

## **THE EFFECT OF USING THE ‘KLIK KB’ APPLICATION ON THE LEVEL OF KNOWLEDGE, ATTITUDES AND BEHAVIOR IN CHOOSING CONTRACEPTIVES**

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### **Abstract**

Research on digital platforms for family planning was scarce, and many studies only measured knowledge without examining changes in attitudes or actual contraceptive-choice behavior. Comprehensive evaluations of the application before and after use were also lacking, leaving insufficient evidence of its effectiveness as an educational tool. This created a clear research gap, highlighting the need to examine the influence of the “KLIK KB” application on users’ knowledge, attitudes, and behaviors in choosing contraceptive methods. This study was to determine the increase in knowledge, attitudes and behaviors in women of childbearing age about contraceptive methods before and after using the Klik KB application. The design of this study was quantitative research that used a pre-experimental design with a one-group pretest–posttest type. This design did not have a comparison (control) group. The instruments used were questionnaires, all of which had been validated and reliability-tested beforehand. The population consisted of 30 respondents, and total sampling was used with accidental sampling to select all 30 respondents. This study used a paired sample t-test. The research was conducted in the Batu Jajar area of West Bandung Regency from May to August 2025. The result is an influence on the use of the Klik KB application on knowledge, attitudes and behavior in choosing contraceptives. There is an influence on the use of the Klik KB application on knowledge, attitudes and behavior in choosing contraceptives. Suggestions for future researchers were advised to use a larger sample for stronger results.

**Keywords:** Attitude, behavior, klik KB application, knowledge, women of childbearing, age.

## **INTRODUCTION**

Indonesia is one of the fourth most populous countries in the world. Population growth in Indonesia continues to increase every year. Based on the data obtained, Indonesia's population is projected to reach 275.77 million people in 2022, an increase of 1.13% from the previous year. The Covid-19 pandemic has a broad impact on aspects of life including family planning programs. (Kemkes RI, 2020). Statistics from BKKBN show that the number of new family planning participants decreased significantly from 422,315 in March 2022 to 371,292 and 388,390 in April-May 2023. The decline in contraceptive use also included implants which fell from 81,062 to 51,536, injections to 341,109. Then birth control pills fell from 251,619 to 146,767, condoms from 31,502 to 19,583, MOP (vasectomy) from 2,283 to 1,196 and MOW (tubectomy) from 13,571 to 8,093.

Based on this, BKKBN made a breakthrough so that contraceptive services continue to run well and the rate of contraceptive use increases. One of the things that was done was the launch of the "Klik KB" application. The 'Klik KB' application can connect directly between family planning acceptors and midwives and can conduct online counseling. Unfortunately, the utilization of the application has not been optimal, one of the factors causing this is ignorance about this application. Based on the results of a preliminary study conducted by researchers, out of 10 family planning acceptors who were asked about this application, 9 people did not know, but one person knew but had never used it. If this application is utilized properly, the BKKBN's hope to continue providing family planning services will be realized.

Knowledge is an important factor that influences the decision to use contraception or not. Limited knowledge about the types of contraceptives limits the ability to choose the type of contraception that suits the situation. Learning media is a tool and method used as a means of building communication from the information giver to the information receiver in order to facilitate communication and make the learning process more interesting. Learning media includes print media (magazines, newspapers, leaflets) and electronic media. Along with the development of technology in the field of education, one of the learning media that can be used is Android-based educational media. In addition to increasing knowledge, the 'Klik KB' application can also influence people's attitudes and behavior in choosing contraceptives. By providing clear and

transparent information, this application can increase individual motivation to use contraceptives.

In 2020, the National Population and Family Planning Agency innovatively launched an application "klik kb" which can be used in finding information about easy and quality birth control services by providing information features on contraceptive tools & drugs and consulting with midwife clinics in Indonesia. However, the use of this application is still not optimal, health workers still more often use flip sheets as a tool for providing IEC on various contraceptive methods. Based on the description above, it encourages the author to conduct research on the Effect of Utilization of the 'Klik KB' Application on the Level of Knowledge in Choosing Contraceptives. Research has shown that the use of the 'Klik KB' application can improve people's knowledge about contraceptive use. The results showed that before the treatment, the respondents' knowledge was in the moderate category as much as 52%, while after the treatment, the respondents' knowledge was in the good category as much as 76%. This indicates a significant effect of the 'Klik KB' application on respondents' knowledge.

