

Implementation Of Community-Based Health Education To Improve Healthy Lifestyle Behaviors Among Hormonal Contraceptive Users

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Abstrak

Akseptor kontrasepsi hormonal sering mengalami berbagai keluhan yang dipengaruhi tidak hanya oleh penggunaan kontrasepsi, tetapi juga oleh perilaku hidup sehat yang belum optimal. Rendahnya pengetahuan mengenai pola makan bergizi seimbang, aktivitas fisik, manajemen stres, dan pola tidur yang baik dapat memengaruhi kualitas hidup serta persepsi akseptor terhadap penggunaan kontrasepsi hormonal. Kegiatan pengabdian kepada masyarakat ini bertujuan mengimplementasikan edukasi berbasis komunitas untuk meningkatkan perilaku hidup sehat pada akseptor kontrasepsi hormonal di Desa Tondomulyo, Jakenan, Pati. Metode yang digunakan adalah edukasi berbasis komunitas dengan pendekatan partisipatif melalui ceramah interaktif, diskusi kelompok, tanya jawab, berbagi pengalaman, dan demonstrasi aktivitas fisik ringan serta teknik relaksasi. Kegiatan diikuti oleh 20 akseptor kontrasepsi hormonal. Evaluasi dilakukan menggunakan pre-test dan post-test untuk mengukur pengetahuan peserta, serta lembar komitmen perilaku hidup sehat yang diisi setelah kegiatan. Hasil menunjukkan bahwa rata-rata skor pengetahuan meningkat dari 59,3 sebelum edukasi menjadi 85,9 setelah edukasi atau mengalami peningkatan sebesar 26,6 poin. Selain itu, sebanyak 95% peserta berkomitmen menerapkan pola makan bergizi seimbang, 90% melakukan aktivitas fisik secara teratur, 85% mengelola stres, 80% memperbaiki pola tidur, dan seluruh peserta (100%) bersedia mengikuti edukasi kesehatan lanjutan. Implementasi edukasi promotif berbasis komunitas terbukti efektif dalam meningkatkan pengetahuan serta mendorong komitmen peserta untuk menerapkan perilaku hidup sehat. Kegiatan serupa perlu dilaksanakan secara berkelanjutan dan diintegrasikan ke dalam pelayanan keluarga berencana guna mendukung peningkatan kualitas hidup dan kesehatan reproduksi akseptor kontrasepsi hormonal.

Kata Kunci: Edukasi Promotif; Perilaku Hidup Sehat; Kontrasepsi Hormonal; Promosi Kesehatan; Pengabdian Masyarakat.

Abstract

Hormonal contraceptive users frequently experience various health complaints that are influenced not only by contraceptive use but also by inadequate healthy lifestyle practices. Limited knowledge regarding balanced nutrition, regular physical activity, stress management, and healthy sleep habits may affect quality of life and women's perceptions of hormonal contraceptive use. This community service program aimed to implement a community-based promotive education program to improve healthy lifestyle behaviors among hormonal contraceptive users in Tondomulyo, Jakenan, Pati. A participatory educational approach was employed through interactive lectures, group discussions, question-and-answer sessions, experience sharing, and demonstrations of light physical exercise and relaxation techniques. The program involved 20 hormonal contraceptive users. Program evaluation was conducted using pre-test and post-test assessments to measure participants' knowledge, followed by a healthy lifestyle commitment questionnaire completed after the educational session. The results demonstrated that the mean knowledge score increased from 59.3 before the intervention to 85.9 after the intervention, representing a 26.6-point improvement. Furthermore, 95% of participants committed to adopting a balanced diet, 90% committed to engaging in regular physical activity, 85% committed to practicing stress management, 80% committed to improving sleep quality, and all participants (100%) expressed willingness to participate in future health education programs. The implementation of community-based promotive education was effective in improving participants' knowledge and strengthening their commitment to adopting healthy lifestyle behaviors. Continuous implementation and integration of similar educational programs into routine family planning services are recommended to support better reproductive health and quality of life among hormonal contraceptive users.

Keywords: Community Service; Health Promotion; Healthy Lifestyle Behavior; Hormonal Contraceptive Users; Promotive Education.

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INTRODUCTION

The Family Planning program is one of Indonesia's national strategic initiatives aimed at improving reproductive health, reducing unintended pregnancies, and promoting family well-being. Hormonal contraceptive methods, including injectable contraceptives, oral contraceptive pills, and implants, remain the most widely used contraceptive options among women of reproductive age because of their high effectiveness, ease of use, and reliable pregnancy prevention (BKKBN, 2021). The widespread utilization of hormonal contraceptives reflects their important role in family planning services throughout Indonesia. Nevertheless, hormonal contraceptive users frequently report various subjective complaints, such as weight gain, fatigue, mood changes, and sleep disturbances. These complaints are often attributed solely to contraceptive use, although an individual's health status is also strongly influenced by the healthy lifestyle practices adopted in daily life (Sembiring, 2019).

