CHAPTER - V
DISCUSSION

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DISCUSSION

The previous chapter lights upon the analysis and findings of the study on quality of life of infertile couples before and after adoption of child. The study aims to analyse the perceived level of stress, social adjustment and quality of marital life of infertile couples before and after adoption of child. The study also looks in to the phenomena of spontaneous conception among couples after adoption. Infertility is a cause of distress in infertile couples. Cultural implications of infertility have profound effect on the perceived wellbeing of couples. This chapter discuss these findings in line with the objectives and hypothesis of the research.

6.1 Effect of adoption on psychological distress

It is evident from the results that infertility is a cause of psychological distress for both males and females. Though infertility is considered as a physical or medical problem, it has a psychological dimension too. It is believed to have a bearing on one’s psychological wellbeing. Fertility is considered as an added advantage in married life almost in all cultures and it is a necessity for a few to remain well in the family. There is no remarkable difference observed in the psychological distress scores of the experimental and control group before adoption of child. But it is evident from the results that there is a statistically significant reduction in psychological distress scores observed among infertile couples of experimental group after adoption of child (p< 0.001, tables 4.2 & 4.4). Hence the hypothesis formulated in the study that adoption of child results in
reduction in the level of psychological distress among infertile couples (H1-1) is accepted by the findings in the study. The present study also confirms the general finding that infertility results in psychological distress (Moller & Fallstrom, 1991). Remarkable amount of reduction of distress and improved psychological wellbeing among infertile couples are also found in a study by Mehta (2010) who reported that adoption is a ‘cure’ to infertility, as it brings about vast changes in couples’ lives.

It is also evident from the results that in both experimental and control groups as well as in different pre test and post test conditions, females experienced more psychological distress compared to males (table 4.1). The higher rate of perceived distress is reported in females irrespective of male or female causes of infertility. This finding has to be discussed and understood in the light of the study reports of Lee and Sun (2001) that irrespective of causes of infertility, society finds the women guiltier of infertility than men which result in women among the infertile couples experiencing more distress than their partners.

The factors to explain gender difference in stress are that women are intimately involved in childbearing process culturally and biologically and find infertility as their responsibility. Women feel guilty of themselves even when male factors are the cause. Medical treatments like ART are more intrusive for females even when the cause is male factors. So women take up the success of treatment as their responsibility alone (Lee and Sun, 2001).

The study also assessed the rate of distress of experimental group at 3 months, 6 months and 1 year after adoption. It is found that the distress level vary
among experimental group at 3 months, 6 months and one year after adoption. The
distress level is found to be reduced at three months after adoption (post test 1),
slightly increased at six months (post test 2) and remarkably decreased after one
year of adoption. Control group do not show significant reduction in stress level in
the post test (table 4.1). This difference in stress levels at three months, six months
and one year of adoption among experimental group is found statistically
significant (P< 0.001, table 4.5). It is also found that post hoc comparison using
test of least significance is also statistically significant between pre test and all the
three post tests among the experimental group at three months, six months and one
year after adoption. (p<0.001, table 4.6). The hypothesis formulated in the study,
that the rate of psychological distress varies among experimental group at
3 months, 6 months and one year after adoption of child (H1- 2) is confirmed by
the findings in the study.

It is observed from the above results that immediately after adoption
couples experienced a sizable reduction in the distress level. However after six
months of adoption, both males and females experienced a slight increase in their
distress level; but a remarkable reduction is observed in males and females by one
year after adoption (table 4.1 and figure 3). The study findings suggest that there
are ups and downs in the lives of adoptive couples related to the distress levels at
many points after adoption, though overall reduction in stress level is noticed after
adoption. The study findings of Mc Kay et al., (2010) is supportive of these
findings. They have reported that periods of harmony and disharmony occur during
comparative adjustments between individual adoptive development and family
adoptive development. According to Viana and Welsh (2010), after adopting a child, additional traumatic stressors come into play focussing on the realization of a dream like tremendous life changes, new responsibilities, and a future marked by uncertainty and fear. Several factors may contribute to these findings. Immediately after adoption the parents assume social role of biological parents and a ‘dream come true’ effect reduce distress. While facing the realities, the anxiety related to unfamiliarity to the routines of the child, issues related to subsequent medical checkups and questions from the society are stressful for the new parents. Following this period, altered family roles, delay in achieving milestones, and series of infections in the child are some of the stimuli for stress. Similar findings are reported by Mc Kay et al., (2010) that physical disturbances and health problems of the child like poor weight gain, skin problems, gastro intestinal problems, allergies, anaemia and delay in milestones add on to the post adoption stress. It is also reported that insecure pattern of attachment in adopted children due to separation experiences are also troublesome for parents after initial euphoria. By around first anniversary of adoption, adjustment occurs where couples become less anxious, emotionally balanced and found to be more attached to the child.

