

QUALITY IMPROVEMENT INITIATIVE TO INCREASE THE ACCEPTANCE RATE OF TABLET CHHAYA (CENTCHROMAN) IN THE IMMEDIATE POSTPARTUM PERIOD IN THE TERTIARY CARE CENTRE OF RSDKS GMC AMBIKAPUR

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Abstract

Background: There are many options in the basket of choices offered by the Government of India, of which Chhaya is the most underutilized. We aim to increase the acceptance of Chhaya through creating awareness. **Materials and Methods:** Total of 350 women enrolled in the study and were followed up at 1, 3, 6 months. The reasons for underutilization was studied. The total duration of study was one year from May 2023 onwards. They were assessed with respect to continuation, acceptance, reasons for discontinuation and satisfaction levels and problems were sorted out. The ultimate aim was to increase the acceptance rates of Chhaya. **Result:** The acceptance among Chhaya users was 70% by the end of six months. Around 3.4% had delayed menses, 2.2% had irregular menses and 2.8% had amenorrhoea. The continuation rates are also high with 95.1% at the end of one month and 71.4% at the end of 6th month. 88% were satisfied with Chhaya and when asked if they would recommend others, 90.9% among them agreed. **Conclusion:** Chhaya is very safe, effective with minimal side effects, its utilisation needs to be improved for population stabilization.

INTRODUCTION

Centchroman popularly known as Chhaya in the Government sector is a boon as a method of contraception. Sadly, it is much underutilized due to the lack of information among the Health care professionals at the periphery as well Family Planning counsellors. It is a reversible post-coital/weekly oral contraceptive (half-life of about 168 hours), designed and developed at CDRI, Lucknow and is the only non-steroidal oral contraceptive in clinical use in the world today. Synthesized in 1967 and completing pre-clinical and clinical studies in 1989, this drug was approved for marketing in 1991, social marketing in 1995 and NFWP in April 2016.^[1] It can be used by postpartum women who are breastfeeding as soon as she feels comfortable.^[2] Centchroman does not affect quantity, quality and composition of breast milk. Its overall use as a contraception is not much utilized and in the immediate postpartum period the studies are very limited. It acts by producing

asynchrony between blastocyst movement and alteration in endometrial receptivity and thus inhibits implantation. It neither suppresses ovulation nor interferes with the hypothalamic-pituitary-ovarian axis unlike the other hormonal contraceptives.^[3]

There are few studies done on use of Centchroman as a means of contraception and only two Indian studies available in literature regarding its postpartum use. According to NFHS V reports, the acceptance of postpartum contraception among women is around 67%. The acceptance rates of Chhaya widely range from 60 to 77.5% but no data exists on its postpartum use.^[4,5] Baseline number of prescriptions were evaluated for the year 2021-2022 and it was found that the usage of Chhaya is only 0.1 to 0.2% only and there were no prescriptions in the postpartum period. By this study, we tend to increase the use of Tablet Chhaya in the postpartum women and also to determine the causes for its underutilization.

Aims and Objectives:

- To increase the use of tablet Chhaya in the postpartum period
- To identify reasons for its underutilization and apply corrective measures

MATERIALS AND METHODS

This study was conducted in the Department of Obstetrics and Gynaecology, RSDKS GMC Ambikapur for a period of one year i.e May 2023 to April 2024. A quality improvement team was formed including Doctors, Nurses, Family Planning counselor. All the women in the postnatal ward were counseled and those willing to participate in the study were included and inclusion and exclusion criteria were applied. The Quality improvement team had regular meetings and Plan –Do–study –Act was done. A Fishbone analysis was done to address the problems with the underutilization of the drug and corrective measures were taken. Corrective measures mainly included counseling and creating awareness in the OPD as well as postnatal wards. Those who agreed to participate in the study were given Tablet Chhaya 30 mg twice a week for 3 months in the immediate postpartum period and were advised to take Chhaya once a week from fourth month onwards and follow up done at,^[1] 3,6 months from the start of contraception and at the total duration of the study was one year. Both undergoing vaginal and caesarean section were included. The subjects were either contacted telephonically or on OPD basis for follow up.

