



Effect of Short Mentoring on Maternal Self Efficacy in Providing Complementary Feeding in Banggai Regency, Indonesia

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Abstract

Maternal self-efficacy (SE) in feeding children was a significant determinant of stunting. The Objective of study was to assess improvement of maternal self efficacy after short mentoring program. This was a Quasi Experiment with The Nonrandomized Prepost-Test Control Group design. Mothers in villages received intervention and those in other 3 village were a control group (30 for intervention and 30 control) Intervention consisted of counselling every weeks for two months related to mothers capacity in providing Complementary Feeding to their children. A control group received Counseling at the Village hall. Measurements of SE were measured by trained field workers before and after two months of intervention. Most mothers were low education (Junior High School and below 58,3%) and from low to middle income family (81,7%). Maternal Self Efficacy improved significantly in both groups ($p < 0,05$). There was a significant difference between groups of change of SE ($16,6 \pm 7,94$ vs $5,9 \pm 5,12$ $p < 0,001$) and Mother's Self Efficacy increased by (23%). Short mentoring to mothers may improve Maternal Self Efficacy of Complementary Feeding.

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Key Words: Counseling, Complementary Feeding, Self-Efficacy, Infant Questionnaire CFSE.

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Introduction

Data from WHO shows that weight loss begins at the age of 4-6 months which is known as the weaning period. This is also reinforced by the finding that two thirds of the toddlers who died had the wrong baby diet, including 41% did not get exclusive breast milk and received complementary foods (CF) that were too early or too late with the composition incomplete, unbalanced and unhygienic nutrients (UNICEF, 2018).

Complementary food for breast milk is one of the direct factors that affect the incidence of stunting in children under two years of age (Kementerian Kesehatan RI, 2018). The results of a literature study (Hendriyani et al., 2020) Increasing children's food intake and physical growth are closely related to mother's self-efficacy. Mother's self-efficacy affects the nutritional status of her child (Solikhah & Ardiani, 2019). During the period of giving CF, the baby is fully cared for by the mother, therefore

skills in this case knowledge and mother's self-efficacy are very important, because knowledge about CF, attitudes and mother's confidence in providing CF will develop a good diet for breastfeeding. consumed by the baby. The results of research conducted by (Hendriyani et al., 2020) show that maternal self-efficacy improves after nutritional assistance interventions are carried out. Similar research will be conducted but in the stunting locus area, Banggai Regency, Central Sulawesi Province.

Methods

This was a quasi-experimental design with The Nonrandomized prepost-test control group design and this study uses a purposive sampling study, with a total of 60 subjects, each of which is 30

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intervention groups. The variables measured were the characteristics of the subject and the mother's self-efficacy. Methods of collecting data using an application-based Household Questionnaire (Kobo Collect) and Complementary Feeding Scale questionnaire. This research was conducted for two months (November - December) in the three villages with the highest stunting loci, namely the village (Sinorang, Masing, Sukamju 1) for the intervention group and the control group (Bone balantak, Gori-gori, Sukamaju) in the South Batui District. The intervention group was given knowledge assistance, counseling and home visits for two months, while the control group was only given counseling at the Village Hall.

Results and Discussion

The results of the study based on the characteristics of parents of children under five can be seen in Table 1. Generally, the mother's age was >30 years 60%, the mother's education level is generally low 58.3%, while the father's education was high 51.7%, most of the mothers do not work 81.7 % and father works as a farmer 70%, most of them were Muslim 55% and come from the Bugis ethnic group 55%. Average income < 2 Million 81.7%. The data in Table 1 also shows

that there is no difference in maternal age, mother's education and father's education, father's occupation and family income in the intervention group and the control group with p value > 0.05. Characteristics of children can be seen in table 2 based on the age group, most of the children aged 6-8 months 70%. The dominant sex was male 54%, children who were still breastfeeding 63%, then children were given prelacteal food 66.7%, the initial age given MP-ASI in both groups was mostly when the child was exactly 6 months old, namely 60%. From Table 2, it is also known that there is no difference in age, gender, whether the mother is still breastfeeding, whether the child is given prelacteal food (food before breastfeeding is smooth?), at what age did the mother stop drinking breast milk, and at what age did the mother receive food other than breast milk for the first time. (months) with p>0.05.