In addition to the major findings of the study related to psychological distress, the study also assessed influence of selected socio demographic and clinical variables on psychological distress among infertile couples. It is found that the gender, educational level of couples and their occupational status emerged as statistically significant socio demographic variables influencing psychological
distress of infertile couples (p< 0.001). Hence the hypothesis formulated in the study that selected socio demographic and clinical variables have influence on psychological distress of infertile couples (H1- 3) is confirmed by the findings of the study. All the other socio demographic variables are not found to be influencing factors in determining the level of psychological distress among infertile couples.

On analysing gender of the sample in relation to psychological distress among couples, it is found that the mean distress scores among females are found to be higher than males. The difference in distress between males and females are found significant (p< 0.001, table 4.8). This finding has to be discussed and understood in the light of studies which obtained similar results among infertile couples in relation to gender difference (Lee and Sun, 2001; Klock, 2008). It is reported that irrespective of causes of infertility, society finds the women guiltier of infertility than men. They have found that women among the infertile couples experience more distress than their partners.

Present study assessed educational level of the sample in relation to psychological distress among couples. It is found that the mean distress scores among the groups of graduates and post graduates are found to be lower than infertile couples of the groups SSLC and plus two. The difference in distress scores among these groups based on educational level is found significant (p<0.001, table 4.11 and 4.12). This could be due to the fact that when knowledge regarding infertility, its treatment modalities and possibilities are more, it may reduce the distress. The group with lower educational status are not well versed with
infertility treatment modalities and find it difficult to come to critical judgements and decision making. The findings of the study by Van and Trimber (1994) also revealed that higher educational level has relationship with improved general wellbeing of infertile couples. The findings are consistent with the present study.

The study also revealed that there is significant difference in psychological distress between infertile couples with regard to their occupational status. Mean distress scores of unemployed group is found to be higher than couples who are employed. The difference in distress scores among infertile couples who belonged to different groups with regard to their occupation is found significant (p<0.001, table 4.13 & 4.14). Employed couples are less worried regarding their income required for costly infertility treatment than the unemployed couples. Moreover employed couples may be less preoccupied with infertility issues due to busy work schedules than the unemployed ones. The findings of the study by Klock (2008) supported the present study that an associated problem among infertile couples is the concern about the financial security.

It is evident from the results that age of sample is not found to be an influencing factor in determining psychological distress among infertile couples. The difference between distress scores among infertile couples of both age groups are not found statistically significant in the study. Infertility is stressful to all couples irrespective of age. Van and Trimber (1994) in a study have found that there is no relationship detected between age and wellbeing of infertile couples. The findings are consistent with the present study.
Results of the study revealed that psychological distress scores of infertile couples did not demonstrate statistically significant difference based on religion. Irrespective of religious beliefs, infertile couples of all religions experienced high distress levels. The findings of Van and Trimber (1994) also revealed that there is no relationship between religious denominations and wellbeing of infertile couples.

The results of the study also revealed that income is not an influencing factor in determining psychological distress among infertile couples. Among the three groups all the groups based on income are found to have almost similar distress scores. The difference between distress scores of infertile couples of three groups are not found statistically significant. Irrespective of income all the infertile couples experienced high level of stress. This indicates that income of infertile couples whether high or low is not exerting a significant influence on their psychological distress.

The study also assessed influence of selected clinical variables on psychological distress scores among infertile couples. It is found that none of the clinical variables are found to be influencing factors in determining the scores of psychological distress among infertile couples.

The findings of the present study reveal that presence or absence of family history of infertility has no significant influence on psychological distress scores among infertile couples. Among four groups of infertile couples based on family history of infertility, it is found that the difference between distress scores is not statistically significant. So family history of infertility is not found to be an influencing factor with regard to psychological distress among infertile couples.
Environmental factors affecting infertility did not emerge as a significant factor influencing psychological distress scores of infertile couples. The difference in distress scores among infertile couples who belonged to the groups who had mumps, abdominal surgeries or did not have any such factors is not found significant. So it is inferred that environmental factors affecting infertility are not found to have influence on psychological distress among infertile couples.

