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## Original Research Article

# Oral contraceptive use and awareness among patients in a tertiary level teaching hospital: a questionnaire based observational study

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## ABSTRACT

**Background:** Oral contraceptive pills (OCPs) are a widely used method of contraception, yet awareness, adherence, and perceptions surrounding their use vary among individuals. Understanding the knowledge, attitudes, and practices related to OCPs is essential for improving reproductive health education and reducing unintended pregnancies.

**Methods:** An observational study was conducted among participants to assess their awareness, usage patterns, and perceptions of OCPs. Data was collected on demographic factors, knowledge of contraceptive effectiveness, adherence to prescribed regimens, reasons for discontinuation, and sources of information. Participant's responses were examined to identify trends and gaps in knowledge.

**Results:** The findings indicate that a significant proportion of participants had limited awareness of the different types of OCPs and their correct usage. Many participants lacked knowledge regarding the difference between 'perfect use' and 'typical use,' which impacts overall efficacy. Common reasons for discontinuation included perceived side effects, misinformation, and accessibility issues. While healthcare providers were a primary source of information, a considerable number of participants relied on non-medical sources, leading to misconceptions. Community perceptions and societal stigma were also identified as influencing factors in OCP acceptance.

**Conclusions:** The study highlights the need for improved educational interventions to bridge knowledge gaps regarding OCPs. Enhancing access to reliable information and addressing misconceptions can contribute to better adherence and acceptance of oral contraceptive use, ultimately improving reproductive health outcomes.

**Keywords:** Awareness, Contraceptive efficacy, Oral contraceptive pills, Patient education

## INTRODUCTION

The modern combination oral contraceptive (OC) has become a mainstay in the effort to provide safe, reliable, and effective contraception.<sup>1</sup> They are largely divided into two types: combined and single-hormone-based. Use of oral hormonal contraceptives is associated with high efficacy, up to 99% if used ideally, and failure rates are low.<sup>2</sup> Oral contraceptives are a crucial component of family planning and reproductive health. Low contraceptive use is a major challenge faced in India.<sup>3</sup> Understanding awareness and usage patterns among women of reproductive age is essential for improving

healthcare services and educational outreach.<sup>4</sup> The effect of mass media and health insurance companies in providing partial information about the oral contraceptive pills is significantly impacting its use.<sup>5</sup>

This study aims to assess the level of awareness regarding oral contraceptives and the prevalence of their use among women aged 15-49 attending a tertiary care hospital. We will also explore factors influencing awareness and usage, including socio-demographic characteristics, education level, and access to healthcare information.

## METHODS

### Study design and area

The simple questionnaire-based study was conducted in D. Y. Patil Medical College and Hospital, Navi Mumbai. Total 200 patients were included into this study.

### Methods of collection of data

After obtaining ethical clearance from the Institutional Ethics Board the study was conducted. Voluntary anonymous participation was invited after taking a written consent from each participant.

### Study period

This study was conducted for 1 month (1<sup>st</sup> November 2024- 1<sup>st</sup> December 2024).

### Inclusion criteria

Female patients of reproductive age group (15-49) visiting Obstetrics and Gynaecology Out-Patient Department were included.

### Exclusion criteria

Faculty members, staff and students will be excluded from the study.

### Statistical analysis

An observational study was conducted at D. Y. Patil hospital, Nerul over a period of one month. A sample of 200 women will be recruited. Data was collected and analyzed by SPSS version 17.

## RESULTS

37.3% of participants belong in age group of 20-24 and 27.4% of them fall in 25-29 years category (Table 1).

**Table 1: Age group distribution.**

Age group	Percentage of participants
15-19	13.9
20-24	37.3
25-29	27.4
30-34	15.4
35-39	5.5
40-45	0.5

53.2% of participants belong to undergraduate and 35.4% fall under high school level (Table 2).

Out of 80.6% women, 62.2% were only aware of combined oral contraceptives, the rest were aware of both combined oral contraceptive pills and progestin-only pills.