Based on the description above, it encourages the author to conduct research on the Effect of Utilization of the 'Click KB' Application on the Level of Knowledge, Attitudes and Behavior in Choosing Contraceptives. This study differed from other similar research because it not only assessed improvements in knowledge after the intervention but also simultaneously measured changes in attitudes and behaviors related to contraceptive choice after respondents used the Klik KB application. Most previous studies focused on face-to-face education or traditional media, whereas this study emphasized the use of a digital application as the primary intervention. In addition, this study employed a one-group pretest–posttest design directly within a community setting, while other studies often used control groups or were conducted in healthcare facilities. This research also integrated health education with the evaluation of a technology-based application, providing a more comprehensive understanding of how the application influenced user behavior—an aspect that has not been widely explored in earlier studies.

## **METHODS**

The design of this study was quantitative research that used a pre-experimental design with a one-group pretest–posttest type. This design did not have a comparison (control) group. Data collection was conducted using pre- and post-tests administered before and after the health

education was provided, as well as questionnaires on attitudes and behaviors toward the use of the Klik KB application. The instruments used were questionnaires on knowledge, attitudes, and behaviors regarding the use of the Klik KB application and family planning choices, all of which had been validated and reliability-tested beforehand. The population consisted of 30 respondents, and total sampling was used with accidental sampling to select all 30 respondents. This study used a paired sample t-test. The research was conducted in the Batu Jajar area of West Bandung Regency from May to August 2025. The ethics approval number was 305/D/KEPK-STIKes/XI/2024.

## RESULTS

The results of the study are the utilization of the Klik KB application based on android can know the knowledge, attitudes and behavior of the family planning community.

**Tabel 5.1. Frequency Distribution of Respondents' Knowledge Before and after the use of Click Birth Control**

Knowledge	Before		After	
	n	%	n	%
Good	10	33,33	18	60
Less	20	66,67	12	40
Total	30	100	30	100

Source: Primary Data 2024

Based on table 5.1 shows that the knowledge of respondents before using the Klik KB application (Pretest) in the Good category was 10 people (33.33%) and after using the Klik KB application (Posttest) increased to 18 people (60%), and the knowledge of respondents before using the Klik KB application (pretest) in the poor category was 20 people (66.67%) and after using the Klik KB application (posttest) decreased to 12 people (40%).

**Tabel 5.2 Frequency Distribution of Respondents' Attitudes Before and after the use of Click Birth Control**

Attitude	Before		After	
	n	%	n	%

<b>Positif</b>	10	33,33	19	63,33
<b>Negatif</b>	20	66,67	11	36,67
<b>Total</b>	30	100	30	100

Based on table 5.2 shows that the attitude of respondents before using the Klik KB application (Pretest) with a positive category of 10 people (33.33%) and after using the Klik KB application (Posttest) increased to 19 people (63.33%), and the attitude of respondents before using the Klik KB application (pretest) with a negative category of 20 people (66.67%) and after using the Klik KB application (posttest) decreased to 12 people (40%).

**Tabel 5.3 Frequency Distribution of Respondents' Behavior before and after the use of Click Birth Control**

<b>Behavior</b>	<b>Before</b>		<b>After</b>	
	n	%	n	%
<b>Good</b>	8	26,67	23	76,67
<b>Less</b>	22	73,33	7	23,33
<b>Total</b>	30	100	30	100

Based on table 5.3 shows that the behavior of respondents before using the Klik KB application (Pretest) in the good category was 8 (26.67%) and after using the Klik KB application (posttest) increased to 23 people (76.67%), and the behavior of respondents before using the Klik KB application (Pretest) in the poor category was 22 people (73.33%) and after using the Klik KB application (posttest) decreased to 7 people (23.33%).

