CAUSES OF COMPLEMENTARY FOODS GIVEN TO BABIES AGED 0-6 MONTHS IN PAYA PASIR, MEDAN MARELAN DISTRICT

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ABSTRACT

The majority of experts accept that complementary foods shouldn't be introduced before 4 months of age, despite inconsistent advice regarding the best time to do so. Regardless of recommendations, studies show that 20% to 40% of infants in the US start eating before they are 4 months old. Previous research was non-representative of the country and concentrated on the introduction of solid foods. While baby-led weaning (BLW) is a popular complementary feeding practice, evidence supporting the potential benefits and/or risks for infant growth, development, and health could be considered. The research method is qualitative with a phenomenological approach. Thematic analysis was used with the help of the Nvivo 12 Plus software. The findings of this study indicated three major themes regarding the causes of complementary feeding: inadequate knowledge, working mothers, and slow baby growth. The purpose of this study is to provide evidence-based guidelines and increase mothers' knowledge about the benefits of complementary foods in infants aged 0–6 months

Keywords: *complementary foods, infants, knowledge, slow baby growth*

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INTRODUCTION

Breastfeeding is recommended as the best source of infant nutrition by all major health organizations, with exclusive breastfeeding recommended for the first six months of life. Complementary foods can be introduced after six months. Breastfeeding for longer than six months may have additional advantages for the infant, such as a lower risk of obesity and respiratory conditions like asthma, though the evidence for these advantages is insufficient (Westerfield *et al.*, 2018). Exclusive breastfeeding should be recommended for at least 4 months and is more effective for 6 months; complementary feeding should not be introduced before 4 months and should not be delayed beyond 6 months for developmental and nutritional reasons. When breast milk does not meet an infant's nutritional needs, complementary foods should be supplied, and caregivers

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and parents should provide a variety of foods with appropriate texture and consistency for the infant's developmental stage, promoting healthy food preferences (Campoy *et al.*, 2018). Based on the low iron content of breast milk, breastfed infants could be highly susceptible to iron deficiencies after their first month of life (Libuda *et al.*, 2018). The introduction of solids at 4 months shows a beneficial impact on the rate of iron deficiency anemia in breastfed infants. In 2015, the World Health Organization (WHO) still recommended exclusive breastfeeding for infants during the first 6 months of life, followed by the introduction of adequate complementary foods (Qasem *et al.*, 2015). Regardless of the risk associated with a family history, the majority of current international guidelines advise introducing complementary foods, including allergenic foods, between the ages of 4 and 6 months (West, 2017). Complementary feeding is a procedure in which a baby is given food other than milk to include in his diet while gradually reducing his milk intake (either breast milk or formula) (Dipasquale and Romano, 2020). Infants should be breastfed exclusively up until they reach the age of four months. Infants who are no longer breastfed or are only partially breastfed should be given a commercially available low-protein infant formula containing long-chain polyunsaturated fatty acids. It is not recommended for infants to begin complementary feeding then because it increases the risk of allergies. Cow's milk should not be consumed during the first year of life. At birth, 7–10 days, and 4-6 weeks of age, all infants should be given 2 mg of vitamin K, as well as daily oral supplements of vitamin D (400–500 IE) and fluoride (0.25 mg) (Prell and Koletzko, 2016).

North Nias (84.28%), Sibolga (72.12%), and Samosir (69.05%) had the highest prevalence of exclusive breastfeeding. While West Nias (11.96%), Serdang Bedagai (16.20%), and Nias (17.62%) were the three lowest regions or cities. Ten regencies or cities, namely North Nias, Sibolga, Samosir, North Tapanuli, South Tapanuli, Mandailing Natal, Tebing-Tinggi, North Labuhanbatu, Dairi, and Humbang Hasunduta, have achieved the 53% Strategic Plan target (Dinas Kesehatan Provinsi Sumatera Utara, 2019).

MATERIAL AND METHOD

A qualitative research design was used in this study. This research was

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conducted using a research design that aims to reveal phenomena holistically and contextually by collecting data from natural settings and using the researcher as a key instrument rather than obtaining results through statistical procedures or in the form of calculations (Fadli, 2021). The Milles and Hubberman (1984) model, an interactive model that clarifies the analysis in 3 steps—data reduction, data presentation, and conclusion or verification—was adopted for the data analysis in this qualitative study. Computer-Assisted Qualitative Data Analysis Software (CAQDAS), specifically the Nvivo 12 Plus software for the coding process, was used to assist in the data analysis for this study.

The researcher creates data categorization based on the concepts that appear in the data, compares the concepts or data categories, and combines all concepts and data categories that are related to one another as part of the interactive coding process. (Sugiono, 2019). An interview guide is an instrument used by researchers. The interview guide is the instrument used by the researcher. In this study, data was collected through in-depth interviews with mothers who have babies aged 0 to 6 months.

RESULT

In this study, five breastfeeding mothers with infants aged 0 to 6 months were the informants.

Table 1.1 Characteristics of Informants

Age	**Percent**
25-31	80%
32-38	20%
Last Education	**Percent**
Bachelor	20%
High School	60%
Associate Degree	20%
Employment	**Percent**
Self-Employed	40%
Housewife	40%
Merchant	20%

Based on Table 1.1, the majority of mothers aged 25–31 years (80%) High school is the most recent history of education (60%), and the majority are self-employed and IRT (40%).