Similarly, 68.7% of women were not aware of the difference between “Perfect Use” and “Typical Use” (Table 3).

**Table 2: Education level distribution of the participants.**

Education level	Percentage of participants
High school	35.3
Under graduate	53.2
Postgraduate	9.5
Prefer not to say	2

**Table 3: Awareness of OCP types among participants.**

Awareness of OCP types	Percentage of participants
Aware	80.6
Not aware	37.8

58.7% of women think missed dose to be cause of failure of oral contraceptive and 31.8% were unaware (Table 4).

**Table 4: Knowledge of OCP failure reasons among participants.**

Knowledge of OCP failure reasons	Percentage of participants
Missed dose	58.7
Interaction with medication	14.4
Gastrointestinal issues	3.5
Not following regime properly	35.8
Not sure	31.8

69.7% of women who used oral contraceptives were found to be using it for family planning (Table 5).

**Table 5: Primary reason for OCP usage by participants.**

Primary reason for OCP usage	Percentage of participants
Family planning	69.7
Menstrual irregularities	14.4
Acne management	4
PCOS	12.1

**Table 6: Side effects experienced by participants.**

Side effects experienced	Percentage of participants
Nausea	4.5
Weight gain	43.8
Mood changes	54.7
Blood clots	21.4
Decreased libido	1
Not aware or sure	38.3

54.7% of women found mood swings and 43.8% found weight gain as side effects experienced while on oral contraceptives while 38.3% women were unaware or not sure about existing side effects (Table 6).

50.2% of the population of women thought it to be safe (Table 7).

**Table 7: Community view on safety of OCPs.**

Does the community consider OCPs safe?	Percentage of participants
Yes	50.2
No	4.5
Not sure	45.3

Major reason found among women to discontinue the OCPs was switching to another method of contraception 41.5% whereas 31.9% women were trying to conceive and hence discontinued the pills (Table 8).

**Table 8: Reasons for discontinuation.**

Reasons for discontinuation	Percentage of participants
Side effects	14.9
Switching methods	41.5
Trying to conceive	31.9
Concerns about long term health	11.7

**Table 9: Sources used for OCP information.**

Sources used for OCP information	Percentage of participants
Healthcare provider	46.8
Internet	37.3
Friends/family	59.7
Social media	32.3

**Table 10: Satisfaction with information quality.**

Satisfaction with information quality	Percentage of participants
Satisfied	29.9
Neutral	48.3
Dissatisfied	21.9

59.7% of women relied on their friends and family for information while 46.8% relied on healthcare professionals (Table 9).

48.3% Women considered their knowledge on the topic neutral with gap and 29.9% were found satisfied with no gaps in knowledge and 21.9% were found to be dissatisfied with their knowledge on the topic (Table 10).

## DISCUSSION

### Overview of findings

The findings of this study highlight the importance of contraceptive awareness in reproductive health. Previous studies have shown that women with higher levels of education tend to have better knowledge and usage of contraceptives. Health care providers are the main link in providing information about various contraceptive methods and in removing myths from the couple's mind.<sup>6</sup> Additionally, access to healthcare information plays a crucial role in increasing contraceptive adoption rates.<sup>7</sup> The study results suggest that targeted educational initiatives can improve contraceptive use and bridge existing knowledge gaps. To date, most women are still unaware of the therapeutic uses of hormonal contraceptives, while on the contrary there is an extensive and constantly increasing literature of these non-contraceptive health benefits.<sup>8</sup> Adverse effects such as nausea and breast tenderness can be managed by changing the estrogen dose or the type of progestogen.<sup>9</sup> Overall, the clinical benefits of the Combined oral contraceptive pills outweigh the risks and adverse effects.<sup>10</sup>

The study on oral contraceptive pills (OCPs) awareness and usage revealed several critical insights into the knowledge, attitudes, and behaviours of participants. A significant proportion of individuals demonstrated a lack of awareness regarding the different types of OCPs available, their correct usage, and the efficacy differences between 'perfect use' and 'typical use.' These gaps in knowledge highlight the need for comprehensive educational interventions.

