



Study of Phenomenology: The Experience of Meeting Nutritional Needs of Infants With Low Birth Weight (LBW) in Positive Deviance Families

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Abstract

Babies born with low birth weight are more prone to experiencing malnutrition problems. Efforts to prevent malnutrition in infants and toddlers can be carried out through the Positive Deviance approach. Positive Deviance is an individual or group (family) based approach by identifying positive behaviors that allow them to find better solutions to their problems. The purpose of this phenomenological qualitative study was to determine the experience of fulfilling the nutritional needs of infants with a history of LBW in Positive Deviance families. The main informants were Positive Deviance mothers, and the supporting informants consisted of Positive Deviance families, non-Positive Deviance mothers, and village midwives. The sampling technique used was purposive sampling. Data were collected using in-depth semi structured-interviews and documentation studies. The results of this study reveal that the experiences of families in fulfilling the nutritional needs of infants with a history of LBW include positive maternal behaviors. For example, Early Initiation of Breastfeeding breastfeeding after childbirth, application of breastfeeding correct way to LBW babies, exclusive breastfeeding, complementary breastfeeding, and other efforts if the baby does not have an appetite. Thus, this study implies that positive habits of mothers and families can meet the nutritional needs of infants, especially in increasing the weight of LBW babies to achieve ideal body weight. Therefore, mothers and their Positive Deviance families need to be role models in transmitting positive habits to other families who have babies in preventing malnutrition in babies with a history of LBW.

Keywords : Positive Deviance;Family Experience;Infant Nutrition;Low Birth Weight

INTRODUCTION

Infant Mortality Rate (IMR) reflects the level of health development of a country as well as the quality of life of its people. According to the World Health Organization (WHO), as many as 7000 newborns in the world die every day. Meanwhile the IMR in Indonesia is approximately 185 / day with the Neonatal Mortality Rate. Which is 15/1000 live births or 47% of under-five deaths (UNICEF, WHO, World Bank, 2019). One of the factors causing the high IMR is premature babies with low birth weight (LBW). WHO and UNICEF

data show that the estimated prevalence of LBW worldwide in 2015 was 14.6%. Of which more than half were born in Asia, 20.5 million live births weighing were less than 2500 g. Most are in low and middle income countries (91%). Notably, nearly three-quarters are in sub-Saharan Africa and South Asia (Blencowe et al., 2019). Meanwhile in Indonesia, the incidence of low birth weight in 2017 was still high at 7.1% (BKKBN, BPS, & Ministry of Health, 2018)

LBW babies are more susceptible to possible growth disorders, a higher risk of death and

morbidity, brain development disorders, and chronic disease later in life. Abnormal infant growth also increases the risk of malnutrition, stunting or thinning in childhood. This situation will get worse if LBW babies do not get sufficient energy and nutrition intake, poor parenting and often suffer from infectious diseases (Devaki & Shobha, 2018).

Therefore, handling to prevent LBW babies from experiencing nutritional problems must be done early. For this reason, the Indonesian government has issued a policy of the First 1000 Days of Life Movement (HPK) starting from babies in the womb to two years old. During this period improving nutrition and health is prioritized to break the chain of LBW problems. It is expected that the intervention carried out in the 1000 HPK movement can have an impact on the safety of child development (Bappenas, 2013).

In this regard, efforts to prevent malnutrition in children in several countries can be done through *Positive Deviance* approach (Bisits Bullen, 2011). The Positive Deviance approach program in the world known as Save The Children has been used in developing countries such as Vietnam, Bangladesh, and in Haiti it is implemented to rehabilitate malnourished children. Positive Deviance Interventions are also continuously being developed and tested to be promoted and adopted as health practices in other fields (Hendryx et al., 2017). The Positive Deviance approach is not only used to help malnourished children but is also used for the treatment of mothers and newborns, as well as increasing infant growth to reduce infant and child mortality (van Dick & Scheffel, 2015).

The concept of Positive Deviance is a situation of positive deviance related to health, the growth and development of certain children and other children in the same community and family (Zeitlin, Ghassemi, Mansour, & Haenel, 1991). Positive Deviance Behavior is divided into four

main categories, such as feeding, nurturing / nursing, hygiene and getting health services. (CORE, 2003). Through the application of the Positive Deviance approach, it is known that there is an increase in the health of mothers and babies that are better, and there will be no more newborn deaths (Shafique, Sternin, & Singhal, 2010).