Inclusion criteria:

- Those willing to participate in the study

Exclusion criteria:

- Those with H/o Renal disease, Liver disease, Tuberculosis were excluded
- Those not giving consent for the study

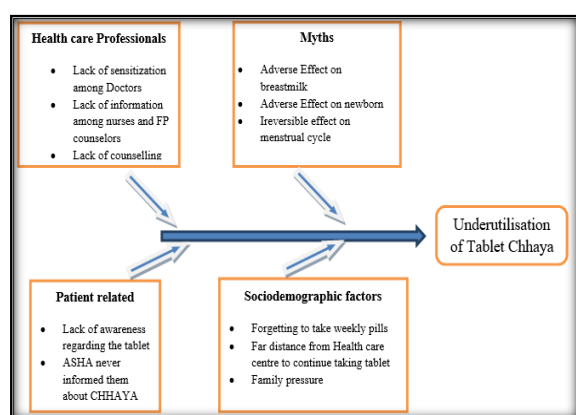


Figure 1: Fishbone analysis for underutilization of Chhaya

RESULTS

Total of 350 women were studied, most of the participants were in the age group of 20-30 years and were Multigravida (67%), 55% were illiterate and 70% belonged to lower socioeconomic status. The total numbers of participants at the start of the study were 0 as there were no prescriptions for the Chhaya tablets in the postpartum period. At the end of three months from the acceptance, there were total of 150 participants which increased gradually to a total number of 350. [Figure 2].

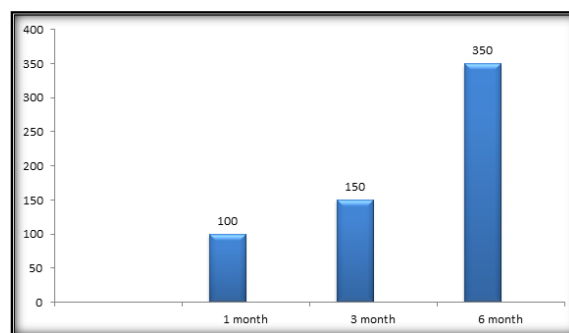


Figure 2: Acceptance among Chhaya users

Most of the women found it convenient to use with very few side effects noted. About 5.7% had AUB with either delayed menses or irregular menses and 2.8% had Amenorrhoea. Counselling was done for them to prevent discontinuation of Chhaya tablets. [Figure 3]

Around 95.1% of the study participants continued Chhaya for one month which declined to 71.4% at the end of six month. [Table 1].

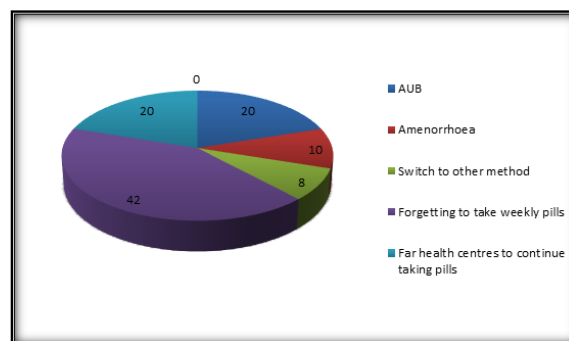


Figure 3: Reasons for Discontinuation

Total of 100 women discontinued taking pills, the main reasons for discontinuation were Forgetting to take weekly pills (42), Far health centres to continue taking pills (20). Around 20 had complaints of AUB, ten women had Amenorrhoea and eight wanted to switch over to other methods. [Figure 4]. The satisfaction levels among the Chhaya users were also quite high with 88% of satisfaction. Out of the 220 satisfied, 200 will recommend others which in turn will increase the overall acceptance of Chhaya. [Table 2].

Table 1: Continuation rate of Chhaya.

