Jurnal Annal RSCB v25n4-2012 - YSB1.pdf

by

Submission date: 01-Jul-2021 06:04PM (UTC+0700)
Submission ID: 1614531667
File name: Jurnal Annal RSCB v25n4-2012 - YSB1.pdf (720.97K)
Word count: 5518
Character count: 28011

http://annalsofrscb.ro/index.php/journal/article/view/4169
Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 12410 - 12424
Received 05 March 2021; Accepted 01 April 2021.

Effect of Application of Counseling in Fertile Age Couple on the Improvement of Knowledge Contarception Implants

[1]*Syarifah Masita*, [2] *YusringSanusiBaso*, [3]*Sri Ramadany*,
[4]*Syafruddin Sharif*, [5] *VeniHadju*, [6] *A. Nilawati Usman*

[1]*Midwifery Studies Program, Graduate School*,Hasanuddin University, *Makassar*
[2]*Center for Media, Learning Resources,and E-Lerning*, Hasanuddin University, *Makassar*
[3]*Community Medicine Study Program, Faculty of Medicine*, Hasanuddin University, *Makassar*
[5]*Department of Nutrition, Faculty of Public Health*, Hasanuddin University, *Makassar*
Midwifery Study Program, Postgraduate School, Hasanuddin University, *Makassar*
Corresponding Author: Masitasyarifah@gmail.com

ABSTRACT

The implant contraceptive counseling application presents a counseling menu consisting of videos and articles and has a chat feature to facilitate communication between counselor and client to obtain information about contraceptive implants. This study aims to determine the effect of providing counseling applications on the improvement of fertile age couples.

This research uses a combination method consisting of *R & D* and *quasi-experiment one group pre-test-post test*. This research was conducted in Padoang-doangan Village from February 2021 to March 2021. The sample was fertile aged couples aged 15-45 years who did not use family planning. All respondents were given questionnaires before and after being given the application to as many as 96 people. G. The data were analyzed using the Wilcoxon test.

Characteristics of the data were the dominant age of respondents aged 20-35 years. Most of the respondents' education was high school graduates and worked as IRTs with multiparity parity status. The percentage level of respondents' knowledge level with good category before being given the application was 10.4%, and there was an increase to 78.1% after being given the application. There is an effect of counseling application on increasing knowledge of Fertile Age Couples.

Keywords: Counseling application, Increasing Knowledge, Contraceptive Implants.

INTRODUCTION

The high rate of female mortality due to complications during or after pregnancy and childbirth indicates a global inequality in quality health services.WHO aims to achieve by 2030 to reduce the maternal mortality ratio to less than 70 deaths in 100,000 live births. Most maternal deaths can be prevented in several ways, including the family planning program. Family planning is a strategy or way to regulate the desired number of children and to determine the distance of pregnancy, reducing the rate of unwanted pregnancies using contraceptives.[1]

According to data from the Indonesian Health Profile 2017, fertile age couples with active family planning users in Indonesia is 63, 22%, while those who never had family planning were 18.63%. The highest active family planning users were in Bengkulu Province at 71.98%, and the lowest active family planning users were in Papua Province at 25.73%. Based on the pattern in

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 12410 - 12424
Received 05 March 2021; Accepted 01 April 2021.

choosing the type of contraception, most active participants in family planning chose injections and pills as contraceptives and were even more dominant (more than 80%) compared to other methods, injections (62.77%), and pills (17.24%). Simultaneously, the use of MKJP (Long-Term Contraception Method) is still very low due to the low level of public knowledge about the advantages of the MKJP method and the limited number of trained personnel and available facilities. Of the total number of active family planning participants, only 17.45% of them used MKJP.[2]

In South Sulawesi Province in 2010 - 2016, the percentage of active family planning participants experienced fluctuations where the data for 2011 - 2012 experienced an increase and again decreased in the year 2013 - 2014, then again experienced an increase in 2015 and for 2016 there was another decline of 2.01%. The highest percentage of new family planning participants in districts/cities in South Sulawesi is Gowa, 76.14%, then Palopo (15.50%), and Pinrang (13.31%), while the lowest percentage of districts/cities with new family planning participants are Jeneponto Regency (1.25%), Bulukumba Regency (0%), and Takalar Regency (0%). Provincial level, the percentage of new family planning participants in 2015 in South Sulawesi was 13.80%.[3]