A study conducted in Indonesia on Positive Deviance by Luthfia, Yanti, & Warsiti (2017) in East Java, shows the factors that affect the Positive Deviance family in an effort to improve the nutritional status of toddlers which include the people who play a role, parental characteristics, environmental or community factors and culture. Meanwhile, Lanita, Febry, & Mutahar (2012) in South Sumatra found that mothers who have toddlers with good nutritional status have Positive Deviance behavior in the form of daily living habits, such as 1) eating habits, 2) hygienic habits, 3) Habits of seeking health service.

Based on the results of the preliminary study, the highest number of LBW cases in Kulon Progo was in the Wates Puskesmas working area, with 38 LBW babies. In addition, in 2018 there were 42 babies born with LBW (Dinkes Kulon Progo, 2018 & UPTD Pusk. Wates). Furthermore, from the data contained in the nutrition section, it was found that infants with a history of LBW experienced an increase in their ideal body weight or had improved their nutritional status.

Therefore, the application of positive deviant behavior is considered important for families with LBW babies to increase their baby weight, by doing so they support government programs. Learning from the experiences of families who have adopted the Positive Deviance approach in the care of babies with a history of LBW as a form of midwifery care, various positive behaviors and strategies are worth carried out to be further informed and practiced by other community members.

This study is different from previous studies where the qualitative research design used in this study is phenomenological research. The variable in this study is about the Positive Deviance family experience in terms of baby care, especially LBW babies. Thus, the aim of this study was to determine the experience of positive deviance families in fulfilling nutrition for low birth weight babies.

METHODS

The researcher conducted this research after obtaining approval from the research ethics committee of Aisyiyah University Yogyakarta Number 846 / KEP-UNISA / II / 2019 and permission from the Kulon Progo District Health Office.

This study employed a qualitative research design with a descriptive phenomenological approach. The sample was selected using a purposive sampling technique. The participants consisted of 6 (six) main informants and 6 (six) supporting informants. The main informants was selected based on inclusion and exclusion criteria. The inclusion criteria cover infants who had a history of LBW aged between 6-12 months with ideal body weight / good nutritional status, those mothers come from poor families and live in the working-area of Wates Kulon Progo Community Health Center. While the supporting informants consisted of husbands, parents / parents in-law, and a local midwife, as well as mother who was not Positive Deviance.

The experience of fulfilling nutrition for infants with a history of LBW in the Positive Deviance families was obtained by in-depth interviews and documentation studies. Which was investigated using semi-structured interview guidelines with open questions.

The research period was started from March to April 2019. The validity test used was the construction test using an expert opinion (expert

judgment). There were 3 experts involved in accordance with the scope of the research. While the data analysis in this study adopted the Miles & Hubberman model (1992) which consists of 3 activities, such as data reduction, data presentation, drawing conclusions and verification.

RESULTS AND DISCUSSION

Based on the results of in-depth interviews involving 6 key informants who have the following characteristics: Mothers aged 21 years - 41 years, babies aged 6 months - 10 months. All babies were born with a history of LBW, which was between 1950 grams to 2,350 grams. When this research was conducted, the babies' weight in the last month reached the ideal / good nutrition category.

Nutrition Fulfillment Behavior of Infants with a History of LBW in *Positive Deviance* Families

1) Early Breastfeeding Initiation (or IMD)

One mother stated that as the primary caregiver, after the baby was born, the baby was placed directly on the breast so that the baby can find the mother's nipple for breastfeeding. Accordingly, the Informants also mentioned that IMD can establish relationships early on and increase affection with their babies.

“When my child was born and was directly put here (pointing at her chest), it was immediately touched, it arose a real affection that he was, thank God, finally born safely “ (IF2).

2) Experiences of Breastfeeding After Childbirth in the Hospital

The experience of breastfeeding newborn babies especially with LBW is not easy for a mother. The informants said that they made every effort to be able to provide breast milk from the first day of delivery in the hospital so that their babies could gain weight from LBW to normal weight. The informants who experienced breastfeeding for the first time also learned the correct breastfeeding

techniques so that they can breastfeed their babies properly.