Healthy lifestyle behavior is a fundamental determinant of health, physical fitness, and overall quality of life. Maintaining a balanced diet, engaging in regular physical activity, obtaining adequate rest, managing stress effectively, and avoiding health-risk behaviors are essential components of a healthy lifestyle that contribute to optimal physiological function (RI, 2022). Among hormonal contraceptive users, adopting healthy lifestyle behaviors can facilitate physiological adaptation to hormonal changes, thereby reducing the occurrence of common complaints associated with contraceptive use. Therefore, healthy lifestyle practices should be integrated into family planning services to optimize both reproductive health and overall well-being (Prastika et al., 2019).

Previous studies have indicated that healthy lifestyle practices among women of reproductive age remain suboptimal. Limited health literacy, inadequate access to accurate health information, and misconceptions regarding the side effects of hormonal contraception often prevent users from distinguishing between lifestyle-related health problems and the physiological effects of contraceptive use. These conditions may negatively affect contraceptive adherence, reduce confidence in hormonal contraceptive methods, and increase the likelihood of contraceptive discontinuation. Furthermore, adequate knowledge of reproductive health and healthy lifestyle behaviors has been shown to be associated with the development of positive attitudes toward maintaining personal health (Pasulu et al., 2023; Rahayu & Putri, 2025).

Health promotion is recognized as an effective strategy for empowering individuals and communities to understand, manage, and improve the factors influencing their health. Health promotion extends beyond increasing knowledge by fostering awareness, positive attitudes, motivation, and the capacity to adopt healthy lifestyle behaviors independently. Through systematic

and continuous health education, individuals are expected to make informed health-related decisions that ultimately improve their quality of life (Putra, 2025; Wardani, 2023).

Community-based education has emerged as an effective health promotion strategy because it is implemented according to the characteristics, needs, and health problems of the target population. This approach positions community members as active participants in the learning process through interactive discussions, experience sharing, collaborative problem-solving, and practical demonstrations that can be applied in everyday life. Active participant involvement has been shown to improve understanding, strengthen motivation, and facilitate sustainable health behavior change more effectively than conventional lecture-based health education (Rombeallo, 2025).

Based on a preliminary needs assessment conducted among hormonal contraceptive users in Tondomulyo Village, Jakenan District, Pati Regency, Central Java, Indonesia, it was found that most participants had limited knowledge regarding healthy lifestyle practices. Many participants reported insufficient physical activity, unbalanced dietary habits, inadequate stress management, and poor awareness of the importance of sleep quality in maintaining health. In addition, many participants believed that all health complaints experienced during hormonal contraceptive use were solely caused by the contraceptive method itself without considering the influence of daily lifestyle behaviors. These findings indicate the need for a more participatory promotive educational intervention to enhance the capacity of hormonal contraceptive users to maintain their health.

Based on these findings, this community service program was implemented through community-based health education to promote healthy lifestyle behaviors among hormonal contraceptive users in Tondomulyo Village, Jakenan District, Pati Regency. The program aimed to improve participants' knowledge, foster positive attitudes, and encourage the adoption of healthy lifestyle behaviors, including balanced nutrition, regular physical activity, effective stress management, and adequate sleep as essential components of reproductive health and quality of life. Furthermore, this program is expected to serve as a sustainable community-based health promotion model that can be integrated into routine family planning services.

METHOD

This community service program employed a community-based health education approach to promote healthy lifestyle behaviors among hormonal contraceptive users. The program was conducted in Tondomulyo Village, Jakenan District, Pati Regency, involving 20 hormonal contraceptive users who were using injectable contraceptives, oral contraceptive pills, or contraceptive implants. Prior to implementation, coordination was carried out with local stakeholders to determine the schedule, venue, and technical arrangements of the program. At the initial stage, participants completed a demographic information form that included age, type of contraceptive

method used, educational level, and occupation. A pre-test was subsequently administered to assess participants' baseline knowledge regarding healthy lifestyle behaviors during hormonal contraceptive use.

The educational intervention was delivered through face-to-face participatory learning methods, combining interactive lectures, group discussions, question-and-answer sessions, experience sharing, and practical demonstrations of light physical exercise and relaxation techniques. The educational content emphasized balanced nutrition, regular physical activity, stress management, healthy sleep habits, and the importance of adopting healthy lifestyle behaviors to support reproductive health among hormonal contraceptive users. Throughout the program, participants were encouraged to share their experiences and discuss challenges encountered during contraceptive use, creating a two-way learning process that was responsive to the community's needs and local context.

