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The Use Of Mobile Applications For Reproductive Health Education And Family Planning With Participatory Learning and Action (PLA) Method Among Couples Of Child-Bearing Age

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ABSTRACT
The rapid development of information technology has significantly affected various aspects of life, including reproductive health and family planning. One innovative approach in this area is the development of mobile apps specifically designed to help couples of childbearing age access accurate, practical, and easy-to-use information. This community service program is implemented to strengthen knowledge, attitudes, and practices related to reproductive health through the use of a mobile app that integrates three important features: a fertility calculator, a contraceptive method guide, and interactive discussions. The fertility calculator allows users to monitor the menstrual cycle, determine fertile and infertile periods, and support pregnancy planning and prevention of unwanted pregnancies. This contraceptive guide provides comprehensive information about the various methods available, including hormonal and non-hormonal options, along with their benefits, side effects, and suitability for a variety of health conditions. Discussion forums create a safe platform for couples to share experiences, ask questions, and receive support from peers and healthcare professionals. Together, these features are expected to increase users' confidence and independence in making decisions. This program uses a community approach, Participatory Learning and Action (PLA) model. A total of 25 couples of childbearing age participated in this program. The results showed a significant increase in participant knowledge, with the average score increasing from 55.2% before the intervention to 82.4% after the intervention. In conclusion, the use of mobile applications in reproductive health education and family planning has been shown to be effective in improving knowledge, attitudes, and behavior changes in couples of childbearing age.

Keywords **:** Couples Of Childbearing Age, Family Planning, Mobile Apps, Reproductive Health, PLA Method.

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INTRODUCTION

Reproductive health education and family planning are important aspects in improving the quality of life of couples of childbearing age. In Indonesia, major challenges in this area include the high rate of unplanned pregnancies, as well as the low understanding of reproductive health among the public. According to data from the National Population and Family Planning Agency, around 50% of total pregnancies in Indonesia are unplanned pregnancies, which can negatively impact maternal and child health (BKKBN, 2024)

Today's digital era makes it easy for users to learn new things and follow trends through various platforms and media available. The rapidly growing use of technology is changing the way people live in various aspects of life. (Putra, 2023). The convenience in this digital era brings many changes that occur which are part of the development of new media because it facilitates communication between humans and other humans. Social media helps users to access information, a medium of self-expression in various ways, as well as a medium of socialization, and others (Bimantoro et al., 2021)

Mobile apps offer high accessibility and ease of use, especially in today's digital era. According to a report by the Indonesian Internet Service Providers Association (APJII), internet penetration in Indonesia reaches 77% of the total population, with the majority of users being couples of childbearing age. This shows that mobile applications can reach the target audience more effectively (APJII, 2024) By providing accurate and relevant information through an easily accessible platform, it is hoped that couples of childbearing age can make better decisions regarding reproductive health and family planning.

Mobile apps can help couples plan their pregnancy better. The results of research using a fertility calculator can increase the chances of pregnancy by up to 30% for couples who are trying to conceive. In addition, the contraceptive guide provided in this app will provide information about the various methods of contraception available, as well as the advantages and disadvantages of each method (Retnaningtyas et al., 2020) A lack of understanding of contraception can significantly reduce the rate of unplanned pregnancies (Nisa et al., 2021).

Some examples of mobile applications that have fertility (ovulation) calculator features are: Ovulation Calculator, My Calender, Clue Period & Cycle Tracker, Flo Period & Ovulation Tracker, Glow Ovulation & Period Tracker, Ovia Fertility & Cycle Tracker, Eve Period Tracker, Ovulation Calendar and Fertility, and Pregnancy Due Date Calculator. JNK Mobile, SATUSEHAT can also be used by the community, having a significant positive impact, such as ease of access and acceleration of health services (Rifky & Jannatin, 2025). These apps help users track menstrual cycles, predict fertile periods, petrify pregnancy programs and even provide insights into overall reproductive health (Rully Fildansyah, 2023) Each type of application has different characteristics. In the application, the use must be adjusted to the needs of each user (Dinengsih & Hakim, 2020)

The presence of new media has created virtual spaces based on online communities. New media can be the answer to learning new things easily. New media provides a different way of communicating between fellow users or media presenters, so that users can interact with each other and obtain information easily and quickly (Salam, 2020). The development of this virtual community is greatly influenced by the rapid growth and development of the internet, so many groups take advantage of it to form a massive virtual community. The emergence of this virtual community has become a trend that allows humans to interact in virtual spaces together. In a virtual community, people with the same interests and curiosity can interact without meeting in person (Primin & Wibowo, 2023) Technological

developments have changed the way people communicate, one of which is as a medium to get information and communicate with unknown people (Suci et al., 2022)