Based on research conducted by (ThoyyibBaroh T, 2015)[4] states that of 38 respondents, most of them have less knowledge about contraceptive implants (60.5%), insufficient knowledge is due to a lack of counseling by health Care to new prospective acceptors about implant contraception, the lack of information resources about implants and the difficulty of obtaining clear information on contraceptives so that acceptors tend to get information from the surrounding environment which causes the occurrence of a misperception about implants. Proper presentation of clear information will have a good effect on understanding the receiver of information and increasing interest and success in using a contraceptive method. In general, the advantages and disadvantages of contraceptive implants are already known to the public, even though the information was they know or have only heard of the experiences of mothers who never used them, if not understood and apply it will not support the contraceptive choice a good source of information and Respondents' interest in the use of contraceptives showed that 33 respondents (63.6%) were interested in non-implant contraceptives and received more information, not from health workers. In contrast, only 27.3% received information from health workers, and there were 9.1. % of respondents who are interested in implants after obtaining information from health. It indicates a significant role in providing information from health workers in promoting implant contraceptive methods to the interest of prospective acceptors.[5]

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 12410 - 12424
Received 05 March 2021; Accepted 01 April 2021.

MATERIALS and METHODS

Location and Research Design

Researchwas carried out in Padoang-doangan, Kota District Pangkajene, Pangkep Regency, South Sulawesi. This type of research uses research design, *a combined method as* a combination of the method *Research and Development (R&D)* (Baso, 2018) and the research design *Quasi-Experimental(Pre-test and post-test nonequivalent control group)* (Hastjarjo, 2019).[6,7]

Population and Sample

The population is that of all Fertile Age Couples in Padoang-doangan, totaling 96 people. This study's sample was fertile age couples (PUS) who did not use contraceptives with a *purposive sampling technique*. The inclusion criteria were PUS aged 15-45 years who did not use contraceptives, did not use contraceptives, had *smartphone* Android or IOSand were willing to be respondents. The exclusion criteria were PUS who did not want to continue the study (Lost Follow Up) and PUS who had not had children.

Data Collection Methods

Collection instruments were the questionnaire sheet for the consent to be a respondent, the respondent characteristic datasheet, the knowledge questionnaire sheet, the validity questionnaire for media experts and material experts, and the *Technology Acceptance Models* (TAM) questionnaire.

The sample's knowledge level was measured using a questionnaire in a *pre-test way* given earlier than the respondent way given earlier, and treatment in the form of an application with a time interval of 1 week before the carried out *post-test was*. Measurement using a *Technology Acceptance Models* (TAM) questionnaire.

Data analysis

Processing is done by computerization using the SPSS (*Statistical Product and Service Solution*) program. The data analysis technique used the *Wilcoxon Sign Rank, where the* test used to compare the knowledge *pre-test* and *post-test*.

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 12410 - 12424
Received 05 March 2021; Accepted 01 April 2021.

Results

1. Characteristics of Research Respondents

The purpose of this analysis is to describe characteristics of respondents like the age, education level, employment status, and parity

Table 1 Characteristics of Respondents

	Level of Knowledge															
	Pre-test								Post-test							
	Good		Enough		Less		Total		Good		Enough		Less		Total	
Characteristics	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Characteristic of age																
≤ 20 years	0	0,0 %	1	1,0 %	4	4,2 %	5	5,2 %	2	2,1 %	3	3,1 %	0	0,0 %	5	5,2 %
20 - 35 years	8	8,3 %	37	38,5 %	29	30,2 %	74	77,1 %	57	59,4 %	16	16,7 %	1	1,0 %	74	77,1 %
≥ 35 years	2	2,1 %	11	11,5 %	4	4,2 %	17	17,7 %	16	16,7 %	1	1,0 %	0	0,0 %	17	17,7 %
Level of primary																
Basic Education (Elementary School, Junior High School)	0	0,0 %	9	9,4 %	11	11,5 %	20	20,8 %	16	16,7 %	4	4,2 %	0	0,0 %	20	20,8 %
Middle Education (Senior High School)	6	6,3 %	24	25,0 %	24	25,0 %	54	56,3 %	38	39,6 %	15	15,6 %	1	1,0 %	54	56,3 %
University	4	4,2 %	16	16,7 %	2	2,1 %	22	22,9 %	21	21,9 %	1	1,0 %	0	0,0 %	22	22,9 %
Job Characteristic																
Not work/House wife	3	3,1 %	30	31,3 %	32	33,3 %	65	67,7 %	48	50,0 %	16	16,7 %	1	1,0 %	65	67,7 %
Private	1	1,0 %	6	6,3 %	3	3,1 %	10	10,4 %	8	8,3 %	2	2,1 %	0	0,0 %	10	10,4 %
Civil Servants	3	3,1 %	5	5,2 %	0	0,0 %	8	8,3 %	7	7,3 %	1	1,0 %	0	0,0 %	8	8,3 %
Other	3	3,1 %	8	8,3 %	2	2,1 %	13	13,5 %	12	12,5 %	1	1,0 %	0	0,0 %	13	13,5 %
Parity																
Primipara	6	6,3 %	9	9,4 %	14	14,6 %	29	30,2 %	22	22,9 %	7	7,3 %	0	0,0 %	29	30,2 %
Multipara	3	3,1 %	33	34,4 %	22	22,9 %	58	60,4 %	44	45,8 %	13	13,5 %	1	1,0 %	58	60,4 %
Grande multi para	1	1,0 %	7	7,3 %	1	1,0 %	9	9,4 %	9	9,4 %	0	0,0 %	0	0,0 %	9	9,4 %

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 12410 - 12424
Received 05 March 2021; Accepted 01 April 2021.

