www.banglajol.info/index.php/JSF

Journal of Science Foundation, July 2017, Vol. 15, No. 2

DOI: http://dx.doi.org/10.3329/jsf.v15i2.37779

# **Original Article**

# Socio-demographic Characteristics of Pelvic Inflammatory Diseases Women attended at a Tertiary Care Hospital in Dhaka

ISSN (Print) 1728-7855

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[Reviewed: 30 April 2017; Accepted on: 1 May 2017; Published on: 1 July 2017]

#### **Abstract**

Background: Women with pelvic inflammatory diseases can occur in different socio-demographic characteristics. Objectives: The purpose of the present study was to see the socio-demographic characteristics of women presented with pelvic inflammatory diseases women. Methodology: The cross-sectional study has been carried out at the outpatient units of Obstetrics and Gynaecology Department of Dhaka Medical College Hospital from January 2007 to June 2007 for a period of six (6) months. Women with the age group of 15 to 45 years presented with lower abdominal pain, tenderness, per vaginal discharge and cervical motion tenderness were included in this study. Women with fibroid uterus, uterovaginal prolapsed or cystocele was excluded from this study. The details of socio-demographic characteristics like the age, religion, social status, occupation, marital status and their husband information were taken. Result: The study was performed on 50 cases of which majority (50%) belonged to the age group of 26 to 35 years. Majority of the patients were housewife (82.0%). Among them 30% of the husbands occupation was driver. Maximum were from low socio-economic status (70.0%), illiterate (50.0%) and married single (80.0%). Conclusion: In conclusion majority of the women presented pelvic inflammatory diseases are in reproductive age group illiterate housewife. [Journal of Science Foundation 2017;15(2):31-35]

Keywords: Pelvic Inflammatory Diseases; socio-demographic characteristics; PID

# Introduction

Pelvic Inflammatory Disease (PID) is an inflammatory condition of the female upper genital tract like uterus, fallopian tube, ovaries with adjacent structures (Odukogbe and Ola, 2005). It includes endometritis, parametritis, salphingitis, oophoritis, pelvic peritonitis and tubo-ovarian abscess. It is evident in acute and chronic form (Baker 2010). In United States, one million women per year are reported to have an episode of PID and 300000 of these are hospitalized (Armstrong et al., 2013; Walker et al., 2010). In Bangladesh, PID is a major health problem for adult female; however, about 15.0 to 20.0% PID cases attending in the Gynae outpatient department of Dhaka Medical College Hospital, Dhaka (Soper 2010).

Despite better understanding of the etiology, pathogenesis, improved diagnostic tools as well as advent of wide range of antimicrobials, pelvic inflammatory disease still constitutes a health hazard both in the

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developed and more so in the developing country<sup>2</sup>. Pelvic inflammatory disease is rare in women who are not sexually active. In women who are not sexually active, only tuberculous salpingitis and PID secondary to appendicitis have been observed (Farley et al., 1992). The overall incidence in modern industrialized countries is 10 to 13 per 1000 women of reproductive age with a peak of 20 per 1000 in the 15-24 years age group (Armstrong et al., 2013). In this context this present study was undertaken to see the sociodemographic characteristics of women presented with pelvic inflammatory diseases women.

## Methodology

This was a prospective observational type of cross-sectional of study. This study was conducted in the outpatient department (OPD) of the Department of Obstetrics and Gynaecology at Dhaka Medical College, Dhaka. The duration of study was from January 2007 to June 2007 for a period of six (6) months. Women with the age group of 15-45 years presented with lower abdominal pain, tenderness, per vaginal discharge and cervical motion tenderness were included in this study. Women with fibroid uterus, uterovaginal prolapsed or cystocele was excluded from this study. After attending in GOPD in DMCH an introduction was given to the patients regarding the purpose and importance of the study. After taking verbal consent from the patients, a pre-designed data collection sheet was filled by taking the age, religion, social status, occupation, marital status ad their husband information. Statistical Packages for Social Sciences (SPSS) Statistics 20.0 was used for the statistical analyses. Categorical data were presented as frequency and percentage. Informed verbal consent was taken from the subject before enrollment in this study.

## Results

The study was performed on 50 cases. The obtained results are shown in the following tables. Out of 50 cases of pelvic inflammatory disease majority (50%) belonged to the age group of 26-35 years (Table 1).

Table 1: Age Distribution of Study Population (n=50)

Age Group	Frequency	Percentage
Less Than 18 Years	1	2.0
18 to 25 Years	10	20.0
26 to 35 Years	25	50.0
More than 35 Years	14	28.0
Total	50	100.0

Out of 50 cases of PID 82% were housewife and 18% were service holder (Table 2).

**Table 2: Occupation of Study Population (n=50)** 

Occupation	Frequency	Percentage
House Wife	41	82.0
Service Holder	9	18.0
Total	50	100.0

Among them 30% of the husbands occupation was driver, 20% were laborer, 24% were business, 16% were service holder and 10% were farmer (table 3).

**Table 3: Occupation of the Husband of the Patients (n=50)** 

Occupation	Frequency	Percentage
Farmer	5	10.0
Laborer	10	20.0
Driver	15	30.0
Business	12	24.0
Service	8	16.0

Among all patients majority were from low socio-economic status which was 35(70.0%) cases followed by middle socio-economic status and upper socio-economic status which were 10(20.0%) cases and 5(10.0%) cases respectively (Table 4).

Table 4: Socio-economic of Study Population (n=50)

Socio-economic status	Frequency	Percentage
Low	35	70.0
Middle	10	20.0
Upper	5	10.0
Total	50	100.0

Among 50 cases of PID 80% were Muslim, 14% were Hindu and 6% were Christian (Table 5).

