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Original Research Article

A study on attitude of contraceptive method users towards newer contraceptive method (ormeloxifene)

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ABSTRACT

Background: This study aimed to asses user attitudes towards newer contraceptive method-Chhaya (ormeloxifene). It assessed the frequency of use, side effects, discontinuation rates, fertility return, and user satisfaction, providing insights into how this method is perceived and experienced.
Methods: The study was conducted from June 2022 to June 2024 at GSVM Medical College, Kanpur, and included 200 women of reproductive age. Participants were recruited from the outpatient department and postpartum wards, with data collected on demographics, reproductive health, contraceptive side effects, and satisfaction using a standardized questionnaire. Statistical analyses, including chi-square and Pearson's correlation tests, were applied using Origin Pro software.
Results: Chhaya users accounted for 9.558% of total OPD attendance. Fertility return was quicker with 46.66% regaining fertility within 6 months of discontinuation. Major side effects -among study participants were delayed cycles (26.92%) and breast tenderness (23.07%). Discontinuation rates were found to be 19.71% discontinuing after 3 months. Satisfaction levels with 32.5% very satisfied were found in the study participants.
Conclusions: Chhaya was associated with a quicker return to fertility, fewer severe side effects, and higher user satisfaction.

Keywords: Chhaya, Contraceptives, Discontinuation rates, Side effects, User satisfaction

INTRODUCTION

In 2021, among the 1.9 billion women of reproductive age (15-49 years) globally, 1.1 billion required family planning, with 874 million using modern contraceptives and 164 million facing unmet needs[1]. Over the past two decades, the demand for family planning has grown significantly, from 900 million women in 2000 to nearly 1.1 billion in 2021.[1] During this period, the number of women using modern contraceptives increased from 663 million in 2000 to 851 million in 2020, with an additional 70 million expected by 2030.[2] The global contraceptive prevalence rate for women aged 15-49 also rose, from 47.7% to 49.0%.[2] In 2022, 77.5% of women had their family planning needs met by modern methods, a 10% increase since 1990.[3]

The use of modern contraceptives serves as a key indicator of reproductive health and the effectiveness of family planning (FP) programs. Proper use of modern contraceptives has the potential to reduce maternal deaths by about 32% and prevent 90% of deaths related to unsafe abortions globally.[2,4] Between 1990 and 2019, the number of women of reproductive age (15-49 years) using contraceptives increased from 554 million to 922 million, resulting in a decline in global fertility rates from 3.2 to 2.5 live births per woman.[5] This rise in contraceptive use has been largely attributed to various FP interventions, reinforcing FP as a valuable public health measure and a viable investment.[5]

This study aims to assess user attitudes towards the newer contraceptive ormeloxifene. It will evaluate the frequency

of use, side effects, failure rates, reasons for discontinuation, and levels of user satisfaction with these contraceptives. Understanding these aspects will help improve reproductive health services and inform public health strategies.

METHODS

The study was conducted from June 2022 to June 2024 at GSVM Medical College, Kanpur. The participants were recruited from the outpatient department (OPD) and postpartum wards of the Department of Obstetrics and Gynaecology. The study targeted women aged 18-49 years, selected through random sampling. Ethical approval was granted by the Institutional Ethics Committee, and informed consent was obtained from all participants.

Study participants

The sample size was calculated using a comparison of proportions, assuming an 87% knowledge rate for Chhaya contraceptive methods. To account for potential non-response, 200 women were recruited in this study. To enhance internal validity, random sampling was employed, and external validity was supported by the real-world clinical setting. Data were collected and anonymized, and confidentiality was maintained by secure storage accessible only to authorized personnel.

Methodology

A comprehensive medical history was obtained from all participants, covering essential demographic and reproductive health variables. These variables included the participant's age, gravidity (the number of pregnancies, including the current one), and parity (the number of times the woman had given birth to a viable fetus). The number of living children, the participant's age at marriage, and the age at first birth were also recorded. Social factors like residence (urban or rural), socioeconomic status (classified into low, middle, or upper categories), employment status (housewife or working), and family type (nuclear or joint) were captured. Additionally, reproductive health information was gathered, including menstrual regularity (regular or irregular cycles), breastfeeding status, place of the last delivery (home or institutional), number of abortions, and the participant's desire for more children.

