

Family Empowerment with the Case Model on the Role of the Family and Exclusive Breastfeeding Behavior

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Abstract

Background: Family empowerment is an effort or process to foster family awareness, willingness and ability to recognize, overcome, maintain, protect, and improve their own welfare. Family empowerment in exclusive breastfeeding behavior is very necessary because exclusive breastfeeding is a world problem that affects infant morbidity and mortality.

Objective: This study aims to analyze family empowerment with the CASE model on family roles and exclusive breastfeeding behavior.

Method: Type of Quasy-experimental research by dividing two experimental groups namely the treatment group and the control group. Both groups are initiated with pre-test, and after the treatment is measured again (post-test). Statistical analysis uses multivariate analysis of covariance (Manacova) to test whether there are differences in treatment of a group of dependent variables after adjusting for the influence of confounding variables.

Results: For the pre-test results: family empowerment on the role of the family obtained a significance value of 0.229 and family empowerment of exclusive breastfeeding behavior obtained a significance value of 0.710 so that greater than 0.05 means that there is no linear relationship of family empowerment with family roles and exclusive breastfeeding behavior. For the results of the post-test: family empowerment on the role of the family obtained a significance value of 0.000 and family empowerment of exclusive breastfeeding behavior obtained a significance value of 0.000 so smaller than 0.05 means that there is a linear relationship of family empowerment with family roles and exclusive breastfeeding behaviour.

Conclusion: Family empowerment with the CASE model is a support for mothers to exclusively breastfeed that can be used as a way to motivate and support pregnant women to have the intention to breastfeed exclusively since pregnancy.

Keywords: Empowerment, role, family, breastfeeding, exclusive.

Introduction

Exclusive breastfeeding is a world problem because exclusive breastfeeding affects infant morbidity and mortality. Exclusive breastfeeding at 6 weeks of age significantly reduced the likelihood of hospitalization for pneumonia and diarrhea⁽¹⁾. Breastfeeding can protect

babies against the risk of asthma, eczema, rhinitis, and reduce the risk of otitis media in early childhood up to 40-50%⁽²⁾⁽³⁾. Exclusive breastfeeding reduces the risk of the incidence of ARI (Acute Respiratory Infection) 32,738 times⁽⁴⁾.

Even so, only about 2/5 of babies worldwide are exclusively breastfed and only about two-thirds of babies are introduced to solid foods at the right time. WHO data shows that the average rate of exclusive breastfeeding in the world is only 38%. Data on exclusive breastfeeding in Indonesia is still below the national target (80%) which is 52.3% (2014), 55.7% (2015), and 54% (up to 6 months) and 29.5% (0-5 months) (2016). While the

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data of exclusive breastfeeding in East Java is 74% (2014), 74.1% (2015), and in 2016 there were 31.3% (up to 6 months) and 48.1% (0-5 months)⁽⁵⁾⁽⁶⁾⁽⁷⁾. Data on exclusive breastfeeding in Sidoarjo Regency is 54.5% (2014), 57.3% (2015), and 54.7% (2016)⁽⁸⁾⁽⁹⁾⁽¹⁰⁾.

Although many efforts have been made by the government, family support is needed because families with breastfeeding mothers need patience, time, and knowledge about breastfeeding. The most important family support is the support of each family member (husband / mother / mother-in-law), as well as other relatives who live in one house, which can have an impact at the beginning of initiation and the duration of breastfeeding⁽¹¹⁾⁽¹²⁾⁽¹³⁾. Family empowerment is an effort or process to foster family awareness, willingness, and ability to recognize, overcome, maintain, protect, and improve their own welfare⁽¹⁴⁾. In several studies, it is shown that family empowerment can improve family coping⁽¹⁵⁾ and change the behavior of family members⁽¹⁶⁾.

The research objective was to develop family empowerment method through a family guidebook, analyze the use of family empowerment guidebooks on family roles and exclusive breastfeeding behavior in the control group and treatment group. were pre-test and post-test are conducted for both groups.