Program evaluation was conducted using a quantitative descriptive approach. Participants' knowledge was measured through a post-test administered after the educational session and compared with the pre-test results to determine changes in knowledge levels. In addition, participants completed a Healthy Lifestyle Commitment Form, which assessed their willingness to adopt balanced dietary practices, engage in regular physical activity, manage stress effectively, improve sleep quality, and participate in future health education activities. The collected data were analyzed descriptively and presented as frequencies, percentages, mean scores, minimum values, and maximum values.

The success of the program was evaluated based on several indicators, including improvements in participants' mean knowledge scores following the educational intervention, active participation throughout the program, and participants' commitment to adopting healthy lifestyle behaviors in their daily lives. As a follow-up strategy, each participant received an educational leaflet to reinforce key health messages, while healthcare providers in Tondomulyo Village, Jakenan District, Pati Regency were encouraged to integrate healthy lifestyle education into routine family planning services to promote sustained behavioral change and improve reproductive health outcomes.

RESULT AND DISCUSSION

The community-based health education program was successfully implemented in Tondomulyo Village, Jakenan District, Pati Regency, involving 20 hormonal contraceptive users. All participants completed the entire program, including baseline data collection, the pre-test, educational sessions, interactive discussions, practical demonstrations, the post-test, and the healthy lifestyle commitment assessment. The results are presented in three sections: participants' characteristics, changes in knowledge before and after the educational intervention, and participants' commitment to adopting healthy lifestyle behaviors following the program.

Table 1. Characteristics of Participants

Characteristics	Frequency (n)	Percentage (%)
Age		
20–30 years	6	30
31–40 years	9	45
>40 years	5	25
Type of Hormonal Contraceptive		
Injectable	11	55
Oral contraceptive pills	5	25
Implant	4	20
Educational Level		
Primary/Junior High School	5	25
Senior High School	10	50
College/University	5	25
Occupation		
Homemaker	12	60
Self-employed	5	25
Employee	3	15
N=20		

The program involved 20 hormonal contraceptive users, with the majority aged 31–40 years (45%). Injectable contraceptives were the most commonly used method (55%), followed by oral contraceptive pills (25%) and implants (20%). Regarding educational attainment, half of the participants had completed senior high school (50%), while most participants were homemakers (60%). These findings indicate that the target population consisted primarily of women of reproductive age who could substantially benefit from community-based health education aimed at promoting healthy lifestyle behaviors.

Table 2. Comparison of Participants' Knowledge Scores Before and After the Educational Intervention

Variable	Pre-test	Post-test
Mean score	59.3	85.9
Minimum score	50	75
Maximum score	70	95
Mean improvement	26.6 points	

The evaluation demonstrated a marked improvement in participants' knowledge following the community-based health education program. The mean knowledge score increased from 59.3 before the intervention to 85.9 after the intervention, representing an average improvement of 26.6 points. In addition, the minimum score increased from 50 to 75, while the maximum score improved from

70 to 95. These findings indicate that the educational intervention effectively enhanced participants' understanding of healthy lifestyle behaviors during hormonal contraceptive use.

Table 3. Participants' Commitment to Adopting Healthy Lifestyle Behaviors After the Educational Intervention

Indicator	Frequency (n)	Percentage (%)
Willing to adopt a balanced diet	19	95
Willing to engage in at least 30 minutes of physical activity per day	18	90
Willing to practice stress management	17	85
Willing to improve sleep quality	16	80
Willing to participate in future health education programs	20	100

In addition to the improvement in knowledge, the educational intervention also strengthened participants' commitment to adopting healthy lifestyle behaviors. Nearly all participants expressed their willingness to follow a balanced diet (95%) and engage in regular physical activity (90%). The majority also committed to practicing stress management (85%) and improving sleep quality (80%). Furthermore, all participants (100%) expressed their willingness to participate in future health education programs, indicating a high level of motivation to sustain healthy lifestyle practices beyond the intervention.

The findings of this community-based activity demonstrated that the implementation of promotive health education effectively improved the knowledge of hormonal contraceptive users regarding healthy lifestyle practices. This was evidenced by an increase in the participants' mean knowledge score from 59.3 in the pre-test to 85.9 in the post-test, representing an improvement of 26.6 points. In addition to the increase in the mean score, the minimum score increased from 50 to 75, while the maximum score rose from 70 to 95. These findings indicate that the educational materials delivered through the promotive education approach were well received and effectively understood by the participants. The observed improvement in knowledge suggests that health education tailored to community needs can strengthen participants' understanding of the importance of maintaining a balanced nutritious diet, engaging in regular physical activity, managing stress effectively, and practicing healthy sleep habits while using hormonal contraceptives (Putra, 2025; Wardani, 2023).