Discussion forums in mobile applications are also an important feature that allows users to share experiences and ask questions directly to experts (Fikriati et al., 2020) Discussion forums can increase knowledge and understanding of reproductive health, as well as create a supportive community. A study showed that service provider results experienced that the use of CHAT-maternity-care was largely well received and considered beneficial in increasing their health literacy insights, increasing health literacy awareness, and encouraging easier, more comprehensive, and more structured estimates of parental health literacy. These findings underscore the importance of education, peer support, and organizational alignment for the wider adoption and implementation of CHAT maternity care (Vlassak et al., 2025)

For example, there is a community that provides a virtual space for women called Mobile Health Applications (mHealth). This discussion application has advanced and easy-to-use features, this application helps its users in various aspects of health, ranging from real-time monitoring of health conditions, Increasing Health Awareness and Education, Increasing Health Service Accessibility to increasing awareness of the importance of a healthy lifestyle. The feature also provides benefits such as Heart Rate and Activity Level Monitor, Sleep Pattern Tracking for Better Health, Diet and Nutrition Management, Daily Food Intake Recording, Suggestive Diet Plan Based on Individual Needs, Educational Content on Illness and Mental Health, Tips and Tricks for a Healthy Lifestyle, Online Medical Consultation Facilities, Access to Doctors and Health Specialists, Chat and Phone Services for Medical Consultation (Biostatistik et al., 2021)

Some mobile applications can serve as a contraceptive guide for the public (Suptiani et al., 2024) Some examples are the "Klik KB" application developed by BKKBN, as well as applications such as "Family Planning" which are available in English. In addition, there are also apps that focus on reminders to take birth control pills, such as "Lady Pill Reminder". Meanwhile, mobile platforms that can be used for health discussion and education include: Alodokter, Halodoc, KlikDokter, Good Doctor, and Satu Sehat Mobile. These platforms provide medical information, doctor consultations, and various health-related features that can be accessed through smartphones. The results of the study show that the WhatsApp application can be used as a medium for health education in adolescents by means of discussion (Sembada et al., 2022) With this interaction, it is hoped that couples of childbearing age will feel more comfortable discussing sensitive issues related to reproductive health, which are often taboo in society.

Therefore, the development of mobile applications that function as fertility calculators, contraceptive guides, and discussion forums can be an innovative solution to increase public knowledge and awareness about reproductive health, especially in couples of childbearing age in assisted village areas (Susanti et al., 2023) Based on this background, community service on the development of this mobile application is expected to make a real contribution to reproductive health education and family planning for couples of childbearing age in the assisted villages and throughout Indonesia. Through a technology-based approach, it is hoped that it can reduce the number of unplanned pregnancies, increase understanding of reproductive health, and provide support to couples of childbearing age in planning their families in a better and correct way.

METHODS

This activity uses a Community-Based Education approach by involving couples of childbearing age (PUS), midwives, health cadres, and village officials as active partners. This approach was chosen because it emphasizes the direct involvement of the community in the learning process, decision-making, and evaluation of activities so that the results are more in line with the real needs in the field. Specifically, the method used is Participatory Learning and Action (PLA). PLA is a participatory method that allows the community not only to be recipients of information, but also to play an active role in identifying problems, formulating solutions, trying, and evaluating results. The stages of implementing the activity include:

1. Coordination and Joint Planning.
   Initial discussions were held with village officials, midwives, and health cadres to agree on the objectives, forms of activities, and implementation times. At this stage, the PLA mapping technique is used, where participants and facilitators map reproductive health problems in the village, especially related to contraception, fertile cycle knowledge, and access to health information.
2. Pre-test (Baseline Assessment).
   Participants filled out questionnaires to measure initial knowledge about reproductive health, contraception, and the use of health apps. The results of the pre-test were used as a basis for comparison to assess the effectiveness of the intervention.
3. Application Education and Training (Participatory Learning).
   Education is carried out by interactive demonstration method. The facilitator introduced the application features (fertile period calculator, contraceptive guide, discussion forum), then participants in groups tried to use the application accompanied by midwives/cadres. Focus group discussions are used to explore experiences and barriers to use.
4. Trial and Assistance (Action).
   Participants were given the opportunity to use the application independently at home. During this period, they were facilitated through WhatsApp group chats to share experiences, ask questions, and give feedback. Midwives and cadres play the role of active companions.
5. Post-test and Participatory Reflection.
   After the trial period, participants again filled out a questionnaire (post-test) to measure the improvement in knowledge, attitude, and satisfaction. In addition, PLA reflection was carried out in the form of a joint discussion to evaluate the benefits of the application, the obstacles faced, and recommendations for improvement.
6. Evaluation and Follow-up.
   Pre-test and post-test results data were compared to assess the improvement in knowledge and attitudes. Qualitative analysis from reflection discussions was used to assess behaviour change, partner involvement (including husband), as well as the potential sustainability of the program.

