



A cross sectional study to know the clinical characteristics and risk factors of patients with pelvic inflammatory disease in the Department of Obstetrics and Gynecology, SMS Medical College and Hospital Jaipur

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Abstract

Pelvic Inflammatory Disease (PID) is a critical public health issue, particularly among women of reproductive age.

The clinical manifestations of PID vary from asymptomatic or mild illness to severe pelvic pain, fever, cervical discharge, dyspareunia, and adnexal tenderness.

Aim And Objectives

To study clinical characteristics and associated risk factors in patients with pelvic inflammatory disease (PID).

To study clinical characteristics in clinically diagnosed PID patient.

To study association between PID and risk factor in terms of age, parity, literacy, history of previous D&C, abortion, previous h/o PID /STI (sexually transmitted disease), IUCD insertion, deliveries at home, socioeconomic status etc.

Conclusion : The incidence of pelvic inflammatory disease (PID) is rising, particularly in developing countries, where factors such as limited health education, lack of awareness about reproductive health, and unsafe sexual practices contribute significantly to its prevalence. The burden of PID is disproportionately higher among women in the younger reproductive age group, who are often unaware of the early signs and risk factors associated with the condition.

Keywords: Pelvic Inflammatory disease (PID), clinical characteristics, risk factors

Introduction

Pelvic Inflammatory Disease (PID) is a critical public health issue, particularly among women of reproductive age, due to its association with serious longterm sequelae including infertility, ectopic pregnancy, chronic pelvic pain, and adverse pregnancy outcomes.

Common risk factors for PID in India include early marriage, early sexual debut, high parity, unsafe abortions, use of unsterile intrauterine devices (IUDs), home deliveries conducted by untrained personnel, and poor menstrual hygiene. Additionally, women with a history of PID or STIs face an increased risk of recurrence due to persistent infections or tubal damage. Engaging in sexual activity with multiple partners also significantly increases the risk—epidemiological studies report a 2.5–3.6 times higher incidence of PID in such cases. Cervical ectopy in younger women further facilitates pathogen ascension into the upper genital tract.

The present study is designed to evaluate the clinical features and risk factors associated with PID in a local population. Given the high burden of PID and its reproductive health implications, this investigation is

essential for early identification and management, especially in primary care settings where diagnostic resources are often limited. Specific objectives include analyzing associations between PID and variables such as age, parity, literacy, history of D&C or abortion, prior STIs or PID, IUD use, home delivery practices, and socioeconomic status.

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Observations & Results

Table 1: Distribution of Patients According to Past Menstrual History

Past Menstrual History	No. of Patients	(%)
Heavy menstrual bleeding with dysmenorrhea	31	25.83%
Irregular	35	29.17%
Regular	54	45.00%
Total Patients	120	

Regarding Past menstrual history, Heavy menstrual bleeding with dysmenorrhea was noted in 31 patients (25.83%), while 35 patients (29.17%) reported irregular menstrual cycles.

The majority, 54 patients (45.00%), continued to have regular menstrual cycles.

Table 2: Distribution of Patients According to Previous History of PID or Sexually Transmitted Disease

Previous history of PID, sexually transmitted disease	No. of Patients	(%)
No	114	95.00%
Yes	6	5.00%
Total Patients	120	

A previous history of pelvic inflammatory disease (PID) or sexually transmitted infections (STIs) was uncommon in the study population, with only 6 patients (5.00%) reporting such a history. The majority, 114 patients (95.00%), had no prior documented episodes of PID or STIs.

Table 3: Distribution of Patients According to Presenting Complaints

Presenting Complaints	No. of Patients (n=120)	(%)
Pain lower Abdomen	101	84.17%
Backache	49	40.83%
Per Vaginum discharge	89	74.17%
Burning micturition	37	30.83%
Itching per Vaginum	29	24.17%
Fever	21	17.50%
Nausea/ Vomiting	5	4.17%
Irregular menstruation	29	24.17%
Dyspareunia	17	14.17%

In the present study comprising 120 patients, a variety of gynecological and urogenital complaints were reported at the time of presentation. The most frequently reported symptom was pain in the lower abdomen, experienced by 101 patients (84.17%), highlighting it as a major concern among the studied population. This was closely followed by per vaginum (PV) discharge, observed in 89 patients (74.17%), which may indicate underlying infections or hormonal imbalances.

Discussion

This cross-sectional observational study was conducted prospectively in the Department of Obstetrics and Gynaecology at SMS Medical College, Jaipur. The study universe included 120 women attending the Gynaecology Outpatient Department (OPD) of the institution, while the study population comprised women who presented with signs and symptoms suggestive of pelvic inflammatory disease (PID) and were diagnosed with PID based on clinical examination and ultrasonography. The primary aim of the study was to evaluate the clinical characteristics and associated risk factors among patients diagnosed with PID. The specific objectives were: (1) to assess the clinical characteristics of women who were clinically diagnosed with PID, and (2) to examine the association between PID and various risk factors, including age, parity, literacy status, history of previous dilation and curettage (D&C), abortion, prior episodes of PID or sexually transmitted infections (STIs), intrauterine contraceptive device (IUCD) insertion, home deliveries, and socioeconomic status. The utility of this study lies in its potential to enhance early recognition and timely management of PID by identifying common clinical presentations and associated risk factors. It may also aid in guiding public health strategies, especially in resource-limited settings, by emphasizing preventive

measures, risk reduction, and targeted health education for vulnerable populations.

Conclusion

The incidence of pelvic inflammatory disease (PID) is rising, particularly in developing countries, where factors such as limited health education, lack of awareness about reproductive health, and unsafe sexual practices contribute significantly to its prevalence. The burden of PID is disproportionately higher among women in the younger reproductive age group, who are often unaware of the early signs and risk factors associated with the condition. If left undiagnosed or inadequately treated, PID can lead to serious long-term complications, including tubal factor infertility, chronic pelvic pain, ectopic pregnancy, and recurrent pelvic infections. These sequelae not only impact the physical and reproductive health of women but also impose a substantial emotional, social, and economic burden. Therefore, increasing public awareness about PID, promoting safe sexual practices, and encouraging timely medical consultation are essential preventive strategies. Early diagnosis through clinical evaluation and imaging, coupled with prompt and appropriate treatment, can significantly reduce morbidity and prevent the irreversible consequences of the disease. Moreover, empowering women through education and access to reproductive healthcare services is fundamental in curbing the rising trend of PID, particularly in resource-limited settings. In conclusion, a comprehensive approach that includes education, prevention, early detection, and treatment is vital to address the growing public health concern posed by PID and to safeguard the reproductive health of women globally.

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