#### **Research Article**

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# Assessment of Leucorrhea diseases in female students

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# **Abstract**

Leucorrhoea also spelled leucorrhoea, flow of a whitish, yellow, or greenish discharge from the vagina of the female that may be normal or that may be a sign of infection. The present study was done in female student of the different departments of IFTM University. Total number of 200 female students was taken into the study. In this study more prevalent symptoms was found that irritation and itching on genital organs which could be worse at night (95%), followed by sedentary life styles (85%) and foul-smell vaginal discharges (70%), moderately prevalent symptoms were found constipation (55%),stress (60%),frequent mood changes (50%) pain in stomach/lower back pain (40%), and less prevalent symptoms were black dark circle around the eyes (25%), anorexia (16%), period irregular (10%). Students should be recommended for treatment and provide awareness and prevention of leucorrhoea by maintain good hygiene, exercise, natural treatment especially in the genital areas to prevent any bacterial infections.

Keywords: Leucorrhoea, Infections, Genital organs, Foul-smell vaginal discharges.

# INTRODUCTION

Leucorrhoea is a very common complaint in obstetric and medical practice. The term "leucorrhoea" is applied to cases of abnormal vaginal discharge, non-haemorrhagic in nature, which is not caused by neoplasm or other serious organic disease. It is also difficult condition to treat satisfactorily in view of its uncertain etiologic. The etiology of leucorrhoea is complex and not well understood. It is considered that changes in the vaginal epithelium; changes in the normal bacterial flora and pH of the vaginal secretion predispose to leucorrhoea. Chronic illness, fatigue, malnutrition, emotional disturbances, chronic retroverted uterus, congestive cardiac failure, gonococcal and monilial infections, vulvovaginitis, lesions of the vaginal wall and uterine cervix have all been associated with leucorrhoea [1].

Leucorrhoea and pelvic inflammatory disease (PID) are common gynaecological problems faced by the gynaecologist and are often difficult to treat. Leucorrhoea is an abnormal excessive vaginal discharge often associated with irritation and pruritus. Leucorrhoea could be physiological when associated with various phases of menstrual cycle or due to cervical/vaginal inflammation or diseases. It can be due to infection with Trichomonas vaginalis, Candida albicans or mixed bacterial infections, chronic cervicitis, cervical dysplasia, malignancy, or due to senile vaginitis. Pelvic inflammatory disease refers to the upper genital tract infections, which encompasses endometritis-salpingitis-peritonitis. The natural course of the disease is not completely understood but it has been suggested that ascending infection is generally due to a sexually transmitted agent [2]. The lateral spread might be due to infected viscera like appendix, diverticulitis or occasionally by haematogenous spread. However, if this does not resolve spontaneously a poly-microbial stage may follow [3]. Gynaecological procedures like intra uterine contraceptive device insertion, dilatation and curettage and obstetric delivery may also be the responsible factors. These patients clinically present with abnormal vaginal discharge, fever, vomiting, pelvic pain and raised erythrocyte sedimentation rate (ESR) [4,5].

# Types of lucorrhea

**Pathologic leucorrhoea** is usually due to infections of the upper and lower female genital tract. The most common sexually transmitted pathogens associated with leukorrhea are *Chlamydia trachomatis*, *Neisseria gonorrhoeae*, and *Trichomonas vaginalis*. Leucorrhoea may be the only presenting sign in women infected with these pathogens <sup>[6,7]</sup>.

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Department of Pharmacology and Clinical Research, School of Pharmaceutical Sciences, IFTM University, Lodhipur Rajput, Delhi Road, Moradabad-244102, U.P., India **Physiologic leucorrhoea** is caused by congestion of the vaginal mucosal membranes due to hormonal stimulation. This may occur during ovulation and pregnancy.

This small scale study was conducted in female students of different department of IFTM University, Moradabad to assess the present/absent, awareness and prevalence of leucorrhoea and the factors influencing the same in these students. The study participants included 200 unmarried girl students. Detailed symptom based questionnaire study was done in this recent work.

#### MATERIAL AND METHOD

#### This study was done under the following manner

- A list of Questionnaire was designed to assess the students about the leucorrhoea.
- ii. This questionnaire was distributed and collected in the students.
- iii. Age wise study in students
- iv. Questionnaire/symptoms based study

# Questionnaire of leucorrhoea [8]

- 1. Do you know about Leucorrhoea?
- 2. Do you have Leucorrhoea?
- 3. Sedentary life styles
- 4. Fatigue/weakness
- 5. Foul-smell vaginal discharges
- 6. Pain in stomach/lower back pain
- Irritation and itching on genital organs, which could be worse at night.
- 8. Constipation.
- 9. Headache and vertigo is often observed.
- 10. Black dark circle around the eyes
- 11. Do you suffering from STD
- 12. Do you have Stress?
- 13. Anorexia
- 14. Period regularly
- 15. Frequent mood changes.

# RESULTS AND DISCUSSION

The recent study was done in female students of the different departments of IFTM University. There were the total numbers of 200 female students taken into the study.

