

A Cross-sectional Research Conducted at a Tertiary Care Centre Examined the Clinical Characteristics of Individuals with Pelvic Inflammatory Disease

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Abstract

Aim: To study clinical profile of patients with pelvic inflammatory disease

Methods: The prospective cross-sectional study which was carried in the Department of Obstetrics and Gynecology, RIMS, Ranchi, Jharkhand, India. 200 patients in reproductive age group having PID were selected randomly.

Result: Most common group presenting with PID were between 25 to 29 years of age (35%) followed by 22 to 24 years of age (25%). It was less common in age less than 20 years (1%) and more than 40 years of age (4%). Maximum women with PID were having parity of 2 to 5 (64%). It was less common in nullipara (5%). PID was commonest in illiterate women (54%) and less common in women who were graduate (2%). PID was more common in women having low socioeconomic status. Maximum number of women presenting with PID did not use contraceptive. (60%). 15% used barrier method but were irregular and 12% used IUCD. Most of the women presented with discharge per vaginum (75%) followed by pain lower abdomen (85%) and back ache (41%). 75% women had discharge per vaginum on speculum examination. 91% had cervical motion tenderness and only 5% presented with adnexal mass.

Conclusion: Incidence of PID is increasing especially in developing countries due to lack of awareness and unsafe sexual practices. It is seen to be more in younger age group with morbidity like tubal factor infertility, ectopic pregnancy and chronic pelvic pain.

Keywords: PID, discharge per vaginum, ectopic pregnancy, chronic pelvic pain

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Introduction

Pelvic inflammatory disease (PID) is a global problem and it is common both in developed and developing countries.[1] The exact incidence of PID is unknown because the disease cannot be diagnosed reliably from clinical symptoms and signs. PID is often asymptomatic or

subclinical.[2] Hospital discharge registries are poor surrogate markers for the true prevalence of PID. In USA, an estimated one million women are treated each year for PID and at least one fourth of these suffer from serious sequelae including infertility, ectopic pregnancy, chronic pelvic pain and

requires major abdominal and pelvic surgery.[3]

In western countries the origin of pelvic inflammatory disease is due to sexual abuse.[4] On the other hand in third world countries like ours, unsafe delivery and abortion play main role in the development of pelvic inflammatory diseases. Sequelae of PID can sometimes be very pathetic, as it causes subfertility which is a very gloomy event in reproductive health of a woman, as well as for her family life.[5] It can cause pelvic and generalized peritonitis, septic shock; chronic pelvic pain which disturbs day to day activities of a woman. PID can cause dyspareunia which disturbs marital harmony. It may also cause ectopic pregnancy, pelvic abscess and tubo-ovarian mass necessitates major surgeries by which mortality and morbidity is further increased.[6] The most important presenting feature is chronic pelvic pain of varying magnitude.

Material and Methods

The prospective cross-sectional study which was carried in the Department of Obstetrics and Gynecology, RIMS, Ranchi, Jharkhand, India, after taking the approval of the protocol review committee and institutional ethics committee. 200 patients in reproductive age group having PID were selected randomly

Inclusion Criteria

Patient presenting with lower abdominal pain with vaginal discharge having either cervical motion tenderness or uterine tenderness or adnexal tenderness on bimanual examination

Patients between 18- 45 years of age

Exclusion Criteria

Other established causes of lower abdominal pain, before menarche and post-menopausal patients

Methodology

After meeting inclusion and exclusion criteria history taken and examination were conducted per speculum and bimanual examination done or variables like age, parity, socioeconomic status, literacy, contraceptive practices and presenting complaints were noted.

Statistical Analysis: Data were recorded in excel sheet and analysed in tabular form and percentage.

Result

Most common group presenting with PID were between 25 to 29 years of age (35%) followed by 22 to 24 years of age (25%). It was less common in age less than 20 years (1%) and more than 40 years of age (4%) (Table 1).