**Table 5: Religion of the patients (n=50)** 

Religion	Frequency	Percentage
Muslim	40	80.0
Hindu	7	14.0
Christian	3	6.0
Total	50	100.0

Among 50 cases majority (50%) were illiterate, 40% were primary education and 10% were secondary education and above (Table 6).

**Table 6: Education Status of the Patients (n=50)** 

<b>Educational status</b>	Frequency	Percentage
Illiterate	25	50.0
Primary education	20	40.0
Secondary education above	5	10.0
Total	50	100.0

Among 50 cases majority were married single women which were 40(80.0%) cases followed by remarried, separated and widow which were 5(10.0%) cases, 3(6.0%) cases and 2(4.0%) cases (Table 7).

**Table 7: Marital Status of the Patients (n=50)** 

Marital status	Frequency	Percentage
Married (Single)	40	80.0
Remarried	5	10.0
Widow	2	4.0
Separated	3	6.0
Total	50	100.0

About 50% were married in before 14 years. However, it had been found that 40.0% PID patients were in between 14 to 18 years of marriage life; furthermore it had been recorded that 10.0% PID patients were married after 18 years. All these findings were very interesting when considering the PID infection among the women who were attend in the hospital. Therefore early marriage was a risk of development of PID among the women (Table 8).

**Table 8: Distribution of Marital Age among the PID Patients (n=50)** 

Marital age	Frequency	Percentage
Before 14 years	25	50.0
14 to 18 years	20	40.0
After 18 years	5	10.0
Total	50	100.0

#### Discussion

PID is a predominately reproductive age illness and its highest prevalence is in the second and third decades of life. It is a very uncommon diagnosis in menopause. It is estimated that less than 2% of patients admitted to hospitals for salpingitis and tubo-ovarian abscess are postmenopausal (Sufrin et al., 2012). In the present study, the average prevalence of PID was found to be 11.55% with 12.5% in rural areas and 10.6% in urban areas (Brunham et al., 2015). It needs to be emphasized that no similar study has been done in the area before, so baseline measures for comparison are seriously inadequate. Women with pelvic inflammatory disease usually attend in the general practitioners, gynaecologist and general surgeon (French et al., 2011). Moreover patients are usually reluctant to attend the doctor unless the sufferings become intolerable. It is therefore difficult to estimate the incidence and prevalence of PID. An elaborate study of 50 cases of PID was done. It showed that the highest percentage (50.0%) of PID is in the age group of 26 to 35 years.

Peterson also mentioned that women with PID were usually under the age of 25 years. Shah et al (1978) showed in a study that 87.0% of the patient belong the age group of 20 to 35 years. Tarafder (1997) showed the highest incidence (55.21%) of PID in the age group of 26 to 35 years. In another study Brunham et al (2015) concluded that cases of PID were usually between the age group of 30 to 44 years (67.1%). PID occur more in the younger age group in the Western countries and it is mostly sexually transmitted infection related. However, in the developing countries it is more commonly in the age group and mostly related to the obstetrical events (Sultana 1996).

Present study showed 82.0% of the patients were housewife and 18.0% were in service. Those were working women mostly manual worker like sweeper, garments worker, house maid, only few were service holder. Sultana showed 83.4% were housewife and 16.6% were service holder. Regarding husbands occupation 16.0% were service holder, 24.0% businessmen, 20.0% were labourers, 30.0% transport driver, 10.0% were farmer, Sultana (1996) showed 54.2% were service holder, 18.85% were businessman, 20.3% were labourers 6.85 were farmer.

In this study 70.0% patients were from lower socio-economical, and 20.0% from middle class, only 10.0% from higher class. Tarafder (1997) showed 49.5% were from lower socio-economical status and Sultana (1996) mentioned 45.0% from lower, 20.6% from middle socio-economical status. It is difficult to draw a conclusion from this study the relation between socio-economical status and PID because only certain class of patients lower or middle class usually attend this hospital. Higher socio-economical classes are less likely to attend. On the socio-demographical aspect study showed that 80% of the patients were Muslim, 14.0% were Hindu, 6.0% were Christian. It is more likely due to the fact that major populations of Bangladesh are Muslim. In another national study, Sultana (1996) showed 96.8% of her patients were Muslim and 3.2% were Hindu. Both the study results are near to similar.

The present study showed majority 50.0% of women were illiterate 40.0% had primary level of education, only 10.0% had secondary education or above. Tarafder (1997) showed 51.05% patients were illiterate, rest were educated at primary, secondary or higher level. Sultana (1996) showed that only 12.9% of patients were educated up to secondary school or above and 51.3% were illiterate, 35.0% had primary level of education. This is comparable with our female education of 16.0%. Lack of education causes ignorance regarding their care, reluctant to their suffering resulting from unsafe child birth and repeated abortion (Sufrin et al., 2012). By educating the women overall situation can be improved.

Marital status is also a risk factor for PID. It was evident that active sexual life has a positive role on PID. This study has shown that PID was prevalent on 80.0% to the married group. Our other national study by Sultana showed 94.4% percent of her patients were married. Tarafder (1997) showed that 92.19% patients were married group. There was a distinct association between early exposure of coitus, multiple sexual

partner, and promiscuous sexual relationship (Bjartling et al., 2010; Gradison 2012). In present study 40.0% of patients were married between 14 to 18 years, 50.0% were married before 14 years and only 10.0% were married after 18 years. Therefore there is still a trend of early marriage in the women.

### Conclusion

In this clinical study it is found that women of 20 to 35 years of age group are prone to pelvic inflammatory disease (PID). The group has a positive relationship with the number of parity, level of education and socioeconomical position in the development of the disease.

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