From table 1, we can see the results of the frequency distribution, where from 96 people, the most respondents were aged 20-35 years as many as 74 people (77.1%) with more education levels in secondary education with a total of 54 people (56.3%). While in terms of work, the more dominating mothers or respondents who do not work (Housewife) with several 65 people (67.8%) and the highest parity number of respondents in this study was Multigravida with a total of 58 (60, 4%).

2. Development Stages

Survey data from the Ministry of Communication and Information that currently, the development of technology is very quickly, the most internet users are in the 18-25 year age range as much as 49%, while the 26-35 years old is 33.8%, women will be easier to access various applications, including health applications.[8]

This stage involved a design and media display features of the implant counseling application with expert assistance in information technology. After the application product has been created and can be used, the validation is done by two media experts and two material experts using a questionnaire to test the validity of the experts and the media in assessing the feasibility of this application. The eligibility criteria are: Very Feasible (85% - 100%), Feasible (69% -84%), Fairly Feasible (53% - 68%), Not Feasible (3% 7-52%), Not Feasible (20%) - 36%), Very improper (0% -19%).

Table 2.

Evaluation	Display	Programming	Presentation	Eligibility
Professional Media 1	89 %	82,4 %	83,6 %	86,2 %
Professional Media 2	90,8 %	84,2 %	73,2 %	85,4 %
Average	90 %	82,4 %	80 %	85,8 %

Validation of Media

Table 2 shows the feasibility of the application by media experts obtained a value of 85.8% value and could be able concluded that the counseling application is declared very feasible

Table 3.Validation of Theory

Evaluation	Theory	Presentation	Language	Contekstual	Eligibility
Professional Media 1	90%	84%	90%	93,2 %	89%
Professional 2	90%	88%	90%	86,6 %	89%
Average	90%	86%	90%	90%	89%

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 12410 - 12424
Received 05 March 2021; Accepted 01 April 2021.

Table 3 shows the feasibility of application by material experts obtained a value of 89%, so it can be concluded that the counseling application material is declared very feasibly.

After testing the validity of subject Theory and media, also test a small group of 10 respondents was conducted to assess user behavior on counseling applications and tested large groups of as many as 96 respondents to assess the usefulness of the applications that have been run a test of validation test using questionnaires *Technology Acceptance Models* (TAM).

3. Assessment of User Behavior The

User behavior assessment was done using the *Technology Acceptance Models* (TAM) questionnaire covering :

a. PE: Ease of use (Perceived Ease to Use)
b. PU: Benefits (Perceived Usefulness)
c. AT: Attitude (Attitude Toward)
d. BI: Desire (Behavioral Intention)
e. AU: User awareness (Actual Usage)

by following the eligibility assessment criteria, including: Very Good (Total Mean Variable ≥ Median Variable), Good (Total Mean Variable = Median Variable), Less (Total Mean Variable ≤ Median Variable). The results of the calculation of application user behavior acquired as follows:

At this stage, fertile age couples consisting of 96 people were given an application and the questionnaire *Technology Acceptance* Model (TAM) to assess user behavior towards the counseling application. The results of the calculation of user behavior acquired as follows:

Table 4 Large Group Test

Description Statistic				
	N	Min	Max	Mean
PE 1	96	3	5	4.50
PE 2	96	3	5	4.42
PE 3	96	3	5	4.24
PE 4	96	3	5	4.14
PE 5	96	3	5	4.05
PE 6	96	2	5	4.17
Average				4.25
Median				4.16
PU 1	96	3	5	4.36
PU 2	96	3	5	4.47
PU 3	96	3	5	4.69
PU 4	96	3	5	4.41

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 12410 - 12424
Received 05 March 2021; Accepted 01 April 2021.

