

## Identifying Some Risk Factors of Female Secondary Infertility

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### Introduction

Countries in the world had categorized with high reproductive ability (more than 3.2 children) and low reproductive ability (less than 2.0 children) at world health report-2013 from WHO. In 2010, 66 countries were high reproductive ability (United Nations and Social Affairs 2013). Mongolian women had average 4.3 children in 1990, and in 2014 it decreased to 3.1 children. So Mongolia had discarded from high reproductive ability category. Women's birth rate decreases, while infertility spreads are increasing.

The infertility epidemic in the world is 8.0-29.0% (Pandey et al., 2014). In 2003, Mongolian infertility rate was 8.7% (NHCMC, 2003) and increased to 11.6% in 2013 (I. Purevogtokhok 2013). According to Mongolian researchers, 45.8% of the causes of infertility female infertility, 25.6% are male factor and 18.8% are due to men and women, and cause unspecified infertility 9.8% (NCHD 2003). The proportion of female infertility in the infertile structure accounts was the highest proportion. Although there are studies on the risk factors for female and male infertility in Mongolia, there are no studies on the risk factors of secondary infertility in women.

### Purpose

To identify female reproductive system diseases and to study risk factors of female infertility in second infertility women.

### Materials and Methods

We surveyed about secondary infertile women, who has approved by inclusion criteria and determined infertility risks. We designed case-control study. We collected 155 data at "Post partum department" of "First Maternity Hospital" for control group, and 75 data at "Women stationary" of "First Maternity Hospital" for case group (ratio 2:1). Data analyzed by STATA for OR (logistic regression tests) and correlations.

### Results

The most common previous disorders are gynecology surgical diseases and tubal pregnancy most occurred (OR=12.2)  $p < 0.006$  before infertility situation. There was statistical reliability diseases. Including: sexually transmitted diseases (OR=2.3-5.5) and clinical procedure of abortion (OR=4.6).

### Conclusion

Infertility women more affected by reproductive system and surgical disorders. 49.0% of secondary infertility women were fallopian tube factor, 20.0% had ovarian abnormalities, 23.0% had pelvic adhesion and endometriosis, and 8.0% were uterine infertility. The history of abortions, sexually transmitted infections, endometriosis, abdominal surgery and use of over one year of glucocorticoids were risk factors for women's secondary infertility.

**Keywords:** Infertility, female infertility, risk factors of infertility, sexually transmitted disease.