

FREQUENCY OF PELVIC INFLAMMATORY DISEASES AMONG WOMEN PRESENTING WITH INFERTILITY

Sidra Jabbar Khan¹, Nargis Gulab¹, Parkha Jabbar Khan²

ABSTRACT

Objective: To determine the frequency of Pelvic inflammatory disease among women presenting with Primary and Secondary infertility in North West General Hospital & Research center Peshawar.

Study design: Descriptive (Cross Sectional) Study

Place & Duration of study: North West General Hospital & Research center Peshawar study was conducted from Oct-1st, 2013 to March 30th, 2014

Methodology: A total 149 women with primary and secondary infertility were selected carefully by purposive sampling according to inclusion and exclusion criteria of the study design.

Results; Results were recorded and then compared with international data. Out of a total 149 infertile women, primary infertility was present in 57% of women and 43% of women had secondary infertility. Mean age was 27.3+ 9.8 SD. Maximum number of patients (40.9%) was in age group of 31-40yrs and maximum number of patients (53%) had duration of infertility of more than 5yrs. 15% in our study participants had Pelvic inflammatory disease while rest of 85% participant had no pelvic inflammatory disease.

Conclusion: This study was conducted to highlight the magnitude of PID in our local population presenting with infertility. The results of this study would be a helpful guide for us to illustrate future research and management strategies for women with infertility.

Key words: Pelvic Inflammatory disease and infertility

INTRODUCTION

Infertility is inability to ensure child bearing when it is wanted. It is best defined as the inability to conceive after one year of unprotected regular intercourse.¹ Infertility is of two types i.e. primary- when there is an absence of a preceding pregnancy, and secondary is exists when there has been a preceding pregnancy irrespective of outcome.² Infertility is a major problem affect women's health and quality of life.³ In Pakistan the frequency of infertility is reported as 21.9%.⁴ The female factors contribute most (40-55%) in the etiologies of infertility followed by male factors (30-40%) both partners (10%) and unexplained (10%). Major causes of infertility include ovarian dysfunction (32%), tubal disease (20%), endometriosis (22%), uterine or cervical factors (18%).⁵ Untreated pelvic inflammatory disease (16.7%), post-abortion, postpartum infection and tuberculosis are common factors of infertility in developing countries.⁴ As most of our patients are illiterate and from low socio-economic class,⁶ most of the patients usually go to Hakeems and Dias for treatment of infertility which lead to further worsening and delay in proper management.⁷

Pelvic inflammatory disease (PID) is usually the result of infection ascending from endocervix causing

Corresponding address:

Dr Muhammad Iqbal Wahid

Research Analyst CPSP RC Peshawar

Contact No: 0346-9033380

Email address: driqbalwahid@yahoo.com

endometritis, salpingitis, parametritis, oophoritis, tubo-ovarian abscess and/or pelvic peritonitis.⁸ Salpingitis is the cause for 10-20% cases of infertility, 5-10% women have ectopic pregnancy and 20-30% develop chronic pelvic pain.¹⁰ In both the developed and non-developed countries, around 10-15% women of reproductive age have at least one episode of PID¹¹ French CE et al. estimated the rates of clinical diagnoses of PID per year in England and reported as 281/100,000 (0.28%) for definite cases, 326/100,000 (0.33%) for definite and probable cases, and 1117/100,000 (1.12%) for definite, probable, and possible cases. During 2000 to 2008, the rate of definite/probable PID decreased by 10.4% per year.¹² The present study was designed to determine the frequency of PID in women presenting with infertility. Infertility is not uncommon in our female population as we live in a geographical location where the population growth rates are among highest in the world. The main reason of enhancing the family is a variety of cultural norms and values which forces families to produce offspring and if not they are treated violently and aggressively.

MATERIALS AND METHODS

This study was carried out in seven months from Oct-1st, 2013 to March 31th, 2014, in the Department of Obstetrics and Gynecology Northwest general hospital and Research center Peshawar. A total 149 women with primary and secondary infertility were selected carefully by purposive sampling.