PU 5	96	3	5	4.51
Average				4.48
Median				4.2
AT 1	96	3	5	4.22
AT 2	96	3	5	4.00
Average				4.11
Median				4.1
BI 1	96	3	5	4.23
BI 2	96	3	5	4.39
BI 3	96	2	5	4.06
BI 4	96	3	5	4.14
BI 5	96	3	5	4.32
Average				4.23
Median				4
AU 1	96	3	5	4.40
AU2	96	3	5	4.47
AU3	96	3	5	4.43
Average				4.43
Median				4.6

Table 4 shows the results of the assessment of a large-scale field test consisting of 96 respondents with assessment results that include ease of use (PE = 4.25 ≥ 4.61), Benefits of Use (PU = 4.48 ≥ 4.2), attitude (AT = 4.11 ≥ 4.1), desire (BI = 4.32 ≥ 4.23), and user awareness (AU = 4.43 ≥ 4.6). Based on the eligibility score criteria, the results of the score from each assessment item indicated that (Mean variable ≥ Median variable) which is what this included in the Very Good criteria, so it can be able to conclude that the assessment of large group trials in counseling applications in couples of childbearing age knowledge of implant contraception is excellent.

4. Knowledge Level Assessment
   a. Knowledge Before and After being given a Counseling Application

Tabel 5 Pre-test & Post-test

Category	Pre-test		Post-test	
	N	%	n	%
Good	10	10,4	75	78,1
Enough	49	51,0	20	20,8
Less	37	38,5	1	1,1
Total	96	100	96	100

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 12410 - 12424
Received 05 March 2021; Accepted 01 April 2021.

Table 5 shows the results of the percentage distribution of respondents 'knowledge before and after being given a counseling application, where the results obtained are the number of respondents' knowledge before being given a counseling application in the Good category as many as ten people (10.4%) Enough as many as 49 people (51, 0%) and knowledge with inadequate category was 37 people (38.5%), while after being given a counseling application there was a change in the level of respondent's knowledge, where the results obtained were: 75 respondents got good category results (78, 1%), who answered in the Enough category were 20 people (20.8%) and in the less category were one person (1.1%)

DISCUSSION

A. *Characteristics of Respondents*

The results obtained show that in table 1, the larges number of couples of childbearing respondents are in the 20 - 35 year age group, with 74 people (77.1%) this age someone has experienced maturity in logical thinking.[9]

Based on the results of research conducted by (Budiman 2013)[10], it is stated that older age has a greater chance of using implant contraceptives compared to couples of childbearing age with tender age. Age can affect someone's knowledge and Attitude because someone with age is relatively young, so the experience they have is still little, and the level of knowledge is still low because of the age factor. The opposite is also true the more one experiences and influences one's knowledge of something.

Based on the level of education, it shows that most of the fertile age couples respondents have a high school education background with a total of 54 people (56.3%), with a primary school education of 20 people (20.8%), and 22 people (22.9%) in college.

Based on research conducted by (SiregarNovita Debi, 2018)[11], the knowledge processed by a person is strongly influenced by the level of education. Through education, a person can develop his potential and gain pieces of knowledge to recognize his own needs. The research results (SintamaniRichaArieb, Rosidah, 2020)[12] that it gets results that up to 48% of respondents had a high school education. That level of education gives the fertile age couples an adult pattern of thought with strong thinking ability that will influence the decision making. The higher the level of education he has, the better he will decide for himself. The theory presented by (Notoadmodjo 2014)[13] goes when respondents can understand the benefits of

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 12410 - 12424
Received 05 March 2021; Accepted 01 April 2021.

using implants, they will tend to carry out this behavior to get the benefits. Thus, the better the respondent's knowledge about implant contraception, the better the participation to become an implant acceptor.

Based on the parity characteristics, the results showed that the number of respondents with Multipara parity was much more with 58 people (60.4%), and the respondent with the low parity was Grande multipara with 09 people (9.4%) while for Primipara respondents were 29 people (30.2%). This result is parallel with the results of research conducted by (Diah, 2019) which states there are 77 respondents with the multipara category of parity (77.8%), which means that there are far more. This data shows that the highest parity category in the research area is multipara.

According to the theory put forward by (Hartanto. 2004), parity is the amount of a baby's birth, whether alive or dead. Parity is divided into three, namely primipara women who are pregnant for the first time and have given birth, multipara are women who have been pregnant or have given birth two or more times, and grande multipara is women who have gotten pregnant and have given birth more than five times. Women with some deliveries ≥ 30 years should end fertility because the more often the mother gives birth, the higher the risk.

The results of the research conducted by (Diah 2011)[14] in the title of: "The Relationship between Parity and Knowledge of Fertile Age Couples in the Selection of Contraception for the Female Operation Method (Mow)" states that there is a relationship between parity and the level of EFA knowledge. Well-informed respondents are dominated by multipara. The suggests that the higher the parity level of a person, namely Grande multipara, actually has a less knowledge level whole fertile age couples with the Multipara category have a high level of knowledge about MOW contraceptives.

