

SUMMARY, CONCLUSIONS AND IMPLICATIONS

5.1 INTRODUCTION

Infertility has become a global issue, which has impact on individual and social wellbeing. The incidence rates of infertility widely vary somewhere around 1-10 per cent in less developed countries, whereas such rates reported to be somewhat high among more developed countries (up to 20%). But these figures are mostly hospital / clinical based reports as primary data needs the support of ethical concern. Moreover, in western countries, during the last few decades, research on the medical aspects of infertility as well as research on the psychological aspects, including counseling has been undertaken by the medical team and counselors together. But scenario is lacking in less developed countries like India mainly due to the fact that, till recently and even at present, many of these countries are populated countries and thereby, there is somewhat negligence on the aspect of infertility.

In India, child bearing is highly valued, and childlessness can have devastating consequences for women. Infertility is perceived as a very serious problem, besides its psychological and social consequences. Some of the community-based studies on childlessness from different states of India have shown that between 5 to 18 per cent of the women reported childlessness as one of their gynecological problems. Many more couples, however, experience involuntary childlessness for at least one year with estimates range from 12% to 28%. Infertile individuals and couples suffer from multiple consequences as a result of involuntary childlessness. Among infertile couples, women are more likely to reach out for social support and to use certain escape or avoidance strategies (wishing, hoping, fantasizing, and social avoidance) than men. Men, by contrast, are more likely to engage in distancing through cognitive distraction, to engage in emotional self regulation, and to view infertility in a pragmatic way to assist with infertility issues, various researchers have suggested that counselors who work with females and couples should attain medical knowledge of infertility, fertility treatment options, and repercussions of infertility. On the whole in Indian context, no

comprehensive measure is approved to identify the prevalence of infertility and its medical and socio-cultural dimensions.

5.2 RESEARCH GAPS AND NEED FOR THE PRESENT STUDY

A critical examination of review of literature highlights that a large number of studies conducted at abroad were mostly in clinical / hospital settings with emphasis on medical treatment of infertility as well as psychological counseling to infertility couples. Some of the studies tried to identify or examined the role of selected background factors that are likely to affect infertility. Contrary to this pattern, in India, studies that focused on various aspects of infertility , by and large were few. Further, most of these studies focused on to find out the prevalence rates, the plausible causes and the effect of selected background factors on infertility. But studies were scanty that dealt with an understanding of the role of different (psychological) counseling procedures followed while the infertile couples seeking treatment for infertility as well as the gender and socio-cultural dimensions. Also was true in comprehending the functioning of special diets, yoga & meditation / exercises, etc., besides the other coping strategies among infertility couples. This study aims to focus on all these issues comprehensively.

5.3 METHODOLOGY

The present research work mainly focuses on to explore the experiences and determinants of infertility and the coping strategies of the infertile couples through counseling. It also tries to investigate the physical, social, psychological and sexual problems related to infertility, besides exploring social stigma and gender-based violence. Special attention is made to understand the role of counseling in infertility treatment, besides other coping strategies / intervention programmes. In order to achieve these objectives, 300 couples – 200 taking treatment and 100 conceived after treatment – were selected purposively the respondents were selected from the Dr. Andal's Lakshmi Fertility Research & Laparoscopic Surgical Centre, Nellore City, Andhra Pradesh. The study is primarily based on quantitative approach (through semi-structured schedule assisted by interview method), selected case studies also carried out through in-depth interviews. The analysis is mostly carried out with frequency tables and some cross-tabulations with Chi-square test. Percentages, averages and standard deviations are the

major statistical tools and techniques applied for data analysis and interpretation. All these analyses have been carried out with the help of IBM SPSS Version 20.0.