Before enrolling in the study, participants received a thorough explanation of the contraceptive methods being evaluated: Chhaya (ormeloxifene), a non-hormonal oral contraceptive.

Data collection was standardized using a self-designed and expert-validated questionnaire. This questionnaire covered various aspects of the participants' demographic and reproductive health information. To assess attitudes toward contraceptive use, a 5-point Likert scale was employed, with responses ranging from "very dissatisfied" to "very satisfied." The scale was used to gauge participants' satisfaction with their chosen contraceptive method, as well as their experience with any side effects. The study's design ensured a structured and systematic approach, allowing researchers to capture data consistently and minimize variability in responses.

Participants were followed up at regular intervals to assess the continued use of their chosen contraceptive method, side effects, and overall satisfaction. The first follow-up occurred after three months, during which researchers confirmed whether Chhaya users had returned their empty blister packs and tracked any menstrual irregularities such as delayed cycles or amenorrhea.

A second follow-up was scheduled after six months, where participants were again asked about their satisfaction levels and any new or persistent side effects since the previous follow-up. In addition to assessing contraceptive use, researchers also evaluated any changes in the participants' fertility desires. Participants who discontinued the use of either method were monitored for the return of fertility, as indicated by the resumption of regular menstrual cycles or successful conception.

RESULTS

The present was conducted on total of 200 for Chhaya. The required data was collected using a study proforma. The collected data was analysed using origin pro software, the findings of the study are summarized in the following tables.

Table 1: Estimation of Chhaya frequency in the current study.

Parameters	This study (Chhaya)
OPD attendance (TP)	22838
Chhaya users (C)	2183
Formula used	CPR = C/TP Ã X 100
Frequency	9.56%

Chhaya frequency in the current study

The frequency of contraceptive use in the current study was calculated using the formula CPR = C/TP×100, where C represents the number of contraceptive users, and TP is the total OPD attendance. Out of 22,838 women attending the OPD, 2,183 were using Chhaya, resulting in a contraceptive prevalence rate (CPR) of 9.558% for Chhaya users.

Table 2: Distribution of participants based on their age range for Chhaya.

Age (years)	Chhaya (N)	Chhaya (%)
17-25	76	38
26-35	114	57
>35	10	5

Table 3: Distribution of living children for Chhaya.

Number of living children	Chhaya (N)	Chhaya (%)
0	3	1.5
1	90	45
2	77	38.5
3	22	11
4	7	3.5
5	1	0.5

Table 4: Parity distribution for Chhaya.

Parity	Chhaya (N)	Chhaya (%)
0	1	0.5
1	86	43
2	79	39.5
3	25	12.5
4	7	3.5
5	2	1

Table 5: Distribution of living children for Chhaya.

Characteristics	Chhaya (N)	Chhaya (%)
Total users who want future pregnancy	135	100
Return of fertility after 6 months of discontinuation	63	46.66
Return of fertility after 9 months of discontinuation	47	34.82
Return of fertility after 12 months of discontinuation	25	18.52

Table 6: Side effects of Chhaya.

Side effects	Chhaya (N)	Chhaya (%)
Delayed cycle	7	26.92
Decreased menstrual blood flow	2	7.69
Abdominal pain	3	11.5
Gastritis	3	11.5
Body ache	2	7.69
Breast tenderness	6	23.07
Weight gain	1	3.84
Vaginal discharge	2	7.69

Table 7: Distribution of discontinuation rates for Chhaya.

Characteristics	Chhaya (N)	Chhaya (%)
Discontinuation after 3 months	14	19.71
Discontinuation after 6 months	24	33.8
Discontinuation after 9 months	12	16.9
Discontinuation after 12 months	21	29.57

Table 8: Distribution of level of satisfaction of participants by Likert scale for Chhaya.

