

Original Article

# Study of factors related to the discontinuation of IUCD usage

Khursheed Muzammil, Surekha Kishore<sup>1</sup>, B S Garg<sup>2</sup>

Assistant Professor, Department of Community Medicine, Muzaffarnagar Medical College, Muzaffarnagar,<sup>1</sup> Professor, Shri Guru Ram Rai Institute of Health & Medical Sciences, Dehradun, <sup>2</sup> Professor, Mahatma Gandhi Institute of Medical Sciences, Sewagram

## ABSTRACT

**Background:** Various studies conducted in the past have shown high rates of discontinuation of IUCD especially in rural areas but very few studies have been conducted for determining the responsible contributing factor for the same. It has been emphasized that there is an urgent need to increase its use for which we have to plan the quality of services. **Objective:** To find out the factors related to the discontinuation of IUCD usage. **Methodology:** The present cross-sectional study was carried out in the 5 villages around Sewagram of District Wardha by interviewing women currently using or those who have ever used IUCD in the past two years. The data was recorded in a structured and pre-tested proforma and subsequently analyzed. **Results:** About 20% of women were found to be IUCD acceptors in the last two years of which 43.48 % were using IUCD currently and 56.52% had ever used them in the last two years. Maximum women got it inserted at the institute. Main reasons for discontinuation of IUCD as cited by women were excessive bleeding per vaginum (39.68%), abdominal pain (38.62%), low backache (35.97%), and weakness (28.04%). **Conclusion:** Increasing the awareness about the importance and benefits of IUCD will be very much helpful in its high acceptance along with providing quality health services. **Keywords:** IUCD usage, side effects, IUCD discontinuation.

**Key words:** IUCD usage, side effects, IUCD discontinuation

## Introduction:

Discontinuation of IUCD (intrauterine contraceptive device) usage is a major problem especially among rural women in India. Various studies conducted in the past have shown high rates of discontinuation of IUCD but quite limited studies have been conducted for determining the responsible contributing factor for the same. Awareness of the IUCD as a long-term contraceptive method is fairly high among married women and married men in this subcontinent at large but the current use of IUCDs remains low compared with the use of other modern methods.<sup>(1)</sup>

Now the question is- can anything be done within the existing health facilities to affect satisfactory IUCD usage? Although some research around discontinuation has already been done at national and international level, the studies have centered on identifying the socio-demographic characteristics of users most correlated with discontinuation. Little research exists on clients' perspectives on IUCD discontinuation in India, on the nature of the side effects and more specifically on the tolerance of the side effects. This study was an attempt and the need of hour to address some of these relatively unsolved questions.

## Material and Methods:

A cross sectional study in 5 villages around Sewagram of District Wardha through a house to house survey with the help of a survey team (5 female field workers and a supervisor) was conducted. The team members were trained enough for the purpose of the present study before its

execution. All the 1051 households were surveyed in the study areas and a total of 1420 women in the reproductive age group (15-45 years) were enquired about their usage of IUCD in the past 2 years. Out of 1420 women only 1165 (82%) women consented to respond on this particular preliminary query. From these 1165 women, ultimately 233 women (20%) who were actually IUCD user in the past 2 years were included in the study as study subjects and their IDI (in-depth interview) was undertaken regarding their socio-demographic character, IUCD usage patterns, reasons for its usage and discontinuation etc. Their consent was taken prior to the start of the study keeping the privacy & the data was recorded in a structured and pretested questionnaire used in the study as study tool. Informed consent procedures followed Engender Health's Standard Operating Procedures required for this type of exercise. These included reading an informed consent statement to potential participants prior to the start of an interview and recording oral consent by all participants at the start of the interview. At the end of the interview, all of the study subjects were given health education regarding the importance of IUCD usage and their misconceptions as the case may be were successfully resolved to increase the acceptance of IUCD when needed. All the questionnaires were checked twice for completeness and consistency as well as all the errors or discrepancies were corrected. Later on the collected data was entered and analyzed by using Epi Info statistical software package Version 3.4.3.

## Address for correspondence:

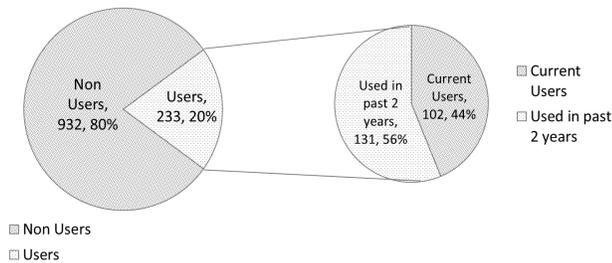
Dr Khursheed Muzammil, Assistant Professor, Department of Community Medicine, Muzaffarnagar Medical College, Muzaffarnagar, U.P., India