By combining the Community-Based Education approach and the PLA method, these activities not only emphasize knowledge transfer through applications, but also encourage active community participation in the learning and decision-making process. The assessment process was carried out quantitatively (pre-test and post-test) and qualitatively (participatory reflection discussions), so that a comprehensive picture of the effectiveness of the intervention was obtained.

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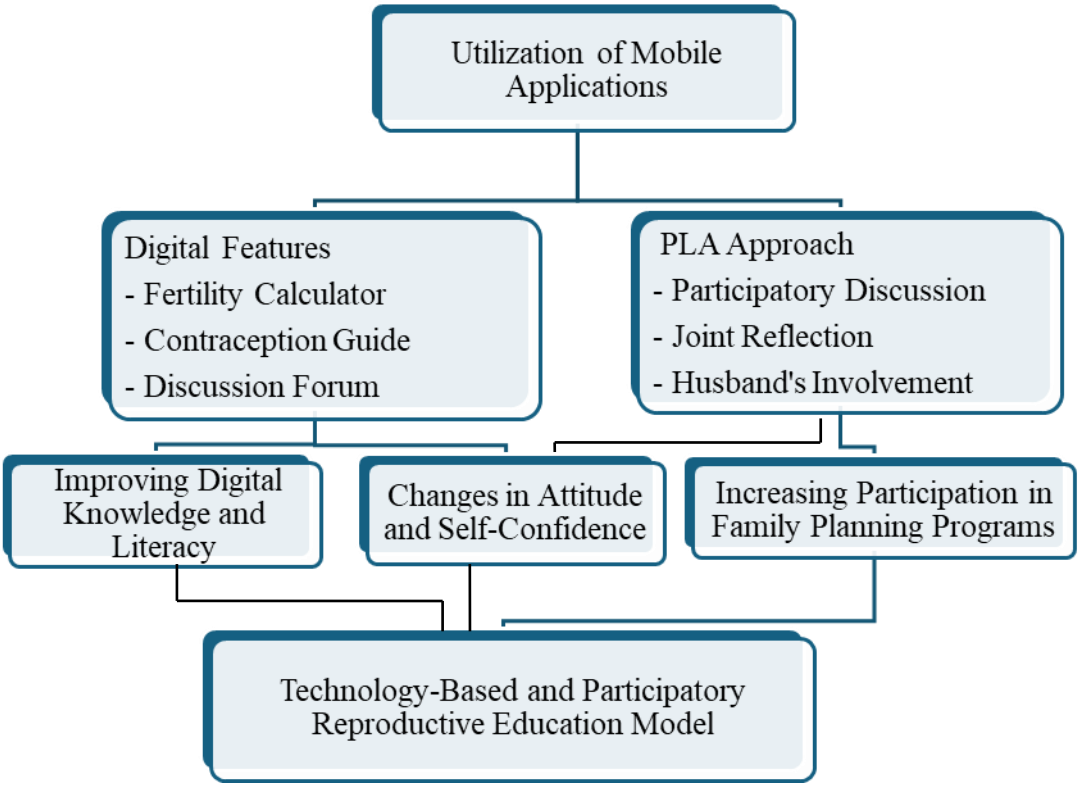

Figure 1. Conceptual model of digital applications – PLA approach – outcomes (knowledge, attitudes, participation)

A conceptual flowchart/model that illustrates the relationship between:
1. Digital applications (key features)
2. PLA approach (participatory discussion, reflection, husband's involvement) approach
3. Outcomes (knowledge, attitudes, participation)
4. Ultimate goal: Technology-based and participatory reproductive education model

RESULT

The implementation of activities with the Community-Based Education approach and the Participatory Learning and Action (PLA) method showed significant results in the childbearing age pairs (PUS) of the activity participants.