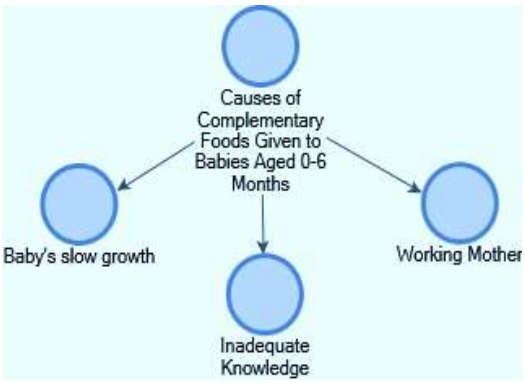

Figure 1.1 The Major Theme Regarding the Benefits of Providing Complementary Food for Mother's Milk in Infants Aged 0–6 Months

Figure 1.1 shows three major themes, namely inadequate knowledge and working mothers. This is the result of the interview's statement :

"I find it difficult to breastfeed my baby because I work 8 hours a day…." ***If-A1***

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"Yes, how about not giving porridge? My child does not appear to be overweight…" ***If-M2***

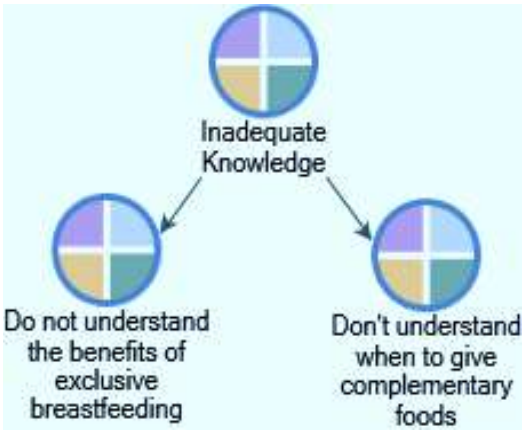

Figure 1.2 Project Map Inadequate Knowledge

According to Figure 1.2, there are two sub-themes: mothers who do not understand the benefits of exclusive breastfeeding and mothers who do not know when to introduce complementary foods. This is the result of the interview's statement :

"breast milk, in my opinion, can be given as additional porridge if my child is still crying besides breastfeeding..." ***If-S3***

Figure 1.3 Sub-themes on Working Mothers

Based on Figure 1.3, only one sub-theme is obtained, which is about mothers who work outside the home and therefore cannot fully breastfeed their babies. This is the result of the interviewer's statement:

*"I work for eight hours every day, and sometimes when I come home from work I'm tired of breastfeeding, Mom…"****If-S3***

Figure 1.4 The sub-theme of slow baby growth

Based on Figure 1.4, just one sub-theme is obtained: babies who look tiny. This is the result of the interview's statement :

"my in-laws often speak of my child having difficulty gaining weight, so it hurts my heart when I hear it…" ***If-K5***

DISCUSSION

Given the increasing popularity of BLW and infants' unique developmental needs, it is essential to establish the benefits and/or risks of breastfeeding as responsive complementary feeding practices for infant growth, development, and health. Before beginning solid food administration, developmental readiness must be taken into account. More research is needed to provide evidence-based guidelines for preterm infants, and studies

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should look into the immediate and long-term effects of the pattern and timing of solid food introduction on health outcomes and subsequent development (Barachetti *et al.*, 2017). The importance of information support for increasing mothers' understanding of the benefits of breastfeeding and the right time to provide complementary foods for breastfeeding A previous research study showed mothers' motivation was to seek support, assistance, or even compassion for nursing issues (McKeever and McKeever, 2017). Problems with lactation are connected to the amount of information about the benefits of the healthcare profession, neonatal length, normal vaginal birth, breast size, breastfeeding experience, pacifier usage, and the need for breastfeeding assistance from family members (Huang *et al.*, 2017).

According to research published in India, structural factors, particularly the length of time spent working in agriculture, hampered the mother's ability to feed her child optimally. Interventions to improve infant and young child feeding practices must take these factors into account, as well as access to food, nutrition education, and behavior change (Burns *et al.*, 2016).

Mothers who work usually feel tired and so they are anxious to provide breast milk, causing milk selection formulas to be the primary choice. Structured educational sessions for mothers and other family members, professional and lay support for breastfeeding mothers, motivational interviews, contact with skin, cessation or discouragement of pacifier use, and a combination of these interventions are examples of breastfeeding promotion interventions (Huang *et al.*, 2017).

The benefits of baby-led weaning (BLW) consist of increased baby appetite, increased food enjoyment, and increased satiety responsiveness. Although this dietary pattern lowers the risk of obesity, there aren't many studies that have looked closely at the connection between BLW and the growth of infants.

In conclusion, complementary feeding could help the consumption of a variety of foods that meet nutritional needs while also promoting the development of optimal food-related behaviors, skills, and attitudes. Given the growing popularity of BLW and infants' unique developmental needs, it is critical to establish the benefits and/or risks of BLW as responsive complementary

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feeding practices for infant growth, development, and health (Boswell, 2021).

CONCLUSION

In this study found 3 major themes about the causes of complementary feeding. Based on interviews with mothers, it was found that there was insufficient knowledge, mothers who had jobs and slow growth of babies. The three major causes of complementary feeding lead to the conclusion that health professionals must educate mothers about the suitability of complementary feeding for infants 0–6 months old and them with evidence-based recommendations

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