**Tabel 5.4 The effect of using the Klik KB application on knowledge, attitudes and behavior in choosing contraception**

<b>Variabel</b>	<b>Mean Rank</b>		<b>P</b>
	<b>Negative Rank</b>	<b>Positif Rank</b>	

<b>Knowledge</b>	Knowledge before	0,00	4,50	0,003
	Knowledge after			
<b>Attitude</b>	Attitude before	0,00	4,50	0,003
	Attitude after			
<b>Behavior</b>	Behavior before	0,00	8,00	0,001
	Behavior after			

Based on table 5.4 shows the statistical analysis of Wilcoxon obtained  $p = 0.003 < 0.05$  so it can be concluded that  $H_0$  is rejected which means that there is an influence on the difference in maternal knowledge before and after using the Klik KB application in contraceptive selection. The mean rank for the positive rank is greater than the negative rank, indicating a positive difference, in other words, the use of the Klik KB application in selecting contraceptives causes an increase in maternal knowledge.

For attitudes based on table 5.4 shows the results of the Wilcoxon statistical test analysis obtained  $p = 0.0003 < 0.05$  so it can be concluded that  $H_0$  is rejected, meaning that there is an influence on the difference in attitudes before and after using the Klik KB application in contraceptive selection. The mean rank for the positive rank is greater than the negative rank, indicating a positive difference.

For behavior based on table 5.4 shows the results of the Wilcoxon statistical test analysis obtained  $p = 0.001 < 0.05$  so it can be concluded that  $H_0$  is rejected, meaning that there is an influence on the difference in behavior before and after using the Klik KB application in contraceptive selection. The mean rank for the positive rank is greater than the negative rank, indicating a positive difference.

## DISCUSSION

Based on table 5.1 shows that the knowledge of respondents before using the Klik KB

application (Pretest) with a good category of 10 people (33.33%) and after using the Klik KB application (Posttest) increased to 18 people (60%). The same thing in table 5.4 that knowledge has a significant relationship with using the Klik KB application with the selection of contraceptives, the better the mother's knowledge about contraception, the better the mother will choose contraception. Some respondents in this study were women of childbearing age who used contraceptives, before using the Klik KB application, the researcher first explained the purpose and purpose while giving a questionnaire (Pretest) to measure the knowledge of respondents before being given the Klik KB application. The material provided regarding contraceptive information using the Klik KB application in the selection of contraceptives. The implementation of the evaluation was carried out by comparing the pretest and posttest questionnaires that had been given to the mother a week later which had been scheduled by the researcher.

There is still a lack of knowledge of mothers in this category because when receiving an explanation of the use of the Klik KB application, because when receiving counseling, the respondent's condition has not focused on listening, besides that the mother's lack of knowledge about contraception using the Klik KB application.

According to the researcher's assumption that the mother's knowledge of the mother's cognitive abilities where the mother's knowledge is at the level of knowing (knowing) about all contraceptive information both what contraception, types of contraception, side effects of contraception, besides that the mother is also in the order of understanding (comprehension) about all contraceptive information both what contraception, types of contraception, side effects of contraception. In the posttest results, it was found that all mothers had good knowledge, which meant that there was a change after being given the use of the Klik KB

application, the mother could apply the Klik KB application to be able to choose contraception according to the conditions of the respondent itself. Changes in knowledge in mothers occur because of counseling using electronic media in the form of the Klik KB application which is given using the lecture, question and answer method and demonstration so that it not only explains but also demonstrates how to use the Klik KB application. Improving knowledge requires correct information in order to form confidence in the community so that they want to carry out a recommendation.

Changes in data knowledge are obtained by providing information provided through counseling using information media. According to Sobur, information media is a graphic, photographic or electronic tool for capturing, processing and reconstructing visual information. Various types of information media can be in the form of print or electronic. One type of electronic information media is the existence of Klik KB. The Klik KB application is an application for midwives that makes family planning services easier and higher quality by providing information on contraceptives and midwife clinics. The change is caused by the factor of providing information using the Klik KB application media, this occurs because there is interest in trying and accepting new things obtained by seeing and trying from the media used. Interesting and appropriate media will increase confidence so that changes both cognitive, affective and psychomotor can occur quickly. Providing information will be more influential if it is given directly by health workers because beliefs will be formed if they get the truth of information from expert figures.

