

Mother's Knowledge Regarding Local-Based Complementary Feeding for Supporting Healthy Indonesia Program with Family Method

Asmaripa Ainy, Misnaniarti, Fatmalina Febry, Dian Safriantini

Abstract: *Undernutrition among children under five years is still the main problem in many developing countries. Healthy Indonesia program has been implemented across Indonesia by the government to improve health status and nutritional status of community through health effort and community empowerment. Growth monitoring of children is one of its indicators. The present study aimed at exploring the mother's knowledge regarding local-based complementary feeding practice for supporting healthy Indonesia program in selected communities at Banyuasin regency in Indonesia. It was a descriptive study with a qualitative approach. Using a semi-structured questionnaire, data was collected and thematic analysis was applied to analysis the data. Twenty four mothers of children aged 6-24 months were interviewed. Four main themes were identified including: (1) child growth, (2) balanced nutrition, (3) picky eating behavior, and (4) local-based complementary feeding recipes. Although willingness to provide a local-based complementary feeding was good among the mothers, this was not always reflected in its practices. This study provides information essential to enhanced health program management and has policy implications for the improvement of nutrition program for children aged 6-24 months in Banyuasin. It is suggested to encourage mothers to practice a healthy complementary feeding made of local foods to children aged 6-24 months.*

Index Terms: Knowledge; Mother; Complementary Feeding; Healthy Indonesia Program

I. INTRODUCTION

The Sustainable Development Goals (SDGs) number 3 targeted the reduction of neonatal mortality to at least as low as 12 per 1000 live births and under-5 mortality to at least as low as 25 per 1000 live births. Several researches showed that malnutrition is associated with infant mortality. Therefore malnutrition is a significant health problem for infants and young children in many developing countries including Indonesia. Optimal growth and development of a child are related to feeding practice factor. It is important to

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Asmaripa Ainy, Health Policy and Administration Department, Faculty of Public Health, Universitas Sriwijaya, Indralaya Campus, South Sumatera, Indonesia, asmaripa_ainy@fkm.unsri.ac.id; asny_plbg@yahoo.com

Misnaniarti, Health Policy and Administration Department, Faculty of Public Health, Universitas Sriwijaya, Indralaya Campus, South Sumatera, Indonesia

Fatmalina Febry, Nutrition Department, Faculty of Public Health, Universitas Sriwijaya, Indralaya Campus, South Sumatera, Indonesia

Dian Safriantini, Health Policy and Administration Department, Faculty of Public Health, Universitas Sriwijaya, Indralaya Campus, South Sumatera, Indonesia

introduce complementary foods at six months of age in addition to breast milk because at that age breast milk is no longer sufficient to complete the nutritional requirements of the child such as energy and micronutrients. According to Udoh and Amodu(1), nutritional status based on weight-for-height of children who received timely complementary foods was normal than children who did not receive timely complementary foods even after controlling for maternal, child and health factors.

Inability factor of parents and families to provide the proper diets using locally available food stuffs was largely being attributed to inadequate intake of food materials for children particularly in developing countries(2). It was stated that giving local complementary feeding to infants and children ages 6-24 months is good for improving their nutritional status and it produced a positive impact on the maternal knowledge skills for weaning independently and increased societal participation(3).

Knowledge among mothers who generally guide her children feeding practice is one of important factors in initiating complementary feeding. There are limited studies on knowledge regarding complementary feeding made from local foods using qualitative approach. The findings of this study will be beneficial for the planning of health nutrition program to improve feeding practices for infant and young children in country. Therefore, this study aimed to describe the knowledge to complementary feeding among the mothers of Banyuasin district, Indonesia.

II. METHODOLOGY/MATERIALS

This study was conducted in Banyuasin regency. It is a district in South Sumatera Province, Indonesia, located on the east coast of Sumatera. Banyuasin local government area lies between 1.30- 40 South Latitude and 104 40' - 105 15' East longitude. The Local Government Area measures approximately 11.832,99 km² (around 12.18% of the total area of South Sumatra Province). Majority area of Banyuasin is a swamp area. It has a population of 822.575 people. The people of Banyuasin are predominantly fishermen and farmers.(4)

It was a descriptive study with a qualitative approach performed between June and August 2018. Informants were mothers having 6-24 months children in the areas of sub-district of Sukajadi, Suak Tapeh and Pangkalan Balai. This qualitative method was

conducted for gaining insight into the participants' experiences. In this qualitative study, 24 mothers of children aged 6-24 months have been explored their knowledge using semi-structural in-depth interviews. Participants were purposively selected based on discussion with local health centers and village midwives. The participants were also informed about confidentiality, that participation was voluntary and informed of their right to withdraw from the study at any time during the interviews.