B. ***Development Stages***

Counselingapplication media (AskingMidwife)get the results of the assessment of two media experts with a percentage of 85.8% and the results of the evaluation of material experts with a percentage of 89% where the results of the two experts are included in very feasible criteria so that the counseling application media (Ask the midwife) is a counseling medium that is very suitable to be used in increasing knowledge of EFA on implant contraception

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 12410 - 12424
Received 05 March 2021; Accepted 01 April 2021.

The counseling application (Asking Midwife) is an online learning media, where this application discusses counseling about nutrition for pregnant women, pregnancy exercise, breastfeeding counseling, and counseling on implant contraception. This application can be accessed via a *browser* or Play Store for android users. This application can provide information about implant contraception, how to insert implants, how to remove implants, and types of contraceptives include the advantages and disadvantages of each contraceptive method in the form of videos and articles about implant contraception are well as myths and facts circulating in the community. The following are the results of the design of the EFA counseling application:

1. The First Stage

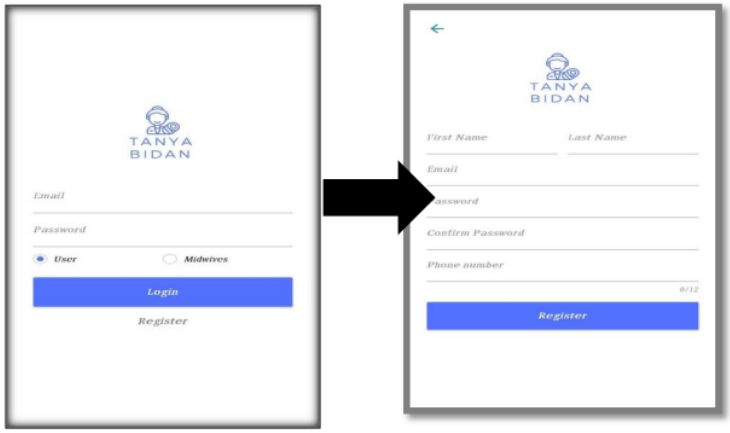


Figure 1. Initial Display & Register Menu

Figure 1 shows the start view of the Asking Midwife application consisting of 1). option "User" this option is used for application users, 2). option as "Midwives" this option is only used by the midwife who in charge as a counselor, 3). The "Log in" is using for users who have registration by e-mail and enter a previously registered password. In the picture to the right, there is the registering menu that must be filled in beforehand as a condition for being able to log into the application method consists of 1) First name, 2) last name, 3) E-mail, 4) Password and 5) Phone number. Once all for identification are fill, later click the registration in the middle of the bottom, and then the user can log into the main menu.

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 12410 - 12424
Received 05 March 2021; Accepted 01 April 2021.

2. Main menu &live chat

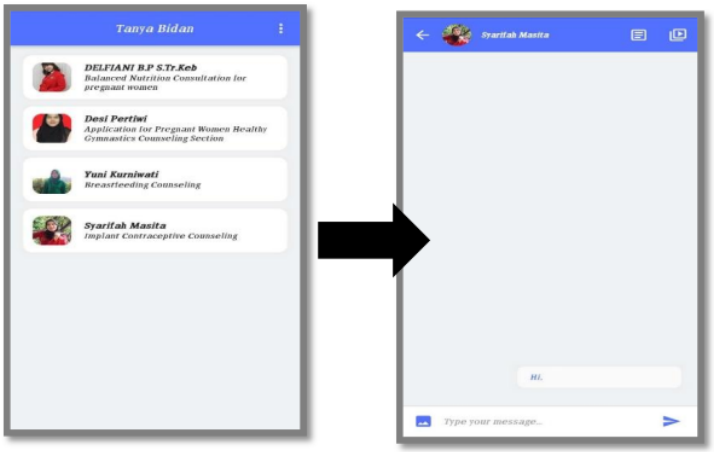


Figure 2. Main Menu *Figure 3. Live Chat*

After registering, a display will appear in Figure two, consisting of 4 choices of materials in sequence start with material on Nutrition Counseling for Pregnant Women, Gymnastics for Pregnant Women, Breastfeeding, and Implant Contraceptive Counseling. After entering the main menu of the application, the user will choose one of the desired materials, and the live chat menu will appear as shown in Figure 3. The live chat display is a menu that makes counseling between clients and counselors easier