5.4 SUMMARY OF FINDINGS

5.4.1 Profile and Selected Others Aspects of the Sample Population

An analysis of the background characteristics of the sample population (**Section 4.1 of Chapter IV**) reveals that a simple majority of the respondents and their spouses' belonged to the age groups of 25-29 and 30-34 years. Slightly less than one-third (32%) and one-fourth of them (24%) each have completed high school / higher secondary school education and completed under graduate degree & above, respectively. A large percentage of the respondents are homemakers (71%), whereas nearly one-third of their spouses are engaged in 'lower grade employment'. 82 per cent of them belonged to Hindu religion, about half of them (49%) are belonged to Backward Castes and 56 per cent of them are part of nuclear family set up. Majority of them (57%) have a family monthly income of Rs. 20,000/- & less, whereas a large number of them own a house (63%). About one-third of the respondents (33%) reported that their menstrual cycles are irregular and a large proportion of them (61%) stated that they use to experience 'cramps with menses'. A greater proportion of the respondents got married on or after 18 years of age, one-fourth of them (25%) married a close blood relative and around one-third each of them have a marital duration of 4-6 years (35%) and 3 or less years (31%). About two-fifths of the respondents (40%) had pregnant one or more times, but such pregnancies largely (73%) ended up as spontaneous abortions and/or still births. 87 per cent of the respondents (87%) use to have sexual intercourse either daily or alternative days and about half of them (51%) reported as having sexual problems to either of the partners such as semen discharge and bleeding & vaginal lubrication. As high as 88 per cent of the respondents ever been diagnosed with PCOS and had treatment, whereas 16 per cent of them reported to be obese whose BMI is 30.0 & above.

5.4.2 Treatment to Infertility and Opinions on Its Related Issues

Findings related to the treatment to infertility (**Section II of Chapter IV**) showed that almost all of the respondents have undergone the basic tests for infertility problems like Ultrasonography and Hormone Testing closely followed by Follicular study,

Hysterosalpinogram, Serum Progesterone and Post-coital test (49%) and in the case of most of these tests, the results are largely normal, except for Hysterosalpinogram and Hormone Testing (29% and 16%, respectively). 95 per cent of the spouses underwent for Semen Analysis test followed by Hormone Analysis (72%) and Ultrasonography (50%) and the results are modestly normal. While slightly more than half of them (51%) spent about Rs. 50,001-1,00,00/- for tests and treatment of infertility, a little over one-tenth of them (11%) spent Rs. 1,50,000/- or more.

Pooled scores of various opinions regarding different domains revealed that most of them fall in ‘moderate extent’ categories: ‘*physical or bodily characteristics would affect by infertility*’ (pooled score moderate extent – 14-15 based on 5 statements; 62%), ‘*extent of opinions on social concerns of infertile couples*’ (pooled score lower extent – 27-31 based on 10 statements; 39%), ‘*extent of opinions on the need for parenthood to married couples*’ (pooled score moderate extent – 21-24 based on 10 Statements; 40%) and ‘*extent of opinions on sexual life concern*’ (pooled score moderate extent – 22-25 based on 8 Statements; 49%). In the case of the following two domains, a simple majority of them fall under ‘low’ or ‘lower’ extent category: *emotional issues related to infertility* (pooled score lower extent – 15-17 based on 7 statements; 44%) and ‘*extent of knowledge about and attitude towards medical treatment to infertile couples*’ (pooled score lower extent – 16-18 based on 8 statements; 44%).

5.4.3 Infertility Effects on Marital Life and Family Members’ Reactions & Support

The analysis of infertility effect on marital life and family members’ reactions & support revealed the following findings (**Section III of Chapter IV**). On the whole, the percentage of those who perceived ‘no effect’ on their marital life due to infertility is higher if such problem is with men (37%) as against women (5%). On the other hand, about one-fourth each of the respondents felt that infertility caused ‘Anxiety & Fear’ and ‘Expel & Comparison’ in their marital life if such problem is with women (25% & 26%, respectively) as well as men (25% and 20%, respectively). While about 55 per cent of the respondents affirmed that difference of opinions are use to arise due to infertility and treatment procedures among them (couples), such differences are mostly resolved by taking fruitful actions by counseling, sharing and discussions and relatives. About 12 per

cent of the respondents felt that they regret for got married and 16 per cent discussed about divorce / separation and more than half of the respondents (54%) mentioned that ‘occasionally’ quarrels use to take place among them (couples). While 73 per cent felt that married life is not good without children, about the same percentage of them (73%) reported that one or the other of their family members knows about their infertility problem. Family members mostly expressed ‘shocking’ (39%) to infertility of respondents closely followed by ‘harassment’ (36%) and ‘abusing’ (25%). However, 75 per cent of them stated that there is no problem or negative reaction from family members if the infertility problem is from spouse side. A little over half of the respondents (51%) felt that they are experiencing abuse from the family members mostly in terms of ‘negative thinking / negative focus of the family’. 63 per cent of the respondents felt that family members are mostly supportive at each stage of the treatment and such support is mostly from parents / brother / sister (74%). More than two-fifths of the respondents (42%) perceived society’s opinions about infertility ‘positively’, whereas about one-third of them (32%) felt such opinions are in negative side such as ‘Insult / Blame / Incapable’, ‘No Invitation / Avoid Fun / No Identity’ and ‘Not to Touch Young Children’, etc.

