# A descriptive study of PID at tertiary care hospital

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Abstract Introduction: Pelvic inflammatory disease (PID) is one of the most serious infections faced by women today. It is a common problem encountered in gynecologic infertility, family planning, legal abortions, postnatal and sterilization clinics in India and abroad<sup>1</sup>. Pelvic inflammatory disease (PID) is an important public health problem with serious repercussion on women's health and well being. Other than the chronicity of lower abdominal pain marring the women's well being, infertility and it's associated stigma compounds the need to study this issue in developing countries. Aims and Objectives: To study the prevalence and risk factors associated with Pelvic Inflammatory Diseases and its outcome. Methodology: This was a hospital based study in 150 PID patients (Pelvic Inflammatory Disease) and Other 150 patients attending the Gynecology OPD for other gynecological conditions Result: Majority of the PID patients were having Multiparty i.e. 54.87% as compared to Non-PID patients 46.13% and this Observed difference was significant  $(X^2=5.28,p<0.01)$ . Most of the PID patients were having Age less18 yrs of age i.e.54.83% as compared to Non-PID patients 45.17% and this Observed difference was significant (X<sup>2</sup>=3.98,p<0.005). Majority of the PID patients were having Home Delivery 58.00% as compared to Non-PID patients ie35.04% and this Observed difference was significant  $(X^2=3.84,p<0.05)$ . Maximum PID patients were having Delivery attended by un-trained personnel 66.96% as compared to Non-PID patients 43.14% and this Observed difference was highly significant ( $X^2 = 16.24$ , p<0.005). Conclusion: As the most of the contributory factor of PID were Multiparty, Home Delivery and Delivery Conducted by Un-trained Personnel and Age less than 18 years so, early marriages and Family planning methods should be adopted in all eligible couple, and all deliveries at home and attended by untrained personnel should be discoursed. Keywords: PID, STDs, Multiparity.

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### **INTRODUCTION**

Pelvic inflammatory disease (PID) is one of the most serious infections faced by women today. It is a common problem encountered in gynecologic infertility, family planning, legal abortions, postnatal and sterilization clinics in India and abroad<sup>1</sup>. Pelvic inflammatory disease (PID) is an important public health problem with serious repercussion on women's health and well being. Other than the chronicity of lower abdominal pain marring the women's well being, infertility and it's associated stigma compounds the need to study this issue in developing countries<sup>1</sup>. Though few studies suggest that 24 - 32 % women in India<sup>2,3</sup> and 8 % in Pakistan suffer from PID <sup>4,5.</sup> Global interest in improving women's health has mainly been confined to improving family planning and child survival interventions<sup>6</sup>. Though maternal and child health care was included among eight basic components of primary health care<sup>7</sup>It is a common and serious complication of some sexually transmitted diseases (STDs), especially chlamydia and gonorrhea. PID can damage the fallopian tubes and tissues in and near the uterus and ovaries. Untreated PID can lead to serious consequences, including infertility, ectopic pregnancy, abscess formation and chronic pelvic pain<sup>8</sup>.RTIs, diseases of cervix and uterus (PID) and utero-vaginal prolapse (UVP) increases with age<sup>4</sup>. Age at marriage and age at birth of first child, birth order, family size and length of inter-birth interval have important effects on reproductive morbidity<sup>9,10</sup>. The risk of developing genital and pelvic infections increases with each birth<sup>11</sup>.

#### **AIMS AND OBJECTIVES**

To study the prevalence and risk factors associated with Pelvic Inflammatory Diseases and its outcome.

### **METHODOLOGY**

This was a hospital based study in 150 PID patients (Pelvic Inflammatory Disease) and Other 150 patients attending the Gynecology OPD for other gynecological conditions. Selected with uniformly accepted criteria<sup>12</sup> for PID as: Complaint of lower abdominal pain, Vaginal discharge, Adnexal tenderness leading to pain. All cases meeting with the above diagnostic criteria, were labeled as clinical cases of PID. Those who had extramarital history were excluded from both cases and controls. After taking consent, we obtained information by conducting in-depth interviews for 2-3 sessions with each patient were excluded from the study.

