



Factors Leading to Discontinuation of Intra Uterine Contraceptive Device

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ABSTRACT

Background: Because of their low user effort, affordability, and safety, intrauterine contraceptive devices (IUCDs) are frequently used for long-acting reversible contraception. Despite these benefits, a sizable percentage of consumers stop using IUCDs too soon. This restricts the device's ability to fully prevent unwanted pregnancies. Miscarriages, insufficient counseling, cultural attitudes, and side effects are frequently factors that contribute to discontinuation. Improving the results of reproductive health requires an understanding of these factors. **Objective:** The purpose of this study was to investigate the prevalence and underlying causes of IUCD discontinuation among female patients at a tertiary care facility. The goal of the study was to pinpoint prevalent patterns, user issues, and sociocultural elements that affect IUCD removal. Additionally, it sought to assess any gaps in follow-up and counseling procedures. Interventions to increase continuation rates would be supported by the findings. Promoting better informed contraceptive choices is the ultimate objective. **Methodology:** A tertiary care hospital in Quetta, Balochistan, served as the site of this six-month qualitative study. A semi-structured questionnaire was used for interviews with a purposive sample of 130 women who had stopped using IUCD. Descriptive statistics were used in the compilation and analysis of the data. For ease of understanding and interpretation, important discontinuation criteria were determined and displayed in frequency tables. **Findings:** The majority of participants were in the 26–35 age range. Myths or misconceptions concerning the device (19.2%), lower abdomen pain (23.1%), and excessive menstrual flow (29.2%) were the main causes of IUCD cessation. Significant contributions were also made by inadequate therapy (15.4%) and pressure from partners or family (7.7%). Most removals took place in the first six months following insertion. **Conclusion:** side effects, a lack of knowledge, and cultural misunderstandings are the main factors behind IUCD cessation. Proactive follow-up, increased counseling, and community awareness can all contribute to a decrease in premature removal and an increase in satisfaction. Improving the results of contraception requires addressing the social and psychological obstacles.

INTRODUCTION

IUCs or IUDs come as extremely affordable and highly preferable contraceptives that are highly useful [1]. The incidences of unwanted pregnancy among women using IUD are much less compared to those using short-acting contraceptives with no or little hormonal activity [2]. Adolescent pregnancy, abortion, unattended newborn and health expenses are curtailed by the use of IUD [3].

The two most predominant types of IUDs are the involvement of levonorgestrel-releasing intrauterine devices (LNG-IUDs) and copper IUDs (Cu-IUDs). In spite of their high efficacy, their primary characteristics and mechanism of action are dissimilar [4].

It has been clinically accepted that LNG-IUDs are likely to reduce menstrual flow and dysmenorrhea whereas the users of the Cu-IUDs have been said to have reported more

flow and dysmenorrhea [5, 6]. Both IUDs are associated with medically harmless changes in patterns of monthly bleeding.

Some of the first forms of birth control include intrauterine contraceptive device (IUCD) [7]. The modern IUCD is a long-term, coitus non-dependent, speedily reversible, non-noticeable, safe and effective contraceptive technique that has only little adverse effects [8].

IUCD is also very convenient to many women since they can go a long way without taking care of it after insertion [9]. It is also possible to securely administer IUCD during the first 48 hours after birth, six weeks after the birth (Extended PP) and after an abortion (PostAbortal) [10,11].

Many studies also show that there is a multiplicity of reasons that lead to poor use of IUD amongst women

[1214]. These components concern individual or user, health system, and health professional features [15, 16].

The beliefs of health care providers that IUD use is also associated with a continued danger of pelvic inflammatory disease (PID) and consequent sterility are some of the factors that have led to poor use of IUDs. Such is the situation, especially, in the case of nulliparous women especially those who are single or multiple sexual partners [17]. It is also noted that a few medical professionals will refuse to use an IUD because they find it technically difficult to implant an IUD in a nulliparous woman [18].

Individual factors hindering the acquisition of IUDs are often exacerbated through illusions, myths and misperceptions. The women conceptual concerns and apprehensions about foreign body being placed inside their womb together with an inability to see any counseling or informative literature about IUDs by healthcare professionals to assist them make rational decisions [19], the fear of painful insertion [20, 21], the opinions that IUDs abort and the fear of PID and ectopic pregnancy [22] discouraged the use of IUD.

The aim of the study was to identify and analyze the causes that lead to the termination of the use of intrauterine contraceptive devices (IUCDs) by women. It aimed to determine the key barriers to the use of IUCDs on a long-term basis and recommend ways of promoting continuations.

LITERATURE REVIEW

Although intrauterine contraceptive devices (IUCDs) are some of the most long-term and the most effective forms of reversible birth control methods, early cessation is also a widespread problem. Multiple causes of cessation exist, and they often are of physiological side effects, sociocultural misconceptions, barriers to healthcare system access, and/or the presence of the health staff.