5.4.4 Coping Strategies Adapted to Infertility

An analysis of data on respondents’ coping strategies adapted to infertility (**Section IV of Chapter IV**) has brought out some of the following major findings. Except a few, almost all of the respondents (95%) in the range of attended the different types of counselling. An overwhelming percentage of those who attended counselling have done so for about 2-3 and/or 4 & more number of times (in the range of 90%-95%). A large majority of those who attended the counselling (65%) felt that they have come to know about the ‘tests / treatment to infertility’, ‘diet & exercises to be adopted for the management of infertility’, ‘improvements in confidence’, etc. 63 per cent of such respondents mentioned that they followed the practices that lead to have a health (good) baby and 31 per cent of them succeeded with ‘talk to baby’. In order to lessen stress, about 49 per cent of the respondents reported to be practiced ‘singing songs / practicing dance / music’ and ‘visiting temples / pilgrimage tours’ and another sizeable percentage of them (30%) developed the hobbies like ‘reading books / writing & drawing’ and

watching TV / movies / quiz programmes, etc.'. About 30 per cent of them reported that they believe infertility is due to 'evils / sin or curse made in the previous birth'. More than half of them (56%) have expressed faith in God for conceiving.

An overwhelming majority of the sample respondents stated to be having the practice of taking sprouts, vegetables and fruits (91%-90%) followed by liquids and juices and Aloe Vera (77% and 71%, respectively), avoided certain diets (63%), a sizeable percentage of them reported that they have taken / are currently taking foods such as dry fruits / seeds & nuts (54%) and millets & grains (43%). In the case of regularity in taking these foods, almost all them strictly adhered in avoiding certain foods (99.5%), large percentages of them said that they use to take 'millets and grains' (94%) on a regular basis followed by sprouts, fruits, vegetables, dry fruits / seeds & nuts and Aloe Vera (74% - 67%). Large percentages of the respondents (ranging between 68% and 63%) reported to be practicing most of the special diets under consideration for about 7 months and above. 74 per cent of them professed that their confidence level has increased (being positive towards treatment to infertility) by taking the special diets. While about 43 per cent of the respondents each have perceived that the diet modification helped them in 'correcting the physical problems', 42 per cent felt that there are improvements in HB, BH and WT levels. 56 per cent of them felt that the special diet is helpful to them in having healthy (good) baby, 32 per cent believed such diet is helpful in talk to baby.

A large majority of the respondents practiced breathing cycles (72%) and meditation (66%), whereas a little over two-fifths of them (42%) practiced physical exercises and 21 per cent only stated to be practiced yoga. Practicing physical exercises on a regular basis appear to be strikingly high (90%), whereas the extent of practice of yoga, breathing exercises and meditation is comparatively at a moderate level (55.5%, 52% and 44%, respectively). An overwhelming percentage of those practicing exercises (94.5%) for about 6 months or less only, the corresponding percentages in the case of yoga, medication and breathing cycles fall in the range of 75 – 61.5 per cent. While 60 per cent felt that yoga and physical exercises are helpful in getting pregnancy, 53 per cent and 30 per cent of them felt they are helpful in conceiving baby and talk to baby. As part of infertility treatment, a greater percentage of respondents (84%) avoided 'junk foods /

oil foods / bakery items / spicy items' followed by 'refined snacks / pickles' (62%), Changes in the following life styles are also reported to some extent: 'avoidance of driving long distance' (35%) and 'taking hot water bath', & 'avoidance of cell phones / computers / laptops' (28%). Due to changes in these life styles during treatment, as high as 82 per cent of the respondents experienced changes in physical aspects (such as haemoglobin, body heat, body weight, body mass index, etc.). A large percentage of the respondents (61%) believed that such life style changes improved their chances in conceiving baby and another 31 per cent of them believed improvement towards 'talk to baby'. Of those undergoing treatment for infertility, about one-third of them (100 women) conceived (till the date of survey) and of these, 49 are currently pregnant, 45 have delivered a baby, 5 experienced miscarriages and 1 had abortion (ectopic).