1. Pre-test and Post-test results
   a. In the pre-test stage, the average knowledge score of participants regarding reproductive health, contraception, and the use of health apps was 56.8% (medium category).
   b. After intervention through education, application trials, and mentoring, the post-test results showed an increase in the average score to 82.4% (good category).
   c. The analysis showed an increase of 25.6 points which indicates an increase in understanding after the activity.
2. Increased Knowledge.
   The majority of participants (80%) experienced an increased understanding of menstrual cycles, fertile periods, and variations in contraceptive methods. Participants

were also able to explain the benefits of using the application as a tool for pregnancy planning and the prevention of unwanted pregnancies.

3. Improved Access to Information.
   Through the app, participants can more easily access information about contraception and reproductive health. The WhatsApp Group-based discussion forum feature was also actively used by 68% of participants to ask questions to midwives/cadres and share experiences with other couples. This strengthens the function of the application as a means of digital literacy for health.
4. Changes in Attitudes and Behaviors.
   As many as 72% of participants stated that they were more confident in choosing and using contraceptive methods according to their needs. Reflective discussions with the PLA method also encourage the husband's involvement in family planning decision-making. Some couples report starting to routinely use the fertile period calculator feature to plan a pregnancy.
5. Increased Participation in Family Planning Programs.
   PLA activities facilitate participants to convey experiences, obstacles, and application improvement ideas. This participation strengthens the sense of ownership of the program. As many as 60% of participants expressed interest in continuing to use the application and inviting other couples in the village to participate in the family planning program.
6. Activity Documentation.
   Documentation in the form of photos during educational sessions, application training, small group discussions, and joint reflection activities have been collected as evidence of activities. This documentation demonstrates the active involvement of participants, especially in practical application usage sessions and PLA discussions that take place interactively.

Table 1. Comparison of pre-test and post-test results of knowledge, access to information, attitudes, and participation of couples of childbearing age after a mobile application intervention with the PLA approach

	Assessment Aspects	Pre-test (%)	Pasca-test (%)	Upgrade Description
	Reproductive health & contraceptive knowledge	56,8	82,4	Increase of 25.6 points
	Access information through the app	40,0	78,0	Faster and easier access
	Attitude & confidence in choosing contraception	47,0	72,0	More confident and confident
	Participation in family planning programs	38,0	60,0	Increased participation, including husband involvement

Overall, the use of mobile applications combined with the Participatory Learning and Action (PLA) method has been proven to be effective in increasing knowledge, expanding access to information, forming positive attitudes towards reproductive health, and increasing the participation of couples of childbearing age in family planning programs.

DISCUSSION

The main goal of this activity is to increase knowledge, attitudes, and participation of couples of childbearing age (PUS) related to reproductive health and family planning through the use of digital technology. The use of mobile applications has proven to be an effective means because it provides easy access to information, in accordance with the increasingly widespread trend of smartphone use in Indonesia (Haryanto, 2024). In the context of limited health services in the assisted villages, this application offers practical solutions to bridge the gap in information and access to reproductive services.

The results of the pre-test and post-test showed an increase in participants' knowledge by 25.6 points, accompanied by a more positive change in attitudes towards the selection of contraceptive methods. The application that features a fertile period calculator, contraceptive guide, and discussion forum not only expands access to information but also makes it easier for couples to make decisions related to family planning programs. The relationship between knowledge and the selection of contraceptives also has a meaningful relationship; the higher a person's knowledge, the more information will be received about the importance of family planning programs and contraceptives (Fahira, 2022)

The Participatory Learning and Action (PLA) approach makes an important contribution in strengthening the implementation of activities. Through small group discussions and participatory reflection, participants take an active role in identifying needs, trying out applications, and providing feedback. This process encourages the husband's involvement in family planning discussions, which previously tended to be more dominated by the wife. Male involvement is especially important given that contraceptive decisions are often influenced by social and cultural factors. The application has also been proven to increase community participation in family planning programs. Most of the participants expressed interest in continuing to use the application and invited other couples to participate. This shows the potential for sustainability and multiplication effects through peer-to-peer sharing (Allaham et al., 2022).

Several obstacles were identified. First, the variation in digital literacy causes some participants to need intensive assistance to be able to use the application optimally. Second, limited internet access in certain regions limits the full use of online discussion features. This challenge shows the need for a strategy to strengthen digital literacy through multi-level training and application adaptation so that it can be used offline in areas with limited connectivity (Hutapea et al., 2020).