In this study it was observed that more nor of female students / candidates suffered with disease were under the age of 21-23 year (81 case) followed by 17-20 year (60 case) followed by 24-26 year (40 case) & very less nor under the age 27-30 (19 case).

In this study more prevalent symptoms was found that irritation and itching on genital organs which could be worse at night (95%), followed by sedentary life styles (85%) and foul-smell vaginal discharges (70%), moderately prevalent symptoms were found constipation (55%), stress (60%), frequent mood changes (50%) pain in stomach/lower back pain (40%), and less prevalent symptoms were black dark circle around the eyes (25%), anorexia (16%), period irregular (10%).

The recent study was done in female students of the different departments of IFTM University, total number of 200 female students taken into the study.

In the present study, it was found that 92 percent reported the problem of leucorrhoea. It was observed that more nor of students / candidate suffered with disease were under the age of 21-30 year (90 cases) followed by 17-20 year (60 cases) followed by 24-26 year (40 cases) & very less nor under the age 27-30 (10 cases).

Table 1: Distribution of students according to age groups

Age distribution of case		
Age group	No. of cases	
17-20 Year	60	
21-23 Year	90	
24-26 Year	40	
27-30 Year	10	
TOTAL	200	

Table 2: Occurrence of leucorrhoeal symptoms in percentage of students

S No	Symptoms	No. of students appeared the symptoms	Occurrence of symptoms (%)
1	Do you know about Leucorrhoea?	170	85%
2	Do you have Leucorrhoea?	184	92%
3	Sedentary life styles	170	85%
4	Fatigue/weakness	130	65%
5	Foul-smell vaginal discharges	140	70%
6	Pain in stomach/lower back pain	80	40%
7	Irritation and itching on genital organs, which could be worse at night.	190	95%
8	Constipation.	110	55%
9	Headache and vertigo is often observed	40	20%
10	Black dark circle around the eyes	70	35%
11	Do you suffering from STD	40	20%
12	You have stress?	120	60%
13	Anorexia	32	16%
14	Period irregularly	20	10%
15	Frequent mood changes	100	50%

In this study more prevalent symptoms was found that irritation and itching on genital organs which could be worse at night (95%), followed by sedentary life styles (85%) and foul-smell vaginal discharges (70%), moderately prevalent symptoms were found constipation (55%), stress (60%), frequent mood changes (50%) pain in stomach/lower back pain (40%), and less prevalent symptoms were black dark circle around the eyes (25%), anorexia (16%), period irregular (10%).

The most common causes of leucorrhoea include vaginal, cervical and uterine pathology. These pathologies which are manifested as leucorrhoea have their specific clinical spectrum. In almost every disease local manifestations dominate the picture. For example vaginal diseases that are the cause of leucorrhoea often manifested as pain in legs, itching, anorexia, constipation and general weakness etc., similarly cervical diseases are manifested as low backache, uterine and other pelvic diseases are mainly manifested as low backache and lower abdominal pain. In present study, revealed that leucorrhoea itself causes some manifestations which are difficult to explain on the basis of underlying pathology. The logical link and biological plausibility almost

impossible to establish. Underlying cause may be the infection, unhygienic condition, stress and sedentrypedus life style. Because students remain under stress due to their study, lack of time for exercise and continue sitting on chair in class may lead to the unhygienic condition/ sweating in genital organ may be responsible for the development of leucorrhea <sup>[9]</sup>. Vaginal infection can be produce due to sharing toilet articles, for example in college toilets/public places. It is also due to wearing unhygienic innerwear or wet innerwear were transmitted infection to the vagina. Stress, tension, anxiety & worries produce leucorrhoea by decreasing the immune response of woman. Some psychological changes during menopausal condition also produce leucorrhoea <sup>[10]</sup>.

Students should be recommended for treatment and provide awareness and prevention of leucorrhoea by maintain good hygiene, especially in the genital areas to prevent any bacterial infections, hydrotherapy/ Hip bath/Cold sitz bath are effective in increasing blood circulation in the vagina, cold water bath also helps relieve congestion in the pelvic region, take daily hydrotherapy to speed up healing, exercise regime helps in treatment of leucorrhoea, exercises improve blood circulation and builds immunity to bacterial attacks, aromatherapy with anti-infective essential oils of rosemary, oregano and sandalwood is effective natural cure for Leucorrhoea adequate sleep and rest facilitate faster healing, herbal tea such as green tea blended with sage or blackberry leaves facilitates in treatment leucorrhea, avoid sanitary napkins, deodorants, sprays and other irritants during treatment as they can aggravate leucorrhoea [11].

#### CONCLUSION

Thus, the present study brings out a high prevalence of leucorrhoea 95% among the female students. Age, education and others status, were seen to influence and shape the perceptions and care seeking activities about the problem of leucorrhoea. Students should be recommended for treatment and provide awareness and prevention of leucorrhoea by maintain good hygiene, especially in the genital areas to prevent any bacterial infections.

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