Materials and Method

Type of Quasy-experimental research. In this design, the experimental group was treated while the control group did not. In both groups the pre-test is taken place, and after the treatment is measured again (post-test)⁽¹⁷⁾. The sampling technique used is multistage sampling. Multistage shows several stages of sampling. Stage 1 selects the sample and sample size according to certain criteria with the cluster. Phase 1 cluster is district. Phase 2

determines the public health center cluster. Large sample collection is like stage 1. Stage 3 is the village, etc⁽¹⁸⁾. The next stage, using purposive sampling technique is a sample selection technique by determining research subjects who meet the research criteria. The sample was chosen by choosing a family with 30 respondents in the final trimester pregnant mothers. Then included in the control group and the treatment group of 15 respondents each. After that the control group and treatment group were given pre-test for 60 minutes. The treatment given was an explanation and implementation of a family empowerment guidebook with the CASE model. Treatment is given for 3x60 minutes which includes explanations and demonstrations carried out by respondents. Evaluation (post-test) is done when the baby is 1 month old.

Intervention effect analysis uses multivariate analysis of covariance (Manacova) to test whether there is a difference in treatment of a group of dependent variables after adjusting for the influence of confounding variables.

Findings: According to Sulistyani (2004) family empowerment aims to form individuals, families, or communities to become independent. Independent in thinking, acting, and controlling what will be done. It is shown by the ability to think, decide and do something that is considered appropriate so that the problems can be resolved⁽¹⁹⁾.

Important reasons for family empowerment include: the family as the smallest social system that can influence and be influenced by a wider social system; the family is the basic unit of society so that it determines the social and health system of the community; families are able to adapt (respond to, change, develop, act and modify their environment); families help determine the decision to achieve individual and family goals⁽²⁰⁾.

1. Pre-test analysis results

Table 1. Multivariate tests

	Effect	Value	F	Hypothesis df	Error df	Sig.
Z1	Pillai's Trace	,141	2,138 ^b	2,000	26,000	,138
	Wilks' Lambda	,859	2,138 ^b	2,000	26,000	,138
	Hotelling's Trace	,164	2,138 ^b	2,000	26,000	,138
	Roy's Largest Root	,164	2,138 ^b	2,000	26,000	,138
Group	Pillai's Trace	,071	,992 ^b	2,000	26,000	,384
	Wilks' Lambda	,929	,992 ^b	2,000	26,000	,384
	Hotelling's Trace	,076	,992 ^b	2,000	26,000	,384
	Roy's Largest Root	,076	,992 ^b	2,000	26,000	,384

a. Design: Z1 + group, b. Exact statistic

The analysis shows that the F value for the Hotelling Trace group, has a greater significance than 0.05 which means it is not significant. Meaning that there is no difference in family role (y1) and exclusive

breastfeeding behavior (y2) between the treatment group and the control group after controlling for the promotion of formula milk (Z1).

Table 2. Test of between-subjects effects

Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	Family Role	12,418 ^a	2	6,209	1,272	,296
	Behavior	26,270 ^b	2	13,135	1,683	,205
Z1	Family Role	2,784	1	2,784	,571	,457
	Behavior	22,237	1	22,237	2,850	,103
Group	Family Role	7,393	1	7,393	1,515	,229
	Behavior	1,104	1	1,104	,142	,710
Error	Family Role	131,749	27	4,880		
	Behavior	210,696	27	7,804		
Total	Family Role	88165,000	30			
	Behavior	360821,000	30			
Corrected Total	Family Role	144,167	29			
	behavior	236,967	29			

a. R Squared =,086 (Adjusted R Squared =,018), b. R Squared =,111 (Adjusted R Squared =,045)

The interaction between family empowerment and promotion of formula milk on the role of the family obtained a significance value of 0.296 so that it was greater than 0.05, meaning that there was no influence of family empowerment and promotion of formula milk on the role of the family. The interaction between family empowerment and promotion of formula milk on

exclusive breastfeeding behavior obtained a significance value of 0.205 so that it was greater than 0.05, meaning that there was no influence of family empowerment and promotion of formula milk on exclusive breastfeeding behavior. The treatment group has not been given a family guidebook so there is no difference between the treatment group and the control group.

