

The Effectiveness Health Education of Preconception Nutrition to Bride-to-be of Childbearing Age Knowledge

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Article

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Abstract

Women are aged 20-35 years are most appropriate age in preventing nutritional problems, especially chronic energy deficiency. Optimal nutrition in premarital women will affect the growth and development of the fetus and the health condition of the baby born. Knowledge of nutrition plays an important role in fulfilling one's nutritional adequacy. The purpose of this study was to determine the effectiveness of providing preconception nutrition health education on the knowledge of brides-to-be of childbearing age at West Ungaran Religious Affairs Office, Semarang Regency. The type of research in this study is quantitative, the population was brides-to-be at West Ungaran Religious Affairs Office in December 2021. The sample was taken by purposive sampling as many as 21 brides-to-be of childbearing age. The analysis used is the dependent t-test. showed that the average value of knowledge before being given health education was 60.67 (min 33-max 80) and the average knowledge after being given health education was 85.81 (min 70- max 97). The results showed a significant difference in knowledge ($p = 0.000 < 0.05$). Health education about preconception nutrition is very necessary for increasing the knowledge of brides-to-be. It is recommended to provide preconception nutrition education to women before marriage.

Introduction

Poor nutritional conditions for pregnant women will be the cause of death and death, namely anemia and chronic lack of energy. Pregnant women who are anemic can experience seizures and even death if they are deficient in iron. Chronic lack of energy is still a major nutritional problem that often afflicts WUS. A person can be said to be SEZ if the results of the measurement of the upper arm circumference (LILA) are below 23.5 cm. The impact of premarital women who suffer from SEZ can lead to anemia, maternal death during childbirth, low birth weight babies (LBW), premature

births, birth defects, and infant death (Stephanie et al. 2016). Serious impacts are also experienced by fetuses and babies born to pregnant women who are malnourished. Problems that occur include growth disorders in the uterus, low birth weight babies, and premature babies (Reeder, Sharon, Martin, & Griffin, 2011). If pregnant women are in a state of folic acid deficiency, they are at risk of giving birth to babies with Neural Tube Defects (NTDs). In addition, babies can experience cretinism or mental retardation if pregnant women are in a state of iodine deficiency (Badriah, 2011; Gardiner et al., 2008; Reeder, Sharon,

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Martin, & Griffin, 2011). In Indonesia, the maternal mortality rate is still relatively large, namely 305/100,000 KH and the infant mortality rate is 33,278 people (IDHS, 2015). Bride and groom are a strategic target group to improve health before pregnancy or the preconception period. Knowledge of nutrition plays an important role in fulfilling one's nutritional adequacy. Lack of nutrition knowledge will affect the understanding of concepts related to nutrition. Therefore, it is necessary to handle one of them by providing health education. Health education is the application or application of education in the health sector. Operationally, health education is all activities to provide and improve the knowledge, attitudes, practices of individuals, groups, or communities in maintaining and improving their health (Notoatmodjo, 2012). The provision of counseling is expected to increase nutritional intake in women of childbearing age (Susilowati and Kuspriyanto, 2016). In line with research conducted by Rahim et al (2013) in Ujung Tanah Subdistrict, Makassar City, it showed changes in knowledge about nutrition and reproductive health after being given the Bride-to-be Course to preconception women. Where before Bride-to-be Course only 70.4% of respondents had sufficient knowledge and 29.6% had less knowledge. After Bride-to-be Course was carried out, there was an increase where all respondents had sufficient knowledge, namely by 100% and none had less knowledge.

Method

The type of research in this study is quantitative, which is used to observe objects that can be measured by numbers, so that the phenomena studied can be studied/measured with scales, indices, or tables, all of which use more exact science (Notoatmodjo, 2010). The research design is a quasi-experimental approach with a one-group pre-posttest design. Researchers provide intervention to respondents by providing preconception nutrition counseling. The

population used in this study were 35 prospective brides of childbearing age at West Ungaran Religious Affairs Office, Semarang Regency from November to December. The sampling technique used is purposive sampling. The sample used in this study were 21 prospective brides of childbearing age who would carry out a wedding in December to January at West Ungaran Religious Affairs Office, Semarang Regency. The univariate analysis model in this study is presented in the form of measurement results, measures of central tendency, and measures of dispersion/deviation. The measurement results can be displayed in the form of numbers, or have been processed into percentages or ratios. Measures of central tendency include the calculation of the mean, lowest value (Minimum), highest value (Maximum), median, mode. The bivariate analysis used in this study is a dependent t-test (paired t-test), which compares whether there is a difference in the mean or mean of two paired groups. Decision-making can also be seen from the significant level of p (Sig(2-tailed)). If $p < 0.05$ then H_a is accepted and if $p > 0.05$ then H_a is rejected.