Patients were carefully selected on the basis specified criteria as follows;

Infertility: A woman who fails to achieve conception after having regular unprotected intercourse (on history).

Pelvic Inflammatory Disease: It was diagnosed if the women had any FOUR of the following features

1. History of fever of more than 100°F in the last 30 days.
2. Cervical Motion Tenderness on Clinical Examination.
3. Foul Smelling vaginal discharge on history and clinical examination.
4. History of menstrual irregularities.
5. History of pain during the intercourse in the last one month.
6. Vaginal discharge culture showing growth of microorganisms in the hospital laboratory.

Primary infertility: Patient gives history that she never conceived in the past with regular, unprotected intercourse for 12 months.

Secondary infertility:-

Patient gives history that she conceived in the past 12 months.

Inclusion Criteria;

1. All women presenting with infertility. (Primary and Secondary)
2. Reproductive age group (15-40 years)

Exclusion criteria

1. Previously diagnosed cases of bilateral tubal obstruction.
2. Patients with history of use of intrauterine contraceptive devices.

3. Women with history of hormonal disturbances.
4. BMI of more than 25kg/m.
5. Male factor Infertility

The study was conducted after approval from hospitals research and ethical board. All women who fail to achieve conception meeting the inclusion criteria were enrolled in the study through OPD. Informed consent was obtained from all patients. All women were subjected to complete history taking and detailed physical and gynecological examination and High vaginal swabs was sent to hospital laboratory for culture. All the observations were done supervision of consultant gynecologist and all the laboratory procedures were done under supervision of an expert microbiologist. After getting reports from laboratory and records of the patients' history and clinical examination, PID was detected as present or not.

RESULTS

Results were entered in SPSS version 17. Data presentation of the 149 patients was done in tabular form. Frequency and Percentages were calculated for categorical variables. Various aspects of the patients were studied which as follows

Table I shows out of 149 in fertile patients primary infertility was present in 57% of cases and 43% of patients were with secondary infertility.

Table II shows age range of patients between 15 to 40yrs. Maximum number of patients (40.9%) were in the age group of (31-40 yrs) while (35.6%) were between (21-30yrs) and (23.5%) were the age between 15 to 20 yrs

Table III shows that maximum patients (53%) in our study presented after more than five years of failure to conceive and (32.9%) had duration of infertility (2-5yrs) and (14.1%) had failure of conception of less than 2 years duration

Table IV shows that out of 149 patients 15.4% in

Frequency of infertility

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Primary Infertility	85	57.0	57.0	57.0
Secondary Infertility	64	43.0	43.0	100.0
Total	149	100.0	100.0	

