



Clinical Research

PREVALENCE OF VAGINITIS IN FEMALES WITH THE HELP OF PAP SMEAR EXAMINATION IN THE RURAL AREAS OF FARIDABAD: A RETROSPECTIVE STUDY.

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ABSTRACT This retrospective study investigates the prevalence of vaginitis among females in rural areas of Faridabad using Pap smear examinations. Vaginitis, an inflammation of the vagina, is a common health issue that can significantly impact women's quality of life. The study analysed data from Pap smear tests conducted on females in these rural regions to identify the types and frequency of vaginal infections. The findings revealed that a large proportion of females had inflammatory smears, indicating the presence of inflammation. This inflammation can be caused by various factors, including infections or non-infectious irritants. Additionally, the study found fewer cases of specific infections such as candidiasis, a yeast infection, and bacterial vaginitis, caused by an imbalance of bacteria in the vagina. The results suggest that while inflammatory smears are prevalent, there is a lesser occurrence of these specific types of vaginitis. Understanding the prevalence of these conditions is crucial for developing targeted health interventions and improving women's healthcare in rural areas. This study highlights the importance of regular Pap smear screenings as a tool for early detection and management of vaginal infections, which can help improve the overall reproductive health of women in these communities.

KEYWORDS :

INTRODUCTION

Vaginitis is a common gynaecological condition affecting women worldwide, characterized by inflammation and infection of the vagina. It can result from bacterial, fungal, or parasitic infections and may present symptoms such as itching, discharge, and irritation. Early detection and treatment are crucial to prevent complications such as pelvic inflammatory disease and adverse reproductive health outcomes. The Pap smear test, traditionally used for cervical cancer screening, also plays a significant role in diagnosing vaginitis by identifying inflammatory cells and specific infectious agents.

Globally, vaginitis affects millions of women annually. According to a study published in the Lancet Global Health in 2021, bacterial vaginosis, a prevalent form of vaginitis, affects approximately 30% of women worldwide, with higher rates observed in low and middle-income countries. In rural and resource-limited settings, the prevalence can be significantly higher due to factors such as limited access to healthcare, inadequate hygiene practices, and lack of awareness about reproductive health.

In India, the prevalence of vaginitis is a major public health concern. A 2020 study in the Indian Journal of Medical Research reported that nearly 40% of women attending gynaecological clinics in rural areas are diagnosed with some form of vaginitis. Socio-cultural factors, including taboos surrounding menstrual health and limited health education, contribute to the underreporting and undertreatment of this condition.

The rural areas of Faridabad, Haryana, reflect this global and national scenario. Women in these communities often face barriers to accessing healthcare services, leading to a higher prevalence of untreated vaginal infections. This retrospective study aims to assess the prevalence of vaginitis in females using Pap smear examinations in the rural areas of Faridabad. By analysing data collected over the past five months, this study seeks to identify patterns, risk factors, and potential strategies for improving women's reproductive health in this region.

Inclusion Criteria

- 1) Age Range: Females aged 18 to 75 years.
- 2) Residence: Females residing in rural areas of Faridabad for at least the past six months.
- 3) Health Status: Females attending primary healthcare centres for routine gynaecological check-ups or Pap smear examinations.
- 4) Consent: Females who provide written informed consent to participate in the study.
- 5) Sexual Activity: Sexually active/inactive females.
- 6) Pap Smear: Females who agree to undergo a Pap smear examination as part of the study.

Exclusion Criteria

- 1) Pregnancy: Pregnant women.
- 2) Menstruation: Women currently menstruating at the time of the Pap smear examination.
- 3) Antibiotic Use: Females who have taken antibiotics within the last two weeks prior to the Pap smear.
- 4) Vaginal Douching: Females who have douched within the last 48 hours prior to the Pap smear.
- 5) Severe Medical Conditions: Females with severe medical conditions that may affect the results of the study, such as active cancer, severe immunocompromised states, or other major illnesses.
- 6) Previous Hysterectomy: Females who have had a hysterectomy.
- 7) Refusal to Consent: Females who do not provide informed consent.
- 8) Inadequate Samples: Inadequate or unsatisfactory Pap smear samples for analysis.

AIMS

The primary aim of this research is to determine the prevalence of bacterial vaginosis (BV) among females in rural areas of Faridabad using pap smear examination.

Objectives

- 1) To determine the demographic analysis.
- 2) To determine the Risk factors.
- 3) To determine the pap smear efficacy in the rural areas.

- 4) For Resource utilisation by Health care workers.
5) Health education impact.

Methodology

A Retrospective study was conducted in the Al Falah School of Medical Sciences And Research Centre, Dhauj to determine the prevalence of Vaginitis among females in rural areas of Faridabad by using Pap smear examinations.

The study population included females aged 18-75 years residing in the rural areas of Faridabad. Data collected from the Histopathology department after taking permission from the HOD Pathology. A structured questionnaire was used to collect socio-demographic data through the Pap smear examination form (age, marital status, education, occupation) and clinical history (parity, menstrual history, symptoms of vaginal discharge, etc.). Healthcare professionals collected cervical samples using a sterile Ayre's spatula.