Table 1: Age wise distribution of PID patients

Age	Number of Patients	Percentage
<20	2	1
20-24	50	25
25-29	70	35
30-34	40	20
35-40	30	15
>40	8	4
Total	200	100%

Maximum women with PID were having parity of 2 to 5 (64%). It was less common in nullipara (5%) (Table 2)

Table 2: Parity wise Distribution of PID patients

Parity	Number of patients	Percentage
0	10	5
1	34	17
2-5	128	64
>5	28	14
Total	200	100

PID was commonest in illiterate women (54%) and less common in women who were graduate (2%) (Table 3)

Table 3: Distribution of patients according to literacy

Education	Number of patients	Percentage
Illiterate	108	54
Primary	62	31
SSC	20	10
HSC	6	3
Graduate	4	2
Total	200	100

PID was more common in women having low socioeconomic status (Table 4)

Table 4: Distribution of patients according to socioeconomic class

Socio-economic status	Number of patients	Percentage
Low	180	90
Middle	20	10
Total	200	100

Maximum number of women presenting with PID did not used contraceptive. (60%). 15% used barrier method but were irregular and 12% used IUCD (Table 6).

Table 5: Distribution of patients according to age at time of marriage

Age at time marriage (Years)	Number of patients	Percentage
<20	16	8
20-30	176	88
>30	8	4
Total	200	100

Most of the women presented with discharge per vaginum (75 %) followed by pain lower abdomen (85%) and backache (41%) (Table 7).

Table 6: Distribution of patients according to use of contraceptive practices

Contraceptive Use	Number of patients	Percentage
Barrier	30	15
Oral Contraceptive pills(OCP)	6	3
Intra Uterine Contraceptive Device (IUCD)	24	12
Tubectomy	20	10
None	120	60
Total	200	100

75% women had discharge per vaginum on speculum examination. 91% had cervical motion tenderness and only 5% presented with adenexal mass.

Table 7: Distribution of patients according to Presenting Complaints

Presenting Complaints	Number of patients	Percentage
Pain lower Abdomen	170	85
Backache	82	41
Per vaginum discharge	150	75
Burning micturition	62	31
Itching per vaginum	50	25
Fever	34	17
Nausea/ Vomiting	6	3
Irregular menstruation	50	25
Infertility	30	15

Discussion

In our study Most common group presenting with PID were between 25 to 29 years of age (35%) followed by 22 to 24 years of age (25%). It was less common in age less than 20years (1%) and more than 40 years of age (4%), Eli Nk Wabong *et al.* also showed maximum incidence in 20 -24 years of age (27.2%) followed by 25 -29 years of age (24.3%).[7] Patient having parity of 2 to 5 showed maximum incidence (64%) and in nullipara (5%). Peterson *et al.* also had similar findings.[8]

In the present study PID was found occurring mostly in multipara. But our findings were in contrast to the study done by westrom *et al.* which showed 74.4% cases in nulliparous women.[9] In our study PID was seen most commonly in illiterate women (54%) followed by women with primary education (31%). Our findings were similar with Eli N K Wabong *et al.* showed maximum PID cases in women who were educated below SSC (54.3%) followed by women having education

having below primary level (20%).[7] Less education makes them less aware about prevention of disease.

PID was maximum seen in women of low socioeconomic status (90%) It was similar with findings of other studies. S Ahmed *et al.* showed PID cases were more common in low and middle class that is 60% and 30% respectively.[10] Although we cannot draw a conclusion from our study regarding socioeconomic status and PID because majority of patient attending Obstetrics and Gynaecology department of our institute belong to lower or middle socioeconomic status.

Our study showed maximum number of women presenting with PID did not used contraceptive. (60%). 15% used barrier method but were irregular and 12% used IUCD. Patel Sangeeta *et al.* showed 19.33% used IUCD.[11]

Pain lower abdomen was most common presenting complaints (85%) followed by discharge per vaginum (75%) and bachache (41%). These findings were similar to the

study by Eli N K Wabong *et al.* which showed pain abdomen in 75.7% and vaginal discharge in 73.27% cases.[7] Fever in our study was less common presentation 17% which is in contrast to Eli N K Wabong *et al.* which showed fever as presenting complaints in 78.85% cases.[7] Maximum patients presented with multiple complains.

On pelvic examination discharge per vaginum was present in 75%, Cervical motion tenderness in 90%, uterine tenderness in 81% and adnexal tenderness in 85%. Adenaxal mass was present in 5% of cases only. our findings correspond with findings of S Ahmed *et al.* which showed fornicial and cervical motion tenderness in 100% cases, discharge per vaginum without foul smell in 74% and foul-smelling vaginal discharge in 16% cases.[10]

Conclusion

Incidence of PID is increasing especially in developing countries due to lack of awareness and unsafe sexual practices. It is seen to be more in younger age group with morbidity like tubal factor infertility, ectopic pregnancy and chronic pelvic pain.

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