**Received:** 12/01/11 **Accepted:** 20/06/11

**Results:**

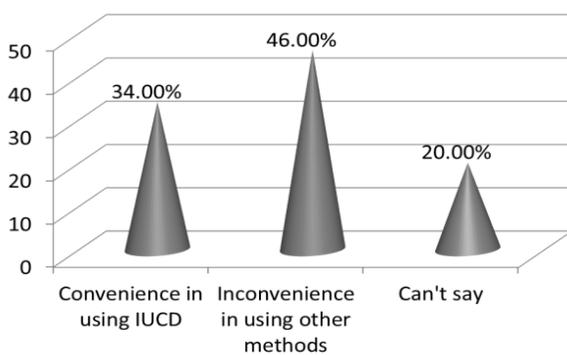
The mean age of study subjects was 28 years, with 140 (60.00%), 35 (15%) and 58 (25%) under the age of 30, 30-35 and older than 35 years respectively. Among the respondents 21% (49) had one child, 34% (79) had two children, and the remaining 44% (105) had three or more children (mean 2.8children). All the study subjects (233) selected from the study area contributed 20% of the women (1165) who consented for the basic preliminary query on the usage and non-usage of IUCD. About 44.00 % (102) study subjects were found to be using IUCD currently at the time of study and the remaining 56.00% (131) had ever used IUCD in the past two years. (Fig-1)

**Figure-1: Distribution of the women surveyed by IUCD usage. (n=1165)**



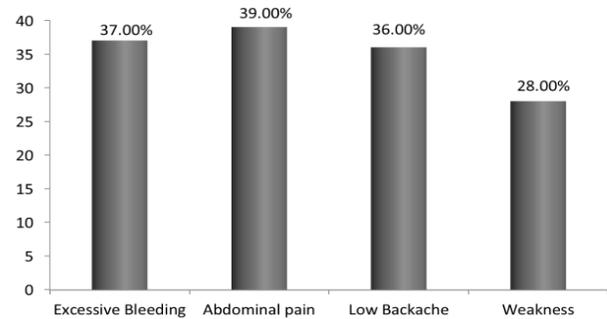
Up to 34.00% (35) and 46.00% (47) of the study subjects who were currently using IUCD at the time of study (n=102) preferred IUCD over other contraceptives for the sake of convenience and due to inconvenience in using other methods respectively. (Fig-2)

**Figure-2: Distribution of the study subjects by their reasons for using IUCD. (n=102)**



Main multiple reasons for discontinuation of IUCD as cited by the study subjects who were IUCD users in the past 2 years at the time of study (131) were excessive bleeding per vaginum (37.00%), abdominal pain (39.00%), low backache (36.00%), and weakness (28.00%). (Fig-3)

**Figure-3: Distribution of the study subjects by their reasons for discontinuation of IUCD usage. (n=131)**



**Discussion:**

A relatively similar study conducted in North India to examine the determinants for early discontinuation among IUCD users in a rural district revealed several significant predictors of early discontinuation of IUCD use. It depicts that discontinuation of IUCD increased more than two times in the presence of factors such as more than usual amount of menstrual flow before insertion and inter-menstrual bleeding after insertion. However no such parameters were recorded in the present study. These findings of Tripathi V *et al* helped a lot to the family planning providers in counseling and practice<sup>(2)</sup>. In a study conducted in Bangladesh, it was found that excessive bleeding was the most important side effect experienced by almost half of the IUCD acceptors leading to the cause of IUCD discontinuation. This finding is almost consistent with the finding of the present study. Community notion of menstruation are a key barrier to successful IUCD use in certain communities. Community interventions that focus on partner attitudes to IUCD use and to community attitudes around menstruation is essential to improve IUCD continuation rates. <sup>(3)</sup>

Understanding the factors that affect discontinuation of family planning is crucial to ensuring that women and couples can attain their long-term fertility desires. Earlier research on the determinants of contraceptive discontinuation has focused on demographic characteristics and on the fertility motivations of users, the quality of family planning services, the family planning service environment, and the experience of methods' side effects. Programs that provide comprehensive services, including counseling concerning methods' side effects and approaches to switching methods, could improve continuation and lead to a reduction of unintended pregnancies and improved maternal and child health outcomes elsewhere where contraceptive discontinuation occurs frequently<sup>(4)</sup>. Effective contraceptive use implies that women use an effective method of contraception to delay or avoid pregnancy until such time as they want another child or no longer need contraception. Premature discontinuation can lead to unplanned pregnancy and unwanted births, which in turn may result in negative public health consequences such as