It is evident from the results that the type of infertility whether primary or secondary is not exerting a significant influence on psychological distress among couples. There is no significant difference in psychological distress scores of couples whose infertility is primary or secondary type. The study by Van and Trimber (1994) also revealed that either duration or type of infertility has no relation with wellbeing of infertile couples and the findings are consistent with the present study.

Type of treatment taken by infertile couples is not found to be influencing the psychological distress. The couples who have taken hormonal treatment demonstrated slightly higher distress scores. But the difference between distress scores among three groups of infertile couples in the present study is not found statistically significant. Irrespective of the treatment modalities, infertility is found stressful for the infertile couples.

The findings of the study reveal that the cause of infertility among the sample did not emerge as a significant factor influencing psychological distress of infertile couples. The trend of mean distress score is found high among couples with female factors as the cause of infertility than the other three groups. But the
difference in distress scores between three groups is not found statistically significant. Initial diagnosis that the defect is with females among couple creates more stress. This is because females conceive and give child birth. Long term infertility creates high stress among couples equally, irrespective of the causative factors. Lee and Sun (2001) in their study also found that infertility of any cause and nature are truly stressful.

All these results reveal that selected socio demographic variables are found to be influencing factors on determining psychological distress among infertile couples.

6.2 Effect of adoption on social adjustment

It is evident from the results that infertility leads to an impairment in social adjustment of both males and females. It is found that lag in social network due to infertility and the resultant isolation is another aspect of infertility which results in low social adjustment among couples. Table 4.26 reveals that there is no remarkable difference in the scores of social adjustment among experimental and control groups in the pre test condition, before adoption. But it is evident from the results that a statistically significant increase in social adjustment among infertile couples is observed in males and females among the experimental group after adoption of child (p< 0.001, tables 4.27 & 4.29). Hence the hypothesis formulated in the study that adoption of child enhances social adjustment of infertile couples (H1- 4) is confirmed by the findings in the study. The present study also confirms the general finding that infertility results in impaired social adjustment (Berg and Wilson, 1995).
The results of the study show that couples among experimental and control group experience low social adjustment in pre-test condition. This is due to the fact that infertile couples demonstrate social withdrawal and isolation. In order to escape from social questions related to childlessness, couples generally avoid social situations where children are present. The findings of the present study are consistent with the findings of Klock (2008) that difficulties of attending social functions such as baby showers or family birthdays for children are difficult for infertile couples. It is also found that activities of daily living such as seeing babies at the local market, office or picnic can precipitate a strong negative emotional response among infertile couples. He also noted that social stigma of childlessness results in feelings of imperfections and a ‘spoiled identity’ among couples.

The results of the study indicate that there is a statistically significant increase in social adjustment among infertile couples of experimental group after adoption of child. The ‘magnifying effect’ of adoption also improves their social network as adopted child help them to mingle with other parents with children and expands their restricted social interactions. The study of Weir (2004) also supports the present findings of the study. He stated that adoptive placement seems to assist infertile couples with a sense of social compatibility with other couples with children. A ‘leapfrogging effect’ occurs, whereby infertile couples describe overcoming the feeling of ‘left behind’ when their social counterparts begin to have children.

It is also evident from the results that in both experimental and control groups as well as in different pre-test post-test conditions, females experienced less
social adjustment compared to males irrespective of male or female cause of infertility (table 4.26). This could be due to the fact that society finds woman among couple as unable to produce children and majority of questions are directed to infertile women. Social withdrawal is found more among women who generally take the responsibility of childlessness. This is also found on looking into the findings of Laura et al., (2007) that it is common for couples to report secrecy and misdirection with regards to their infertility diagnosis. For example, women reported telling family and friends that the source of the couple’s infertility is hers, when in fact the cause is male factor. In addition, men reported a feeling that there is more social support for infertile women whereas infertile men are more ridiculed by the society.

The present study also assessed the social adjustment of experimental group at 3 months, 6 months and 1 year after adoption. It is found that the scores of social adjustment differ among experimental group at 3 months, 6 months and one year after adoption. The social adjustment increased at three months after adoption (post test 1), slightly decreased at six months (post test 2) and remarkably increased after one year of adoption (table 4.26). Control group do not show significant increase in social adjustment in the post test. This difference in social adjustment scores at three months, six months and one year of adoption among experimental group are found statistically significant (P<0.001, table 4.30). The post hoc comparison using test of least significance is found statistically significant between pre test and all the three post tests of the experimental group at three months, six months and one year after adoption. (p<0.001, table 4.31). The
hypothesis formulated in the study that the level of social adjustment differ among experimental group at 3 months, 6 months and one year after adoption (H1-5) is accepted by the findings in the study.

