

THE EFFECT OF FAMILY EMPOWERMENT ON THE HEALTH STATUS OF PREGNANT MOTHERS BASED ON KSPR (POEDJI ROCHYATI SCORE CARD)

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Abstract

One of the reasons for the inability of families to carry out early detection and care for high-risk pregnancies is the lack of optimal education and assistance by health workers, which can have an impact on the health status of mothers and their babies. This study aims to analyze the effectiveness of the family empowerment model on the health status of pregnant women. This study uses a quasi-experimental method with a cross-sectional study approach, intervention model of family empowerment on the health status of pregnant women. Sampling used the probability sampling method with simple random sampling, the number of samples was 60 pregnant women consisting of 30 interventions and 30 controls. The independent variable is the intervention model of family empowerment, while the dependent variable is maternal health status. The data collection instrument used a questionnaire. The research data were analyzed using the Wilcoxon statistical test which showed that ($p = 0.025$). This means that the family empowerment model affects the health status of pregnant women as measured by KSPR. After being given the intervention of the family empowerment model, almost all respondents both increased family involvement in maintaining and caring for pregnant women so that they could carry out early detection of high-risk pregnancies through KSPR.

Keywords: family empowerment, pregnancy, health, pregnant women

Introduction

A high-risk pregnancy is a pregnancy that will cause greater danger and complications for both the mother and the fetus in the womb and cause death, illness, disability, and discomfort. Pregnant women who have a high risk compared to normal pregnancy or childbirth, will have a greater danger of pregnancy/delivery (Widarta, Cahya Laksana, Sulistyono, & Purnomo, 2015; Mirzakhani, Ebadi, Faridhosseini, & Khadivzadeh, 2020). One of the efforts to improve the ability of families in self-care is to empower family members to participate and give strength to pregnant women and families to be able to take responsibility and control the health of high-risk pregnant women (Istikhomah, 2018).

The results of a preliminary study of 20 people showed that 80% (16 people) of the family in this case were husbands, did not know and were unable to recognize the signs and symptoms that pregnant women were in the risk category or not, did not know how to do early detection of pregnancy with using the MCH book (Maternal and Child Health) and KSPR (Pudji Rochyati Score Card), do not understand what to do if there is an emergency

and have not determined who is the main decision maker and there is no planning to prepare funds, where to choose health facilities (clinics, Puskesmas or hospital), as well as the transportation to be used in case of complications.

Family empowerment is one strategy that can be done to increase knowledge and skills (Woodall et al., 2010). Thus, researchers are interested in developing a family empowerment model that is expected to increase the ability of families in early detection of high-risk pregnancies so that they can improve the health status of pregnant women as assessed through pregnancy risk based on the KSPR (Poedji Rochyati Score Card).

Method

This type of research is a quasi-experimental research. The purpose of this study was to conduct a model simulation to test the effectiveness of the family empowerment model. Quasi experimental research was conducted with pretest and posttest after the model was tested. There are 2 groups that will be involved in this study, namely the treatment group and the control group. The population of pregnant women in the working area of the Wonokromo Health Center is 128 pregnant women. Then categorized into a homogeneous sample obtained 70 people. With the criteria of pregnant women who have entered the second trimester during the data collection period, pregnant women who live in their area of residence for at least 3 months, planning to give birth in the area of their current residence. And after calculating the sample obtained by 60 people. The sample size of the second phase of the research for each group was 30 respondents from the intervention group and 30 respondents from the control group by random sampling. The research data were analyzed using the Wilcoxon statistical test which showed ($p = 0.025$). This means that the family empowerment model affects the health status of pregnant women as measured by KSPR.

Instrument and Procedures

The health status of pregnant women was measured before and after the intervention was measured in the categories of low risk, high risk or very high risk. The family empowerment intervention was carried out by home visits which were carried out as many as 8 sessions for 8 weeks with a duration of $\pm 60 - 120$ minutes through home visits. The methods used are lectures, discussions (questions and answers), demonstrations and contextual counseling and adult learning with an active learning learning process using interactive learning media, through bookled media, learning modules, KSPR scores, DRISK applications, and MCH books. At the end of each meeting, the researcher asked the respondents again about the material that had been presented. After the last intervention, the researcher will then conduct a post-test in the treatment group and the control group by asking the family to fill out a questionnaire on the ability to detect high-risk pregnancies and measure the health status of pregnant women. The collected data is then analyzed. After taking the post-test data, it is to fulfill the principle of fairness in research ethics. Then the researcher will also provide the same intervention to the control group as given to the treatment group. This research has been through an ethical test

