

## Reproductive Features of Patients with Secondary Infertility

SHAMIM AKHTAR<sup>1</sup>, RIZWANA NASREEN<sup>2</sup>, HUMAIRA BIBI<sup>3</sup>, AYESHA AZHAR KHAN<sup>4</sup>, ASMA AMIN BAIG<sup>5</sup>, NAJIA RIFFAT<sup>6</sup>

<sup>1</sup>Assistant Professor GynaeObs, Kuwait Teaching Hospital, Peshawar Medical college, Riphah international university, Pakistan.

<sup>2</sup>Gynaecologist PAC Hospital, Kamra, National University of Medical Sciences

<sup>3</sup>Assistant professor Gynae Obs, Kuwait Teaching Hospital, Peshawar Medical College, Riphah International University, Pakistan.

<sup>4</sup>Assistant Prof Gynae&obs Arif Memorial Hospital, University of Health Sciences, Lahore.

<sup>5</sup>Assistant Prof Gynae&obs, Arif Memorial Hospital, University of Health Sciences Lahore.

<sup>6</sup>Commander, Classified Gynaecologist, PAC Hospital, Kamra

Correspondence to Dr. Shamim Akhtar, Email: [drshamim67@yahoo.com](mailto:drshamim67@yahoo.com), Cell: 0333-8290662

### ABSTRACT

**Background:** Childlessness is a very pain full situation. It affects both partners but more to females. Burden of secondary infertility is more than primary infertility but it is not captured properly. Secondary infertility also has significant psychological, personal and marital sufferings. Social pressures add the anxiety if only daughters are born.

**Aim:** To find out the reproductive characteristic features of patients presenting with secondary infertility.

**Place and duration:** This retrospective cross sectional study was conducted in Health Care Center Hospital (Pvt) Ltd from July 2021 to September 2022.

**Method:** All patients with secondary infertility of more than one year were included who had previous one or more spontaneous conceptions irrespective of pregnancy outcome. Patients who had no record of previous pregnancies and those who conceived after infertility treatment were excluded. Clinical history was checked from patient's files and delivery registers. Data was entered in preformed Performa and analyzed by SPSS Version 20. Frequencies were calculated by percentages.

**Results:** Total 115 patients with secondary infertility were included. Sixty one patients had one or more parity, 54 patients had miscarriages. Fifty eight patients had alive babies and 3 babies died. Among 58 live babies 40 patients had only females, 12 had only male and 6 had both male and female children. Among 61 para women, forty three patients had vaginal delivery, 33 normal vaginal and 10 were instrumental deliveries. Cesarean Section was done in 18 patients, 13 were emergency and 05 elective C/S.

**Practical implication** This study will help to understand the burden and factors contributing to secondary infertility. This will guide to manage those factors so that to lesson the secondary infertility.

**Conclusion:** Secondary infertility is an important issue in gynaecological clinics. These patients usually have some identifiable risk factors. Their case should be reviewed carefully to find out the risk factors for proper management.

**Keywords:** Infertility, tubal factor, STDs, miscarriage, Cesarean section,

### INTRODUCTION

Inability to have children is a very stressful and demoralizing condition<sup>1</sup>, affecting 10-15% couples all over the world<sup>2,3</sup>. Infertility affects couples emotional and psychological wellbeing badly and they feel socially disgraced and isolated<sup>4</sup>, and loose interest in personal life. It also brings disharmony of marital relations<sup>2,5</sup>. It can be primary or secondary.

Secondary infertility is a condition when couple fails to conceive again despite trying for it for one year<sup>6</sup>. Mostly primary infertility gains the main focus and secondary infertility is usually a neglected area<sup>7</sup>. Secondary infertility is also a common problem<sup>8</sup> and has grave psychological consequences as that of primary infertility<sup>7</sup>. In America 11% couple fail to conceive again<sup>6</sup>. Secondary infertility becomes more traumatic when prior pregnancy ends up in miscarriage, fetal demise or death after delivery<sup>9</sup>. In our society if alive child is a female also a stressful condition. Inability to give birth to a male child becomes a constant source of embarrassment and female loses her worth in family and society as well<sup>4</sup>. These women have tendency to seek spiritual help as well<sup>10</sup>.

Most common cause of secondary infertility is unexplained<sup>11</sup>. Risk factors in primary or secondary infertility usually overlap but secondary infertility mostly has some identifiable, preventable and treatable risk factors<sup>8</sup>. Both male and female factors contribute but female factor is more prevalent<sup>5</sup>.

Tubal factor is a common and important cause of secondary infertility<sup>12</sup>. These patients usually consult multiple doctors for their problem as the time passes with no results<sup>5</sup>. Rather multiple vaginal examinations lead to genital tract infections that complicate the problem by involving tubal factor<sup>13</sup>. Unsafe sexual practices lead to STDs<sup>8</sup>. Previous history of D&C with aseptic techniques and in unhygienic environment also a major risk factor for genital tract

infections<sup>13</sup>. Induced abortions are another cause of pelvic infection<sup>14</sup>. All these factors cause pelvic inflammatory disease that is the main etiology of tubal factor involvement<sup>15</sup>.