It is observed from the above results that immediately after adoption couples experience a sizable increase in the social adjustment. However after six months of adoption both males and females experienced a slight decrease in their social adjustment; but a remarkable increase is observed in males and females after one year of adoption (table 4.26 and figure 3). The findings of the study suggest that there are ups and downs in the lives of adopted couples related to the social adjustment at many points after adoption though overall increase in social adjustment is noticed after adoption. Along with emotional ups and downs, social reactions also can take deviations due to many external sources. Adoptive parents face criticisms, negligence, rejection and difference of opinions from relatives and friends related to rising of child. This results in avoidance or limiting in social relationships by the adoptive parents. The findings of Foli et al., (2000) support the present findings. According to the investigators, adopted children can bring about all kinds of reactions even from strangers, like compassion, feelings of care, curiosity and rejection. Adoptive parents are not happy with the continuous attention they receive from onlookers. Relatives and grandparents may need more time to get used to the new child. Adoptive parents may fear that their child may be discriminated against because of his or her different looks. This can lead to more stress around adoptive parenthood instead of relieving it. They avoid social gatherings at times in order to limit the social circle.
The results of the study also point out that by one year of adoption, couples of experimental group demonstrated the best level of social adjustment. Zosky et.al., (2005) in their study also reported that eventually the adoptive parents would settle down to experience the joys of adoptive parenthood by improving social contacts. Adoptive parents initiate celebrations at home like birthday gatherings in the post adoption period.

In addition to the major findings of the study, the study also assessed influence of selected socio demographic variables on social adjustment among infertile couples. The gender among the infertile couples emerged as a statistically significant variable influencing social adjustment of infertile couples (p<0.001). So the hypothesis that selected socio demographic and clinical variables explain variation in the level of social adjustment among infertile couples (H1- 6) is confirmed by the findings of the study.

On analysing gender in relation to social adjustment among couples, the mean social adjustment scores among females are found to be higher than males among infertile couples. The difference in social adjustment among males and females are found to be significant (p<0.001, table 4.33). Social withdrawal is found more among women who generally assume the responsibility of childlessness in order to protect men in the society. Findings of Laura et al (2007) are consistent with present findings which yielded similar results in the dimension of social adjustment among infertile couples with respect to gender difference.

It is evident from the results that age of sample is not found to be an influencing factor in determining social adjustment among infertile couples. The
difference between social adjustment scores among infertile couples of both age groups are not found significant in the study. Infertility prevents all couples from having active participation in social interactions irrespective of the age.

Results of the study revealed that social adjustment scores of infertile couples do not demonstrate statistically significant difference based on religion. Irrespective of religious beliefs, infertile couples of all three religions experienced low social adjustment.

It is evident that educational level of the sample is not influencing social adjustment of infertile couples in a significant manner. The mean social adjustment scores among different levels of educational groups such as post graduates, graduates, plus two and SSLC are found almost similar. The difference in social adjustment scores among the groups are not found statistically significant. Irrespective of educational levels all couples demonstrated low social adjustment.

Present study revealed that there is no significant difference in social adjustment between infertile couples with regard to their occupational status. The difference in social adjustment scores among infertile couples who belonged to different groups with regard to their occupation are not found significant. Couples belonged to all the groups whether employed or unemployed demonstrated low social adjustment and the difference between the social adjustment scores are not statistically significant.

The results of the study also reveals that income is not an influencing factor in determining difference in social adjustment scores among infertile couples. The difference between social adjustment scores of infertile couples of three groups
are not found statistically significant. Irrespective of income all the infertile couples experienced low social adjustment. This indicates that income of infertile couples whether high or low is not exerting a significant influence on their social adjustment.

The study also assessed influence of selected clinical variables on social adjustment among infertile couples. None of the clinical variables are found to influence the level of social adjustment among infertile couples.

The findings of the present study reveal that presence or absence of family history of infertility has no significant influence on social adjustment of infertile couples. Among four groups of infertile couples it is found that the difference between social adjustment scores is not statistically significant. Hence the family history of infertility is not found to be a variable influencing the social adjustment of infertile couples.