### Knowledge and awareness gaps

One of the key findings was the variation in awareness levels among participants, with education and occupation playing a substantial role in influencing knowledge about OCPs. A large portion of the population relied on misinformation or non-medical sources, such as social circles or the internet, for contraceptive knowledge. This lack of reliable information leads to misconceptions, improper use, and in some cases, discontinuation of OCPs.

### Adherence and compliance

The study found that adherence to the prescribed regimen was inconsistent among participants. Many users missed doses or did not follow the correct regimen, leading to decreased efficacy and increased risk of unintended pregnancies. Factors affecting adherence included forgetfulness, lack of understanding of proper use, and concerns about potential side effects. The difference between 'perfect use' and 'typical use' was not well understood by many, resulting in improper pill-taking habits and a false sense of security regarding pregnancy prevention.

### **Reasons for discontinuation**

Among participants who discontinued OCPs, the most commonly stated reasons were perceived side effects, inconvenience, and access-related issues. Side effects such as nausea, weight gain, and mood changes were frequently reported, although their severity and impact varied among individuals. Some participants switched to alternative contraceptive methods due to negative experiences with OCPs, while others discontinued contraceptive use altogether, potentially increasing the risk of unintended pregnancies. Although most of the women were aware about the methods, they were ignorant about the details like duration of protection, return of fertility on discontinuation and non-contraceptive benefits.<sup>11</sup> Women who present both obesity and use of combined oral contraceptives (COCs) have a greater risk (between 12 and 24 times) to develop venous thromboembolism than non-obese non-COC users.<sup>12</sup>

### **Role of healthcare providers and information sources**

The study highlighted the importance of healthcare providers in disseminating accurate information regarding OCPs. While many participants consulted medical professionals, a significant number relied on non-medical sources, leading to misinformation and misconceptions. Enhancing communication between healthcare providers and patients is crucial to ensuring accurate knowledge transfer and addressing concerns related to OCP use.<sup>13</sup> Additionally, increasing the availability of educational materials through trusted platforms can improve awareness and encourage adherence.

### **Community and societal perceptions**

Social stigma and cultural beliefs also played a role in OCP acceptance and usage. Some participants reported hesitancy in discussing contraceptive options due to societal taboos and negative perceptions within their communities. These societal barriers can prevent individuals from seeking medical advice or using OCPs effectively. Addressing these challenges requires community-based education programs that promote open discussions on reproductive health and contraceptive choices.<sup>14</sup>

### **Implications for public health and future interventions**

The findings from this study underscore the need for targeted public health initiatives to improve OCP awareness and usage. Healthcare systems should focus on integrating reproductive health education into routine medical consultations and community outreach programs. Addressing myths and misconceptions through clear, evidence-based communication can help in increasing acceptance and adherence to OCPs. Furthermore, interventions such as digital reminders, educational campaigns, and improved healthcare provider training can contribute to better patient outcomes. By enhancing access

to accurate information and removing societal barriers, more individuals can make informed decisions regarding their contraceptive choices, ultimately improving reproductive health outcomes at a broader level.<sup>15</sup>

This study has limitations in respect to applicability to broader populations, including rural communities. The sample size of 200 participants may not fully capture the diverse range of awareness and perception regarding OC pills. The short duration of one month also restricts the ability to assess long term trends in OCPs awareness and adherence.

### **CONCLUSION**

Many women remain unaware of classic oral contraceptive (OC) non-contraceptive health benefits even as new health advantages emerge from experience and research. This study highlights the gaps in awareness, adherence, and perception regarding oral contraceptive pills. Addressing these challenges requires multi-faceted approaches, including enhanced education, improved patient-provider communication, and community-based awareness programs. This study underscores the need for increasing awareness and access to reliable contraceptive information among women of reproductive age. Future research should focus on the long-term impact of educational programs on contraceptive usage trends.

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