"When she had low weight at the hospital, although the breast milk had not come out yet, I still gave it, waiting for the milk to come out. Even though this lasted a day and a night, I still didn't have breastmilk, I kept breastfeeding my baby, I never used a breastmilk donor ...,Alhamdulillah, as it is my own child, I kept struggling, I didn't want to stay in the hospital for longer, and ultimately this baby's weight grows immediately and increases quickly." (IF4).

3) How to Breastfeed LBW Babies

The results of the interview showed that several informants gave their breast milk directly to their babies. Meanwhile, there were also informants who gave breast milk by firstly milking and then giving the breastmilk using a spoon, and it was done when the baby was still LBW, as expressed by several informants as follows:

"So for a week before I gave breastmilk, I couldn't help it, I didn't spoon it, it hurt, my mother bought me and my husband a pump tool, so it's easier ... so after milking it, I gave it to my baby, to drink immediately. afterward, after she fed, I paused milking. Once she cried again and I woke up, I already had a backup milk stock. So, I tried it, besides scooping, I also tried to breastfeed her right away " (IF1)

"... The milk just came out one spoonful, so I gave it to my baby, until I could immediately breastfeed it, until I could produce much breastmilk, for that I was very patient ... " (IF4).

4) Exclusive Breastfeeding

Based on the interview, it was found that the feeding was in accordance with the age of the baby. When babies aged 0-6 months they were only given breast milk without additional food. The informants also gave breast milk in every less than two hours to the baby when the babies were still in LBW condition. As a result, their babies had increased in weight above 2500 grams, as recounted by the informants as follows:

" In that time, up to 6 months, exclusive breastfeeding. Yes, without additional foods... I didn't have to wait for 2 hours to breastfeed" (IF2)

"Starting to eat when it was 6 months, so from the time (we) were discharged from the hospital to 6 months I only gave it breast milk". " (IF3)

5) Complementary Feeding (MP)-ASI

All informants gave supplementary food at the age of the baby after 6 months. The baby's eating frequency was 2-3 times a day plus a snack between breakfast and lunch.

"Yes .. usually in the morning for playing, in the middle of the day at 11-12, and in the afternoon when my baby wakes up, before bath time yes ... twice, and sometimes 3 times to eat porridge, because my baby has also eaten light foods and has been breastfed." (IF1)

" At the age of 6 months I gave the Sun or filtered porridge, heavy food can be 3 times, just like us. But, the portions were small in the morning as long as there was food. For fruits, I usually gave my baby a banana that had been crushed beforehand. As for now, I scrape it right away using a spoon, as well as dragon fruit, so usually the cheap ones, Sis." (IF4)

In general, the menu that the mothers make is Sun porridge, filtered porridge, with a mixture of tubers and vegetables. The baby snacks that are given by the mothers are in the form of biscuits or bread, fruits either directly or juiced, jelly / pudding, cakes or snacks, and others. MP-ASI processing is made based on the age of the baby and suiting the baby's ability to chew / swallow soft food. For example, the food ingredients are steamed or boiled first, then filtered or blended. Each informant stated that she gives complementary foods to the baby, as expressed in the following extracts:

"Vegetables and mushy rice. Eggs and tofu- Tempe, I boil them but I don't add spices, when it's soft, I grind the rice. Sometimes I add the mixture with Sun porridge. Snacks is usually in form of toddler bread, as for drinking water, it is just plain water and breast milk, that's all". " (IF2)

"Feeding rice to my baby started at the age of 8 months, previously it was Sun and Breast milk (ASI), now I also give it Jenang porridge, sum Sum porridge, grits and Waruk (yellow squash), egg protein, usually fish, fish itself like tilapia. As for vegetables, I use spinach and broccoli" (IF3).

6) Handling if the baby has no appetite

If their babies have no appetite or have a decreased appetite, the mothers take an action by making more varied foods that their baby likes. In addition, the informants stated that they fed the babies more patiently and going through various efforts. For examples, feeding the baby directly by hand (without a spoon), feeding the baby while playing or while traveling and being carried. The mothers also did not force their babies if she/he does not want to eat, otherwise they continue to prioritize breastfeeding.