Environmental factors affecting infertility among the sample did not emerge as a significant factor influencing social adjustment of infertile couples. The difference between social adjustment scores of infertile couples who belonged to the three groups is not found significant. It is inferred that environmental factors affecting infertility are not found to have any influence on social adjustment among infertile couples.

It is also evident from the results that the type of infertility whether primary or secondary is not exerting a significant influence on social adjustment among couples. There is no significant difference observed in social adjustment of couples who have primary or secondary infertility.
Type of treatment taken by infertile couples is also not found to be influencing their social adjustment. Irrespective of treatment modalities like hormonal treatment, In vitro fertilization or intra uterine insemination, the infertile couples generally demonstrated low social adjustment. The difference between social adjustment scores among three groups of infertile couples in the present study is not found statistically significant. Whatever the treatment modalities are, infertility resulted in low social adjustment in all the infertile couples.

The findings of the study reveal that the cause of infertility among the sample is not found to be a significant factor influencing social adjustment of infertile couples. The difference in social adjustment scores among infertile couples with male causes, female causes, combined causes and unexplained causes are not found statistically significant. Irrespective of the causative factors, all infertile couples demonstrated impairment in social adjustment.

6.3. **Effect of adoption on quality of marital life**

It is evident from the results that infertility results in impaired marital quality for both males and females. The stress caused by infertility has an impact on marital adjustment and the quality of marital life of the couples. There is no remarkable difference found in the marital quality scores of experimental and control groups before adoption. But it is evident from the results that a statistically significant increase in quality of marital life is observed in males and females among the experimental group after adoption of child (P<0.001, tables 4.52 and 4.54). So the hypothesis formulated in the study that child adoption results in an increase in quality of marital life among infertile couples (H1- 7) is confirmed by
The findings of Klock (2008) also reveal that infertility result in impairment in quality of marital life among couples.

The results of the study point out that couples among experimental and control groups demonstrated low quality of marital life in pre tests. The hurdles in investigations, diagnosis and treatment of infertile couples affect marital relationships and sexual relationships adversely, resulting in low quality of marital life. As duration of infertility increases, infertile couples are not in a position to comfort each other since both are equally in distress. The marital relationships can be strained because of the fear that the fertile partner will leave the infertile partner. Moreover the couples may be advised to engage in sexual act at certain intervals in specified manner as a part of treatment which take away the naturality of sexual act of the couples. This in turn makes the sexual act a stressful event.

The findings of Klock (2008) throw light into the findings of the present study. He emphasized that the stress caused by infertility has direct effect on marital adjustment. It lowers frequency of intercourse and sexual satisfaction. Ramzanzadeh et al. (2009) in another study reported that an additional strain on the marital relationship is the changes in the couple's sex life. For the infertile couples, sex becomes the trial to have a child. The increased intrusion into the sexual habits of the couples by the recommendations of the medical team for timed intercourse, frequent intercourse, or limited intercourse make sex a difficult task.

The results strongly highlight that there is a statistically significant increase in quality of marital life among infertile couples of experimental group after adoption of child. The child adds flavour to the life and changes the life style of
couples. This results in improvement of family and marital relationships. Sexual relationships are no more stressful which naturally take away psychogenic sexual difficulties. The following studies strongly support the present findings of the study. Weir (2004) reported that couples with troubled marital relationships will find a child magnifying their marital and familial relationships. In a study which assessed marital satisfaction within the first year after adoption of a child, both mothers and fathers reported high levels of marital satisfaction and relief of sexual problems (McKay et al., 2010).

It is also evident from the results that in both experimental and control groups as well as in different pre test and post test conditions, females experienced less quality of marital life than males (table 4.51). This is due to the fact that women are found to be in distress more than men. Psychological distress has negative correlation with quality of marital life. Ramzanzadeh et al (2006) conducted a study to determine the effect of diagnosis of infertility on sexual and marital satisfaction among infertile couples. The results showed that among couples with both male and female infertility factors, women had less sexual and marital satisfaction as compared to their spouses. This finding is consistent with the present study.

The study also assessed the quality of marital life of experimental group at 3 months, 6 months and 1 year after adoption. It is found that the rate of marital quality varied among experimental group at 3 months, 6 months and one year after adoption. The quality of marital life increased at three months after adoption (post test 1), further increased at six months (post test 2) and remarkably increased after
one year of adoption. Control group do not show significant increase in quality of marital life in the post test (table 4.51). This increase in quality of marital life at three months, six months and one year of adoption among experimental group is found statistically significant (P< 0.001, table 4.55). The post hoc comparison using test of least significance is also found significant between pre test and all the three post tests of the experimental group at three months, six months and one year after adoption (p< 0.001, table 4.56). The hypothesis that quality of marital life steadily increases among infertile couples at 3 months, 6 months and one year after adoption of child (H1- 8) is confirmed by the results of the study.