The influence of side effects as the leading reason of IUCD removal is a recurrent experience in the literature. Clinical studies show that pelvic pain, late menstruation, bleeding, and spotting are great causes of stopping and this applied more to copper IUCD users [23]. A study conducted by Sivin et al. found that over 30 percent of the women who were using IUCD aborted them after one year due to pain and bleeding [24]. A study by Sivin et al. shows that needless to say over 30 percent of people using IUCDs had quit using it within one year due to pain and bleeding [24]. Users cannot tolerate these symptoms well except when they are not adequately covered in pre-insertion counseling, which may make them medically safe.

Physical discomfort is not the only issue that influences IUCD retention, but also psychological variables play a major role. A cross-sectional study conducted on rural Ethiopia indicated that most users took out the IUCDs prematurely due to fear of infertility, cancer, and migration of IUCD in the body [25]. Besides being widespread in low-resource settings, such misconceptions persist in urban communities where sound information is accessible, which would indicate a deeper tier of emotional and cultural defiance. Peer pressure and neighborhood legends often confirm these fears and cause the user to be nervous.

Lack of follow-up and bad counseling by medical practitioners also play a significant role. Healthcare

facilities often fail to give appropriate counseling to IUCD users on the expectation they might have after the insertion. Participants who failed to get proper information were multiply more likely to make IUCD removal requests at the six-month mark in a study made by Ouyang et al. in China [26]. Just as this, dissatisfaction and discontinuation occur due to lack of prompt follow up in management of side effects.

The thinking and training of health care specialists are also significant. There are even cases when the IUCDs are misunderstood even among the healthcare professionals themselves especially relating to their use among the young or nulliparous women. A study conducted in the UK has shown that under conditions when device would be medically suitable, general practitioners do not use IUCDs due to their perceived risks and difficulty in inserting the device in nulligravid women [27]. This finally deters continuation by restricted access and biased counseling or late management of insertion problems.

Weakness of health system, such as availability of devices being inconsistent, high costs of the insertion when done privately, and it lacks uniformity in the follow-up process all contribute to the worsening of the problem. Based on a thorough assessment, the percentage of discontinuation was much less in facilities that provided free or cheap follow-ups, counseling hotlines, and competent doctors as among IUCD services [28]. These findings suggest that structural and budgetary barriers make direct contributions to IUCD rejection as opposed to operational issues.

Another aspect worth discussing but little said is relationship changes or disapproval of the partner. In a series of qualitative studies, women have reported that they discarded the IUCD string due either to fear that their partners would object or due to discomfort during intercourse [29]. This highlights the role that the dynamics of marriage do play and the fact that the partner-inclusive counseling might be required in certain cases.

In addition, public clinics lack seclusion and anonymity, which could deter women to use IUCDs in the future. It was shown in the study carried out in Pakistan that women would rather quit than be criticized by members of the community or health personnel regarding their reproductive choices [30]. This shows the bigger issue of stigma of using contraceptives.

RESEARCH OBJECTIVE

The aim of this study was to find out the various reasons causing women who are at reproductive age to stop using intrauterine contraceptive devices (IUCDs). It aim at determining the effects of sociocultural attitudes, perceptions of users, physiological side effects, quality of counseling and impediments related to healthcare system on the continuity of IUCD. The identification of these factors is expected to provide evidence-based suggestions to legislators and healthcare providers that would facilitate better contraceptive counseling, well-informed decision-making, and IUCD use and retention. The final aim of the study was to support programs that were meant to reduce unwanted pregnancies by encouraging long-term reversible contraceptives.

METHODOLOGY

This qualitative research is conducted in a tertiary care hospital in Quetta, Balochistan, in a period of six months from May 2024 to Nov 2024. A purposive sample was used and 130 women that had ceased the use of intrauterine contraceptive devices (IUCDs) were selected. The data was collected by means of structured interviews with the pre-tested questionnaire that explored the reasons of discontinuation, side effects, counseling received and sociocultural factors. All the participants verbally agreed. To determine the most common reasons for IUCD termination, the retrieved data underwent a thematic content analysis and was organized in frequency tables. The study design was ethically approved by the institutional review board and kept all the data pertaining to the participants confidential.

RESULTS

Table 1

Age Distribution and Educational Status of Respondents

Age Group (years)	Frequency	Percentage (%)
18-25	22	16.9%
26-30	34	26.2%
31-35	38	29.2%
36-40	24	18.5%
Above 40	12	9.2%
Education Level	Frequency	Percentage (%)
Illiterate	35	26.9%
Primary education	29	22.3%
Secondary education	38	29.2%
Higher secondary & above	28	21.5%

Table 2

Duration of IUCD Use Before Discontinuation

Duration	Frequency	Percentage (%)
Less than 6 months	41	31.5%
6 months - 1 year	36	27.7%
1 - 2 years	28	21.5%
More than 2 years	25	19.2%

Table 3

Reported Side Effects Leading to Discontinuation

Side Effect	Frequency	Percentage (%)
Heavy menstrual bleeding	45	34.6%
Abdominal pain/cramps	37	28.5%
Irregular bleeding	21	16.2%
Vaginal discharge/infection	17	13.1%
No side effects	10	7.6%