"So when he was sick, he didn't want to eat, but I was not painstaking, only for breakfast it took two hours, during the two hours I patiently fed him little by little, and when he did not want to swallow the food, he only kept it in his mouth ." (IF1)

"I browsed on the internet, to find the solution of how to get a baby eat easily, so it is suggested to feed the food to the baby by hand " (IF1)

"I feed my baby while sightseeing and carrying him, so I do not force him" (IF3)

The role of family support and village midwives

The results showed that all informants stated that they received support from family members (husbands and parents) such as assisting them in carrying out their daily tasks of caring for their babies. Meanwhile, information obtained from supporting informants, such as local midwife, shows that midwives are responsible for the health of mothers and babies in their working areas.

The experiences of Positive Deviance mothers in meeting the nutritional needs of newborns with LBW in the hospital was carried out with the introduction of breastfeeding through IMD. IMD provides the benefit of stimulating the release of the hormone oxytocin which then causes muscle contraction in the areola of the mother's breast so that a *let-down reflex* occurs so that the milk will flow out into the baby's mouth (Gangal, Bhagat, Prabu, & Nair, 2007). Breast milk is

universally recommended as the main intake of enteral nutrition in infants because it is beneficial for the health and well-being of the babies. In addition, breast milk can also reduce the risk of infection, allergies, and it has a positive effect on growth and development. Babies also benefit from direct contact with their mother while breastfeeding, so that it can increase psychological stability (Bonet et al., 2015).

Positive Deviance mothers were also successful in giving exclusive breastfeeding to their babies so that the babies reached their ideal body weight. A study in India on infants with LBW showed that infants who were exclusively breastfed experienced a weight gain that was almost the same as the weight of babies born with normal weight (Singh, Devi, & Raman, 2009).

All informants started giving complementary foods after their success with exclusive breastfeeding. The WHO / UNICEF Global Strategy for Infant and Young Child Feeding recommends giving complementary foods when a child is aged 6 months to 24 months. The breastfeeding would ideally continue until the child reaches 24 months old or older in order to achieve the optimal growth and development (Kemenkes, 2014). The actions of Positive Deviance mothers in this study were also carried out by applying various complementary foods, applying eating frequency and good eating habits. In line with this study, a study in India has identified Positive Deviance mothers' behavior that supports optimal infant feeding, such as mothers are interested in learning about infant nutrition and how to serve various foods. Positive Deviance mothers reported that they can exclusively breastfeed for 6 months, introduce complementary foods for about 6 months, and then wean their offspring with appropriate foods (D'Alimonte, Deshmukh, Jayaraman, Chanani, & Humphries, 2016). Similarly, a research results in Ecuador stated that Positive Deviance intervention

supports mothers in improving nutrition in their babies and children. Thus, by fulfilling good nutritional needs by the Positive Deviance family, babies who have a history of LBW will have a significant impact on increasing their ideal body weight (Roche et al., 2017).

At the same time, the roles and supports given by families and health workers are needed by mothers in carrying out baby care, especially if the baby is a LBW baby. Argue that supports from parents and siblings can be a strong resource for mothers or Positive Deviance families. The support could be in the form of assistance to mothers while giving care for the infant such as preparing food and helping to see a doctor (D'Alimonte et al., 2016). Accordingly, a research in China suggested that mothers who get help and information from health care professional staff and attend health education classes in health services have greater attitudes and knowledge in breastfeeding and infant care practices. Therefore, it is important to note that services that are always ready and close to individuals and accompanying families or community groups will be very helpful in improving health status (Hamze, Mao, & Reifsnider, 2019).

As for family income factor in this study is in accordance with the characteristics of the Positive Deviance group, who are coming from poor families. In this regard, despite condition of low family income, families can still be successful in improving the nutritional health of their children if the mothers as the main caregivers have *Positive Deviance* habits (Zeitlin et al., 1991).

CONCLUSION

The results of the study provide an overview of the experiences of the Positive Deviance families in fulfilling nutrition in infants with LBW history. Which have improved their baby's nutritional status

to be ideal / good. Therefore, Positive Deviance behavior could be worth considered solution in overcoming health problems, especially in the care of low birth weight babies.

In this case, the role of health workers in the Positive Deviance approach is to make mothers and Positive Deviance families as role models in transmitting positive habits to other families with babies. By the same token, Positive Deviance Families can participate in social campaign activities that are organized by the surrounding community. In short, Positive Deviance Mothers and Families can introduce positive behaviors or habits and the efforts made to improve family health.

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