

ORIGINAL RESEARCH

Socio-demographic factors associated with leucorrhoea among reproductive age group

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Received: 12 March, 2023

Accepted: 18 April, 2023

ABSTRACT

Leucorrhoea is one of the major problem encountered in gynaecological practice. The most common cause of leucorrhoea is physiological, followed by vaginal infections due to bacteria, virus, fungi and parasites. Other causes includes foreign bodies, cervicitis and atrophic vaginitis. Patients meeting the study criterion and who give consent were recruited. A detailed clinical history-the age of the women, socio economic condition, and marital status were noted. The mean age of study cases was 30.25 years. Majority women were married, and have vaginal discharge as the leading complaint. Majority had studied upto primary school and leucorrhoea is more common in rural women and most of them were home makers and agricultural women. Leucorrhoea is more common in lower middle class.

Key words: Socio-demographic factors, leucorrhoea, reproductive age group

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INTRODUCTION

Vaginal discharge is a topic silent in nature as most women are not aware of the change of the normal from abnormal. In women from lay population, where the health literacy is low and socio cultural background is poor, the health seeking patterns for vaginal discharge and disclosure of the vaginal health matters are poor. Another important aspect of this population is their risk behaviours which make them more vulnerable for sexually transmitted infections and other reproductive tract infections.¹

Vaginal discharge not only affects women's routine physical and social activities but also her mental health and all aspects of a women's life. It restricts her domestic and occupational work thus resulting in social and economic problems.²

Leucorrhoea is the second most common problem after menstrual disorders.³ One in ten women will present with vaginal discharge in the course of a year.⁴ Almost every fourth woman in gynaecological out-patient department has the complaint of vaginal discharge.⁵

Leucorrhoea is one of the major problem encountered in gynaecological practice. The most common cause of leucorrhoea is physiological, followed by vaginal infections due to bacteria, virus, fungi and parasites. Other causes includes foreign bodies, cervicitis and

atrophic vaginitis.⁶ It occurs in 1-14% of all women in the reproductive age group and is responsible for 5-10 million OPD visits per year throughout the world. The prevalence of vaginal discharge in India is estimated to be 30%.⁷ If untreated, it predisposes to pelvic inflammatory diseases, infertility, urethral syndrome, endometritis, pregnancy loss, preterm labour, PROM, chorioamnionitis. Most common cause of symptomatic vaginal discharge is Bacterial vaginosis (33-47%)⁸ followed by Candidiasis (20-40%) and Trichomoniasis (8-10%)^{9,10}. These three conditions account for 90% of all etiologies of abnormal vaginal discharge. Multiple infections can also coexist.⁹ Pathological discharge in women of reproductive age, is usually caused by infection and causative organisms may or may not be sexually transmitted.

The estimation of prevalence of leucorrhoea is helpful in early detection and treatment of various diseases associated with it.

METHODOLOGY

STUDY DESIGN: Prospective study.

SAMPLING AND SAMPLE SIZE: convenient sampling and a sample size of 200.

INCLUSION CRITERIA

1. All the Women of reproductive age group.

2. Complaining of abnormal vaginal discharge.

EXCLUSION CRITERIA

1. Pregnancy.
2. Puerperium.
3. Post abortal women within 6 weeks.
4. Women with c/o bleeding pv.
5. Women who have taken antibiotics or antifungals in past 1 week.
6. Benign and malignant tumors of uterus and cervix.
7. Women with laboratory confirmed STD.
8. Women with IUCD/proven foreign body.
9. Women with predisposing factors like diabetes/immunosuppression.

METHODS

- Patients meeting the study criterion and who give consent were recruited.
 - Comprehensive history includes following.
1. A detailed clinical history-the age of the women, socio economic condition and marital status were noted.

The complaints of white discharge per vagina was elaborated to include the,

- A) Quantity of discharge-copious/moderate/scanty.
- B) Colour of discharge-white/green/greenish yellow/grey.

RESULTS

Table 1: Distribution of subjects according to age group

Age group	Frequency	Percent
16-20yrs	20	10.0
21-25yrs	31	15.5
26-30yrs	49	24.5
31-35yrs	47	23.5
36-40yrs	45	22.5
41-45yrs	8	4.0
Total	200	100.0

It shows age distribution of all patients studied. The mean age of the study cases were 30.25 years. 24.5% were in the age group of 26-30 years followed by 23.5% between 31-35 years, 22.5% between 36-40

C) Consistency of discharge-homogenous/thick curdy/watery.

D) Odour-present/absent.

E) Its relationship to menstruation

2. Other associated symptoms like itching vulva, lower abdominal pain, burning micturition, dyspareunia were enquired.

3. In obstetric history a careful note was made regarding married life, number of pregnancies, number of abortions.

4. In menstrual history-Menstrual cycle, its rhythm, dysmenorrhea was enquired. Relationship of leucorrhoea to menstrual cycle was noted, LMP was noted.

5. Past history for having taken treatment for similar complaints.

6. Personal history in regard to use of contraception (IUD insertion, oral contraception), recent use of antibiotics, steroid therapy was obtained.

PHYSICAL EXAMINATION

General condition, nutritional status, anaemia, CVS, RS, pulse rate, blood pressure, per abdomen.

GYNECOLOGICAL EXAMINATION

PER SPECULUM EXAMINATION: For condition of vagina, cervix and discharge. Bimanual Examination: For uterine position, size, consistency, mobility and adnexal masses, tenderness.

years, 15% between 21-25 years, 10% between 16-20 years and 4% between 41-45 years. The youngest in the cases was 16 years of age and oldest was 45 years.

