

THE INFLUENCE OF EDUCATION USING MODIFICATION MODULE ON KNOWLEDGE, ATTITUDE, AND BEHAVIOR OF PREGNANCY CARE IN KENDARI, INDONESIA

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ABSTRACT

Background: Prenatal care is one way to prevent complications of pregnancy, and educational approach is the best approach to improve the knowledge of mothers about prenatal care.

Aim: This study aimed to determine the influence of education on knowledge, attitude, and behavior of pregnancy care in Kendari, Indonesia

Methods: This was Quasi Experimental study with pre-post design. There were 4 groups involved in this study, which were: 1) The group that received educational intervention using a modification module from the MHC book of the Department of Health, 2) The group that received educational intervention using MHC book of the Department of Health, 3) The group that only used modification modules from MHC book of the Department of Health, and 4) The group that only used the MHC book of Department of Health. The intervention was given for 6 months. Seventy eight of 4-months pregnant women were selected by purposive sampling. Data were collected by asking the respondents to fulfill the questionnaires, which adopted from the questionnaire of Faculty of Public Health, Hasanuddin University to measure knowledge (15 items), attitude (18 items), and behaviors (15 items) of respondents. Data were analyzed by using Wilcoxon test and Kruskal Wallis test.

Results: Results showed there was an influence of education on knowledge, attitude, and behavior of pregnancy care. Improvement in knowledge, attitudes, and behavior of pregnancy care was higher in the group of pregnant women using a modification module

Conclusion: Education through the class of pregnant woman has an impact to increase knowledge, attitude, and behavior of care of pregnant woman. It is therefore the efforts to maintain educational approach is necessary.

Key words: education, knowledge, attitude, pregnancy care

INTRODUCTION

One way to prevent stunted growth and death of the fetus is maternity care. Prenatal care as a part of maternity care is an effort that can be implemented to prevent complications in pregnancy. Pregnant women are expected to take care of their pregnancy properly. Some of the factors that influence the behavior of mothers in prenatal care include internal and external factors. Internal factors are age and parity, while external factors are knowledge, attitudes, economic, social, cultural, geographic, support people closest, employment and education.¹

Educational approach is the best approach than the current coercive approach to improve the knowledge of mothers about prenatal care through behavioral factors. Changes in behavior as a impact of the education through a learning process is expected to be life long learning.² Class of expectant mother is one way of giving education to pregnant women to enhance the knowledge of mothers about prenatal care and growth of the fetus in the womb. Knowledge of prenatal care is the basis for the formation of good grooming behavior.³ Class of pregnant women is a means to learn in groups in small groups of 5 to 10 people about the health of pregnant women in the form of face-to-face aimed at improving the knowledge and skills of mothers about pregnancy, childbirth, postnatal care, newborn care through practice using KIA book.^{4,5} Learning class of pregnant woman has an advantage because pregnant women can learn in groups to express opinions and give the opportunity to others put forward ideas to solve the problems faced and make wise decisions in the face of possible problems that arise.⁶

Results of research states that the class of pregnant women should be followed by a pregnant woman and her partner because it is very helpful in maintaining and preserving the baby later.⁷ Pregnant women who take a class of

pregnant women, pregnancy care better than those who did not attend classes pregnant women.¹ Class of pregnant women increase the knowledge of pregnant women about pregnancy and improving antenatal visits.^{8,9} In addition pregnant women class is also beneficial to reduce pain during childbirth, anxiety, stress and depression.^{10,11,12} Class of pregnant women in Kendari has been implemented since 2011. Although it has been implemented, but cases of maternal and infant mortality is still high. In 2012 the maternal mortality rate was 53 per 100,000 live births, and increased to 104 per 100,000 live births by 2013. Similarly, rate of complications in pregnancy was 47.67%, and 77.81% who received treatment. The incidence of LBW was 1.54% in 2013, and increased to 2.1% from January to October 2014. The figures of stillbirth was 0.34% that 30% was for LBW.¹³ This study aimed to determine the effect of Education on prenatal care among Pregnant Women in Kendari, Indonesia. This study was a part of the study that has been published about the effect of Education on Nutritional Intake of prenanant women in Kendari, Indonesia.

METHODS

This was Quasi Experimental study with pre-post design. There were 4 groups involved in this study, which were: 1) The group that received educational intervention using a modification module from the MHC book of the Department of Health, 2) The group that received educational intervention using MHC book of the Department of Health, 3) The group that only used modification modules from MHC book of the Department of Health, and 4) The group that only used the MHC book of Department of Health. This research was conducted in Kendari July 2015 to January 2016.