Based on the results of the PLA's reflection, several recommendations can be submitted. First, application development needs to pay attention to a simple and user-friendly interface design so that it is easy to understand by people with low levels of digital literacy. Second, the involvement of the husband needs to be facilitated through special features that encourage discussion with the partner, such as reminders of contraceptive use or special forums for men. Third, the integration of the application with local health services will strengthen the sustainability of the program and ensure that the quality of information is maintained. Overall, the use of PLA-based mobile applications can be considered an effective strategy in improving reproductive health literacy and participation in family planning programs (Siwi, R.P.Y et al., 2023). With sustainable development, this approach has the potential to become a technology-based education model that is inclusive, participatory, and according to the needs of the community in various contexts, including remote areas (Laar et al., 2024).

This is also in line with data from the National Population and Family Planning Agency which states that a good understanding of contraception can reduce the number of unwanted pregnancies (BKKBN, 2021) In addition, 80% of respondents indicated that the change in knowledge was good, the change helped to understand the menstrual cycle, solved problems around fertility, was able to make decisions (Wahyuni et al., 2025) and reported that the fertility calculator helped them in determining the fertile period they experienced, planning the pregnancy better than before.

The discussion forums contained in their mobile applications also showed a positive impact. About 65% of active users participated in the trial on health discussion forums, which allowed them to share their experiences and gain social, emotional and psychosocial support from their spouses, other participants in the forum as well as midwives and health cadres. This condition creates a supportive community and shares knowledge, creating a safe and comfortable atmosphere for couples to share their experiences, feelings, and concerns related to reproductive health which is an important aspect of reproductive health education (Dewi Mira Putryani, 2025) The discussions that took place in the forum also provided new insights into various contraceptive and fertility methods that may not have been known to users before, such as male contraceptive methods, koyo and ring contraceptive methods (Wahyuni, 2017).

In the context of reproductive health, couples of childbearing age in Indonesia, which ranges from 15 to 49 years old (Wahyuni, C, 2023)(Khusuma et al., 2020) need to have access to appropriate and accurate information. According to data from the National Population and Family Planning Agency, there are around 65 million couples of childbearing age in Indonesia, most of whom still lack adequate education and information related to reproductive health (BKKBN, 2021) Further analysis, showed that the mobile app was more effective among couples of childbearing age 20-35 years, where 85% of this age group reported an increase in knowledge about reproductive health after using the app. These statistics show that the younger generation is more open to using technology in seeking health information (Maulida Rahmawati Emha & Liza Novitasari Wijaya, 2024) This reflects a global trend in which health apps are gaining popularity among younger generations, and shows great potential for future health education.

The development of mobile applications as a reproductive health and family planning education tool for couples of childbearing age is a very relevant and strategic step (Rahmidini & Hartiningrum, 2021) The development of a mobile application that focuses on fertility calculators, contraceptive guides, and discussion forums is an innovative step in improving reproductive health education and family planning for couples of childbearing age. In the context of Indonesia, where the birth rate is still quite high and access to reproductive health information is often limited, this application can be an effective and efficient solution.

The mobile app used includes three main features: a fertility calculator, a contraceptive guide, and a discussion forum. Fertility calculators are designed to assist couples in determining their fertile period, which is especially important for those who want to plan a pregnancy. The results of the pre and post tests show that understanding the menstrual cycle and the timing of ovulation can increase the chances of pregnancy by up to 30%. By using this app, couples can more easily track their menstrual cycles and predict their fertile periods, thus increasing the effectiveness of family planning. Through a fertility calculator, couples can better understand their ovulation cycle and fertile period. A better understanding of fertility can increase the couple's chances of better planning a pregnancy.

Thus, the app not only helps in pregnancy planning but also in preventing unwanted pregnancies.

The in-app contraceptive guide feature provides comprehensive information about the various contraceptive methods available, including the advantages and disadvantages of each. According to data from the Ministry of Health of the Republic of Indonesia, the rate of contraceptive use in Indonesia is still relatively low, especially among teenagers and young couples. With clear and easily accessible information, it is hoped that couples can make better decisions about the method of contraception that suits their needs. For example, many couples still do not understand the difference between hormonal and non-hormonal contraception, which can result in the choice of inappropriate method (Hasibuan & Pane, 2022) The contraceptive guide provided in this mobile app is also very important.

Based on a report from the World Health Organization (WHO), the proper use of contraceptives can reduce the rate of unwanted pregnancies and improve the health of mothers and children. Family planning offers many benefits. By helping individuals avoid unwanted pregnancies and plan births, the program reduces pregnancy-related health risks, especially for adolescent girls. In addition to health, family planning allows women to pursue education and employment opportunities, helping families and communities thrive (Goals, 2025) This app can provide accurate and up-to-date information about various accurate contraceptive methods, so couples can make more informed decisions according to their needs and conditions.