2. Post – test analysis results

Table 3. Multivariate tests

Effect		Value	F	Hypothesis df	Error df	Sig.
Z1	Pillai's Trace	,007	,091 ^b	2,000	26,000	,913
	Wilks' Lambda	,993	,091 ^b	2,000	26,000	,913
	Hotelling's Trace	,007	,091 ^b	2,000	26,000	,913
	Roy's Largest Root	,007	,091 ^b	2,000	26,000	,913
Group	Pillai's Trace	,984	812,714 ^b	2,000	26,000	,000
	Wilks' Lambda	,016	812,714 ^b	2,000	26,000	,000
	Hotelling's Trace	62,516	812,714 ^b	2,000	26,000	,000
	Roy's Largest Root	62,516	812,714 ^b	2,000	26,000	,000

a. Design: Intercept + Z1 + group, b. Exact statistic

The analysis shows that the F value for the Hotelling Trace group, has a smaller significance than 0.05 which means significant. This means that there are differences

in family roles (y1) and exclusive breastfeeding behavior (y2) between the treatment group and the control group after controlling for the promotion of formula milk (Z1).

Table 4. Test of between-subjects effects

Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	Family role	10305,004 ^a	2	5152,502	1997,006	,000
	Behavior	2940,511 ^b	2	1470,256	204,144	,000
Z1	Family role	,470	1	,470	,182	,673
	Behavior	,211	1	,211	,029	,865
Group	Family role	4294,662	1	4294,662	1664,524	,000
	Behavior	1220,497	1	1220,497	169,465	,000
Error	Family role	69,663	27	2,580		
	Behavior	194,456	27	7,202		
Total	Family role	163028,000	30			
	Behavior	375211,000	30			
Corrected Total	Family role	10374,667	29			
	Behavior	3134,967	29			

a. R Squared =,993 (Adjusted R Squared =,993), b. R Squared =,938 (Adjusted R Squared =,933)

The interaction between family empowerment and promotion of formula milk on the role of the family obtained a significance value of 0.000 so that it was smaller than 0.05, meaning that there was an influence of family empowerment and promotion of formula milk on the role of the family. The interaction between family empowerment and promotion of formula milk on exclusive breastfeeding behavior obtained a significance value of 0.000 so that it was smaller than 0.05, meaning that there was an effect of family empowerment and promotion of formula milk on exclusive breastfeeding behavior.

Family empowerment with the CASE model can enhance the role of families in supporting exclusive breastfeeding behavior. Family empowerment can improve family functions which ultimately can make the family independent⁽²¹⁾. Family empowerment is a form of family support for pregnant women so that mothers can breastfeed exclusively after giving birth. Factors that influence maternal intention to breastfeed are knowledge, trust (stigma about breastfeeding), and family support (husband, mother, family members, and relatives). These factors affect the continuation of breastfeeding in the first month of postpartum⁽²²⁾. The most important family support is the support of each family member (husband / mother / mother-in-law), as well as other relatives who live in one house, which can have an impact at the beginning of initiation and the duration of breastfeeding. Breastfeeding mothers need informational support, assessment support, instrumental support, and emotional support from the family (mother / mother-in-law) to improve breastfeeding⁽²³⁾.

Family empowerment means to provide knowledge, understanding and practice the material in the family guide book. The family guide book contains things related to the role of the family, breastfeeding behavior, stages of breastfeeding, conditions often encountered in breastfeeding, and dairy breast milk. After being given the material in the guidebook and practicing it, it is hoped that the family can motivate and support pregnant women to exclusively breastfeed.

Conclusion

The use of a family empowerment guidebook with the CASE model has a linear relationship with family roles and exclusive breastfeeding behavior.

Family empowerment increases the role of the family (family support and intentions of pregnant women for exclusive breastfeeding) and increases exclusive breastfeeding behavior (knowledge, attitudes, actions).

This shows that family empowerment can be used as a family guide to support pregnant women to exclusively breastfeed.

Conflict of Interest: There is no conflict of interest for the five authors.

Source of Funding: This research was funded by the author himself. There is no other financial support.

Ethical Clearance: All procedures carried out in this study are in accordance with the ethical standards of the Airlangga University Public Health Research Ethics Committee.

Informed Consent: Informed consent was obtained from all panelists who participated in this study.

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