Table 2: Distribution of subjects according to education

Subjects	Frequency	Percent
Illiterate	31	15.5
Primary	49	24.5
Secondary	14	7.0
SSLC	47	23.5
PUC	41	20.5
Graduate	18	9.0
Total	200	100.0

It shows education wise distribution of study subjects. Majority of the subjects had completed their primary school(24.5%) and SSLC(23.5%) followed by

PUC(20.5%), 15.5% illiterate, 7% were completed Secondary school, 9% completed their graduation.

Table 3: Distribution of subjects according to occupation

Occupation	Frequency	Percent
Agriculture	32	16.0
Asha worker	1	.5
Coolie	8	4.0
Garments	3	1.5
Home maker	128	64.0
School catering	1	.5
Social worker	1	.5
Student	16	8.0
Tailor	1	.5
Teacher	7	3.5
Work	2	1.0
Total	200	100.0

It shows occupation wise distribution of study subjects. 64% of the subjects were home maker, 16% were agriculture, 8% were student, 4% were coolie, 3.5% were teacher, 1.5% were garment workers, 1% were working in private company, 0.5% were Asha worker, 0.5% were school catering, 0.5% were tailor.

Table 4: Distribution of subjects according to place

Place	Frequency	Percent
Rural	144	72.0
Urban	56	28.0
Total	200	100.0

It shows distribution of subjects according to place. Majority (72%) were from rural, remaining (28%) from urban areas.

Table 5: Distribution of subjects according to socioeconomic status

Status	Frequency	Percent
Lower middle	124	62.0
Upper lower	44	22.0
Upper middle	32	16.0
Total	200	100.0

It shows distribution of subjects according to socioeconomic status (Modified Kuppaswamy SES classification). 62% belongs to lower middle class, 22% belongs to upper lower class, remaining 16% belongs to upper middle class.

Table 6: Distribution of subjects according to marital status

Status	Frequency	Percent
Married	173	86
Separated	4	2.0
Unmarried	19	10
Widow	4	2.0
Total	200	100.0

It shows marital status distribution among subjects. 86% were married, 10% were unmarried, 2% were separate and widow.

Table 7: Distribution of subjects according to consistency of vaginal discharge

Discharge	Frequency	Percent
Clear	24	12.0
Curdy	63	31.5
Frothy	46	23.0
Mucoid	67	33.5
Total	200	100.0

It shows distribution of subjects according to consistency of vaginal discharge. 33.5% had mucoid discharge, 31.5% had curdy discharge, 23% had frothy discharge, 12% had clear discharge.

Table 8: Distribution of subjects according to amount of discharge

Discharge	Frequency	Percent
Copious	31	15.5
Minimal	82	41.0
Moderate	87	43.5
Total	200	100.0

It shows distribution of subjects according to amount of discharge. 44% had moderate amount of discharge, 41% had minimal amount of discharge, remaining 15% had copious discharge.

Table 9: Distribution of subjects according to odour of discharge

	Frequency	Percent
Foul smelling	91	45.5
Non foul smelling	109	54.5
Total	200	100.0

It shows distribution of subjects according to odour of discharge. 54.5% had non foul smelling discharge while 45.5% had foul smelling discharge.

DISCUSSION

In our present study we found that leucorrhoea is most common in 26-30 years age group which is similar to studies done by MadhuBindu *et al.*,^[11] Uma Devi Set *al.*,^[12] Durga K *et al.*,^[13]. This could be because of increased sexual activity, childbirths and use of contraceptives at this age.

In present study, 24.5% of the subjects had studied upto primary school, 23.5% high school, 15.5% illiterate, 20% PUC, 9% degree. The highest percent of infection among less educated and illiterate women might be due to the careless in personal hygiene and there is relation between the rate of infection by vaginosis and economic status, educational background and study population.

Vaginal discharge was found to be more prevalent in women belonging to lower class and lower middle class. These findings are comparable with that of Kulkarni *et al.*, Chaudhary V *et al.*,^[14] Poor personal and genital hygiene may be responsible for this.

In our study most of the women were house wife (64%) which is similar in study conducted by Varsha Chaudary *et al.*,^[14] Majority of women belongs to rural areas (72%) in our study which is similar to studies done by S Uma Devi *et al.*,^[12] in which maximum incidence of vaginal discharge was noted in 60% of women who belongs to urban area and 40% of women belongs to rural area in study group.

In present study most of our cases 173 (86.5%) were married remaining 19 (9.5%) were unmarried. 4 (2%) were separated and widowed each which is comparable with Sampdashivadas Rajkumar *et al.*,^[14] Varsha Chaudary *et al.*,^[15] In contrast to this Patel V *et al.*,^[16] find higher percentage of vaginal discharge in younger age group, unmarried females and among those who are working. This may be

because unmarried and younger age group female with vaginal discharge reported less to the hospital.

In present study 33.5% presented with mucoid discharge, 31.5% presented with curdy white discharge, 23% presented with frothy discharge. This is clinically suggestive of BV, candidiasis and *T. vaginalis* and remaining 12% had clear discharge. This study is similar to study conducted by Uma Devi S *et al.*, whereas 34% presented with thick curdy, mucoid or watery 59% and frothy discharge in 7%.

In present study the amount of discharge moderate in 43.5% of women followed by 41% minimal and 15.5% copious which is similar in studies conducted by S Uma Devi *et al.*,^[12] whereas amount of discharge moderate in 52% of women followed by 27% minimal and 21% copious. In the present study discharge with foul smelling odour seen in 45.5% of women remaining 54.5% were had non foul-smelling vaginal discharge.

CONCLUSION

The mean age of study cases was 30.25 years. Majority women were married, and have vaginal discharge as the leading complaint. Majority had studied upto primary school and leucorrhoea is more common in rural women and most of them were home makers and agricultural women. Leucorrhoea is more common in lower middle class.

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