Based on table 5.2 shows that the attitude of respondents before using the Klik KB application (Pretest) with a positive category of 10 people (33.33%) and after using the Klik KB application (Posttest) increased to 19 people (63.33%). The same thing as in table 5.4



that there is an effect of attitude in using the Klik KB application, based on the researcher's assumption that the views of mothers who have used the Klik KB application that so far still lack understanding about contraceptive selection. In Notoatmojo, the attitude component consists of the level of change in the mother's attitude including accepting, responding, appreciating and being responsible. This is in accordance with the respondent's situation after receiving contraceptive counseling with the Klik KB application media, it is already in the acceptance stage. This can be seen during the process of providing counseling both in lectures, questions and answers and demonstrations when using the Klik KB application, the mother's enthusiasm is seen to listen to the material presented, on the other hand, it can be seen that in the response stage, the mother spontaneously and actively responds to questions and when feedback from researchers.

Positive changes in attitude are inseparable from increasing maternal knowledge, the better the mother's knowledge about family planning, the more positive the attitude shown by the mother. Before counseling on the Klik KB application, there were still many who responded to each questionnaire question with a negative attitude and after being given contraceptive counseling through the Klik KB application, the negative attitude turned into a positive attitude because of the stimulus given and well received by the mother. Attitudes have a significant relationship with maternal knowledge about contraceptive selection using the Klik KB application, the better the mother's knowledge about using the Klik KB application, the better the mother's contraceptive selection, as respondents in the study were women of childbearing age, before being given contraceptive counseling using the Klik KB application, the researcher first gave an explanation of the purpose and purpose while giving a pretest questionnaire to measure attitudes before being given counseling, The material provided is

how the mother's attitude in the selection of contraception, in the delivery of counseling also researchers pay attention to the Klik KB application can function properly, there is still a mother's attitude in the non-negative category because when receiving counseling the mother is less focused because she brings her child, causing less focus. This study is in line with research conducted by Suriana (2021) which states that there is an effect of providing health education with the attitude of mothers in choosing contraception at the Makassar General Hospital.

Based on table 5.3 shows the behavior of respondents before using the Klik KBapplication (Pretest) with a good category of 8 (26.67%) and after using the Klik KBapplication (posttest) increased to 23 people (76.67%), the same as table 5.4 that there is an influence on behavior before and after using the Klik KB application in contraceptive selection. Based on the researcher's assumption that good behavior will be influenced by a positive attitude in using the Klik Kb application in contraceptive selection, women of childbearing age good behavior is influenced by individual character and environment. A person's behavior can change according to what is believed from the surrounding environment, if the surrounding environment is good then behavior will also be good, this is in accordance with the majority of women of childbearing age at PMB R have good behavior due to a supportive environment in choosing contraception. This is in accordance with Mardiah (2019) that behavior including the selection of contraceptives is influenced by 3 factors, namely predisposing factors (knowledge, attitudes, education, economy and family), supporting factors (availability of medical devices, information sources) and driving factors (family support and community leaders).

## RESEARCH LIMITATIONS

This study had several limitations, including the use of a one-group pretest–posttest design without a control group, which limited the ability to compare outcomes with other populations. The sample size was small and limited to one geographic area, reducing the generalizability of the findings. Data collection relied on self-reported questionnaires, which may have introduced response bias. Additionally, the study period was relatively short, preventing the evaluation of long-term behavioral changes related to the use of the Klik KB application.

## CONSLUSION

There is an influence on the use of the Klik KB application on knowledge, attitudes and behavior in choosing contraceptives. Suggestions for future researchers were advised to use a larger sample for stronger results.