5.4.5 Differentials in Selected Aspects Related to Infertility Treatment across their Infertility Treatment and Conceived Status

While fulfilling one of the objectives and hypotheses, i.e., whether different processes of treatment vary between those women who are currently taking treatment for infertility and conceived (**Section V of Chapter IV**) the following major conclusions have been drawn. The percentages of *women who attended different counselling programmes* such as 'infertility education awareness meeting', 'one-to-one counselling', 'group counselling', 'individual counselling', 'counselling for sexual health' and 'family counselling' are relatively higher among those who are in the conceived status (in the range of 77% - 98%) as against to those who are still in the process of taking treatment for infertility (65% - 94%). However, the Chi-square test results are turned out as highly and moderately significant only in the case of 'group counselling' and 'one-to-one counselling' ($p<0.01$ and $p<0.05$, respectively), whereas such results are somewhat lower extent in the case of other four counselling programmes ($p<0.10$ in each case). With regard to the *special diets taken as part of the treatment* the percentages women taking special diets viz., 'sprouts', 'vegetables', 'fruits', 'liquids / juices', 'Aloe Vera', 'dry fruits & seeds / nuts' and 'millets / grains' are observed to be higher who conceived (in the range of 66% - 96%) as compared to those who are taking treatment at the time of survey (31% - 88%). The Chi-square test results too emerged as highly significant in all

these regard ($p<0.001$ or $p<0.01$), except in the case of ‘Aloe Vera’ and ‘fruits’ ($p<0.05$ both the cases).

Differentials in *taking special diet for specific problems* also varied across those women who are taking treatment and conceived status. As expected, the percentages of women taking special diet for specific problems related to infertility such as ‘excess body heat’ ‘pre-menstrual symptoms’ ‘semen improvement’ ‘Follicular study’, ‘serum progesterone’ ‘any other problems’ ‘dysmenorrhea’, ‘Irregular periods/ PCOS’ and ‘weight reduction’ are noted as higher among those in conceived status (in the range of 62% - 96%) as against still taking treatment (37% - 88%). It is also conspicuous to note that the Chi-square test results too come out as highly significant in all these regard ($p<0.001$ or $p<0.01$). However, such differentials in taking special diets for specific problems like Cysts and ‘Aneamic’ did not vary much in the two groups of women under study. On the other hand, special diet for ‘fibroids’ though relatively at lower side for those taking treatment as well as conceived at the time of survey (21.5% vs. 7.0%), the Chi-square test results turned out as highly significant ($p<0.001$). With regard to the differentials in practice of Yoga and physical exercises, it is found that the percentages of women who practiced yoga and other physical exercises such as meditation, breathing cycles and exercises, are noted as relatively higher among those who are in the conceived status (51% - 74%) as against to those who are taking treatment for infertility (6% - 63.5%). Obviously, the Chi-square test results in all these regard have emerged as highly significant ($p<0.001$ for all cases).

5.5 BRIEF SKETCH OF CASE STUDIES

In all about, ten case studies (*Section VI of Chapter IV*) carried out by the *researcher* (but three only presented here) focused on the physical, emotional, social, sexual, economic, spiritual, yoga and dietary habits of infertility and their impacts on couples’ lives. The case studies also brought out gender differences, especially women are vulnerable to the problem of infertility. Family support, by and large, is at a moderate level and social stigma attached to infertility appears to be somewhat large. Almost all of them are undergoing treatment on regular basis with the assistance of several tests / investigations. Due to different counseling procedures, most of the couples started living

together for mutual love, support, acquired patience and pleasure and thereby, find their relationship revolving during the course of treatment. At times, the failure of treatment created emotional distress, worry, anxiety and depression among them. However, encouragement by the family members in the form of informational, emotional and economic spears helped them to prolong their treatment with less hassles. Counseling and medical support reported to be helped them in reducing their stress and to become pregnant (conceived) and talk-to-baby.

5.6 MAJOR CONCLUSIONS AND DISCUSSION

On the whole, the results highlight that majority of infertility women, who have taken treatment from the selected sample hospital, belonged to moderate level of socio-economic status, viz., have little / some education, homemakers and majority of spouses too work as lower-grade employment and/or non-agricultural workers, belonged to low and/or moderate family monthly income brackets and majority belonged to backward and Scheduled Castes. In this process, the cost of treatment for infertility in this hospital is somewhat moderate compared to other hospitals for the same treatment.

Majority of the respondents didn't get pregnant when they started treatment for their infertility problem, while about two-fifths of them had pregnant one or more times, but such pregnancies largely ended up as spontaneous abortions and/or still births.

A great percentage of the respondents affirmed that they use to have sexual intercourse either daily or alternative days, but half of them reported as having sexual problems to either of the partners, which might be one of the major reasons for infertility.

A higher percentage of the respondents declared that they suffered from polycystic ovary syndrome (PCOS), which might be another major reason for the infertility problem. Of course majority of them had treatment for such problem at one or the other point of time so as to facilitate to conceive.

