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## Original Research Article

# A prospective study to investigate the epidemiology of various gynaecological problems among women at a tertiary care centre

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## ABSTRACT

**Background:** Women have unique health concerns and are affected by health issues that are either more prevalent in women than in men or a disease that is common in men too but require a different treatment approach in women and this is where women's health comes into play. Women are afflicted by some or the other reproductive morbidity at least once in their lifetime. These reproductive morbidities are broadly categorised into obstetric, gynaecological or contraceptive morbidity. Among these three categories of reproductive morbidities, gynaecological morbidities are relatively more frequent and account for a major proportion (43%-92%) of the disease burden in women.

**Methods:** This study was a prospective, single-centre, controlled, observational study conducted from January 2021 to December 2021 in the department of obstetrics and gynaecology of Bhaktivedanta hospital and research institute, Thane, India. The objective of this study was to study the magnitude and impact of a particular type of gynaecological problem in this region and to know the need of developing better preventive and therapeutic protocols including the start of specialised gynaecological clinics.

**Results:** Among various reproductive health issues, there were three most frequently occurring issues reported which were menstrual disorder, abnormal vaginal discharge and lower abdominal pain with a frequency of 29%, 24% and 19% respectively. Among the menstrual disorders commonly observed in women, the most common disorders were irregularity of menstrual cycles (39%) and menorrhagia (31%). Out of all the characteristics of vaginal discharge, changes in its colour constituted the highest percentage (51%) with white and yellow colour discharge being the most common (23% and 24% respectively).

**Conclusions:** Menstrual irregularities and reproductive tract infections were the major gynaecological morbidities observed. This study identifies major gynaecological problems and highlights the need for dovetailing health care resources towards it.

**Keywords:** Gynaecological Problems, Menorrhagia, Dysmenorrhea, Reproductive disorders

## INTRODUCTION

Women have unique health concerns and are affected by health issues that are either more prevalent in women than in men or a disease that is common in men too but require

a different treatment approach in women and this is where women's health comes into play. Women's health encompasses several aspects ranging from menstrual and reproductive system disorders to infertility and from pregnancy to menopause. However, in developing countries like India, much priority is given to maternal

health, an aspect of women's health instead of comprehensive women's health or reproductive health of non-pregnant women in particular. Women are afflicted by some or the other reproductive morbidity at least once in their lifetime. These reproductive morbidities are broadly categorised into obstetric, gynaecological or contraceptive morbidity. Among these three categories of reproductive morbidities, gynaecological morbidities are relatively more frequent and account for a major proportion (43%-92%) of the disease burden in women.<sup>1-3</sup> WHO defines gynaecological morbidity as all structural and functional disorder of genital tract excluding those relating to pregnancy, delivery or perpuerium. This particular class of reproductive morbidities adversely impacts the reproductive ability, mental and social wellbeing of the afflicted. Moreover, if left untreated these conditions can lead to pregnancy related complications, congenital infection and/or increase the risk of contracting HIV infection or Pelvic Inflammatory Disease. Studies have reported that around 1/3<sup>rd</sup> of the adult women lost their lives to gynaecological morbidities.<sup>4</sup> Despite these staggering figures showing grimness of gynaecological morbidities, reproductive health policies or strategies still fail to cover this domain probably due to paucity in the numbers of population based studies covering whole range of the gynaecological issues prevalent among the women and/or lack of awareness about gynaecological illnesses and presence of hesitance in women to talk about and seek treatment for these problems. The present OPD-based epidemiological study was conducted with an objective to study the prevalence of the gynaecological illnesses among women visiting Bhaktivedanta Hospital and Research Institute, a sub-urban tertiary healthcare centre in Thane district of Maharashtra, India.