3. Article & Video

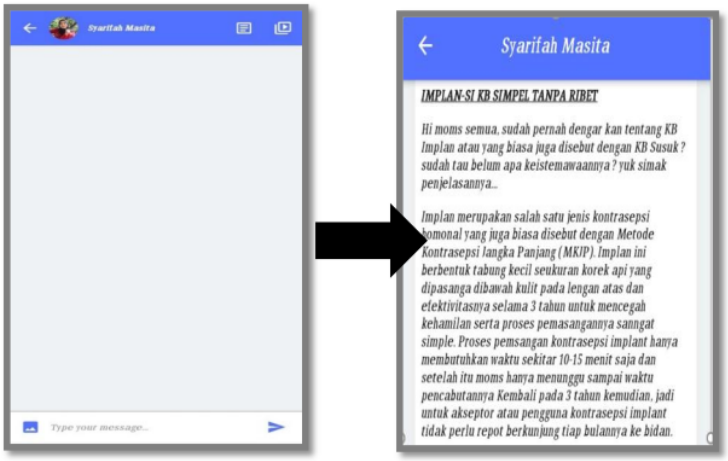
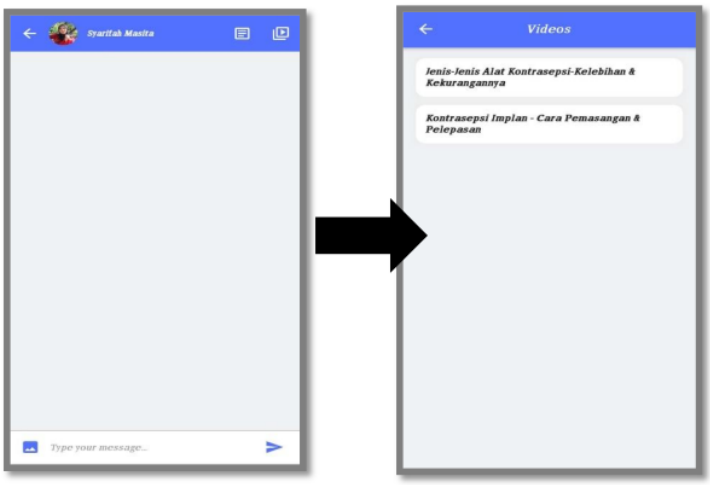


Figure 4 Article Menu

Figure 4 contains a short article about the previously selected material. A short article about the implant, contraception discusses the benefits of implants, effects side and

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 12410 - 12424
Received 05 March 2021; Accepted 01 April 2021.

Mythos / Facts that can change the user's view of things that are not true about using contraceptive implants



In Figure 5, you can see the video icon on the top right. When the user clicks on the icon, two material choices will appear: the types of contraceptives, their advantages, disadvantages, and a video about how to insert and remove the implant.

A mobile application is smartphone software that has been connected to the internet to make it easier to access information and consultations easily and quickly. This application can be download using a specific operating system and site, and the one example is *Google* Play.[15]

With the Ask a Midwife application, it will be easier to get information and conduct counseling or questions and answers freely without having to go to health services and time. unlimited, so that PUS will feel comfortable and easy and increase their knowledge with this application.[16]

C. User Behavior of the Counseling Application

the instrument used in this study to analyzeapplication users' behavior is to use the questionnaire *Technology acceptance model* (TAM). TAM is a questionnaire that aims to measure the level of application use in media and material validation as well as a questionnaire or questionnaire to measure the level of knowledge of fertile age couples on implant contraception and is an information system to measure the level of acceptance and use of technology for users which contains closed questions to obtain the required information which consists of 5 aspects.[17]

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 12410 - 12424
Received 05 March 2021; Accepted 01 April 2021.

Based on the assessment result on small-scale field tests and large-scale field tests using the *Technology Acceptance Model* (TAM), questionnaire results have obtained that all aspects of the questionnaires received a grade that fell into the excellent category. These results suggest that fertile aged couples exceptionally well receive a Asking Midwifecounseling application.

The study results coincided with the results of research conducted by (Hanif 2017)[18] that the ease of use of the application significantly affected his user behavior to use the application. The results can be seen from the overall mean value of 4.10 and the coefficient testing results for easier use of interest to use have a value of 0.458 with a CR of 4.404 and a probability (p) of 0.000, which is means that there is a significant influence between the two.

Meanwhile, research conducted by (Arief 2008)[19] shows that there is a positive influence between each aspect of the assessment using the *Technology Acceptance Model* (TAM) questionnaire, which shows the influence of linkages such as *Perceived Ease of Use* (PE) affects *Perceived Usefulness* (PU), *Perceived Usefulness*(PU) affects *Attitude Toward Using* (AT), *Perceived Ease of Use* (PE) affects *Attitude Toward* (AT), *Attitude Toward* (AT) affects *Behavioral Intention to Use* (BI), *Perceived Usefulness* (PU) affects *Behavioral Intention to Use* (BI).

