistrict ... "(Midwife)

"It is family's positive habits ... exclusive breastfeeding, taken care by his mother, his mother is patient especially in feeding up her children ..., her children

are preferred in the feeding ... sometimes the father is the priority because the family thinks that the father is the one who works ... so the children get the remaining food ... "(Midwife)

"The family of PD is more about the behavior of his parents ... especially mother ... eating behavior, mostly, mothers here give exclusive breastfeeding ... taking care of children ... sometimes that is considered unimportant by the mother is a nap for toddler... keeping the child, home, and environment hygiene... "(Nutrition Consultant).

Information on the PD family's behavior in efforts to improve the nutritional status of under-fives which were not performed by non-PD families such as the mother did not provide exclusive breastfeeding, the mother had no steps if the child refused to eat, and the mother did not routinely bring children to *Posyandu* as stated by PD family below.

"....After the birth, I gave the formula to my baby because my breast milk did not come out ... after breast milk came out, I gave breast milk mixed with the recipe... I gave breast milk until about the age of 7 months. It's challenging to feed up my child ... So if he does not want to eat already ... I do not force him ... "(Non-PD family).

DISCUSSION

A. People Who Play a Role

The primary roles of the mother as a caregiver by making positive habits are such as having frequent oral interactions with children, giving and showing attention and affection in children, providing tasks division between parents to make sure that the duty of monitoring and caregiving runs smooth and father active participation in child caregiving. This is by the results of research by Zong et al.; the study shows a relationship between mothers' behavior and incidence rates of undernourishment and malnutrition in seven cities in China. The study mentions that a better mother's response is associated with a smaller incidence of malnutrition and undernourishment. The role of mothers has a positive relationship with the child's malnutrition status, which means the better the mother's behavior, the lower the incidence of malnutrition among children will be [13].

B. Parents Characteristics of Under-Fives (Knowledge, Education, And Income)

Mothers knowledge of healthy food dishes influences feeding patterns for toddlers. All the informants mention that a healthy food dish for toddlers is the perfect four healthy food, and all informants routinely give the food to their children. This suggests that although knowledge is not a direct factor affecting children's nutritional status under five, this nutritional education has an important role. By having sufficient knowledge, especially about health, one can know the various kinds of health problems that may arise so that the solution can be sought [14].

The mother's religious knowledge influences the mother's parenting pattern to the child. Mothers who have a good understanding of religion and consider the child as the trust (deposit) from Allah SWT will be responsible for educating and teaching useful things. In the early days of mothers' care, children who have a religious understanding and have good character will grow and develop well. Also, they will have a positive impact on the development of children in the future. Mothers who keep up the Qur'an and Hadith in caring for children, by the Hadith: "Every tree is

bearing fruit. The fruit of the heart is the child. Allah will not care for anyone who does not love to their children. "(Hadith narrated by Muttafaqun' alaih)

The Word of God in Quran Surah AnNisa 9 states as follows: "And let the fear of God those who should leave behind those sick children, whom they fear for (their welfare). Therefore they should fear Allah and let them speak the truth".

The results showed that all informants have the necessary educational background (elementary and junior high) and have the income under the regional minimum wage of Bojonegoro. Studies conducted by Groeneveld [15] in many countries, such as Guatemala, show that some mothers already have proper techniques on practices, traditions, and beliefs in food preparation, feeding children, caring for children during sickness and recovery. Mothers who have this excellent method are not mothers of high Education level. The results of such trials are not different from those in West Bengal that suggest Positive Deviance is a vital strategy to reduce the risk of nutritional disorders.

This study's results are similar to Edris's research [16], which shows no relationship between maternal educations with nutritional status in children. A low level of education does not guarantee that a mother does not know about food to the family. High curiosity can affect the mother in getting information about the right meals for children.