#### RESULTS

Table 1: Distribution of PID patients as per Parity of Women

Multiparty	PID patients	Non-PID patients	Total	p-value
Present	107 ( 54.87%)	88(46.13%)	195(100.00%)	
Absent	43( 40.95%)	62 ( 59.15%)	105(100.00%)	χ <sup>2</sup> =5.28 P<0.01
Total	150 (50.00%)	150 (50.00%%)	300(100.00%)	

Table 1: Shows majority of the PID patients were having Multiparty i.e. 54.87% as compared to Non-PID patients 46.13% and this Observed difference was significant ( $\chi^{2}=5.28,p<0.01$ )

 Table 2: Distribution of PID patients as per age at marriage of the women

Age at Marriage	PID patients	Non PID patients	Total	p-value
Age ≥18	116 (48.73%)	122(51.00%)	238(100.00%)	χ <sup>2</sup> =3.98
Age <18	34(54.83%)	28(45.17%)	62 (100.00%)	P<0.005
Total	150(50.00%)	150(50.00%)	300(100.00%)	

Table 2: Shows majority of the PID patients were having Age less than 54.83% as compared to Non-PID patients 45.17% and this Observed difference was significant ( $\chi^{2}$ =3.98,p<0.005)

 
 Table 3: Distribution of PID patients as per Place of Previous delivery of the women

0%) $\chi^2 = 3.84$
0%) P<0.05 0%)

**Table 3:** Shows majority of the PID patients were having Home 58.00% as compared to Non-PID patients 35.04% and this Observed difference was significant  $(\chi^2=3.84,p<0.05)$ 

Table 4: Distribution	of PID	patients	as per	the	previous	delivery
	condu	ucted Per	sonnel			

Delivery Conducted By	PID patients	Non PID patients	Total	p-value
Trained Personnel	75(39.89%)	113(60.11%)	188(100.00%)	
Un-Trained	75	43(43.14%)	112	χ <sup>2</sup> =16.24
Personnel	(66.96%)	- ( - · · )	(100.00%)	P<0.001
Total	150 (50.00%)	150 (50.00%)	300(100.00%	

Table 4: Shows majority of the PID patients were having Deliver attended by un-trained personnel 66.96% as compared to Non-PID patients 43.14% and this Observed difference was highly significant ( $\chi^2 = 16.24$ ,p<0.005).

#### DISCUSSION

Majority of the PID patients were having Multiparty i.e. 54.87% as compared to Non-PID patients 46.13% and difference this Observed was significant  $(\gamma^2 = 5.28, p < 0.01)$ . This could be due the fact that multiparty is associated with increased risk of infections. Most of the PID patients were having Age less than 54.83% as compared to Non-PID patients 45.17% and Observed difference this was significant  $(\chi^2=3.98,p<0.005)$ . As sexual intercourse smaller age is having higher risk of STD and other infections leads to PID the findings are similar with Hobcraft (1985).<sup>9</sup> Majority of the PID patients were having Home delivery 58.00% as compared to Non-PID patients 35.04% and this Observed difference was significant ( $\chi^2=3.84$ , p < 0.05). As the Home is not as aseptic as the Labor room and mostly the home delivery is associated with the unhygienic conditions and un- trained personnel that causes higher rate infection. Maximum PID patients were having Delivery attended by un-trained personnel 66.96% as compared to Non-PID patients 43.14% and this Observed difference was highly significant ( $\chi^2$ =16.24, p<0.005). This is due to the reason that Un –trained person is un-aware about mechanism of normal delivery and aseptic precautions that causes the infections this similar to SV Patel et al  $(2013)^{12}$ . They found The OR with untrained person as a risk factor for PID was 2.41 with 95% CI being 1.78-3.27. This suggests etiological fraction of 58.5% (CI 43.9-69.4%) among untrained persons. The delivery by untrained person was significantly higher in cases than in controls (p<0.00001).

# CONCLUSION

As the most of the contributory factor of PID were Multiparty, Home Delivery and Delivery Conducted by Un-trained Personnel and Age less than 18 years so, early marriages and Family planning methods should be adopted in all eligible couple, and all deliveries at home and attended by untrained personnel should be discoursed.

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