The discussion forum in this app serves as a platform for users to share experiences, ask questions, and discuss issues related to reproductive health. In line with research results showing that social support and peer information can improve understanding and acceptance of reproductive health issues (Murni et al., 2025) With this forum, couples not only get information from trusted sources, but also from the real experiences of others who may face similar situations. This can create a sense of community and mutual support among app users. The discussion forums in the app also provide a platform for couples to share experiences and gain support from fellow users. With this forum, users can exchange information, ask questions, and get answers from experts, thus improving their overall knowledge.

However, the use of this mobile-based application is not free from challenges. One of the main challenges is to ensure that the information conveyed is accurate and evidence-based, both by couples of childbearing age as users and also health workers as tutors. Therefore, profiders or application developers must collaborate with medical personnel and reproductive health experts, in presenting up to date and accurate mobile health application-based content. In addition, there needs to be efforts to increase digital literacy among couples of childbearing age, considering that not everyone has access to or the ability to use technology well. Information shows that internet penetration in Indonesia reaches 77%, but there is still a gap in the use of technology in rural and other remote areas.

Overall, the development of this mobile application is expected to make a significant contribution to increasing the knowledge and awareness of couples of childbearing age regarding reproductive health and family planning. By providing easy and quick access to relevant information, the app can assist couples in making better and healthier decisions in their reproductive lives. Through this technology-based approach, it is hoped that a healthier and empowered generation can be realized in planning their families. We hope that other mobile applications will continue to be developed and refined based on user feedback to meet the evolving needs of reproductive health education.

CONCLUSION

The development of this mobile application is expected to contribute significantly to increasing awareness and knowledge of couples of childbearing age about reproductive health and family planning. By providing easily accessible and understandable information, this application has the potential to reduce the number of unwanted pregnancies and improve the quality of life of couples of childbearing age.

REFERENCE

Allaham, S., Kumar, A., Morriss, F., Lakhanpaul, M., Wilson, E., Sikorski, C., Martin, J., Costello, A., Manikam, L., & Heys, M. (2022). Participatory learning and action (PLA) to improve health outcomes in high-income settings: A systematic review protocol. *BMJ Open*, *12*(2), 1–6. https://doi.org/10.1136/bmjopen-2021-050784

APJII. (2024). *Laporan Penetrasi Internet di Indonesia*. Jakarta. https://album.apjii.or.id/

Bimantoro, A., Pramesti, W. A., Bakti, S. W., Samudra, M. A., & Amrozi, Y. (2021). Paradoks Etika Pemanfaatan Teknologi Informasi di Era 5.0. *Jurnal Teknologi Informasi*, *7*(1), 58–68. https://doi.org/10.52643/jti.v7i1.1425

Biostatistik, J., Kesehatan, I., & Permatasari, A. D. (2021). Manfaat Penggunaan Mobile Health (m-Health) Dalam Pencatatan dan Pelaporan Kesehatan Ibu. *Jurnal Biostatistik, Kependudukan, Dan Informatika Kesehatan*, *1*(2). https://doi.org/10.7454/bikfokes.v1i2.1010

BKKBN. (2021). *Pedoman Pelayanan Kontrasepsi Dan Keluarga Berencana*. Direktorat Kesehatan Keluarga Kemenkes RI.

BKKBN. (2024). *Standar Data SIGA YAN KB*. https://siga.bkkbn.go.id/

Dewi Mira Putryani, M. A. L. (2025). Edukasi Keluarga Berencana (Kb) Dalam Meningkatkan Pengetahuan Tentang Pemilihan Alat Kontrasepsi Pada Wanita Usia Subur (Wus). *Jurnal Peduli Masyarakat*, *7*, 1–6.

Dinengsih, S., & Hakim, N. (2020). Pengaruh Metode Ceramah Dan Metode Aplikasi Berbasis Android Terhadap Pengetahuan Kesehatan Reproduksi Remaja. *Jurnal Kebidanan Malahayati*, *6*(4), 515–522. https://doi.org/10.33024/jkm.v6i4.2975

Fahira, T. R. (2022). Hubungan antara Pengetahuan Kesehatan Reproduksi dengan Persiapan Berkeluarga Mahasiswa Kesehatan Masyarakat Universitas Airlangga Tahun 2021. *Media Gizi Kesmas*, *11*(1), 182–190. https://doi.org/10.20473/mgk.v11i1.2022.182-190

Fikriati, N., Hapsari, A., Ardyawin, I., & Saleh, A. (2020). Information Sharing Behaviour in Social Media. *JIPER | Jurnal Ilmu Perpustakaan |*, *2*(2), 66–87.