It is observed from the above results that immediately after adoption couples experience a sizable increase in the quality of marital life. After six months of adoption both males and females experienced further increase in their quality of marital life. A remarkable increase in quality of marital life is observed in males and females after one year of adoption (table 4.51 and figure 3). The findings reveal that quality of marital life steadily increases among adoptive couples at many points after adoption. It can be interpreted that adoption functions as a ‘cure’ to infertility and the impact of stressors are taken away. This results in tremendous improvement in marital and sexual relationships.

The results of the study also pointed out that by one year of adoption couple of the experimental group demonstrated highest level of quality of marital life. By one year after adoption the couples are able to cope better with post adoption stress. Adopted parents have almost achieved real parenthood status as the child becomes an inevitable part of their life. They need not be concerned
anymore about infertility and treatment issues. The findings of McKay et al., (2010) and Weir (2004) are consistent with the present study. They revealed that both mothers and fathers reported a shift of feelings from ‘new child’ to ‘own child’ within a few months after adoption. Adoptive parents also reported high levels of marital satisfaction and relief of sexual problems within the first year of adoption.

The results of the study with regard to subscale variables of quality of marital life also points out that couples among experimental and control groups scored high on all subscale variables in pre test. This indicates low quality of marital life of both the groups before adoption. Quality of marital life is a multi dimensional phenomena and it is a product of its sub variables. Understanding, rejection, satisfaction, affection, despair, decision making, discontent, dissolution potential, dominance, self disclosure, trust and role functioning are the twelve sub variables of Marital Quality Scale. After adoption, it is found that all the subscale variables of marital quality among experimental group demonstrated low scores. This indicates high quality of marital life among infertile couples after adoption (table 4.57). It is evident from the results that there is a statistically significant increase in quality of marital life with regard to all twelve subscale variables. It is observed in males and females of the experimental group after adoption of child (P<0.001, tables 4.58, 4.59 and 4.60).

The results highlight that there is a statistically significant increase in all subscale variables of quality of marital life among the experimental group. High scores on sub variables of quality of marital life are observed among infertile
couples before adoption. It is evident from the results that quality of marital life increases in all dimensions of subscale variables after adoption. The results obtained with regard to all subscale variables confirm the results of overall marital quality scores. The present findings can be explained in the light of the study by Shah (1995). The findings of the study carried out in a clinical and normal group yielded supporting results to the present study. She observed significant difference between both the groups with regard to the mean total scores on sub variables of marital quality.

It is revealed from the results of sub variables of quality of marital life that experimental and control groups reported low quality of marital life related to all sub variables before adoption. Experimental group demonstrated a statistically significant increase in quality of marital life on all subscale variables after adoption. Hence it can be concluded that along with increase in quality of marital life as a whole, adoption resulted in significant increase in all subscale variables scores too.

In addition to the major findings of the study, the study also assessed influence of selected socio demographic variables on quality of marital life among infertile couples. It is found that the gender emerged as a statistically significant variable influencing quality of marital life of infertile couples (p<0.001). The hypothesis formulated in the study that selected socio demographic and clinical variables explain variation in the levels of marital quality among infertile couples (H1-9) is confirmed by the study findings. All the other socio demographic
variables and clinical variables are not found to be influencing factors in determining the level of quality of marital life among infertile couples.

On analysing gender in relation to quality of marital life among couples, it is found that the mean scores on quality of marital life among females is higher than males among the infertile couples. The difference in quality of marital life among males and females is found to be significant (p< 0.001, table 4.62). One of the inevitable components determining quality of marital life is pregnancy and childbirth. As this function is directly related to females, women are more concerned about success of sexual relationship leading on to pregnancy and childbirth. Hence marital and sexual relationships are found to be affecting women among infertile couples more than men. This results in a reduction of quality of marital life in females. Study of Ramzanzadeh et al., (2006) is consistent with present study which yielded similar results in the dimension of gender difference in the quality of marital life among infertile couples. They have also found that low marital satisfaction is observed in females more than in males.

It is evident from the results that age of sample is not an influencing factor in determining quality of marital life among infertile couples. The different age groups reported more or less the same marital quality. The difference between scores on quality of marital life among infertile couples of both age groups is not found significant in the study.

