

## Education and Practice of Complementary Foods Among Mom's Groups on The Kemuning District Banjarbaru Selatan

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### ABSTRACT

Stunting is one of the nutrition problems in the world. Nutrition improvement since the womb until the provision of complementary food is needed to solve this problem. Appropriate knowledge and skills in processing complementary foods can be a success factor of good nutritional parenting. This activity aims to provide knowledge and skills about complementary foods among mothers in Kemuning Village. The activity includes preparation, implementation and reporting. The preparation begins with permission and coordination. The implementation involved facilitator namely Lactation Counselors from Association of Indonesian Breastfeeding Mothers (AIMI) in South Kalimantan. Reporting includes activity reports and publications. The activity was held at Posyandu in Kemuning Village attended by 16 participants (mothers who have babies and toddlers) and two representatives from PKB Kemuning and the Head of TP-PKK Kemuning Village. The results through pre and post-test show that the average pretest score of participants is 67.9 and the average posttest score of participants is 77.3. It can be concluded that this activity is effective in increasing the knowledge of participants by 21%. Furthermore, it is necessary to evaluate the improvement of participants' skills.

**Keywords:** Stunting, complementary food, education

### INTRODUCTION

The health and intelligence of a child is supported by the provision of good and appropriate nutritional from an early age. To realize quality children, the Ministry of Health has issued a strategy for Infant and Child Feeding (Pemberian Makan Bayi dan Anak/PMBA) which includes recommending the PMBA gold standard, namely carrying out Early Initiation of Breastfeeding (IMD), providing exclusive breastfeeding, providing complementary foods (MP-ASI), and continue breastfeeding until 2 years of age or older.<sup>1</sup>

The nutritional problem that is the main concern of the world today is stunting. Based on the 2013 Basic Health Research data, the prevalence of stunting under five was 37.4%, meaning that 3-4 out of 10 children under five in Indonesia experienced stunting and this figure decreased in the 2018 Basic Health Research survey, which was 30.8% in the national figure and the prevalence was 29.24% in the province of South Kalimantan. Stunting among child under five is not caused by heredity but generally by malnutrition and or experiencing illness for a relatively long time, especially in the first thousand days of life. In general,

stunting, especially in the first thousand days of life, can cause low endurance, low intelligence, and low productivity as adults. To overcome stunting, it is necessary to improve nutrition from the time the fetus is in the womb, exclusive breastfeeding until the age of 6 months, and proper complementary feeding from the age of 6 months.<sup>2,3,4</sup>

Stunting is a condition when a toddler has a below average height. This is due to the insufficient nutritional intake in a long time. Stunting has the potential to slow down brain development, with the long term effects in the form of mental retardation, low learning abilities, and the risk of developing chronic diseases such as diabetes, hypertension, obesity.<sup>5</sup>

Therefore, prevention efforts should be carried out as early as possible. In the first 1000 days of life, it is highly recommended that pregnant woman consume good nutrition. Not only to meet their nutritional needs, but also good nutritional intake needed for the baby in the womb. Furthermore, the research to prevent stunting shows that protein consumption greatly affects the increase in height and weight of children over 6 months. Children who received protein protein intake of 15 percent of the total

calorie intake were shown to be taller than who take 7.5 percent of total calorie intake. Children aged six to twelve months are recommended to assume a daily protein of 1.2 g/kg of body weight. Meanwhile, children aged one to three years need a daily protein of 1.05 g/kg body weight.<sup>6</sup>

At the age of 6 months, breast milk only fulfills 2/3 of the baby's nutritional adequacy, and at the age of 1 year only 1/3 of the needs. For this reason, giving complementary foods is usually started when the baby is 6 months old. This is because the nutritional needs of infants aged 6 months are not enough just from breast milk. Based on the global standard for infant and young child feeding, complementary food must meet several requirements, namely: Timely: complementary food is started when the need for energy and other nutrients exceeds that obtained from breast milk; Adequate: complementary food must contain enough energy, protein and micronutrients; Safe: the storage, preparation and administration of complementary food must be hygienic; Properly: complementary food is given in accordance with the signs of hunger and appetite shown by the baby and the frequency and method of administration according to the baby's age.<sup>7</sup>

In 2019, Banjarbaru City was initiated Program Suka Makan Ikan or Love to Eat Fish program as an effort to improve nutrition for infants and toddlers, besides the inauguration of the Family Planning Village which is a new program from the BKKBN also supports this activity from a cross-sectoral perspective. Kemuning District in the South Banjarbaru area is one of the targeted suburbs, in 2020 the Kemuning District area won First place in the Child and Adolescent Parenting Contest, this is a reference that this area deserves to be developed further apart from that in the area at this time more than 80 families with toddlers, of course, this requires special strategies and attention for efforts to improve infant nutrition, one of which is by providing complementary feeding education and practice to the mother group in the riverside area through the Community Partnership Program.<sup>8,9</sup>

The Kemuning area which is located on The outskirts of the river in Banjarbaru City and has many families with toddlers requires special attention in good and correct nutritional parenting. In order to achieve this, appropriate efforts are needed, one of which is to create a Community Partnership Program regarding good and correct complementary food Education and Practice for women's groups in the region.

