

Article

The Influence of the Pregnant Friend Application on Pregnant Women's Attitudes and Knowledge about Danger Signs of Pregnancy at RSIA Masyita

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A B S T R A C T

Every pregnancy carries the risk of mild or severe complications that cause death, morbidity, disability in the mother or baby. Attitudes and knowledge about the danger signs of pregnancy are very important to prevent unwanted complications during pregnancy. Efforts to increase knowledge and attitudes about the danger signs of pregnancy are very necessary. The pregnant friend application is a health application for pregnant women as a means of communicating between pregnant women and midwives to gain knowledge and convey complaints about pregnancy directly. This study determined the effect of using the "Pregnant Friends" application on attitudes and knowledge about the danger signs of pregnancy at RSIA Masyita. This study used a one group pretest-posttest design, the sample in this study was 30 pregnant women visiting RSIA Masyita, the research was conducted in June-August 2023. Data were analyzed using the Wilcoxon test. After carrying out the Wilcoxon test, the value obtained was $p = 0.001$ for the Knowledge variable and for the attitude variable, the value obtained was $p = 0.004$ ($p < \alpha$) so that there was an influence of using the Pregnant Friends Application on Attitudes and Knowledge about Danger Signs of Pregnancy.

I. INTRODUCTION

The high maternal mortality rate in Indonesia is caused by several health and non-health factors. According to WHO (2022), the maternal mortality rate (MMR) in the world is 303.00 if. The Maternal Mortality Rate (MMR) in ASEAN is 235 per 100,000 live births. Every pregnancy carries the risk of mild or severe complications that cause death, morbidity, disability in the mother or baby. Attitudes and knowledge about the danger signs of pregnancy are very important to prevent unwanted complications during pregnancy. Efforts to increase knowledge and attitudes about the danger signs of pregnancy are very necessary, one of which is a Health Application that helps in educating the public. Thus, it is necessary to create a Health application for pregnant women as an effort to help reduce the death rate of pregnant women. Lack of early detection to recognize the danger signs of pregnancy and risk factors in pregnancy can result in a lack of quick anticipation during pregnancy and the pregnancy process, resulting in a high risk of maternal death. The pregnant friend application is a health application for pregnant women as a means of communicating between pregnant women and midwives to gain knowledge and convey complaints about pregnancy directly.

II. METHODS

This research used a quasi-experiment with a one group pretest-posttest design. The samples taken were 30 pregnant women who visited RSIA Masyita. The pregnant mother who visited used the Pregnant Mother Friend Application which had been previously downloaded via an Android-based cellphone. Pregnant women have been given a pre-test and post-test to measure pregnant women's knowledge and attitudes towards the danger signs of pregnancy. data has been analyzed using the Wilcoxon test.

III. RESULT

3.1 Characteristics of respondents

Table 1. Characteristics of respondents

No	Variables	Frequency (n)	Percentage (%)
1.	Age (year)		
	20-25	11	37
	26-30	14	47
	31-35	5	16
2.	Education		
	Basic	2	6,7
	Midle	13	43,3
	High	15	50
3.	Occupation		
	Worked	19	36,7
	Not worked	11	63,7

Based on the data, the majority of respondents fall within the 26-30 age group, accounting for 46,7% of the total sample. The education levels among respondents show a skew toward higher education. Among the three categories—Basic (Primary and Middle School), Mid-level (High School), and Higher Education (Diploma and Bachelor's Degree). Regarding occupation, 63.7% of respondents are employed, while 36.7% are unemployed.

3.2 The Effect of Using the Pregnant Friend Application on Attitude and Knowledge About Danger Sign of Pregnancy at RSIA Masyita Makassar

Table 2. The Effect of Using the Pregnant Friend Application on Attitude and Knowledge About Danger Sign of Pregnancy at RSIA Masyita Makassar

No	Variables	Pre test		Post test		P Value
		n	%	n	%	
1.	Knowledge					
	Lack	5	17	0	0	0.001
	Enough	14	47	4	13	
	Good	11	36	26	77	
2.	Attitude					
	Worked	4	13	0	0	0.004
	Not worked	26	87	30	100	

Table 2. shows that before using the Teman Bumil application, the majority of pregnant women had sufficient knowledge of 47%, while after being given and taught the Teman Bumil application, the majority had good knowledge of 36%. After the Wilcoxon Test, the P Value was obtained on the knowledge variable of 0.001 ($p < \alpha$: 0.005), while on the Attitude variable, before using the Teman Bumil application, pregnant women had a Good Attitude before using Teman Bumil amounting to 87% while after using the application, a Good Attitude was obtained 100% and After the Wilcoxon Test, the p Value was obtained on the attitude variable: 0.004 ($p < \alpha$), thus there is an effect of using the Teman Bumil application on increasing the knowledge and attitudes of Pregnant Women.