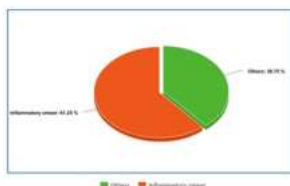
The samples were smeared on glass slides, fixed with ethanol, and transported to the pathology laboratory for analysis. The association between BV and various risk factors (age, parity, socio-economic status, etc.) will be assessed. Confidentiality of participants' data was maintained throughout the study.

Participants diagnosed with Vaginitis were provided with appropriate treatment and counselling. After getting all the data it will be analysed in Microsoft word and Excel 2000.

RESULT

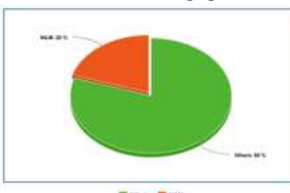
1. Report on Pap Smear Examination Results in Rural Faridabad of inflammatory smear:

In a study conducted in the rural area of Faridabad, 80 pap smear examinations were performed, revealing that 49 (61.25%) were inflammatory smears. This significant percentage indicates a high prevalence of cervical inflammation among the women examined. Inflammatory smears can be indicative of infections, hormonal changes, or other underlying conditions that require further investigation and potential intervention. The results underscore the necessity for improved healthcare access and education on cervical health in the region. Addressing these issues could lead to better preventive measures and treatment, ultimately improving women's reproductive health in rural Faridabad.



2. Report on Pap Smear Examination Results in Rural Faridabad of negative for intraepithelial lesions:

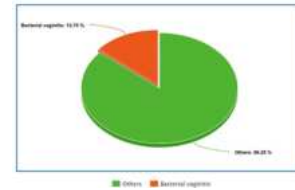
A recent study conducted in the rural area of Faridabad examined 80 pap smear samples to assess cervical health among women. The findings revealed that 16 out of these 80 samples (20%) tested negative for intraepithelial lesions, indicating no presence of precancerous or cancerous cervical cell changes. This result suggests that a significant proportion of the women tested are at low immediate risk for cervical cancer. However, the remaining 64 samples may require further analysis to determine the presence of any abnormalities. These findings highlight the importance of regular cervical screening for early detection and intervention in rural populations.



3. Report on Pap Smear Examination Results in Rural Faridabad of bacterial vaginitis:

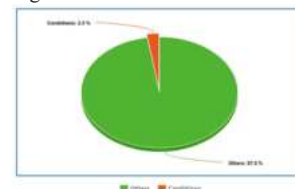
A study conducted in the rural area of Faridabad involved 80 pap smear examinations to assess the prevalence of bacterial vaginitis. The results indicated that 11 out of the 80 women (13.75%) tested positive for bacterial vaginitis. This finding suggests a significant presence of bacterial vaginitis among the women screened, highlighting potential gaps in reproductive health awareness and access to healthcare

services in rural regions. The data underscores the need for improved health education, regular screenings, and enhanced healthcare facilities to address and manage bacterial infections effectively in these communities.



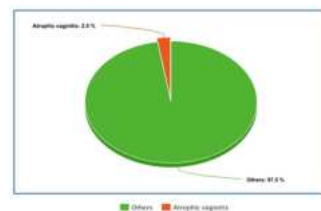
4. Report on Candidiasis Detection in Pap Smear Examinations in Rural Faridabad of Candidiasis:

A study conducted in the rural area of Faridabad involved 80 pap smear examinations, revealing two cases of candidiasis. This results in a candidiasis detection rate of 2.5%. While the prevalence appears low, it underscores the importance of regular screenings in rural regions, where access to healthcare may be limited. Candidiasis, caused by the overgrowth of yeast, can lead to discomfort and, if untreated, potential complications. The findings highlight the need for awareness and preventive measures to improve women's health in rural communities and ensure early diagnosis and treatment of such infections.

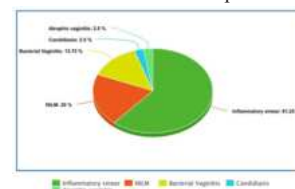


5. Report on Pap Smear Examination Results in Rural Faridabad of Atrophic vaginitis:

A recent study conducted in the rural areas of Faridabad analysed 80 pap smear examinations to assess the prevalence of atrophic vaginitis. Out of these, 2 cases were diagnosed with atrophic vaginitis, representing 2.5% of the total examined population. This finding highlights a relatively low occurrence of the condition within the sampled demographic. The study underscores the importance of regular cervical screening, especially in rural settings where healthcare access may be limited. Early detection through pap smears can aid in the timely management of gynaecological issues, promoting better women's health outcomes in these communities.



The PAP smear examination of various samples reveal :



CONCLUSION

In a study involving 80 samples analysed through Pap smear tests, the predominant result was inflammatory smears. These smears constituted the majority of the findings, indicating a significant prevalence of inflammation among the sampled population. In addition to inflammatory smears, a smaller portion of the samples indicated infections such as candidiasis, bacterial vaginitis, atrophic vaginitis which were present in a notable yet lesser percentage. Furthermore, 20% of the samples were diagnosed with bacterial vaginosis, suggesting a moderate presence of this condition within the studied group. The high incidence of inflammatory smears highlights the need for further investigation into the causes of cervical inflammation among the rural population. The presence of candidiasis and bacterial vaginosis, although less frequent, indicates potential areas for public health intervention and education. These findings underscore the importance of regular screening and comprehensive gynaecological care to address and manage common cervical and

vaginal health issues effectively.

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