These findings are consistent with the concept of health promotion, which posits that increasing knowledge is the first step in the process of health behavior change. According to the WHO (2022), health promotion aims to empower individuals and communities to gain greater control over the determinants of their health by enhancing health literacy and strengthening individual capacity

(WHO, 2022). Nutbeam (2021) further explains that adequate health literacy enhances an individual's ability to access, understand, evaluate, and apply health information in making appropriate health-related decisions. Therefore, the increased knowledge achieved by participants in this activity constitutes an important foundation for the development of sustainable healthy lifestyle behaviors (Nutbeam, 2025). These findings are also consistent with the study by Pasulu et al. (2023), which reported that greater knowledge among contraceptive users is associated with more positive attitudes toward contraceptive use.

In addition to improving knowledge, the program successfully fostered participants' commitment to adopting healthy lifestyle behaviors following the educational intervention. Nearly all participants expressed their willingness to maintain a balanced nutritious diet (95%), engage in regular physical activity (90%), manage stress effectively (85%), improve their sleep patterns (80%), and participate in future health education activities (100%). This commitment indicates that the educational intervention not only provided additional knowledge but also enhanced participants' motivation to initiate positive changes in their daily habits. Within the context of health promotion, the emergence of such commitment represents an early indicator that participants have developed a readiness to adopt healthier behaviors, thereby increasing the likelihood of sustained behavioral change over time (Rahayu & Putri, 2025; Schwarz, 2019).

The improvement in participants' commitment can be explained by Social Cognitive Theory, which emphasizes that behavior change is influenced by the dynamic interaction among knowledge, personal experience, social environment, and individuals' beliefs in their own capabilities (Bandura, 2020). Through interactive discussions and the sharing of personal experiences, participants were provided with opportunities to learn from one another while strengthening their confidence in adopting healthy lifestyle behaviors. This approach also enhanced participants' self-efficacy, as they not only received information from facilitators but also observed real-life experiences shared by peers facing similar circumstances. These findings are consistent with those reported by McKenzie et al., who found that behavior-based educational interventions effectively improve community motivation and adherence to sustainable healthy lifestyle practices (McKenzie et al., 2005).

The success of this program was also influenced by the application of a community-based educational approach that positioned participants as active agents in the learning process. Unlike conventional one-way health education sessions, this participatory approach enabled participants to identify health-related issues, discuss potential solutions, and exchange experiences relevant to their daily lives. Such interactions created a more engaging learning environment, facilitating better understanding and internalization of the educational content. Previous studies have demonstrated that community-based interventions are more effective in improving health literacy, promoting

community participation, and sustaining long-term behavioral change than educational approaches that primarily focus on information dissemination (O'Mara-Eves et al., 2015; Rombeallo, 2025).

Despite the positive outcomes, several limitations should be acknowledged. The relatively small number of participants limits the generalizability of the findings to the broader population of hormonal contraceptive users. Furthermore, the evaluation was conducted immediately after the educational intervention, preventing assessment of the long-term sustainability of the participants' healthy lifestyle behaviors. Therefore, community-based promotive health education should be integrated into family planning services through continuous mentoring and periodic reinforcement by healthcare professionals, particularly midwives. Such an approach is expected not only to improve knowledge but also to sustain long-term behavioral change, thereby contributing to improved quality of life, enhanced reproductive health, and the long-term success of family planning programs.

CONCLUSION

The implementation of community-based promotive health education demonstrated a positive impact on improving knowledge and encouraging healthy lifestyle behavior among hormonal contraceptive users. The evaluation results showed a significant increase in participants' mean knowledge scores following the educational intervention, indicating that the participatory approach comprising interactive lectures, group discussions, demonstrations, and experience sharing was effective in enhancing participants' understanding of the importance of maintaining a balanced nutritious diet, engaging in regular physical activity, managing stress effectively, and practicing healthy sleep habits.

Beyond improving knowledge, the program successfully fostered participants' commitment to adopting healthy lifestyle behaviors in their daily lives. The community-based approach provided opportunities for participants to exchange experiences, discuss challenges, and identify practical solutions tailored to their individual circumstances, thereby creating a more meaningful and engaging learning process. Therefore, community-based promotive health education represents an effective strategy for strengthening promotive and preventive efforts within family planning services while contributing to improved quality of life and reproductive health among hormonal contraceptive users.

The positive outcomes of this program suggest that community-based promotive health education should be implemented continuously and integrated into routine family planning services at healthcare facilities. Healthcare professionals, particularly midwives, are encouraged to incorporate healthy lifestyle education into regular counseling sessions for hormonal contraceptive users so that improvements in knowledge can be translated into sustained behavioral change. Furthermore, future community engagement programs should involve larger and more diverse

participant groups, provide periodic follow-up support, and include long-term evaluations of behavioral outcomes to comprehensively assess the effectiveness and sustainability of the intervention.

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