D. Knowledge Level

The result obtains in this study is that the application of counseling about implant contraception is very effective in increasing knowledge of fertile age couples Applications that are easily accessible and the mother's interest in obtaining information support the increase in knowledge of this. Sources of information about implants that are usually obtained by fertile age couples are through the experiences of other people by word of mouth, counseling, posters, and via the internet.[4]

Media counselingAsking Midwife in this study to be developed with Android-based smartphone technology, consists of four materials in the *main menu,* one of the materials is about implant contraception. Android is a smartphone operating system most used in Indonesia in 2016, which amounted to 47.3 million users (77%) since it has a large population affordable make it easier for people to access the required information.[20]

The results obtained researchers to tests of significance to the increase in value before and after a given intervention in the form of an application by using test Wilcoxon Signed Rank test is ρ-value of 0.000> 0.05. Thus it can be concluded that the application of counseling significantly improves knowledge of implants contraceptive. Eligible this study is in line with

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 12410 - 12424
Received 05 March 2021; Accepted 01 April 2021.

the results obtained by (Retnaningtyas Erma, Astutik, FajarWati A, 2020)[21] in the research indicates an increase in respondent's knowledge after being given an application, and it was determined that the level of knowledge people has affects their ability to use the application and with the use of the application someone's knowledge will have increased from before.

With the creation of the counseling application (Asking Midwife), it has hoped that it can have a positive impact on the community in increasing their understanding of contraceptives, especially implants that there are no mistakes in receiving information that contradicts the facts and increases public awareness in choosing, determining and using contraceptives.[22,23,24,25,26]

CONCLUSIONS AND ADVICE

Based on the research results that have been conducted on the effect of counseling application of infertile age couples on increasing knowledge of implant contraception, it can be concluded that there are significant differences in against of knowledge of fertile age couples before and after being given the application. This Asking Midwifecounseling application can influence the increase in knowledge of fertile age couples about implant contraception.

It is hoped that fertile age couples can easily access the counseling application (Ask the Midwife) to get information about contraceptive tools, especially implants, so that prospective acceptors can easily make solid choices and can be developed by future researchers so that more materials and topics of counseling can be used more widely.

REFERENCES

1. WHO. (2020). *World Healt Organization mortality 2019*. https://www.who.int/data/gho/whs-2020-
2. Ministry Health Indonesia. (2017). Indonesian Profile Health in 2016. www.kemkes.go.id
3. Health of Province South Sulawesi. (2015). *Profile Health ofProvince South Sulawesi*.
4. Thoyyib Baroh T, W. Y. Relation betweetknowledge Level about Implant with Implant Contraception Knowledge to Acceptor in BPS. *Journal of Chemical Information and Modeling*. 2015;*53*(9):1689–1699.
5. Kamaruddin. M, Mudyawati, P. D. Factors Relationwithusing Methods ContraceptionImplantin Public Health Centre District Bulukumba.*Journal Medica Alkhairaat*.2020.*2656–7822*, 164.
6. Baso, Y. S. Application Model Based on Html as One of Solution Local Language.2018;*2*(1):1.
7. Hastjarjo, T. D. Experimental Quasi. *Psichology Journal*.2019;*27*(2528–5858), 188–191.
8. Patimah, M., Kurniawati, A., & Susilawati, S.Application Design ¨KoPiKu Kontrasepsi Pilihanku¨ of Mobile Contraception Decision Making Tools Based on Android. *Journal of Midwifery*.2020;*10*(1):1–8.
9. Nursalam, D & Utami, S. *Midwifery and Children*. Salemba Medika.2015

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 12410 - 12424
Received 05 March 2021; Accepted 01 April 2021.