Level of satisfaction	Chhaya (N)	Chhaya (%)
Very dissatisfied	0	0
Dissatisfied	0	0
Neither dissatisfied nor satisfied	35	17.5
Satisfied	100	50
Very satisfied	65	32.5

DISCUSSION

This study assess contraceptive Chhaya, by examining usage patterns, side effects, discontinuation rates, satisfaction levels, and fertility return among 200 women of reproductive age.

The contraceptive prevalence rates (CPR) calculated in this study showed that Chhaya users made up 9.558% of the total female outpatient department (OPD) attendance, which could be due to better awareness, accessibility. The age distribution of participants was, with the majority of users being in the 26-35 years age group, which aligns with prior research indicating that women in their late 20s and early 30s are the most likely to use contraceptives. According to NFHS-5(National Family Health survey) 2019-21 the current use of Chhaya contraceptive (women age 15-49 years) is 5.1%.

The 17-25 years age group comprised 38% of Chhaya users, indicating that younger women also favored these contraceptive methods. A smaller proportion of participants were over 35 years old, with 5% of Chhaya users. These findings align with previous studies, such as the work by Doke et al, which reported that most women using Chhaya contraceptives were between 20 and 30 years old.[6] The fact that Chhaya users were predominantly young women could reflect the general preference for these methods among this age group, which is typically in its peak reproductive years.

The return of fertility after discontinuing contraceptive use is a key concern for women who plan future pregnancies. Among Chhaya users, 46.66% regained fertility within 6 months of discontinuation, 34.82% within 9 months, and 18.52% within 12 months.

Side effects were a major factor influencing the experience of the contraceptive method and the decision to discontinue them. Chhaya users reported a range of side effects, with the most common being irregular menstrual cycles (34.6%), which included delayed cycles (26.92%) and decreased menstrual blood flow (7.69%). Other notable side effects among Chhaya users included breast tenderness (23.07%), abdominal pain (11.5%), gastritis (11.5%), body aches (7.69%), and vaginal discharge (7.69%). A small percentage (3.84%) also reported weight gain. These side effects are in line with the findings of

Radhika et al, who noted that menstrual irregularities were the most frequent reasons for discontinuation among Chhaya users.[7] The impact of Chhaya on the menstrual cycle is well-documented, and these side effects, while non-life-threatening, can lead to significant discomfort and dissatisfaction.

Discontinuation rates provide valuable insight into how well users tolerate a contraceptive method over time. In this study 19.71% of Chhaya users stopped after 3 months of use. By 6 months, 33.8%, at 9 months, 16.9% and by 12 months, 29.57% of Chhaya users had stopped using the contraceptive. Although Chhaya users experienced side effects, these may have been less severe or easier to tolerate, leading to a lower early discontinuation rate.

Satisfaction with contraceptive methods is a crucial factor in determining whether users will continue using the method or opt for an alternative. Among Chhaya users, 50% were satisfied, 32.5% were very satisfied, and none reported dissatisfaction. These findings suggest that Chhaya users were slightly more satisfied overall.

The higher satisfaction among Chhaya users could be linked to the quicker return of fertility after discontinuation and the lower early discontinuation rate. These findings are supported by Oumer et al who found that a positive attitude toward modern contraceptives strongly correlates with higher satisfaction and continued use.[8] Ehsanpour et al also emphasized the role of user attitude in contraceptive choices, reinforcing the importance of satisfaction in the success of a contraceptive method.[9]

This comparative study highlights the differences in user experience, side effects, discontinuation rates, and satisfaction levels for Chhaya users. Chhaya users tended to experience fewer side effects, had a quicker return of fertility after discontinuation, and reported higher satisfaction levels.

CONCLUSION

This study assessed Chhaya, a new contraceptive method. Chhaya had a higher prevalence and quicker fertility return, with the majority of users regaining fertility within 6-9 months. Chhaya users reported fewer severe side effects, particularly related to menstrual irregularities, leading to lower early discontinuation rates and higher satisfaction levels, with no dissatisfaction recorded. The study highlights that Chhaya may be the more favorable option for women seeking fewer side effects and a quicker return to fertility, emphasizing the need for personalized contraceptive counseling to address individual preferences, side effect management, and future fertility plans.

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