IV. DISCUSSION

4.1 Characteristics of respondents

Age has an influence on a person's comprehension and mindset. Women at this age are included in the early adulthood category, where women are able to make their own decisions. (Sandra 2015) However, there are still many who cannot distinguish between good and bad decisions. Therefore, the older they are, the more their comprehension and mindset will develop so that the knowledge they gain will improve. Age can affect a person's knowledge and attitude, the older they are, the more mature they will be in thinking and working (Susanti 2021). Education can produce insight or knowledge of a person. In general, someone who is more educated will have broader knowledge than someone with a lower level of education (Chandra, Junita, and Fatmawati 2019). Theoretically, the level of education is a factor that influences knowledge, while knowledge is a factor that underlies the formation of behavior (Notoatmodjo, 2021). Therefore, if a pregnant woman is highly educated, it will have an even greater influence on her knowledge and attitude in responding to pregnancy danger signs (Handayani, Sri. Milie 2020). This finding indicates that a majority of respondents are working individuals Mothers who work as self-employed will get more information or the latest news that is currently developing, so that the knowledge gained is greater than pregnant women who do not work or are housewives (IRT) (Ariestanti, Widayati, and Sulistyowati 2020).

4.2 The Effect of Using the Pregnant Friend Application on Attitude and Knowledge About Danger Sign of Pregnancy at RSIA Masyita Makassar

The Teman Bumil application is one of the pregnancy and parenting applications that wants to make it easier for parents, especially pregnant women, to get complete and reliable information by launching a book about pregnancy and good and correct child care. Teman

Bumil is also one of the popular applications with the number of downloads reaching 1 million. In addition, from 20 thousand reviews given by users, the Teman Bumil application managed to get 4.7 out of 5 stars. Not only that, Teman Bumil also enriches interactive features so that in addition to being able to consult with specialist doctors with pediatricians, midwives, lactation experts, psychologists, and other professionals. Ardianto Pambudi. (Ardianto Pambudi, Nurchim, and Agustina Srirahayu 2020).

Teman Bumil Co-Founder, Robyn Soetikno, explained that Teman Bumil is an application-based platform specifically designed for pregnant women. This application is equipped with unique features such as a checklist to help mothers go through pregnancy comfortably, as well as a mother and baby record feature that makes it easier for mothers and fathers to continue to record their child's development (Tofid, Eddy Julianto, and Harjoseputro 2020).

The results of this study are supported by previous research conducted by Astuti in (2021) stating that knowledge of danger signs in pregnancy is very helpful in reducing MMR, because by knowing the danger signs of pregnancy, a pregnant woman will find a health service place more quickly so that the risk of pregnancy can be detected and handled earlier. The education factor is a predisposition in the behavior of health facility users towards the absorption of information and knowledge (Kolantung, Mayulu, and Kundre 2021).

In the study of Puspitasari & Indrianingrum (2021) it was stated that the Teman Bumil application influenced the level of respondent knowledge about danger signs of pregnancy in the 3rd trimester with a p value <0.05 . This is also in line with the research of Yuni et al (2022) that the Teman Bumil application has been proven to have a significant effect on the knowledge and attitudes of respondents as indicated by the results of the paired sample T-test statistic which obtained a value of $p = 0.010$ ($p < 0.05$) (Irawati Indrianingrum and Indah Puspitasari 2021).

V. CONCLUSION

Knowledge ability before the intervention of using the "Teman Bumil" application in pregnant women, the majority had sufficient knowledge. While after the intervention of using the "Teman Bumil" application, the majority increased to good knowledge. Likewise, the attitude of pregnant women increased before the intervention of using the "Teman Bumil" application, pregnant women who had a good attitude increased from 87% to 100%. Researchers really hope that pregnant women can improve their knowledge and attitudes about pregnancy danger signs properly so that the Teman Bumil application can be an alternative choice to improve the knowledge of pregnant women, and implement good attitudes so that the mother and fetus are not in danger.

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