Results and Discussion

Table 1. Distribution of average knowledge of bride before preconception nutritional health

Knowledge	N	Mea n	SD	<i>mi</i> <i>n</i>	<i>ma</i> <i>x</i>
Before	2	60,7	10,8	33	80
After	1	6	02		

Based on Table 1, can be seen the average value of knowledge of the bride before intervention was 60,7, the minimum value was 33 and the maximum was 80 with a standard deviation of 10,802

Based on the result above, there was difference knowledge before and after health education. in line with the research that has been done by Rahim et al in (2013) in Ujung Tanah District, Makassar City showed that there was a change in knowledge about nutrition and reproductive health after being given the



Bride and Groom Course to preconception women. Where before course only 70.4% of respondents who have sufficient knowledge and 29.6% who less knowledgeable. After the course was done, all respondents have sufficient knowledge, namely by 100% and no one has less knowledge. In line with the research of Ninik, Intan (2020) that some participants have low knowledge about preconception nutrition in Religious Affairs Office in Rembang District, because the respondent is < 20 years old have no knowledge at all about preconception nutrition even participants who are > 20 years old there is only 1 person who never heard of. Participants with junior high and high school graduates still some do not know about preconception nutrition, with the majority work as farmers and who have heard of about preconception nutrition by profession as a kindergarten teacher. Participants said the question was difficult to answer because the participants claimed to have never known about preconception nutrition before. This is because the participants have never been exposed to prior information regarding preconceptual nutrition. Knowledge of nutrition plays an important role in fulfillment of a person's nutritional adequacy. Knowledge level will be encourage someone to have optimal abilities in the form of knowledge and attitude. Lack of knowledge about nutrition will influence a person in understanding concepts and principles as well as information related to nutrition. Effort knowledge improvement can be done by providing nutrition education (Supariasa, 2014). Nutrition education encourages a person in the form of knowledge, and changes in attitude (Notoadmojo, 2012)

Table 2. Distribution of average knowledge of bride after preconception nutritional health

Knowledge	n	Mean	SD	min	max
After	2	85,8	6,99	70	97
	1	1	7		

Based on Table 2, can be seen the average value of knowledge of the bride before intervention was 85,81 the minimum value was 70 and the maximum was 97 with a standard deviation of 6,997

Known the average value after intervention preconception nutrition counseling of 85.81 a minimum value of 70 and a maximum of 97 with a standard deviation of 6,997. This is in line with research conducted by Fauziah (2012) that giving interventions in the form of health education can improve knowledge of premarital women regarding preconceptual nutrition, with the result which is significant $p=0.001$. This research also produces conclusions which is the same as Azzahra (2015) that the counseling method can increase mother's knowledge of the provision of MP-ASI. And according to Salafas et al (2020) based on the post test results it was found that there was a change in the lowest value to 67 and the value of the highest is 87 while the average value is 77.50, These results show that the provision of information is very useful to increase knowledge. This is because information it is very necessary to increase knowledge. Efforts to increase knowledge can be done by: provide nutrition education (Supariasa, 2014). Nutrition education 72 encourage someone in the form of knowledge, and attitude change (Notoadmojo, 2012). This is stated in the results of

Table 3. The Effectiveness of Preconception Nutritional Health Education on Knowledge of brides-to-be of Childbearing Age

Knowledge of Bride	n	Mean	Standard Deviation	P-Value
Before	2	-		0,00
After	1	25,0	6,704	0
		48		

The results of the analysis of the T-test of the data obtained the results of the p-value = 0.000. This figure shows that the



p-value <0.05, means that there is a difference in the level of knowledge of prospective brides of childbearing age about preconception nutrition before and after being given health education at West Ungaran Religious Affairs Office, Semarang Regency. This is in line with research conducted by Fauziah (2012) that the provision of interventions in the form of health education can increase the knowledge of premarital women about preconception nutrition, with a significant result $p = 0.001$. This study also resulted in the same conclusion as Azzahra (2015) that the counseling method can increase a mother's knowledge of giving complementary feeding. Researchers argue that knowledge about nutrition plays an important role in fulfilling one's nutritional adequacy. The level of knowledge will encourage someone to have optimal abilities in the form of knowledge and attitudes. Lack of nutrition knowledge will affect a person in understanding concepts and principles, as well as information related to nutrition, knowledge about the importance of nutrition for prospective mothers can increase awareness of nutrition fulfillment before she becomes pregnant.

Conclusion and Suggestions

the conclusion from the results of the analysis of the t-test of the data obtained the results of the p-value = 0.000. This figure shows that the p-value <0.05 means that there is a difference in the level of knowledge of prospective brides of childbearing age about preconception nutrition before and after being given health education at West Ungaran Religious Affairs Office, Semarang Regency so that the provision of health education is effective in increasing knowledge of prospective brides. Then suggestions for prospective brides are expected to increase knowledge about preconception nutrition through health education in brides-to-be courses organized by the Office of Religious Affairs

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