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# **IIPS Research Brief**

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# FOLLOW UP SURVEY OF CHILDLESS WOMEN IN ANDHRA PRADESH Sayeed Unisa\*

Infertility is the most neglected component in the reproductive Figure 1 health programmes of many developing countries despite its well-established links to other reproductive health issues, such as STDs and unsafe abortions. In India also, there are no special intervention and programme efforts to treat infertile couples.

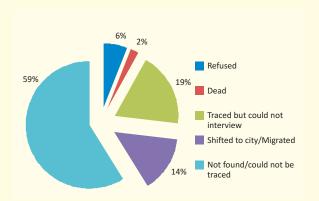
A community-based study was carried out during 1996-99 to document the treatment seeking behavior among childless couples in Ranga Reddy district of Andhra Pradesh and to identify major problems and possible remedies. This study was one of the most thorough non- medical investigations of infertility in India. However, it did not throw light on the success rate of fertility-enhancing treatment as the sample of childless couples studied by definition was comprised of those who had so far not been treated effectively. Hence the need for the present study arose to understand the fertility-seeking pattern among the childless couples after six long years. Some of them are likely to have children by natural course or by treatment or by adoption since 1996 -99. Hence it was felt necessary to understand their course of action through which infertile couples had children, and their treatment seeking behaviour and cost of successful treatment.

### Methodology

In the baseline study conducted during 1996-99, villages of Ranga Reddy district of Andhra Pradesh were selected by stratified random sampling. All the villages were grouped into three strata in ascending order of female literacy. Then ten villages were randomly selected from each stratum and childless women were listed.

For the present study it was decided to revisit the same 30 villages of Ranga Reddy district. In the first survey consent from these women were taken and all of them agreed that they can be contacted for re-interviews at later years. Hence, a complete list of addresses was kept with the principal investigator of the project. All the 332 women interviewed in the first study were recontacted for re-interview. Out of them, only 147 women (44 %) could be traced and interviewed successfully for the present study. In the cohort surveys, loss to follow-up is common and if the duration of observation increased then iteration will be high.

Percentage distribution of women not interviewed in follow-up survey



Sometimes, couples try to shift to some unknown place where they can have fewer stigmas. There is also possibility that couples may shift to places where treatment of infertility is available or at least easily accessible. Moreover, among childless couples there is very high chance of breaking up of families. Furthermore, this is very specific study where we are trying to examine the success of fertility treatments at community level. Hence, this study will help us to examine how long and how much money, infertile couples are spending to have a child in India.

The causes of infertility come from three general sources: physiological dysfunctions, preventable causes, and unexplained causes. Physiological causes of male infertility include issues with sperm counts, motility and quality and ejaculatory dysfunctions. In case of females, mostly causes are related to sexual dysfunctions, ovulation, and adhesion of pelvic, tubes, ovaries, uterine or cervix. In this survey women were also asked to report problems which were diagnosed by doctor; as perceived causes of infertility reported by women are not very precise. They have reported mainly the problems related to semen, uterus (uterus and ovaries) and menstruation. Irregularity of menstruation may be the result of uterus related or some hormonal problems; hence, it is not further analyzed. In case of severe semen or uterus related problem couples have to undergo longer period of treatment. Hence, duration and cost analyses are carried out for these two problems i.e., semen and uterus related problems.

Another important factor that plays role in the continuation of treatment is cost. Many couples believe that expensive medications are the best and land up incurring heavy expenditure for the treatment. Hence, examining the cost of treatment which results in pregnancy and successful live birth is necessary. The mean and median duration and cost of all treatments women underwent are analyzed. Treatment costs include doctors' fees, cost of medicines and travel costs.

Duration and cost of treatments are examined using Kaplan Meir survival analysis. Kaplan-Meir survival analysis examines the distribution of time between two events, such as length of treatment and event (time between treatment and pregnancy or live birth). However, this kind of data usually includes some censored cases. Censored cases are cases for which the second event isn't recorded. The Kaplan-Meier procedure is a method of estimating time-to-event models in the presence of censored cases.

A comparison of all women of first survey (332) and 147 women who were followed are made. The distribution of these women in terms of age, education, religion, caste and standard of living were similar to that of the first survey. Hence analyses based on these women will be similar to the total first surveyed women. There is a possibility that those women who were not able to interview may still be childless or had separation or divorce. Moreover the objective of this study is to know the duration and cost of treatment in having successfully live birth. Hence, loss of follow-up may not affect the result of second survey.

#### Results and discussion

Out of 147 women followed for the second survey, 79 women have become pregnant at least once. Forty percent women have conceived within five years of marital duration. Around 14 percent women have taken longer time and conceived for the first time after ten years of marital duration. These pregnancies were resulted in live births, still births and abortions. Sixty five women (42 percent) had at least one live birth. Nine women had still births and out of these three women had two stillbirths. Another nineteen women had abortions. Among those women who had live birth, 27 women have not gone for any treatment. However, these women have taken longer time for conceiving after marriage.

Couples had a live birth after more than five years of treatment (mean). Eighteen couples have gone through surgical procedures before conception. Case histories of their medical reports revealed that, around 15 couples have undergone IVF/IUF treatment. The highest total cost incurred for these couples where the husband was suffering from semen/sperm related problems was around Rs 1.5 lakhs. For women related problems too, couples were spending around Rs one lakh for treatment. Some of the couples among those who went for IVF/IUF treatment have spent around 30-50 thousands per cycle for treatment. The couples whose causes of infertility were not specified by diagnosis, underwent treatment on an average for six Years. These couples must have spent a lot of time in diagnosis itself. Only for minor problems the treatment duration was less than three years.

Around 40 percent couples without live birth and 13 percent couple with live birth have sold their property/borrowed/got money from relatives for treatment. The amount of money either borrowed or got by selling property ranged from Rupees 2000 to three lakhs. Couples have sold agricultural land, housing plot, and gold jewelry for treatment. Among those who have borrowed money, the main source of loan was either bank or close relatives from wife and husband sides. In some cases couples have borrowed money from friends and neighbors too.

Figure 2: Duration of treatment by causes of infertility related to wife

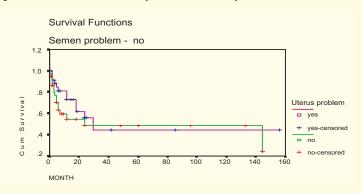
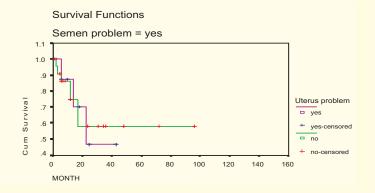


Figure 3: Duration of treatment by infertility causes of husband and wife



#### **Policy Implication**

Infertility treatment is being strongly sought after by childless couples in rural areas. Couples want to be treated but refrain themselves from taking any treatment due to its heavy cost. The expenditure on treatment has increased vastly over the years so is the number of people seeking treatment. A higher proportion of the respondents wanted their treatment to be free of cost (similar to ANC and institutional delivery).

A good referral system is needed to help childless couples, starting from the village level to "high-tech" hospitals. Basic low cost diagnostic and treatment services may be provided at community level in India because very large number of women are likely to be infertile in the coming years. Looking at the potential demand for these services, the component of infertility may be included with more emphasis in the current policy of health services to women/men. A Government programme for managing infertility is required along with the management of fertility in the country to demonstrate a public commitment to help people in family building.

For further details about this study, please contact Prof. Sayeed Unisa at unisa@iips.net

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