## METHODS

This study was a prospective, single-centre, controlled, observational study conducted at the department of Obstetrics and Gynaecology of Bhaktivedanta Hospital and Research Institute, Thane, India from the year January 2021- December 2021. A total of 500 patients were enrolled in the study. All female patients who presented with gynecological problems were included in this study. All female patients having no or other problems apart from gynecological issues were excluded from the study. Post voluntary consent, a short questionnaire was given to all the OPD patients to understand the various gynaecological disorders in women. The questionnaire was validated by subjects and expert validation and was approved by the Institutional ethics committee. The data obtained would then be analysed and characterised for understanding the trend of illnesses in patients suffering from gynaecological problems. The objective of this study was to study the magnitude and impact of a particular type of gynaecological problem in this region and to know the need of developing better preventive and therapeutic protocols including the start of specialised gynaecological clinics. This may help in formulating better protocols and strategy for managing gynaecological disorders in a

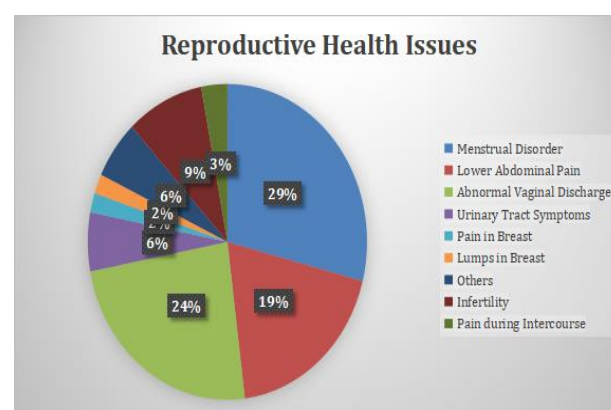
tertiary level care setting. The various parameters obtained from the results of the questionnaire were summarised by descriptive statistics and percentages.

## RESULTS

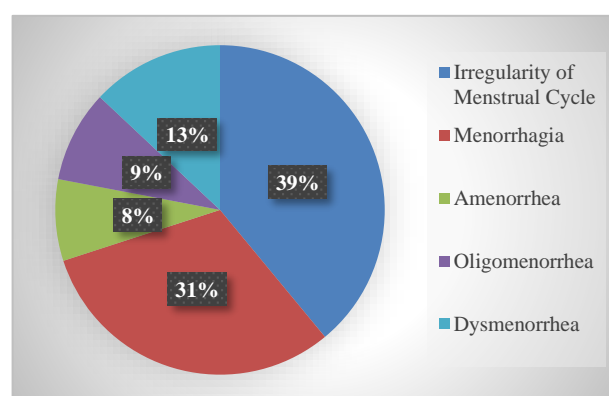
In this study we tried to examine the prevalence of various gynaecological illnesses in a total of 500 women visiting Gynecology OPD. Among these 500 cases, the majority (70.40%) women belonged to the age group of 20-39 years i.e., reproductive age, followed by (19.38%) women falling under the premenopausal age group (40-50 years). 8.16% and 2.04% of these subjects belonged to the postmenopausal (above 50 years) and late adolescent age group (between 15-19 years) respectively (Table 1).

**Table 1: Age groups of women in gynecology OPD.**

Age group (years)	%
Late Adolescent (15-19)	2.04
Reproductive (20-39)	70.40
Premenopausal (40-50)	19.38
Postmenopausal (>50)	8.16



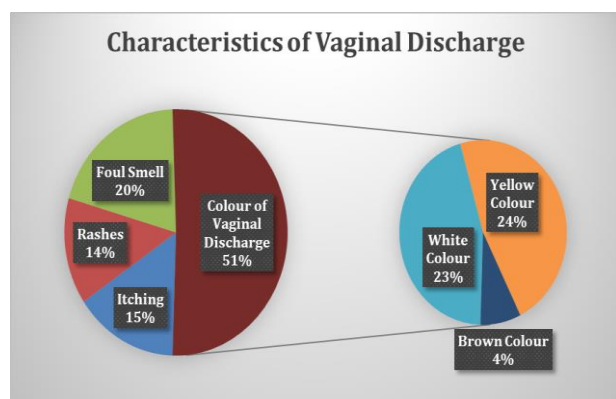
**Figure 1: Reproductive health issues.**



**Figure 2: Common menstrual disorders.**

Among various reproductive health issues, there were three most frequently occurring issues reported which were menstrual disorder, abnormal vaginal discharge and lower abdominal pain with a frequency of 29%, 24% and

19% respectively (Figure 1). Among the menstrual disorders commonly observed in women, the most common disorders were irregularity of menstrual cycles (39%) and menorrhagia (31%) (Figure 2). Out of all the characteristics of vaginal discharge, changes in its colour constituted the highest percentage (51%) with white and yellow colour discharge being the most common (23% and 24% respectively) (Figure 3).