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Results

Table 1: Distribution of respondent characteristics

Characteristics	Category	Control		Intervention		P-Value
Husband's Age	17–25 years old	12	40,0	9	30,0	0,589
	26–45 years old	18	60,0	21	70,0	
Husband's Education	Base	8	26,7	4	13,3	0,420
	Intermediate	18	60,0	22	73,3	
	High	4	13,3	4	13,3	
Husband's Job	Factory workers	0	0,0	1	3,3	0,100
	Gojek drivers	0	0,0	2	6,7	
	Trader	12	40,0	9	30,0	
	Nurse	0	0,0	1	3,3	
	Security guard	0	0,0	3	10,0	
	Government employees	1	3,3	0	0,0	
	Private	16	53,3	11	36,7	
	Self-employed	0	0,0	3	10,0	
Doesn't work	1	3,3	0	0		
Pregnant women age	17–25 years old	16	53,3	17	56,7	1,000
	26–45 years old	14	46,7	13	43,3	
Pregnant women education	Base	8	26,7	6	20,0	0,621
	Intermediate	20	66,7	20	66,7	
	High	2	6,7	4	13,3	
Pregnant women job	Teacher	0	0,0	1	3,3	0,181
	Trader	3	10,0	3	10,0	
	Nurse	0	0,0	1	3,3	
	Private	4	13,3	11	36,7	
	Doesn't work	22	73,3	13	43,3	
	Self-employed	1	3,3	1	3,3	
Parity	1,00	15	50,0	17	56,7	0,951
	2,00	10	33,3	8	26,7	
	3,00	4	13,3	4	13,3	
	4,00	1	3,3	1	3,3	

Based on the data presented in Table 1, it is known that the majority of husbands in the control group are 26–45 years old, have secondary education, work in the private sector, while most wives are 17–25 years old, have secondary education, do not work, and have a third pregnancy. 1. The result of the average KSPR score is 5.20 with a standard deviation of 5.18885 and has the lowest score of 2 while the highest is 18.

In the intervention group, most of the husbands were aged 26–45 years, with the latest secondary education, working in the private sector, while the wives were mostly 17–25 years old, with secondary education, not working, and the 1st pregnancy. The result of the average KSPR score is 3.60 with a standard deviation of 3.08053 and has the lowest value of 2 while the highest is 14. Furthermore, from the different test, it is known that the

p-value above 0.05 indicates that there is no difference in the characteristics of the respondents between the treatment groups. With the control group.

Table 2: Distribution of KSPR Category (Pudji Rochyati Score Card) Treatment Group and Control Group

Variable	Category	Intervention (n = 30)				Control (n = 30)			
		Pretest		Posttest		Pretest		Posttest	
		f	%	f	%	f	%	f	%
KSPR Category	Low risk : 2	14	46,7	17	56,7	15	50,0	15	50,0
	High risk : 6-10	12	40,0	9	30,0	8	26,7	8	26,7
	Very high risk : > 10	4	13,3	4	13,3	7	23,3	7	23,3

Table 2 shows the description of the KSPR (Pudji Rochyati Score Card) from the results of the pretest and posttest in the control group, the results are the same, namely most of the respondents have a low risk KSPR category. In the intervention group before being given treatment, most of the respondents had a low risk KSPR category. And after being given permanent treatment, most of the respondents had the KSPR category in the low risk category, but there was an increase from 46.7% to 56.7%.

Tabel 3: Hasil Pengujian Status Kesehatan Ibu Hamil Pada Penelitian Pengembangan Pemberdayaan Keluarga (Family Empowerment)

Indikator	Kelompok	Test	\bar{x}	SD	Δ	Statistics	Sig.
Skor KSPR	Perlakuan	Pretest	6,0000	5,46	-0,6667	-2,236	0,025
		Posttest	5,3333	5,16			
	Kontrol	Pretest	8,0000	8,45	1,54	-21,286 ^a	0,000
		Posttest	8,0000	8,45			

The results of the statistical test analysis of the intervention group on the KSPR score resulted in a significance value of $< \alpha$ (5% or 0.05). Therefore, it can be stated that there is a significant difference in the KSPR score before and after the intervention. Or in other words, there is a significant effect of giving treatment to the family empowerment model on the health status of pregnant women assessed based on the KSPR score.