Thematic analysis was applied to analysis the data and identified regular patterns of meaning regarding the major issues pertaining to local-based complementary feeding practice. All participants were informed on the aims of the study. Questionnaire guide was designed based on the research objective. A transcript-based analysis was used, which involved reading through the transcripts and field notes, looking for emerging themes.

III. RESULTS AND FINDINGS

Banyuasin regency is divided into 19 sub-districts with 304 villages/urban villages. With a total of 288 villages and 16 urban villages.⁽⁴⁾ The distance between the Capital District (Pangkalan Balai) and the Capital of the Province (Palembang) is 45 km which can be reached in approximately 1.5 hours by bus/car.

A. Profile of Study Respondents

Table 1. Distribution of mother age and children by sex and age

Profile	n(%)
Mother Age(y)	
20-30	18(75%)
31-40	6(25%)
Child sex	
Male	18(75%)
Female	6(25%)
Child age(M)	
6-8	3(12,5%)
9-11	5(20,8%)
12-24	16(66,7%)

Table 1 shows the majority 18 (75%) of the mother were 20-30 years old, 6(25%) were above 30 years. Moreover, the majorities (75,0%) of the children were male and only 25,0% of the children were female. More than a half (66,7%) of the children were of age group 12-24 months, the minorities of the children (12,5%) were of age group 6-8 months.

1) Mothers' Knowledge Regarding Local-Based Complementary Feeding

The knowledge aspects extracted from this study were 1) mother's understanding of complementary feeding, 2) schedule for providing complementary feeding, 3) providing complementary feeding with healthy nutrition made from local foods for children aged 6-24 months, 4) constraints in the provision of local-based complementary feeding, 5)

local-based complementary feeding menus and recipes and 6) Indonesian government effort to pursue a healthy Indonesian society.

The knowledge of mothers aged 20-30 years is categorized good. A total of 12 mothers (66.7%) and only a few (6 mothers) have less knowledge (33.3%). Whereas in the group of mothers aged 31-40 years, almost all mothers (5 people or 83.3%) have good knowledge and mothers with poor knowledge only 1 person (16.7%). Mothers with good knowledge explain that complementary feeding is the food that is given in addition to breast milk when the child is 6 months and above, as quoted in the following interviews:

"I gave complementary feeding to my child when she was more than 6 months" (Se)

"Complementary feeding... It is the food that I give to my child when she was 6 months old and I also give breast milk according to my child's wishes" (Dw)

"I provided complementary feeding for my second son after the age of 6 months" (St)

"From a health worker in health post, I obtained information that complementary feeding was given to children after the age of 6 months" (Su)

The stages in giving complementary feeding were still not well understood by all mothers. Complementary feeding must be introduced gradually, because the mechanism of swallowing and the baby's ability to digest is still weak. In addition, also need to consider the possibility of a side reaction from food, such as allergies or food intolerance. This was illustrated in the following interviews:

"I gave family foods when my son was entering the age of 9 months because I felt he was interested in the foods I provided."(Rn)

"My son is very selective in eating so at the age of 8 months I started introducing family favorite foods."(Mr)

"Providing family foods that is spicy and dense textured is my effort to increase eating desire of my child who is now at 10 months aged."(Ru)

The preparation of complementary feeding from local foods is also explained by the mother as a form of utilizing food ingredients that are widely available in the surrounding area such as catfish, tofu, eggs, chicken meat, pumpkin, cassava, long beans, papaya, banana and watermelon. Giving complementary feeding to children is a challenge for all mothers because sometimes their children do not directly like foods made from the local ingredients. The results of interviews with the mother obtained a general description as follows:

"...I am looking for information about complementary feeding from social media for providing complementary feeding at first time to my son."(Su)
 "A menu needs to be made to ensure the variety of local ingredients I give to my son." (Rs)
 A few days at the start of giving complementary feeding, my daughter seems to not like the complementary feeding that I prepared..."(Di)

Research findings by Aruldas et. al.(5) showed that elderly women, like

mothers-in-law had significant role to influence and guide child feeding practices in the family and lack of knowledge among them was a barrier in initiating complementary feeding at the correct age. According to several mothers who become research informants, providing complementary feeding at the right age and amount is important for optimal growth for their children.