Age of Participants

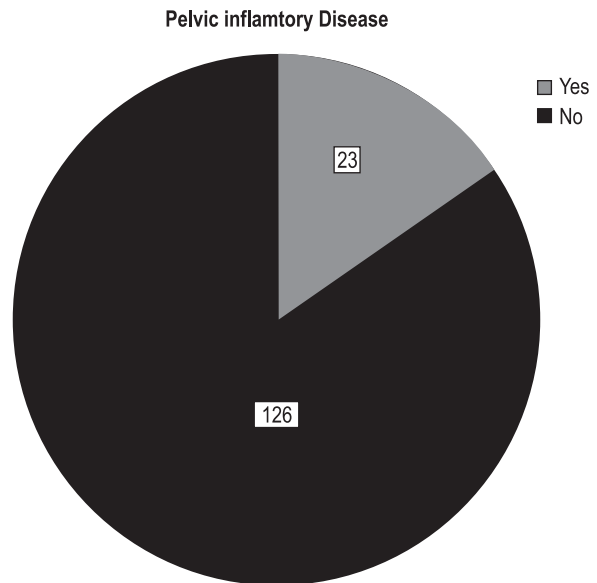
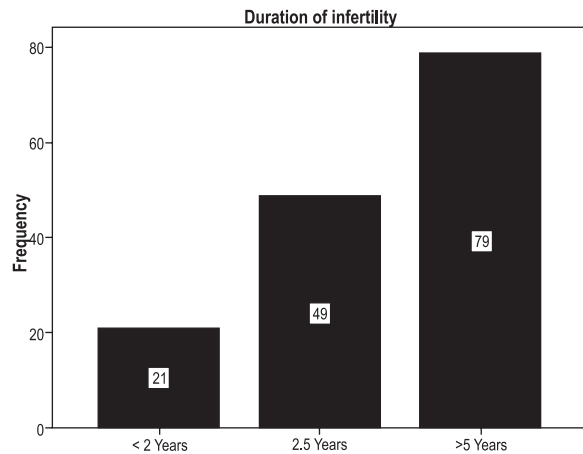
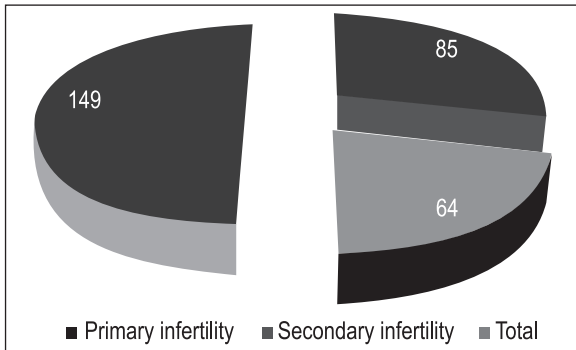
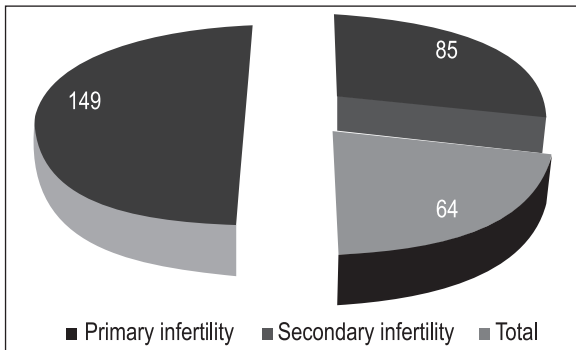
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 15-20 Years	35	23.5	23.5	23.5
21-30 Years	53	35.6	35.6	59.1
31-40 Years	61	40.9	40.9	100.0
Total	149	100.0	100.0	

Duration of infertility

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid < 2 Years	21	14.1	14.1	14.1
2-5 Years	49	32.9	32.9	47.0
>5 Years	79	53.0	53.0	100.0
Total	149	100.0	100.0	

Pelvic Inflammatory Disease

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	23	15.4	15.4	15.4
No	126	84.6	84.6	100.0
Total	149	100.0	100.0	



our study participants had Pelvic inflammatory disease 15.4% participant had no pelvic inflammatory disease.

DISCUSSION

In our study primary infertility was present in 57% of patients and secondary infertility in 43% of patients. In a study conducted by Haider G 66% of patients had primary infertility and 33% of patients were in secondary infertility group.¹³ Maximum number of patients (40.9%) were in the age group of (31-40 yrs) while (35.6%) were between (21-30 yrs) and (23.5%) were below the age between (15-20yrs) which is similar to the study con-

ducted by Preeti Kanal that showed maximum number of cases of infertility (45%) in the age group of 21-25 yrs, followed by 35% of cases of infertility in the age group of 26-30 yrs.¹⁴ Only 15.4% of patients with chronic PID in our study had minimal pelvic organ damage while rest of the 84.6% had no Pelvic inflammatory disease.

In Pakistan most of the patients go to hakeems

And dais for the treatment of infertility which leads to further deterioration and delay in suitable management. In addition because of the aseptic techniques used by these quacks the prevalence of PID is raising in our country also the genital tract tuberculosis is not uncommon in our country which leads to tubal damage and pelvic adhesions. In this situation negligence by paramedics should be discouraged and evaluation of infertile patients should be carried out in specialized centers.¹⁵

CONCLUSION

This study was conducted to help us to highlight the magnitude of PID & Primary and secondary infertility in our local population presenting with infertility and the results of this study would be useful guide for us to draw future research and management strategies for women with infertility. It will open new horizons for further research in this direction and will aid in comparing our data collected with the international available data.

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