10. Budiman. *Knowledge in Culture Socialization*.2013
11. Siregar Novita Debi, P. siti. Descriptive ofKnowledge AboutImplant Contraceptionin Clinic ofEla Azmi in 2018. *Journal of Midwifery:*2018;*3*(ISSN 2599-1841).
12. Sintamani Richa Arieb, Rosidah, R. S. Relation Knowledge andBehaviour Couple With Fertile Period toChose Contraception Tools with Implant Methods in Cirebon District.*Ovary Midwivery Journal*. 2020*:2685-967X*.
13. Notoadmodjo, S.*Knowledge Behavior Health*. Reneka Cipta.2014
14. Diah, Y. A. . RelationCouple Knowledge and Fertile Period in Using Contraception Methods. *Journal Scientific Medical Records and Health Informatica*.2019;*1*(2086–2628).
15. Hasan, M. *Analysis of Influenced Mobile Application in Bekasi* City.2019;47–52.
16. Johua Ignatius B, Yohanes D, Indrajani, R. B. *Improvement Application Hospital Mobile Based on Android*,.2020;1–12.
17. Ammenwert, E. Technology Acceptance Models in Health Informatics : TAM and UTAUT. *IOS Perss*, 2019;64–71.
18. Hanif. Analysis Using Mobile Banking Through Approching Technology Acceptance Model (TAM) with Modification. *E-Journal Ekonomi Bisnis Dan Akuntansi*, 2017;28.
19. Arief, W. *Evaluation of Attitude Using Information SystemWith ApprochingTechnology Acceptance Model*.2008
20. Internet, A. P. J. *Penetration and Behaviourusing Internet Indonesia*.2017
21. Retnaningtyas Erma, Astutik, Fajar Wati A, M.Analysis of Skill ofCalender Methods for Mowen in Fertile Period (WUS) to Looking for Fertile Period in Public Health Center Balowerti, Kedir City *Jurnal of Quality Women Health*.2020.
22. Achmad H, Djais Al, Jannah M, Huldani, Putra AP. Antibacterial chitosan of milkfish scales (Chanos chanos) on bacteria porphyromonas gingivalis and agregatibacter actinomycetescommitans. Systematic Review In Pharmacy. 2020;11(6):836-841
23. Djais Al, Achmad H. Dewiayu D, Sukmana BI, Huldani. Effect of Combination Demeneralization Freeze Dentin Matrix (DFDDM) and moringa oleifera lam osteoprotegerin (OPG) and receptor activator of nuclear factor kappa bliganf (RANKL) as a marker of bone remodelling. Systematic Reviews in Pharmacy. 2020;11(6):771-779
24. Achmad H, Djais, Syahrir S, Fitria A, Ramadhany YF. Impact Covid-19 in pediatric dentistry: A Literatur Review. International Journal Of Pharmaceutical Research. 2020. 12:830-840
25. Achmad H, Djais AJ, Petrenko EG, Laris V, Putra AP. 3-D printing as tool for applying biotechnologies in modern medicine. International Journal of Pharmaceutical Research. 2020;12(4):3454-3463SS
26. Achmad H, Djais Al, Syahrir, Fitria A, Ramadhany YF. A Literature us regarding the use of herbal medicines in pediatric dentistry. International Journal Of Pharmaceutical Research. 2020;12:881-897

Jurnal Annal RSCB v25n4-2012 - YSB1.pdf

ORIGINALITY REPORT

8%	5%	5%	0%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Christiane Berger, Ardeshir Mahdavi. "Exploring Cross-Modal Influences on the Evaluation of Indoor-Environmental Conditions", Frontiers in Built Environment, 2021 Publication	2%
2	zombiedoc.com Internet Source	1%
3	sloap.org Internet Source	<1%
4	journal.universitaspahlawan.ac.id Internet Source	<1%
5	Wahyudi Wahyudi, Marisa Ambarwati, Endang Indarini. "DEVELOPMENT OF WEB GAME LEARNING MATERIALS FOR PRIMARY SCHOOL STUDENTS", Infinity Journal, 2019 Publication	<1%
6	Eka Nur Rahayu, C. Asri Budiningsih, B.M. Wara Kushartati. "Multimedia improves knowledge and choice of contraception	<1%

among pregnant women", International Journal of Public Health Science (IJPHS), 2020
Publication

7	bmcpublichealth.biomedcentral.com Internet Source	<1 %
8	repository.unhas.ac.id Internet Source	<1 %
9	www.tel-tek.no Internet Source	<1 %
10	Junnhyeok Park, Kwangmin Kim, Taehee Lee, Minkyu Kim. "Tailings Storage Facilities (TSFs) Dust Control Using Biocompatible Polymers", Mining, Metallurgy & Exploration, 2019 Publication	<1 %
11	docobook.com Internet Source	<1 %
12	researchonline.ljmu.ac.uk Internet Source	<1 %
13	www.downloadjurnal.com Internet Source	<1 %
14	www.journaltocs.ac.uk Internet Source	<1 %
15	www.tandfonline.com Internet Source	<1 %

16	International Journal of Bank Marketing, Volume 29, Issue 7 (2011-10-17) Publication	<1 %
17	International Journal of Contemporary Hospitality Management, Volume 26, Issue 2 (2013-12-21) Publication	<1 %
18	www.neliti.com Internet Source	<1 %
19	individual.utoronto.ca Internet Source	<1 %
20	www.hrw.org Internet Source	<1 %
21	Medi Kartika Putri, Yudho Giri Sucahyo. "Factors analysis that affecting the user acceptance towards IPv6 transition", 2016 International Conference on Advanced Computer Science and Information Systems (ICACSIS), 2016 Publication	<1 %

Exclude quotes	On	Exclude matches	< 5 words
Exclude bibliography	On		