“Giving mixed foods with the right frequency can increase my child's physical growth...”(Rs)

“The type of complementary feeding is given according to the age of the child because the ability to digest from children develops according to their age.”(Di)

Mothers of children aged 6-24 months who become research informants stated that there were still difficulties for them to provide variety of complementary feeding from local food ingredients. This is due to a time factor, difficulty to look for and adjust recipes from local ingredients to their children taste and easiness in cooking food for all family members so that children before one year of age have already been introduced to family foods. Although willingness to provide a local-based complementary feeding was high among the mothers, this was not always reflected in their behaviors.

The Indonesian government's efforts to improve public health status are implemented in a Healthy Indonesia Program with Family Approach. The role of mother is very essential in terms of paying attention to the health of her children. Mothers have more time to take care of the household. The informants stated that they knew about the program, which one of the indicators is to monitor the growth of children under five aged every month. With regard to the Healthy Indonesian Program, findings show that mothers were informed by health workers and cadres during activities in a health post. These are interview quotations:

“I got information about Healthy Indonesian Program from a health post. At that time, health worker informed that children need to be monitored for growth and development periodically. I think, it is an effort to achieve Healthy Indonesia.”(My)

I ever obtained information on Healthy Indonesian Program when I was visiting local health post. A midwife who manages health post explained regarding objective of the program and its relation to child health.”(Nu)

The interviews yielded rich data relating to mothers' knowledge regarding complementary feeding practice to their children. Four main themes were identified including: (1) child growth, (2) balanced nutrition, (3) picky eating behavior, and (4) local-based complementary feeding recipes and eleven major sub-themes to be identified from the interview. Themes and sub-themes are set out in table 2 and described in detail below.

Table 2. Overview of themes

Themes	Sub Themes
Child growth	1. Child physical growth 2. Child health card 3. Weighing and measuring a child

Balanced Nutrition	1. Consume the right amount of calories 2. Nutrient-dense foods 3. Eat a variety of foods
Picky eating behavior	1. Anxiety for mothers about child nutritional status 2. Dealing with picky eater child
Local –based complementary feeding recipes	1. Healthy local foods for children 2. Menu planning for children 3. Family meals made from local foods

After age 6 months to 24 months, giving complementary feeding needs to be conducted gradually(6). The importance of mother's knowledge regarding complementary feeding practices is useful in reducing the risk of stunting. In addition to complementary feeding, breast milk must also be given to infants until the child is 24 months old(7). Study by Siolimbona et.al.(8) described that effort to increase maternal knowledge about complementary feeding giving can be conducted by providing socialization in the community, both by health workers and cadres.

Hemlata and Jana(9) highlighted that preventive aspect in healthcare delivery system at present is emphasized rather than the curative aspect such as nutrition lessons regarding complementary feeding preparation in the vaccine clinics and in community. Besides, it was identified that local cultural and traditional practices in South Africa has correlation to complementary feeding practices(10). Furthermore, timing of introduction, food choices and dietary diversity are several important aspects to an effective complementary feeding practice. (11)

IV. CONCLUSION

This study provides essential information to enhanced health program planning and has policy implications for the improvement of nutrition program for children aged 6-24 months in Banyuasin. It is suggested to encourage mothers to practice a healthy complementary feeding made of local foods to children aged 6–24 months.

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AUTHORS PROFILE.

Asmaripa Ainy from Health Policy and Administration Department, Faculty of Public Health, Universitas Sriwijaya, Indralaya Campus, South Sumatera, Indonesia. My area of interest is sustainable growth.

I am Misnaniarti from Health Policy and Administration Department, Faculty of Public Health, Universitas Sriwijaya, Indralaya Campus, South Sumatera, Indonesia. My area of interest is sustainability.

My name is Fatmalina Febry from Nutrition Department, Faculty of Public Health, Universitas Sriwijaya, Indralaya Campus, South Sumatera, Indonesia. My area of interest is growth and sustainability.

Dian Safriantini from Health Policy and Administration Department, Faculty of Public Health, Universitas Sriwijaya, Indralaya Campus, South Sumatera, Indonesia. My area of interest is sustainable development.