Months after acceptance	Number of participants continuing to take Chhaya	Percentage
1 month	333	95.1
3 months	300	85.7
6 months	250	71.4

Table 2: Satisfaction levels among study participants at the end of six months

Satisfaction levels	Number of participants n(n%)
Satisfied	220 (88%)
Not satisfied	30 (12%)
Satisfied and Will recommend others	
Yes	200 (90.9 %)
No	20 (9.09%)

DISCUSSION

Postpartum period is considered the ideal time to motivate women to accept contraceptive measures. The most commonly used contraceptives used following delivery in our institute is PPIUCD but due to its side effects like AUB, Pain abdomen, Missing threads, white discharge, women tend to get it removed also. Centchroman also known as Ormiloxefene available as Chhaya in the Government sector free of cost. It falls under SERM, which acts through the estrogen receptors. Chhaya being non-steroidal is very safe, easy to take, no daily intakes with no major side effects. Apart from contraception, it is also used in fibroadenoma, mastalgia, prevention of breast cancer etc.^[6] Because of its low oestrogenic activity, it also has anti-osteoporotic and cardio protective properties. Despite having numerous benefits, it is mainly underutilized both in the Government and the Private sectors.

Before starting the study we realized that the Doctors were not sensitized to prescribing Chhaya in the immediate postpartum period and were following the routine of inserting PPIUCD or performing Tubectomy. So, we had a common discussion regarding the safety profile in the postpartum period among Doctors in the Department. Overtime, we included Nursing personnels as well as family planning counselors to advise Chhaya following delivery. Also, the women were not aware of the usage of Chhaya following delivery. This was corrected by counselling and taking help of ASHA and counselors at the periphery. Fishbone analysis mainly revealed that it was lack of communication and motivation among the healthcare professionals which was a major factor for the underutilization of Chhaya be it the Doctor, Nurse or ASHA at the periphery. There were also many myths among women regarding its use in the immediate postpartum period regarding effect on breast milk and the neonate which was addressed.

The acceptance among the Chhaya users was quite high. Total of 500 women counseled, 350 agreed to participate in the study. From the start of initiation of the study and by the end of one month the acceptance was 20% which increased to 30% at the end of third month and 70% by the end of six

months. These results are slightly higher with studies done by Sarkar et al,^[7] where the overall acceptance was 81.7%. The acceptance rates are on the lower side with 35% at the end of 1.5 year in the study done by Radhika AG et al.^[8]

Chhaya being non hormonal, the side effects experienced by the participants are also minimal. Around 3.4% had delayed menses, 2.2% had irregular menses and 2.8% had amenorrhoea. The menstrual irregularity reported by Radhika AG et al 8 was 9%. Doke G et al,^[9] also reported headache (1.37%) and vomiting (0.06%). Our participants didn't had any such complaints. Those having side effects were counseled to continue taking Chhaya.

The continuation rates are also high with 95.1% at the end of one month and 71.4% at the end of 6th month. This is similar to the findings done by Sarkar et al,^[7] 96.7%, 89.5%, and 78.6%, at the end of 1, 3, 6 months respectively. The main reasons for discontinuation were mainly sociodemographic factors like forgetting to take weekly pills (12%), Far distance from health care centres or difficult access (5.7%). Eight women wanted to switch to other methods like PPIUCD, DMPA as a long acting reversible contraception and thus discontinued. Miuli I et al,^[4] also reported the main reason for discontinuation to be psychosocial entity.

Regarding the satisfaction levels, 88% were satisfied with Chhaya and when asked if they would recommend others, 90.9% among they agreed. This will in turn further increase the acceptance of Chhaya among the postpartum women.

CONCLUSION

This is the first quality improvement initiative done by our Institute with respect to Chhaya. Improvement in the utilization rates of Chhaya require rigorous counselling sessions and manpower to create awareness. Both the partners need to be addressed to increase the acceptance and reduce the issues with discontinuation due to family pressure. Clearing the doubts and fear among the general public can generate more no. of acceptors and thus help in population stabilization.

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Ethical clearance: Institutional ethical committee clearance was obtained before starting the study

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