The samples in this study were mostly pregnant women with 4 months gestational age in Kendari Indonesia. The

samples were 80 pregnant women divided into four groups with each group a sample consisted of 20 pregnant women by purposive sampling. But the sample was reduced to 78 pregnant women because 2 of them were excluded due to having 8 months gestational age.

Data were collected by asking the respondents to fulfill the questionnaires, which adopted from the questionnaire of Faculty of Public Health, Hasanuddin University to measure knowledge (15 items), attitude (18 items), and behaviors

(15 items) of respondents. The measurement was conducted 3 times: the beginning phase, three weeks after beginning phase, and 2 months after the second measurement.

The intervention of Educational approach was conducted 12 times for 6 months in every two weeks during pregnancy, starting from 4 months gestational age until delivery. Data were analyzed using Wilcoxon test and Kruskal Wallis test.

RESULTS

Characteristics of Respondents

Table 1. Characteristics of Respondents

Characteristics	Group								p-value
	1		2		3		4		
	n(20)	%	n(20)	%	n(20)	%	n(18)	%	
Age									
<20	2	10,0	0	0	0	0	3	16,7	
20-35	18	90,0	20	100,0	20	100,0	15	83,3	0,097
Education									
SMA	19	95,0	17	85,0	19	95,0	17	94,4	
Diploma	0	0	1	5,0	1	5,0	0	0	0,675
S1	1	5,0	2	10,0	0	0	1	5,6	
Tribe									
Muna	2	10,0	5	25,0	10	50,0	2	11,1	
Buton	0	0,0	0	0,0	4	20,0	1	5,6	
Tolaki	14	70,0	15	75,0	6	30,0	12	66,7	0,001
lainnya	4	20,0	0	0,0	0	0,0	3	16,7	
Income									
< Rp. 1.650.000	7	35,0	8	40,0	8	40,0	5	27,8	0,846
≥ Rp. 1.650.000	13	65,0	12	60,0	12	60,0	13	72,2	
Parity									
Primi/nullipara	14	70,0	14	70,0	11	55,0	14	77,8	0,492
Multipara	6	30,0	6	30,0	9	45,0	4	22,2	

Group I: a class of pregnant women using the modified module; Group II: a class of pregnant women using MCH Handbook; Group III: classless, using a modification module; Group IV: classless, using the MCH Handbook

Table 1 showed that the respondents of the group of classes + more modifications modules aged from 20-35 years (90%), were the tribe Tolaki (70.0%), with the level of high school education (95%), having family incomes greater than or equal to the UMP (Rp. 1,650,000,-) and were primiparous/nullipara (70.0 %). While respondents of the classes + MCH

handbook were all aged 20-35 years (100%), the tribe Tolaki (75.0%), with the level of high school education (85%), household income ≥ UMP (60%), and parity primiparas/nullipara (70%). Respondents in all groups modification module were 20-35 years old (100%), from the tribe of Muna (50%), with the level of high school education (95%), family

income \geq UMP (60%), and parity primiparas/nullipara (55%). The last, respondents of the MCH handbook aged 20-35 years (83.3%), from the tribe Tolaki (66.7%), with the level of high school education (94.4%), UMP \geq family income (72.2%), and parity primiparas/nullipara (77.8%). Chi-square test results showed

that maternal age, parity, family, education, employment and income family history of the disease, family and parity were not difference with $p > 0.05$, except the tribes of the mothers were difference with $p < 0.05$. However, it was generally indicated that the characteristics of respondents were homogeneous.

Difference Score of Knowledge, Attitude and Behavior of Pregnancy Care of Respondents Before and After Intervention

Table 3. Difference Score of Knowledge, Attitude and Behavior of Pregnancy Care of Respondents Before and After Intervention

Variable	$\Delta 1$	p	$\Delta 2$	p
Knowledge				
Group 1 (n=20)	4,3 a		6,6 a	
Group 2 (n=20)	2.0 b	0,000	3.2 b	0,000
Group 3 (n=20)	1.0 c		2.5 b	
Group 4 (n=18)	0.8 c		1.8 b	
Attitude				
Group 1 (n=20)	4,0 a		6,5 a	
Group 2 (n=20)	2.4 b	0,000	3.5 b	0,000
Group 3 (n=20)	1.1 c		3.0 b	
Group 4 (n=18)	0.4 c		1.2 c	
Behavior pregnancy care				
Group 1 (n=20)	3,3 a		5,2 a	
Group 2 (n=20)	2.1 b	0,000	3.1 b	0,000
Group 3 (n=20)	1.3 c		2.0 b,c	
Group 4 (n=18)	0.4 d		1.0 c	

Table 3 showed that the test results of Kruskal found there were no differences in knowledge, attitudes and behavior of prenatal care among the four groups at the second and third measurements. Improved knowledge, attitudes and behavior of antenatal care was highest in the group receiving education with educational modules modification compared with KIA book, as well as a group of modules modifications higher than group MCH handbook.