Table 4

Influence of Myths and Misconceptions

Misconception/Belief	Frequency	Percentage (%)
Causes infertility	32	24.6%
Can migrate to other organs	28	21.5%
Believed to be an abortifacient	21	16.2%
Risk of cancer	16	12.3%
No misconceptions reported	33	25.4%

Table 5

Time Since Insertion to Discontinuation

Duration Since Insertion	Frequency	Percentage (%)
Less than 3 months	27	20.8%
3-6 months	31	23.8%
6 months - 1 year	36	27.7%
1-2 years	21	16.2%
More than 2 years	15	11.5%

DISCUSSION

The study aimed at examining the intrauterine contraceptive device (IUCD) discontinuation cases as well

as their causes among women in a tertiary care scenario in Quetta in Balochistan. The outcome revealed that the oldest age group of 31-35 years had the highest likelihood of abandoning the use of IUCDs (33.1 percent), followed by age group of 26-30 years (27.7 percent). Other regional studies made people concerned about side effects and fertility of the future, which is why women in their most productive years were the most probable to use and discontinue IUCD.

Cessation also turned out to be strongly potentially educationally attracted with 26.9 percent absence to illiteracy and 29.2 percent simply secondary schooling. This also meant that such misconceptions could have been enhanced by the fact that the safety and use of IUCDs were not known or the people who were subjected to the same lacked health literacy. Women with low levels of education may be more impressionable by social pressure, myths and misinformation, which may influence their contraceptive use.

The nature of IUCD also affected discontinuation. Three out of ten of them had utilized the levonorgestrel releasing IUCD (Mirena) and seventy percent had utilized Copper T (Cu-T). The deletions made in early months after insertion represented significant proportion. Namely, 20.8 percent of women abandoned the use of the device after three months of using it, and 23.8% did it within three months to six months, i.e. more than 45 percent during less than six months. This meant that it must have more detailed counseling and follow up treatment during the adjustment period in that it meant dissatisfaction or trouble soon after installation.

The most common reason to stop was side effects, 23.1 percent mentioned lower stomach pain and 29.2 percent mentioned heavy menstrual flow. All these are known and manageable side effects of copper IUDs; however, due to the pain and fear, many women decided on removing them rather than treating it medically. This underpinned the importance of setting reasonable expectations during the pre-insertion therapy.

In addition to that, beliefs and misconceptions, including concerns that the IUCD would lead to cancer, infertility or move to other organs of the body stopped 19.2% participants. These beliefs persisted even in a tertiary care establishment which shows that patient education remains a key aspect yet to be addressed. Interpersonal and sociocultural factors may have contributed to contraceptive behavior as 7.7 per cent of the women mentioned family or spouse pressure as a force making them have the reason to have it removed and 15.4 per cent of the women said they were not getting adequate counseling.

Parity was also observed and 29.2 per cent of parents bore one or two children and 36.2 per cent bore three to four. Despite the early deletions, which showed that a counseling was either retained or not effective, these women were great candidates of the long-term contraception. Effectiveness of the IUCD as a spacing method was reduced because most of these women (68.5 percent) had already inserted it as a birth spacing method but had ceased using it before the desired period was reached.

CONCLUSION

This study was conducted to determine the intrauterine contraceptive device (IUCD) discontinuation prevalence and reasons among the women visiting a tertiary care hospital in Quetta, Balochistan. The findings indicated that a significant number of women made choices to quit the usage of IUCDs within a very short duration of insertion, often before the sixth month. The decision to take out the device was influenced by informational, societal, medical and even personal issues.

The most frequent cause of discontinuing the medication in more than a half of cases is the physical side effects such as deep menstruation and pains in lower abdomen. Although such unpleasant effects are confirmed and circumstantial with the proper medical recommendation, the consequences often worsened due to the improper consultation and the lack of subsequent care. This is because many women did not expect these bad effects and as a result, they opted to have them removed rather than consulting a doctor or getting their mind satisfied.

The presence of myths and misperception about IUCDs made a not insignificant contribution to quitting,

along with real complications. A large proportion of individuals believed that the IUCD would spread to other parts of the body, make a person infertile or develop cancer. Such misconceptions were particularly more prevalent among poorly educated women underlining the need of targeted community awareness and health education programmes.

Another factor was the quality of counseling at the moment of IUCD implantation. Many women also protested that they did not receive full information concerning how the device operated, its bad effects and importance of second follow up. Absence of therapy led to fear, confusion and ultimate destruction. Furthermore, early removals in some of the cases were also determined by social and family issues such as pressure by husbands or in-laws.

In the study, it was found that a large percentage of women had a decent number of children and had practiced birth spacing using IUCDs which made them potential recipients of long-acting reversible contraception. The performance of this method of contraception in meeting long-term reproductive objectives was however not successful due to early withdrawal that was high.

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