Based on the results of the CFSE analysis In table 3, the CFSE value before assistance between the intervention group and the control group was p = 0.001 and after two months of mentoring there was a significant change with p = 0.001. The results of the CFSE difference test for the intervention group were 16.6, in the control group 5.9, there was a significant change with p= 0.001.

Table 1. Frequency distribution of maternal age, education, occupation, religion, ethnicity, income of parents in the intervention group and the control group

Variable	Intervention		Control		Total	p-value*
	n	%	n	%	%	
Mother's age						
<30 years	20	66.7	16	53.3	60	
31- 45 years	10	33.3	14	46.7	40	0.292
Mother's education						
Low (Junior High school and below)	18	60	17	56.7	58.3	0.793
Height (high school and above)	12	40	13	43.3	41.7	
Father's Education						
Low (Junior High school and below)	12	40	17	56.7	48.3	0.196
Height (high school and above)	18	60	13	43.3	51.7	
Father's Occupation						
Day Laborer	3	10	2	6.7	8.3	
Private employees	4	13.3	2	6.7	2	
ASN employees	1	3.3	0	0	1	



Farmer	17	56.6	21	70	63.3	
Dosen't work	3	10	0	0	3	0.293
Fisherman	2	6.7	0	0	2	
Driver	0	0	1	3.3	1	
Self-employed	0	0	4	13.3	8	
Mother's Occupation						
Yes	4	13.3	7	23.3	11	
Not	26	86.7	23	76.7	81.7	0.317
Religions						
Islam	26	86.7	29	96.7	55	
Hindu	3	10			3	
Kristen	0	0	1	3.3	1.7	
Others	1	3.3	0	0	1	
Culture						
Bugis	13	43.3	20	66.7	45	
Jawa	7	23.3	7	23.3	23.3	0.001
Bali	3	10			5.0	
Others (taa)	7	33.3	3	10	29.7	
Family's Income						
< 2 Million	25	83.3	24	46.7	81.7	0.379
> 2 Million	5	16.7	6	20	18.3	
Parity						
Primipara	13	43.3	12	40	41.6	0.230
Multipara	17	56.6	18	60	58.3	

Source: Primary Data 2021 *Chi-Square

Table 2. Frequency distribution of child's age, sex of child, history of breastfeeding and CF

Variable	Intervention		Control		Total	p-value*
	n	%	n	%	%	
Age						
6-8 Month	19	63.3	23	76.7	70	0.260
9-11 Month	11	36.7	7	23.3	30	
Gender						
Male	19	63.3	15	50	56.7	0.297
Female	11	36.7	15	50	43.3	
Is your child still breastfeeding at this time?						
No	11	36.3	11	36.6	36.7	1.000
Yes	19	63.3	19	63.3	63.3	
Is the child given pre lacteal food (food before breastfeeding is smooth?)						
No	20	66.7	22	73.3	73.3	0.786
Yes	10	33.3	8	26.7	30	
What age did your child get food other than breast milk for the first time (months)						
3 Months	0	0.0	1	3.3	1.7	
4 Months	2	6.7	3	10	8.3	
5 Months	2	6.7	3	10	8.3	
6 Months	21	70	20	66.7	41	
7 Months	2	6.7	2	3.3	5.0	0.839



8 Months	2	6.7	2	6.7	6.7	
10 Months	1	3.3	0	0	1.7	

Source: Primary Data 2021 *Chi-Square

Table 3. CFSE before and after the intervention between the intervention group and the control group

Variable ¹	Before (0 Month)	After (2 Months)	p- value ³	Change Δ	p-value
	Mean ±SD	Mean ±SD		Mean±SD	
Score complementary feeding self-efficacy ²					
Intervention(n=30)	50.80 ± 10.8	67.47 ± 4.4	0.000*	↑ 16.6 ± 7.94	0.000 ⁴
Control (n=30)	65.4 ± 17.5	71.33 ± 14.4	0.000*	↑ 5.9 ± 5.12	