Tuberculosis is common in low socioeconomic people. Inability to seek timely treatment may involve pelvic organs. Difficulty in diagnosis of GTB further complicates the condition and leads to infertility<sup>15</sup>.

Previous cesarean section is also considered a risk factor for secondary infertility, but literature does not support it<sup>16</sup>. In current modern societies life style changes have an important role in secondary infertility. Sedentary life style and food habits result in obesity leading to increased risk of infertility<sup>17</sup>.

This study was conducted to find out the different reproductive features of patients presenting with secondary infertility. The duration of study was 15 months. This study will enhance our understanding of the factors influencing the fertility. Also this will give us the insight of burden of problem and enable us to address them and intervene timely to do better management.

### METHODOLOGY

This retrospective cross sectional study was conducted in Health Care Center Hospital (Pvt.) Ltd. from July 2021 to September 2022. Permission was taken from hospital ethical committee. All patients with secondary infertility of more than one year were included who had previous one or more spontaneous and documented conception irrespective of pregnancy outcome. Patients who had no documentary evidence of pregnancy in case of previous pregnancy loss and those who conceived after infertility treatment were excluded. Clinical history was checked from patient's files and delivery notes were collected from delivery registers. Data was entered in preformed Performa and analyzed by SPSS version 20. Frequencies were calculated by percentages. Tables were used for showing results.

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## RESULTS

There were total 115 patients with secondary infertility. 54(47%) patients had miscarriages, sixty one (53%) patients had one or more parity, fifty eight patients had alive babies and 3 babies died. Over all 57(49.6%) patients with secondary infertility had no alive baby. Among 58 live babies 40(69%) patients had only females, 12(20.7%) had only male and 6(10.3%) had both male and female children. Out of 61 parous women, 43(70.5%) delivered vaginally, 37 by normal vaginal delivery and 06 by instrumental delivery. 18(29.5%) patients underwent cesarean section, 13 emergency and 05 elective C/S.

Table 1: Demographic Features (n=115)

	n	%age
Parous	61	53
Alive Babies	58	50.4
Early Neonatal Death	02	3.3
Intra Uterine Death	01	1.6
Miscarriages	54	47
No Alive Issue	57	49.6

Table 2: Gender of Alive Babies

Gender	n.	%age
Female child only	40	69
Male child only	12	20.7
Male and Female	06	10.3

Table 3: Obstetric Outcome

Mode of delivery	n	%age
Vaginal Delivery	43	70.5
Normal vaginal delivery	37/43	86
Instrumental delivery	06/43	14
Cesarean section	18	29.5
Emergency C/S	13/18	72.2
Elective C/S	05/18	27.8

## DISCUSSION

In this retrospective cross sectional study 115 patients with secondary infertility were included. Sixty one (53%) patients had one or more children and in 54 (47%) patients pregnancies ended up in miscarriages. Bala M showed 63.2% previous abortion rate<sup>5</sup>. This difference may be because of small sample size.

Among 61 parous women 58(95.1%) had one or more alive issues, 02(3.3%) patients had early neonatal death and 01 (1.6%) intra uterine death. Overall 50.4% patients with secondary infertility had one or more alive issues and 49.6% patients had no alive issue. Hasina, Nathalie and Bala M showed the relation of secondary infertility with bad obstetric history<sup>5,8,18</sup>. In these patients infertility was more painful and they were more depressed.

The obstetric outcome of 61 parous women was that 43 (70.5%) patients had normal vaginal delivery. Deliveries at unsterilized places and unhygienic practices during post natal period contribute a major proportion of secondary infertility.

In this study 18 (29.5%) patients had cesarean section<sup>19</sup>. It is a common concern that cesarean section is associated with increased incidence of infertility. Hasina showed the association of previous cesarean section with secondary infertility<sup>18</sup>. Nosheen showed 44.44% CS rate in her study<sup>13</sup>. But study by Luckey Serwat reports the same CS rate in infertile and fertile females<sup>16</sup>.

About two thirds (69%) of patients had one or more daughters only. In a study conducted by Neelofar 32% women had daughters only<sup>9</sup>. Having only female child is a stress full condition. Always they are blamed for giving birth to daughters. Often they are threatened for displacement from home<sup>9</sup>. These patients lose their worth in family and they experience low self-esteem in society<sup>4</sup>.

Twelve (20.7%) patients had only sons. To give birth to a son is taken as a pride in eastern culture. It is common practice to

remarry for the sake of male child. Females having sons experience secured marital relations<sup>9</sup>.

Six (10.3%) patients had both male and female issues but still they got help for more pregnancy. It is because it is a tradition in our society that people like large family size and feels more wealthy<sup>9</sup>.

## CONCLUSION

Secondary infertility is an important issue. It should be taken seriously. These patients should be listened empathetically and focused carefully for proper assessment and timely management. Social influences should be given worth while managing the pts.

**Conflict of interest:** Nil

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