Discussion

The family empowerment model in carrying out early detection of high-risk pregnancies can be done by providing education, assistance, and training to families. This is in accordance with previous research, namely efforts to increase knowledge and skills through education and training can lead to sustainable behavior change (Wong-rieger & Rieger, 2013). The intervention of the family empowerment model has a positive impact on the family, because it can increase family satisfaction and empowerment.

The family empowerment intervention given to the treatment group was carried out in a structured manner by providing material that was compiled based on the results of research and modeling in phase I research. The family empowerment intervention was carried out with home visits conducted in 8 sessions for 8 weeks (done regularly once a week) with a duration of \pm 60 – 120 minutes through home visits. The method used is lectures, discussions (questions and answers) are carried out in the first and second

weeks, at additional meetings and demonstrations and counseling are contextual and adult learning with an active learning learning process using interactive learning media, through bookled media, learning modules, KSPR scores, the DRISK application that can be downloaded via the Playstore, as well as the use of KIA books. At the end of each meeting, the researcher asked the respondents again about the material that had been presented.

Empowerment carried out for families through strengthening filial values by strengthening internal factors (knowledge, self-motivation, and family connectedness) and external factors (midwives, and support) makes families able to commit to caring for pregnant women. And pass the empowerment stages well and are able to collaborate with health workers in efforts to care for pregnant women which in turn can improve the ability of families in early detection of high-risk pregnancies. The results of this study are in accordance with previous research, namely empowerment interventions can increase family readiness in caring for family members and increase family ability in disease management (Wangpitipanit et al., 2016). Empowerment interventions for families can increase knowledge, motivation, self-confidence which can increase knowledge and technical skills, as well as the ability to perform early detection of high-risk pregnancies.

The results of the statistical test analysis of the intervention group on the KSPR score resulted in a significance value of $< \alpha$ (5% or 0.05). Therefore, it can be stated that there is a significant difference in the KSPR score before and after the intervention. Family involvement in educational interventions regarding the recognition of pregnancy danger signs and early detection of high-risk pregnancies can increase the family's ability to help detect worsening of pregnant women, predict morbidity in at-risk pregnant women and allow timely intervention to prevent the possibility of more severe conditions. The family, in this case the closest people to pregnant women, plays an important role in prenatal care, including in early detection of high-risk pregnancies. Family involvement in the introduction of high-risk family factors is important to support success in determining how families integrate, interpret, and adapt to high-risk pregnancies. The role of the family in the introduction of risk factors for pregnancy is in the form of ways to recognize the signs of a risky pregnancy, as well as knowing when is the right time to bring pregnant women for intensive examinations so that there is no emergency according to the advice of health workers. Independence to carry out early detection of risky pregnancies can be increased by providing education and optimizing MCH books that are carried out intensively. Empowerment interventions for families regarding diet regulation are given in stages, covering basic knowledge materials in the form of how to detect risky pregnancies through the Pudji Rochyati Score Card (KSPR) contained in the Maternal and Child Health (KIA) book, how to recognize the signs of a risky pregnancy. , what equipment must be prepared in the event of an emergency, and knowing when is the right time to take pregnant women to a health care facility so that an emergency does not occur. In addition, families were also trained by demonstrating how to calculate scores on the Pudji Rochyati Score Card (KSPR) contained in the Maternal and Child Health (KIA) book as well as in the D'RISK application that had been made by researchers. Empowerment interventions given to families can increase the family's ability to identify risk factors for pregnancy.

The results of this study are also consistent with previous research, namely empowerment interventions with appropriate education and training strategies can increase knowledge and skills (Wong-rieger & Rieger, 2013). Education and support for pregnant women and their families can increase knowledge, skills and experience in treating complications in pregnancy. Empowerment will make families have the knowledge and skills needed in early detection of high-risk pregnancies so that changes in family behavior occur to be more aware of the importance of benefits and support from both family members and midwives so that they can increase the basic values of family kinship, in the form of responsibility (responsibility), attention (respect), and care (care) so as to increase commitment in the care of pregnant women at risk so as to increase the stages of family empowerment so as to increase the ability of families in early detection of high-risk pregnancies.

Conclusions

The family empowerment model can improve the health status of pregnant women assessed based on the KSPR score. After being given the intervention of the family empowerment model, there was an increase in family participation in early detection of high-risk pregnancies so as to prevent pregnancy complications.

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