Goals, S. D. (2025). World health statistics. In *Choice Reviews Online* (Vol. 49, Issue 12). https://doi.org/10.5860/choice.49-6620

Haryanto, A. T. (2024). *APJII Jumlah Pengguna Internet Indonesia Tembus 221 Juta Orang*. DetikInet. https://inet.detik.com/cyberlife/d-7169749/apjii-jumlah-pengguna-internet-indonesia-tembus-221-juta-orang

Hasibuan, S., & Pane, A. H. (2022). Hubungan Antara Tingkat Pengetahuan Ibu Dengan Pemilihan Kontrasepsi Di Puskesmas Sipiongot. *Ibnu Sina: Jurnal Kedokteran Dan Kesehatan - Fakultas Kedokteran Universitas Islam Sumatera Utara*, *21*(2), 138–144. https://doi.org/10.30743/ibnusina.v21i2.250

Hutapea, S., Silviani, I., & Agung, U. D. (2020). *1) 2) 1,2)*. *9*(1), 88–92.

Khusuma, A., Suhartiningsih, S., & Anasis, A. M. (2020). Efektifitas Belimbing Manis (Averrhoa Carambola Linn) sebagai Anti Hipertensi pada Pasien Hipertensi di

Puskesmas Metro Pusat, Kota Metro. *Titian Ilmu: Jurnal Ilmiah Multi Sciences*, *12*(2), 77–84. https://doi.org/10.30599/jti.v12i2.683

Laar, A. S., Harris, M. L., Khan, M. N., & Loxton, D. (2024). Views and experiences of young people on using mHealth platforms for sexual and reproductive health services in rural low-and middle-income countries: A qualitative systematic review. *PLOS Digital Health*, *3*(12), 1–20. https://doi.org/10.1371/journal.pdig.0000362

Maulida Rahmawati Emha, & Liza Novitasari Wijaya. (2024). Kesehatan Reproduksi: Efek Program Kelurga Berencana (Kb) Terhadap Wanita Usia Subur. *Jurnal Kesehatan Madani Medika*, *15*(1), 116–123. https://doi.org/10.36569/jmm.v15i01.374

Murni, N. S., Islami, I. M. R., Bansu, I. A., Khobibah, & Astuti, S. (2025). *Kesehatan Reproduksi: Kesuburan Dan Permasalahannya, Serta Peran Teman Sebaya*. https://repository.nuansafajarcemerlang.com/publications/591662/kesehatan-reproduksi-kesuburan-dan-permasalahannya-serta-peran-teman-sebaya

Nisa, R., Mawarni, A., & Winarni, S. (2021). Hubungan Beberapa Faktor dengan Kehamilan Tidak Diinginkan di Indonesia Tahun 2017 (Analisis Data Sekunder SDKI Tahun 2017). *Jurnal Riset Kesehatan Masyarakat*, *1*(2), 1–10. https://doi.org/10.14710/jrkm.2021.13314

Primin, B., & Wibowo, A. P. (2023). 5076-17573-2-Pb. *Jurnal Informatika: Jurnal Pengembangan IT*, *8*(2), 119–125.

Putra, R. S. (2023). Kajian Penerapan Teknologi Informatika pada Dunia Kesehatan. *AKADEMIK: Jurnal Mahasiswa Humanis*, *3*(3), 180–187. https://doi.org/10.37481/jmh.v3i3.813

Rahmidini, A., & Hartiningrum, C. Y. (2021). Analisis Kesesuaian Penggunaaan Alat Kontrasepsi Dengan Tujuan BerKB menggunakan Aplikasi e-KABE. *Jurnal Kebidanan Dan Keperawatan Aisyiyah*, *17*(1), 30–47. https://doi.org/10.31101/jkk.1732

Retnaningtyas, E., Astutik, F., Wati, A. F., & Malo, S. (2020). Analisis Kemampuan Aplikasi Metode Kalender Keluarga Berencana Wanita Usia Subur (WUS) Dalam Menentukan Masa Subur Di Puskesmas Balowerti Kota Kediri. *Journal for Quality in Women's Health*, *3*(1), 44–49. https://doi.org/10.30994/jqwh.v3i1.48