increased maternal, neonatal and infant morbidity and/or mortality.<sup>(5-7)</sup> Contraceptive discontinuation also contributes to unmet need for family planning, which represents women who no longer want to get pregnant or want to delay a pregnancy and are sexually active but are not using a method of contraception to avoid or delay a pregnancy<sup>(8,9)</sup>. Some research demonstrate that women who are younger, of higher parity, and unmarried or not in union, are the most likely to discontinue a method<sup>(10,11)</sup>. Other demographic factors, such as education, place of residence, and household income have tended to have less consistent relevance for discontinuation<sup>(11,12,13)</sup>. Fertility desires and other individual-level characteristics of the woman, such as the level of motivation to prevent pregnancies, self-efficacy and autonomy, are also considered to be directly related to contraceptive discontinuation<sup>(14)</sup>. Partner involvement in contraceptive discontinuation is not yet well understood, though it has been found to be associated with method of choice<sup>(15)</sup>. In a panel study conducted in 2006-2007, it was noted that service quality had little effect on the IUCD discontinuation, while individual characteristics and the experience of specific side effects showed significant effects, which is not inconsistent with our finding. Their results suggest that programs should emphasize continuous contraceptive coverage rather than continuous use of a particular method<sup>(16)</sup>.

### Conclusions:

The rate of IUCD discontinuation is a bit high, suggesting a need to tackle the problem of IUCD discontinuation through effective educational strategies on the process of fertility and contraception. It is therefore emphasized that discussions with friends and family members may play a positive role in the decision to continue or discontinue IUCD, which indicates the importance of social support for the use of contraception. Family planning programs are advised to build on these sources of support by widely promoting the dissemination of new and accurate information and keeping family planning issues in the public sphere.

### References:

1. Alam ME, Bradley J and Shabnam F. IUD use and discontinuation in BD. E&R Study No-8; New York: Engender Health / The ACQUIRE Project: Nov- 2007.
2. Tripathi V, Nandan D and Salhan S. Determinants of early discontinuation of IUCD use in rural northern district of India: a multivariate analysis and its validation. *J Biosoc Sci.* 2005 May; 37(3): p-319
3. Alam ME, Kabir MA and Rahman MM. Overwhelming Reasons for High IUD discontinuation in Bangladesh. *JUJS*, 2009; Vol. 32(1): p.127-128
4. Fallon JBO, Speizer IS, Cáliz J, and Rodriguez F. Contraceptive Discontinuation among Honduran Women Who Use Reversible Methods. *Studies in Family Planning*, Mar 2011; 42(1): p.11
5. Marston C and Cleland J. Do unintended pregnancies carried to term lead to adverse outcomes for mother and child? An assesment in five developing countries. *Population Studies (Camb)*. 2003; 57(1): p.77-93.
6. Conde-Agudelo A, Bermúdez AL, et al. Birth spacing and risk of adverse perinatal outcomes: a meta-analysis. *JAMA*, 2006; 295: p.1809-1823.
7. Fallon BO, Speizer IS, et al. Contraceptive discontinuation: A one year follow-up study of female reversible method users in urban Honduras. Chapel Hill, NC, MEASURE Evaluation and PRODIM (Tegucigalpa, Honduras): 2008.
8. Jain A. Should eliminating unmet need for contraception continues to be a program priority? *International Family Planning Perspectives*. 1999; 25: p.49
9. Casterline J, Zanatay FE, et al. Unmet need and unintended fertility: Longitudinal evidence from Upper Egypt. *International Family Planning Perspectives*. 2003; 29(4): 158-166.
10. Ali M and Cleland J. Contraceptive discontinuation in six developing countries: a cause-specific analysis. *International Family Planning Perspectives*. 1995; 64(3): p.92-97
11. Curtis S L and Blanc AK. Determinants of contraceptive failure, switching, and discontinuation: An analysis of DHS contraceptive histories. Calverton, Maryland, Macro International Inc.; 1997.
12. Ali M and Cleland J. Determinants of contraceptive discontinuation in six developing countries. *J Biosoc Sci.*, 1999; 31(3): p.343-360.
13. Zhang F, Tsui A, et al. The determinants of contraceptive discontinuation in Northern India: A multilevel analysis of calander data. Working Papers, MEASURE Evaluation, 1999.
14. Blanc A. The effect of power in sexual relationships on sexual and reproductive health: An examination of the evidence." *Studies in Family Planning*. 2001; 32(3): p.189-213.
15. Pariani S, Heer D, et al. Does choice make a difference to contraceptive use? Evidence from east Java. *Studies in Family Planning*, 1991; 22(6): p.384-390
16. Taheri EG, Mehri KG, Saffari M and Moslemian S . Influential Factors on Discontinuation of Intrauterine Contraceptive Device. *Hayat*, 2009; 14(2): p.88.

**Source of Support: Nil, Conflict of Interest: None**