The aim of the program is to provide

education and practice on complementary feeding so that mothers gain additional knowledge and skills on how to make appropriate complementary foods for their toddlers.

## METHOD

The method of implementing the activities chosen as a solution to overcome the problems in this program is through the transfer of knowledge. The transfer of knowledge consists of two activities, namely counseling activities or providing education regarding the processing and giving of complementary food and the second is the practice of processing complementary food. Both of these activities are carried out offline and online. Complementary food education counseling is carried out offline and the practice of making complementary food online regarding online communication media such as whatsapp groups and dissemination of the results of activities carried out online through online media such as Instagram.

The activity stages of the community partnership program with this scientific transfer method include:

### Preparation phase

The activity preparation stage is to coordinate with the Kemuning District which is the target of the activity to carry out licensing for this community partnership program activity. After obtaining permission and disposition from the District Office, the Implementing Team coordinates with the Head of the TP-PKK in Kemuning District and the Head of RT. 23 which is the place for the implementation of activities as well as the manager of the Posyandu in Kemuning District.

### Implementation Stage

The implementation of the community partnership program in collaboration with the Indonesian Breastfeeding Mothers Association (AIMI) South Kalimantan was held on October 10, 2021, at the Dahlia Posyandu RT.23 Kemuning.

The counselor from AIMI South Kalimantan plays a role as one of the presenters in the transfer of knowledge, the implementing team as organizers and also presenters, as well as a group of women in the riverside area of Banjarbaru City as partner participants.

The transfer of appropriate complementary foods uses power point media that has been prepared by facilitator using standardized media from AIMI by lecturing and discussing methods. The using of power point

media is one of the effective ways in outreach activities and the lecture method is effective for the mothers.<sup>10,11</sup>

After a series of remarks delivered by the Chairman of the PKK Kemuning and the Chairman of the Team Program, the first activity was delivered by Mrs. Rasmayana as the Lactation counselor representing the AIMI Region of South Kalimantan. The material presented was about the importance of complementary foods, how to process complementary food in family menus and local food and the challenges of giving complementary foods (challenging conditions, allergies and post-illness recovery).

Furthermore, activities regarding the practice of processing complementary foods are carried out online through the Whatsapp group and mothers as partner participants are asked to send the complementary food menu that they have practiced. The results of the complementary food processing practice are contested by uploading recipes, photos of processed complementary food and processing videos on online social media (instagram) which are then selected as a form of award. The winner of the competition gets a prize from the team program.

#### **Stage of Evaluation and Preparation of Activity Reports .**

Evaluation of the community partnership program activities was measured using an instrument in the form of a questionnaire given to participants/participants who attended before and after the activity was carried out. The results of the activities are compiled in activity reports and disseminated on the implementation of the program.

#### **RESULT AND DISCUSSION**

The results of the implementation of program activities consist of:

##### **The implementation of the transfer of knowledge of health education about complementary food**

The transfer of knowledge is carried out through educational activities and complementary feeding practices to mothers on the outskirts of the Kemuning River, South Banjarbaru. The team activity was held on October 10, 2021, from 16.00 to 18.00 WITA, at the Dahlia Posyandu RT.23 Kemuning .

The material was delivered by a counselor from AIMI South Kalimantan who acted as one of the presenters in the transfer of knowledge, the implementing team as organizers and also presenters, as well as a

group of women in the Kemuning riverside area of Banjarbaru City as partner participants.

After a series of remarks delivered by the Chairman of the PKK Kemuning and the Chairman of the Team program, the first activity was delivered by Mrs. Rasmayana as the ASI counselor representing the AIMI Region of South Kalimantan. The material presented was about the importance of complementary foods, how to process complementary food in family menus and local food and the challenges of giving complementary foods (challenging conditions, allergies and post-illness recovery).

The activity was attended by 16 participants and 2 (two) invitees who were also present, namely Mrs. Windu Tri W as Chair of TP-PKK Kemuning and Mrs. Rosmi H as PKB Kemuning.

The Indonesian Peditrician Association formulated a strategy for providing complementary foods, namely.<sup>12</sup>:

1. On time (Give the complementary foods when the only breastmilk is not enough to meet the baby's needs-baby is six months old)
2. Adequate (The complementary foods provided meets the energy, protein, and micronutrient needs of children)
3. Safe and Hygienic (The process of preparing and making complementary foods using safe and hygienic method, materials, and tools)
4. Provided responsively (The complementary foods is given consistently according to hunger or satiety signals from children).