Based on research conducted by Tanumihardjo et al., it can be concluded that in the condition of low family income, they can still give their toddlers good nutritional status if the mother as the primary caregiver performs PD behavior [17]. There is the fact that children with malnutrition status do not always happen in needy families, which means that there are children with functional nutritional status in impoverished families. Thus, poverty is not the root of malnutrition. PD behavior is a solution to solve health problems such as preventing malnutrition cases in infants and toddlers.

The results are also supported by other research by Liu et al. [18], showing that the family's economic status has little influence on child nutrition. This study is similar to Marjan's [19] study, which shows no income relationship with nutritional status. Less family income can still meet the family's food needs, so they have a healthy nutritional status.

C. Environmental or Community Factors

Environmental factors in this study are the social environment where informants live. Institutions that often play a role in health problems are Puskesmas, Ponkesdes, and Posyandu. All informants stated that the place of health services affects children's nutrition in which they all benefit from Posyandu. They can get free immunization and free information, weigh their toddlers, and also get other food.

Service that is always ready and close to the community will be very helpful in improving health status. The opinion supports this by Zeitlin in which he stated that the quality of health care affects cognitive development, health, and social adjustment of the child [20]. Health care efforts aim to improve children's health and nutritional status to avoid mortality and low physical quality. Health

services could affect their health with the rapid handling of health problems, especially problems of nutrition.

Accessible environmental health and primary health services to every family such as immunization, child weighing, child health, nutrition education, and health facilities such as Posyandu, Puskesmas, and mother's understanding of health, reduce the risk of children affected by disease and malnutrition [21].

D. Culture

Culture in this study is a habit in society that can support or inhibit children's nutritional improvement. Patterns in the community that support efforts to improve under five-year-old children's nutritional status are delivered by some informants, namely the habit of fishing Mujair in the reservoir, which can be used for side dishes. All informants state that most residents give exclusive breastfeeding to their children, so the PD family widely imitates this habit. All informants state there are no myths that could inhibit the improvement of children's nutrition. This is in line with Kaput et al., study stating that under-five nutritional status can be improved by using the resources (social, economic, and cultural) within the family and community. Cultural factors are the most influential in developing health status [22].

A similar finding is also revealed by Marsh et al. [6], mentioning that children's growth or nutritional status is related to food consumption and is also associated with infections, social aspect, economy, culture, parenting, education, and environment. As well as toddlers' nutritional status improvement, cultural factors are also closely related to the community's belief. For example, if the tradition of breastfeeding newborns is preserved, the possibility of infant health status will rise.

E. Motivation

Motivation or encouragement presented from the informants to improve all children's nutritional status is directed to make sure that the toddlers grow healthy and smart, or not quickly get sick like the first child. These motivating factors are likely to influence mothers to repair or improve nutritional status. Motivation is a concept used when there is a willingness (initiation), a mobilization that directs behavior. The higher the cause correlated with, the higher the intensity of action. This explains that mothers who have the motivation to make their children healthy and smart are more likely to have a toddler with good nutritional status

CONCLUSION

Factors affecting the Positive Deviance family in improving children's nutritional status include: The person most directly involved in efforts to improve the nutritional quality of toddlers is the mother. She has a good understanding of religion and assumes that Allah SWT trusts the child will educate and raise children with full responsibility. The family knows the healthy food menu for toddlers and presents it every day, and there are efforts to keep under-fives healthy. Also, the highest level of formal education of under-five parents is elementary education with income below the Bojonegoro regional minimum wage. However, this does not prevent parents from improving their nutritional status.

Institutions or community organizations that often play a role in health problems are Posyandu, Puskesmas, and Puskesmas. Exclusive breastfeeding practices and the absence of harmful myths in the community can support the efforts to improve nutrition. The drives of having smart and healthy children can be the motivation to improve children's nutritional status.

It is necessary to increase the empowerment of families with stunting through a variety of activities in integrated health and nutrition center, as well as making PD families role models to transmit positive habits to the family of the other toddlers

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