**Figure 3: Characteristics of vaginal discharge.**

## DISCUSSION

Reproductive morbidities constitute a major portion of disease burden in women worldwide. Exploring the prevalence of gynaecological illnesses, a type of reproductive morbidity is a challenging task since women either consider it as insignificant health concerns or hesitate to talk about their reproductive issues. Socio-economic conditions and demographic determinants such as illiteracy and gender discrimination further leads to decreased reporting of such cases and delayed treatment which ultimately results in worsening of the gynaecological disorders. Out of the various reproductive health issues in women, the most common were menstrual disorders (29%) followed by abnormal vaginal discharge (24%) and lower abdominal pain (19%). These results were in agreement with the findings of studies by Inamdar et al, Zafar et al, Bonetti et al which also reported menstrual disorders to be the highly prevalent gynaecological disorder.<sup>5-7</sup> In our study, UTI's contributed for about 6% of the total cases. However, in other studies by Inamdar et al, Zafar et al, Khatri et al and Bonetti et al, the prevalence rate of UTI was much higher.<sup>5-8</sup> In our study, the rate of infertility was 9%. This was similar to the results found in the study by Katole et al.<sup>15</sup>

Menstrual disorders cause physical, behavioural and emotional changes around the time of menstruation and also affect the normal functioning, social life and daily activities of women. The most common menstrual disorders noted in our study among women of reproductive age group were irregularity of menstrual cycle (39%), menorrhagia (31%) and dysmenorrhea (13%). This was followed closely by Oligomenorrhea (9%) and amenorrhea (8%). However, in a study done in Turkey by Cakir et al

dysmenorrhea was the most common menstrual disorder obtained which was followed by irregularity of the menstrual cycle.<sup>9</sup> In other American, Australian and European studies, the frequency of dysmenorrhea was 20% in women.<sup>10</sup> The rate of menorrhagia and oligomenorrhea was similar in another study reported by Vaidya et al in India.<sup>11</sup> The results of amenorrhea contributed to about 5-9% in population based surveys in various developing countries which was similar to our results.<sup>12</sup> Vaginal discharge is usually regarded as a normal and regular occurrence. However abnormal vaginal discharge of certain colour or discharge accompanied with foul smell, incidences of itching/irritation or rashes can indicate an infection or any other gynaecological issue. The various characteristics of abnormal vaginal discharge include colour of vaginal discharge, foul smell, itching and rashes.

Out of the 24% of the women who complained about having abnormal vaginal discharge, the majority (51%) of this population reported vaginal discharge of either white, brown or yellow colour. Of these 51% participants, 23% had white colour discharge and 24% had yellow colour discharge while only 4% had brown colour discharge. Moreover 15% of the women with abnormal vaginal discharge complained about itching of the skin of the vagina and the surrounding area. While 14% women self-reported the issue of rashes and 20% complained about the foul smell along with vaginal discharge. These findings are in agreement with another study that aimed to find the prevalence and determinants of abnormal vaginal discharge in Northern India.<sup>13</sup> A study conducted in Nigeria to understand the prevalence, pattern and predictors of abnormal vaginal discharge also found the prevalence rate of abnormal vaginal discharge to be 55.6% with majority (76.3%) women having whitish discharge, 49.6% experiencing the issue of foul smell and 41.3% having the complain of itching around the vulva.<sup>14</sup> The limitation of the study is that it is only conducted at one centre and hence, we need to carefully extrapolate results of the study while policy making.

## CONCLUSION

Menstrual irregularities and reproductive tract infections were the major gynaecological morbidities observed. This study identifies major gynaecological problems and highlights the need for dovetailing health care resources towards it.

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