Results of the study revealed that the marital quality of different groups based on religions is more or less the same. Religious beliefs do not serve as a factor influencing the marital quality of infertile couples in the present context of
the study. The difference between scores on quality of marital life among infertile couples of all three religions is not found significant in the study.

It is evident that educational level of the sample is not influencing quality of marital life of infertile couples in a significant manner. Irrespective of educational levels, all infertile couples demonstrated low quality of marital life.

Present study revealed that there is no significant difference in quality of marital life between infertile couples with regard to their occupational status. Couples belonging to all the groups whether employed or unemployed demonstrated low quality of marital life. The difference between scores of quality of marital life among various groups of couples is not found statistically significant.

The results of the study also revealed that income is not an influencing factor in determining difference in quality of marital life among infertile couples. Irrespective of income all the infertile couples experienced low quality of marital life. The difference between scores on quality of marital life among three groups of infertile couples is not found statistically significant. This indicates that high or low income do not exert a significant influence on quality of marital life among infertile couples.

The findings of the present study also reveal that presence or absence of family history of infertility has no significant influence on quality of marital life of infertile couples. The difference between scores on quality of marital life of infertile couples of the four groups is not found statistically significant.
Environmental factors affecting infertility among the sample is not found as a significant variable influencing quality of marital life among infertile couples. The difference in quality of marital life among infertile couples who belonged to the three groups is not found significant. It is inferred that environmental factors affecting infertility is not found to influence quality of marital life of infertile couples.

It is also evident from the results that the type of infertility whether primary or secondary is not exerting a significant influence on their quality of marital life. There is no significant difference observed between the quality of marital life of couples based on type of infertility.

Type of treatment taken by infertile couples is also not found to be influencing the quality of marital life. Irrespective of treatment modalities adopted for infertility, all couples demonstrated low quality of marital life. The difference in quality of marital life experienced by three groups of infertile couples in the present study is not found statistically significant.

The findings of the study reveal that the cause of infertility among the sample did not emerge as a significant factor influencing quality of marital life of infertile couples. Irrespective of the causative factors, all infertile couples demonstrated low quality of marital life. The difference in quality of marital life between couples with different causes of infertility is not found statistically significant.
Quality of life of infertile couples before and after adoption of child

The study assessed the quality of life of couples before and after adoption of a child. The dependent variables for the assessment of quality of life among infertile couples in the study are psychological distress, social adjustment and quality of marital life. It is found that high levels of psychological distress among infertile couples in turn resulted in an impairment in social adjustment and quality of marital life. The difference between mean pre test and post test scores on psychological distress, social adjustment and quality of marital life among the experimental group are found to be statistically significant (p<0.001, table 4.80). It is evident that psychological distress got reduced markedly after adoption. Adoption resulted in an increase in social adjustment among the experimental group. Quality of marital life also increased remarkably among the experimental group after adoption. Quality of life of couples after adoption is the product of the effect of adoption on all three dependent variables in the study. So the results of the study reveal that there is significant increase in quality of life of couples after adoption with regard to all dependent variables. Therefore it can be concluded that quality of life of couples among experimental group increased after adoption. It is also found that in pre test and post test conditions, females demonstrated less quality of life than males. The findings of the present study are supported by the findings of Verhaak et al., (2007) and Berg and Wilson (1995). They have found that infertility negatively influences many dimensions of couples’ quality of life. It is also reported that infertile women seem to experience lesser quality of life compared to infertile men.
6.4. Adoption and Spontaneous Conception