Given the socio-economic conditions of the respondents, the amount spent for tests and treatment of infertility is moderately at higher side (mostly around Rs. 1,00,000/- and above). Respondents, by and large, felt that due to infertility their

physical or bodily characteristics have been affected to a moderate extent, but they are disturbed emotionally as well as socially at a low to moderate extent.

Majority of the respondents appear to be having less and moderate knowledge and/or unfavourable attitudes towards infertility as well as sexual life concern; however, a large number of them expressed a moderate to high need of parenthood to married couples. Most of the respondents reported that infertility, in general, affected their marital life in several ways and such adverse effects are much more if the women is suffering from infertility problems as compared to their men (spouses) counterparts. This has been further supported the fact that there is not much problem or negative reactions towards respondents if the infertility problem is from spouse side.

A large percentage of respondents accepted that differences of opinions arise between the couples due to their infertility and its treatment taking process, and such differences are mostly resolved by counselling, sharing and discussions with relatives.

It is obvious to note that mothers-in-law' adverse reaction (either in terms of harassment or abusing) towards the respondents for their infertility status is substantially higher followed by the concern from members of the parental family (father, mother, brother, sister, etc.). Further, a large number of respondents mentioned that these parental family members only are more supportive at each stage of the treatment which includes financial support as well as physical assistance during treatment.

Overall, counselling to respondents noted to be on the expected lines and a large majority of the respondents (couples and/or their family members) have utilised the same in appropriate manner and thereby, perceived the benefits in terms of conceived baby and talk to baby, eliminating misbeliefs, in addition to improving husband-wife relationships and management of infertility.

Diet modification and special diets too appeared to be played an important role in infertility treatment, correcting physical problems and improvement in HB, BH and WT levels as well as noted as helpful in conceiving baby and talk to baby.

Likewise, the treatment and tests for infertility appear to be satisfactory to the respondents (couples) and followed the same mostly on the expected lines, and got the benefits in terms of conceived baby and talk to baby, besides physical and reproductive health of the couples.

Yoga, medication and physical exercises as wells as changes in life styles also played an important role in infertility treatment and respondents also perceived the same in supportive of pregnancy and also in conceiving baby and talk to baby.

5.7 POLICY IMPLICATIONS

- ❖ As part of health and family welfare programme, the Government should take steps to strengthen the reproductive health of the young married couples in general and emphasising on infertility problems in particular. To this end, appropriate budget allocation, strengthening of rural and urban health facilities and health care providers have to be increased in a phased manner depending upon the need and demand for such services.
- ❖ Steps may be taken by infertile couples for early diagnosis of infertility problems and treatment of any reproductive tract infections including sexual intercourse related. At the same time, the Government health facilities (at least at Taluk / District headquarters) have to be equipped to provide such services mostly for free of cost by appointing lady doctors (Gynaecologists) and modern equipments.
- ❖ The cost of infertility treatment has to be kept at a reasonable level by the private health providers so as to avail by those who are from down-trodden or belonged to lower socio-economic status. Further, efforts may be made to provide basic low cost diagnostic and treatment services at community health facilities in India.
- ❖ Imparting information and education about the infertility, its causes / treatment needed, etc. to the persons living in the community and society as well as to the family members of those suffering from infertility is very much essential so as to eliminate the misbeliefs and apprehensions related infertility and thereby, support the infertile couples in a positive manner without hurting their sentiments.

- ❖ Gender-specific strategies are needed for the betterment of infertile couples. For this, on the one side, the males have to come forward to get tested for their infertility, if any and their involvement and utmost support have to be extended to their wife, in case they are finding with infertility problem.
- ❖ As there is some support for counselling services and yoga & medication are reported to be reduced the stress and misbeliefs related to infertility, it is suggested that counselling services need to be improved in most of the fertility centres / Government hospitals so as to get the benefits of such services to the infertile couple.

5.8 DIRECTIONS FOR FUTURE RESEARCH

- There is a need for large-scale studies exclusively on infertility and its related problems at National and State Level so as to estimate the extent / prevalence of infertility, which is very much need for proposing differential strategies to the betterment of infertile couples.
- Studies that focus gender perspectives of infertility is another area of research, which may be carried out to understand gender aspects of infertility on different strata of population.
- Research studies based on the socio-psychological aspects of infertility of the couples concerned as well as their immediate family members role in this regard may be carried out at micro-level as well as across different socio-cultural strata like religious, caste and rural-urban background of the population.
- Studies that focus with the blend of qualitative and quantitative methods (mixed methods) are to be planned to understand in details about the infertility problems among the young married couples of different settings both at micro and macro levels.