Rifky, P. M., & Jannatin, I. S. (2025). Kajian Literatur tentang Pengaruh Aplikasi Kesehatan Satusehat Mobile dan Mobile JKN terhadap Kesadaran Gaya Hidup Sehat di Indonesia (2019-2023). *Jurnal Penelitian Inovatif*, *5*(1), 327–352. https://doi.org/10.54082/jupin.920

Rully Fildansyah. (2023). Pengaruh Penggunaan Aplikasi Mobile Health (Health) dan Fitur Pemantauan Kesehatan Terhadap Gaya Hidup Sehat. *Jurnal Multidisiplin West Science*, *2*(06), 473–482. https://doi.org/10.58812/jmws.v2i6.431

Salam, O. D. (2020). Personal Branding Digital Natives di Era Komunikasi Media Baru (Analisis Personal Branding di Media Sosial Instagram). *Business Economic, Communication, and Social Sciences (BECOSS) Journal*, *2*(1), 19–30. https://doi.org/10.21512/becossjournal.v2i1.6070

Sembada, S. D., Pratomo, H., Fauziah, I., Amani, S. A., Nazhofah, Q., & Kurniawati, R. (2022). Pemanfaatan Media Online Sebagai Sarana Edukasi Kesehatan Pada Remaja : Tinjauan Literatur. *PREPOTIF : Jurnal Kesehatan Masyarakat*, *6*(1), 564–574. https://doi.org/10.31004/prepotif.v6i1.3110

Siwi, R.P.Y, E. R., Wulandari1, A., Rohmah1, M., Tsalatsatul, R., Mufida1, Astikasari1, N. D., Putri1, A. B., Khusna1, C. A., & Dhanik Rita Widhiatut. (2023). Edukasi Nutrisi Ibu Hamil Untuk Tumbuh Kembang Optimal Bayi. *Jurnal Inovasi Dan Pengabdian*

Masyarakat Indonesia, *2*(3 juli 2023), 19–22.

Suci, D. N., Basthomi, Y., Cahyono, B. Y., Anugerahwati, M., Masuara, F., & Anggraini, M. P. (2022). How Do Vocational Students Perceive the Use of Telegram for their Online Reading Comprehension? *Hermes (Denmark)*, *62*, 127–139. https://doi.org/10.7146/HJLCB.VI62.128116

Suptiani, L. P., Rohmatin, E., & Alvianika, V. (2024). Upaya Edukasi Melalui Aplikasi Android " Pilih Kontrasepsi IUD " (PK IUD) Sebagai Alat Bantu. *Jurnal Kebidanan Poltekkes Kemenkes Tasikmalaya*, 24–32.

Susanti, S., Flora, R., & Zulkarnain, M. (2023). Pengaruh Teknologi Digital Terhadap Peningkatan Kesehatan Reproduksi Perempuan. *Electronic Journal Scientific of Environmental Health And Disease*, *3*(2), 143–153. https://doi.org/10.22437/esehad.v3i2.27656

Vlassak, E. M. E., Keulen, J. K. J., Miteniece, E., de Ritter, R., Hendrix, M. J. C., & Nieuwenhuijze, M. J. (2025). Care Providers' and Parents' Experiences with Implementing the Conversational Health Literacy Assessment Tool (CHAT)-Maternity-Care in the Netherlands: A Mixed Methods Study. *Healthcare (Switzerland)*, *13*(10), 1–20. https://doi.org/10.3390/healthcare13101173

Wahyuni, C, dkk. (2023). *Buku Ajar Pelayanan Keluarga Berencana*. Mahakarya Citra Utama Group. https://scholar.google.com/citations?view_op=view_citation&hl=id&user=gOows9AAAAAJ&citation_for_view=gOows9AAAAAJ:TQgYirikUcIC

Wahyuni, C. (2017). *Buku Ajar Kesehatan Reproduksi dan Keluarga Berencana*. Strada Press. https://scholar.google.com/citations?view_op=view_citation&hl=id&user=gOows9AAAAAJ&cstart=20&pagesize=80&citation_for_view=gOows9AAAAAJ:IjCSPb-OGe4C

Wahyuni, C., Nita Dwi Astikasari, & Retno Palupi Yoni Siwi. (2025). Improving Women's Reproductive Health Through Complementary Midwifery: Menstrual Well-being Education and Digital-Based Holistic Therapy. *Jurnal Masyarakat*, *1*(2), 69–75. https://doi.org/10.63425/ljm.v1i2.67