Source : Primary Data 2021 1 mean ± SD. 2 Skala 0=Skor Lowest; 104=skor highest (n=30), 3 Uji Wilcoxon, 4 Uji Mann Whitney

Maternal Self-Efficacy is characterized by practical problems regarding food preparation at home and a lack of knowledge about health and nutrition. Research shows that mothers/caregivers need skills to practice complementary feeding (WHO, 2013). The concept of Maternal Self-Efficacy in Health behavior has a significant relationship. Several studies that have used the concept of Self-Efficacy include the relationship of Self-Efficacy with diet and overweight control (Hays et al., 2002) and fruit and vegetable intake (Luszczynska et al., 2007) and previous research on the effect of practice interventions. CF with Self-Efficacy (Hendriyani et al., 2020).

The assistance provided to mothers from the intervention group included knowledge, counseling and skills for approximately two months. The nutritional assistance intervention was carried out based on Theory (TPB) (Bandura, 1977) to increase complementary feeding and maternal hygiene practices. It is believed that when mothers gain knowledge of nutritional assistance, it will be internalized resulting in behavioral changes (French et al., 2012) (Glanz et al., 2002).

The results of this study showed that there was a significant change after mentoring between the control group and the intervention group with p = 0.001 And mothers in the intervention group who were given knowledge, skills and counseling had a complementary feeding self-efficacy score that was greater than mothers in the control group (16.6 vs 5.9 p= 0.001). The results of the study were in line with previous researchers that interventions with assistance, home visits and counseling can increase the mother's efficacy in giving complementary

feeding. The same thing is explained by Ragita, (2017) in (Aryani et al., 2021) which states that the CF education intervention for 4 weeks with 7 meetings for mothers was able to change behavior, namely knowledge and attitudes to change the pattern of giving CF into better.

Refers to the Theory of planned behavior which has been widely used in developing Health behavior interventions. The findings by (Duan et al., 2018) show that TPB is an appropriate theory to explain the influence of psychosocial factors such as knowledge, attitudes, self-efficacy, subjective norms, and intentions on infant feeding behavior, and is a useful guide for designing targets and primary approach to interventional infant feeding. Nutritional support for two months has a very significant effect on the mother. The assistance that has been provided includes knowledge, counseling and practical skills in the manufacture, processing and giving of CF. Frequency of questions on the mother's self-efficacy questionnaire in giving CF. The questionnaire consists of 3 point aspects, namely the aspect of quantity and quality of complementary feeding (Points 1-4), hygiene and food safety (Points 5-13) and aspects of responsive feeding (Points 14-26).

The frequency of mothers' answers on the aspect of the quantity and quality of complementary foods was seen before the mentoring, i.e. on average the mothers answered doubtful on the aspect of the quantity and quality of complementary foods and after the mentoring the mothers answered sure. In addition to improving maternal self-efficacy in the practice of giving complementary feeding, the mother's self-efficacy in hygiene and hygienic



practices in preparing complementary feeding also improved after the intervention, before the intervention, the average mother answered doubtful and after mentoring the average mother answered confidently, it has been explained by (Kajjura et al., 2019) that hygiene practices through washing hands with soap, and making food and water safe for consumption improved significantly at the 2-month follow-up (post-intervention) compared to baseline, with Thus, nutrition education carried out for 2 months can change the knowledge and practice of mothers in giving MP-ASIFurthermore, in the aspect of responsive feeding, before the mentoring intervention, on average, the mother had less self-efficacy or answered unsure at points (14-26) and after the mentoring intervention for two months on average, the mother answered confidently on the Responsive Feeding aspect.

Education, knowledge, culture, ethnicity and self-efficacy greatly affect mothers in giving complementary feeding which has an impact on health status so that assistance with intervention is very significant and is expected to prevent malnutrition, both undernutrition and excess nutrition. (Achadi et al. 2020) explained that education is often related to a person's economic level, where low income has a high chance of risking living in poverty. This cycle is difficult to break, except with the participation of all parties If income increases

Conclusion

Short monitoring for two months had a very significant effect on both groups, but maternal CFSE scores increased more in the intervention group with a difference of (16.6 vs 5.9 p= 0.001) respectively

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