## REFERNCE

- 1) Adelekan, T., Mihretu, B., Mapanga, W., Nqeketo, S., Chauke, L., Dwane, Z., & BaldwinRagaven, L. (2020). Early Effects of the COVID-19 Pandemic on Family Planning Utilisation and Termination of Pregnancy Services in Gauteng, South Africa: March–April 2020. *Wits Journal of Clinical Medicine*, 2(2), 91. <https://doi.org/10.18772/26180197.2020.v2n2a7>
- 2) Ahmed, S., Choi, Y., Rimon, J. G., Alzouma, S., Gichangi, P., Guiella, G., Kayembe, P., Kibira, S. P., Makumbi, F., OlaOlorun, F., Omoluabi, E., Otupiri, E., Oumarou, S., Seme, A., Shiferaw, S., Anglewicz, P., Radloff, S., & Tsui, A. (2019a). Trends in contraceptive prevalence rates in subSaharan Africa since the 2012 London Summit on Family Planning: results from repeated crosssectional surveys. *The Lancet Global Health*, 7(7), e904–e911. [https://doi.org/10.1016/S2214-109X\(19\)30200-1](https://doi.org/10.1016/S2214-109X(19)30200-1)
- 3) Caruso S, Rapisarda AMC and Minona P (2020) Sexual activity and contraceptive use during social distancing and self- isolation in the COVID-19 pandemic. *European Journal of Contraception and Reproductive Health Care*. Taylor & Francis 25(6): 445–448. Available at: <https://doi.org/10.1080/13625187.2020.1830965>.

- 4) Dian Herawati, Dina Fitriana Rosyada, Rita Dian Pratiwi, E. N. W. (2020). Family Planning Services by Midwifery of Private Midwifery Practice in Yogyakarta During the Pandemic Period of Covid-19. *Jurnal Ilmu Kesehatan Masyarakat* 11 (July), 123-135
- 5) Intan Yusita, Novia R, dkk. Pendampingan Wanita Pasangan Usia Subur Dalam Penggunaan Kontrasepsi Sebagai Upaya Menekan Baby Booms Di Masa Pandemic Covid-19. *Jurnal Peduli Masyarakat*, Volume 2 No 4 Hal 181-186, Desember 2020
- 6) Kemkes RI. Profil Kesehatan Republik Indonesia. 2020. [www.kemkes.go.id](http://www.kemkes.go.id)
- 7) Nurjismi, E. (2020). Situasi Pelayanan Kebidanan pada Masa Pandemi COVID-19 dan Memasuki Era New-Normal. [https://www.ibi.or.id/media/Materi Webinar IBI -USAID Jalin Covid19/Seri 5 -10 Juni 2020/PDF 1 Emi 10 Juni USAID Jalin Situasi Pelayanan Kb Pada Masa Pandemi Covid-19 %26 Era New Normal](https://www.ibi.or.id/media/Materi%20Webinar%20IBI%20-%20USAID%20Jalin%20Covid19/Seri%205%20-%2010%20Juni%202020/PDF%201%20Emi%2010%20Juni%20USAID%20Jalin%20Situasi%20Pelayanan%20Kb%20Pada%20Masa%20Pandemi%20Covid-19%20-%20Era%20New%20Normal)
- 8) Undang-Undang Republik Indonesia No. 52 Tahun 2009 Tentang Perkembangan Kependudukan dan Pembangunan Keluarga. 2009.
- 9) Wagner BG, Choi KH and Cohen PN (2020) Decline in Marriage Associated with the COVID-19 Pandemic in the United States. *Socius* 6.
- 10) Wiknjosastro H. Ilmu Kebidanan Edisi Ketiga. Yayasan Bina Pustaka Sarwono Prawirohardjo Jakarta. 2010.
- 11) Witono, S. P. (2020). Kepesertaan Keluarga Berencana Pada Masa Awal Pandemi Covid-19 di Daerah Istimewa Yogyakarta. *Jurnal Kependudukan, Keluarga Dan Sumber Daya Manusia*, 1(2), 77–88. <https://doi.org/10.37269/pancanaka.v1i2.4>