##### **There is an increase in knowledge before and after health education is given about complementary food**

Before and after the program implementation, participants were asked to fill out the pre-test and post-test instruments to measure changes in knowledge. The results of the pre and posttest were analyzed to assess changes in participants' knowledge.

The average value of the participants at the pre-test was 67.9 while the average value of the participants at the post-test was 77.3.

Furthermore, the difference in the average value of the two was calculated to measure whether there was an increase in the value before and after being given education about complementary food. The results of the analysis showed an increase before and after education was given to mothers with toddlers in the yellow area who were present as participants in program activities by 21% which is presented in Figure 1.

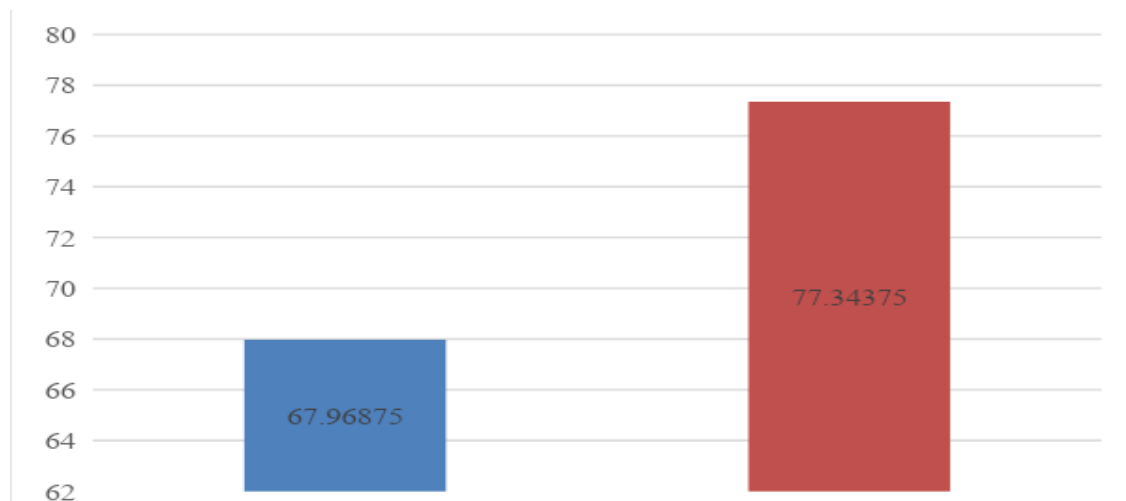


Figure 1. Bar Graph of Pretest and Posttest Values

The increase of knowledge is in line with the results of Artini's research in 2018 on Analysis of Factors Influencing Early Complementary Foods. One of the internal factors that contribute positively is a mother's knowledge. The same result is also shown in Nurdin's research in 2019, which states that maternal factors, parenting patterns and the patterns of giving complementary foods affect the incidence of stunting.<sup>13,14</sup>

#### There are additional skills regarding correct complementary food management practices

Measurement skills on the practice of processing complementary foods are carried out through competitions for participants which are held online via Whatsapp groups and mothers as partner participants are asked to send the complementary food menu that they have practiced. The results of the complementary food processing practice are contested by uploading recipes, photos of processed complementary food and processing videos on online social media (instagram) which are then selected by several winners as a form of appreciation. The winner of the competition gets a prize from the the team program. This shows that good skills are certainly needed in the practice of providing complementary foods, as mentioned by the research of Wangiyana in 2020 showed a significant correlation between the frequency of providing complementary foods ( $p=0.047$ , 95% CI) and the amount of complementary foods given ( $p=0.029$ , 95% CI) with the incidence of stunting in children.<sup>15</sup>

#### CONCLUSION

The conclusions of this activity include: the implementation of knowledge transfer runs smoothly. It was attended by 16 participants and two invitees. The activity was facilitated by

TP-PKK, Posyandu and AIMI South Kalimantan as presenters, there was an increase in knowledge of 21% in participants before and after the implementation of program, 3) skills about the practice of complementary foods were proven by the participants through making the complementary food menu that was contested.

It is hoped that these positive activities can be continued with broader targets so that mothers will receive appropriate information about complementary foods.

#### ACKNOWLEDGEMENT

Acknowledgments are conveyed to 1) Faculty of Medicine, University of Lambung Mangkurat as Sponsor/Grant Fund Provider for PKM Activities, 2) Officers and Heads of the Kemuning District Office and Kemuning District Residents for their willingness and cooperation in implementing Program Activities, 3) field implementers and all parties who contributed to the implementation and preparation of reports.

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