DISCUSSIONS

Results showed the effect of education on knowledge, attitude, and behavior of

antenatal care. It is indicated that the respondents already have an adequate knowledge of the pregnancy. This is due to pregnant women who are respondents in the study has been exposed to the knowledge of the pregnancy of the midwife who provide counseling or counseling during pregnancy checks events (ANC). Knowledge is not only derived from the provision of information, but experience, both from his own experience and others. The parity is an event experienced by individuals from within himself that experience to bear children (parity) which becomes knowledge in pregnant women subjectively. With

increasing age, a person will change aspects of the physical and psychological (mental), in which the psychological aspect of this way of thinking, someone is more mature and adult.¹⁴ Increased knowledge is one measure of the success of pregnant women class, in which there is a learning activity (learning) in terms of cognitive, through successive transformations of information on respondents. This is consistent with the view that the learning process is a series of events/occurrences within the subject that took place in a sequence that begins with the stimulus/stimulus.¹⁵

Class of pregnant woman has the objective in forming positive attitudes of them by increasing the knowledge, changing attitudes and behavior in order to understand about the pregnancy, and knowing the body changes during pregnancy, and doing pregnancy care of the post-pregnancy period. Class of pregnant women is a means to learn together about the health of pregnant women. This activity aims to enhance the ability of pregnant women to practice healthy living, related to prenatal care, birth preparedness, safe childbirth period, as well as being a parent and coupled with pregnancy exercise. This class would also make pregnant women are able to apply the things that have been obtained from the class. So, in case of complications or complications during pregnancy, they may know as early as possible and can be handled optimally.¹⁶

Providing information about the nutritional status, in terms of nutrition education to pregnant women, is considered as an important tool to promote a healthy lifestyle and prenatal care. Knowledge about nutrition is an important promotional tool in pregnancy. It also affects the behavior of pregnant women to consume fruits and vegetables.¹⁷ Pregnant women who have knowledge about

nutrition visit antenatal 10x compared to women having no knowledge. Knowledge about nutrition also has a strong association with the consumption of supplements in pregnancy.¹⁸ While it also provides positive effect on the awareness of nutrition in pregnancy, and this knowledge was increased 31% after being given the knowledge.¹⁹

Pregnant women who have a good knowledge of the pregnancy, the quality of life is better in receiving their pregnancy and the birth.^{12,20} The provision of knowledge in a class of pregnant women will also improve self-efficacy of pregnant women to reduce pain, anxiety, stress, fear, depression during childbirth and postpartum.^{10,11,21,22} Provision of information about pregnancy in small groups (classes pregnant women) are more effective than in a large group.⁵ Lack of information or knowledge frequently and repeatedly can increase one's knowledge retention. Class of pregnant women, conducted using participatory approach, means that pregnant women who are not positioned only receive the information for a passive position tends to be ineffective to change behavior. The class of pregnant women is designed with a participatory learning methods where mothers are not seen as students, but as people learn. In practice, women are encouraged to learn from the experience of others, while the facilitator role as advisors on the correct knowledge.

Intervention in the form of education may actually enhance a person's attitude towards something. Respondents' attitudes about pregnancy, and care during pregnancy are influenced by knowledge of respondents to the same thing. In the process of class of pregnant women, there is an interaction between the messages, communicators and communicant. The facilitator in the class was the mother who were coming from the other coaches of

posyandu (community care), which means that the mothers do not know about facilitators and only met during the implementation of the class. Increased behavior of pregnant women in this study as a result of their learning experience in a class of pregnant women, as well as a measure of the first evaluation of the classroom training program pregnant women, which followed by a change in attitude in the form of antenatal care visits, as scheduled by ideal standards. In the execution of pregnant women who were given the knowledge, the class was programmed to have a good effect on a person's reaction. The results were consistent with studies.²³ It could be stated that the class of pregnant women can increase the attitude to maintain good health and their babies. Pregnant women who attended the class were better than those who did not attend the class. It is therefore the efforts to improve the maternal socialization about the of pregnant women is necessary to increase the knoweldge, change the attitude and behavior of antenatal care of the mothers.¹

CONCLUSION

It could be stated that the class of pregnant women can increase the attitude to maintain good health and their babies. Pregnant women who attended the class were better than those who did not attend the class. Changes in knowledge, attitudes, and behavior of antenatal care was higher in group 1 (education module with modifications), compared with the education group MCH handbook. It is therefore the efforts to improve the maternal socialization about the of pregnant women is necessary to increase the knoweldge, change the attitude and behavior of antenatal care of the mothers. On the other hand, the information from print and electronic media is needed to

provide to increase the knoweldge of mothers for better prenatal care.

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