The study gives a hint that a remarkable reduction in psychological distress is resulted as a result of adoption. This in turn improved social adjustment and quality of marital life among infertile couples. There is a vicious cycle operating between psychological distress and infertility. Adoption results in remarkable reduction in distress among couples. Along with reduction in distress, adoption also enhances general wellbeing among the couples. The general wellbeing due to adoption may have resulted in an improvement in the glandular and endocrine functions. The general improvement in the glandular and endocrine functions due to improvement in the wellbeing might have resulted in better reproductive functioning. The improved state of wellbeing due to adoption might have resulted in positive changes in the reproductive physiology. This in turn would have resulted in better reproductive functions and improved fertility. This might be the reason for spontaneous conception which is observed in the case of four percent of couples in the experimental group after adoption. No system of medical science presently can explain spontaneous conception after adoption in a convincing manner. Permission for child adoption will be granted to couples only if they are clinically certified infertile couples. Permission for adoption will be granted when modern medical science fails to obtain a result in the treatment of infertility. Therefore the four percentage of spontaneous conception observed in the experimental group is an important finding in the area of infertility treatment. This finding clearly indicates the significant role of psychological wellbeing in the treatment of infertility and conception. The incidence of spontaneous conception in
the present study opens a new area of research in the treatment of infertility. It is popularly believed that a healthy mind is essential for a healthy body. Modern medicine agrees that a balance between mind and body is essential for effectiveness of any treatment. If this is the case, treatment of infertility should contain strategies to manage stress and to improve the wellbeing of couples. The psychological component in the treatment of infertility is generally ignored or overlooked. Any attempt to treat infertility should contain techniques to deal with stress and to improve wellbeing of couples. Studies by Moller and Fallstrom (1991) reported on the disruptive effects of stress on overproduction of extra hormones like adrenaline and nor adrenaline. These hormones affect the reproductive system, disrupting menstrual cycles, ovulation, tubal function and uterine receptivity. This finding (Moller and Fallstrom, 1991) is supplementing the findings on spontaneous conception after adoption obtained in the present study. The results of the present study reveal that four out of hundred couples among the experimental group conceived spontaneously after adoption during the study period of four years. It is evident that adoption results in better quality of life among couples. Hence the hypothesis that spontaneous conception among infertile couples can be explained in terms of better quality of life as a result of adoption of child (H1-10) is accepted by the findings of the study.

The present findings of the study are also supported by findings of Takefman, Brender, Boivin and Tulandi (1990). They have reported that there is substantial evidence to suggest that the distress associated with infertility can contribute to its perpetuation. They also reported that reduction of stress improved
reproductive functions. Anecdotal reports of infertile couples who conceived during or after holidays, after adoption or on decision to adopt were also have reported in the study. All these findings of Takefman et al., (1990) are consistent and supportive of the hypothesis (H1-10) of the present study.

Moller and Fallstrom (1991) also reported similar findings in this context. They have reported that because of the close connection between sexuality and reproduction, a fear of parenthood can be the cause of sexual problems resulting in infertility. It is found in their study that 22 out of the 28 couples who approached an infertility clinic one year after marriage became pregnant without any treatment, just after starting of medical examinations. This can be interpreted as a sign of released stress when turning to the doctor and having him/her ‘take over the case’.

When diagnosed with infertility, many couples feel helpless and no longer in control of their life. Infertility can be a major cause of stress because the important life goal of parenthood is threatened. The medical investigations to determine the cause of a couple’s infertility evoke further stress reactions. Therefore in a circular fashion the stress of the infertility investigations can increase negative emotional reactions and decrease probabilities of conception. Emotional and psychological problems among couples could lead to infertility. Similarly infertility also can lead on to emotional and psychological problems. In both cases it is obvious that infertility is a crisis leading to a psychological imbalance especially when a possible and quick solution is not found for it (Takefman et.al., 1990; Hassani, 2010).
The findings of the present study also identified a vicious cycle operating between infertility and psychological distress. The vicious cycle formulated in the study is also based on theories and studies related to infertility. The present findings are supported by the vicious cycle described by Moller and Fallstrom (1991). The findings of the present study are put together to develop a model and is presented in figure 4.

![Vicious Cycle between Psychological Distress and Infertility](image)

**Figure 4.** Vicious Cycle between Psychological Distress and Infertility.

It is a fact that infertility results in stress for couples. It is also a fact that psychological distress has an adverse effect on the endocrine and immune systems of the body. There can be a possible connection between infertility and resultant stress on perpetuation of infertility or failure of infertility treatment. This can be
due to a change in endocrinology or reproductive functions as a result of infertility related stress. Understanding the connection between the two is therefore very important in dealing with infertility. Infertility is mainly of two types, namely structural and functional infertility. Structural Infertility is due to structural defects of male and female reproductive systems like congenital or acquired anomalies of testes, uterus, ovaries and fallopian tubes. Psychopathology has no role in this type of infertility. Functional infertility is attributed to abnormal psychological functioning on the part of one or both individuals of the couple. It is the major cause of failure to conceive in as many as 50% of cases and also denoted as psychogenic infertility. In such cases reproductive failure is the result of psychological and emotional factors. Psychogenic infertility is supposed to occur because of unconscious anxiety about sexual incompetence, ambivalence toward motherhood or due to conflicts of gender identity.

The impact of stress changes the pattern of personal relations of infertile couples. Being stressed results in marital distress and disrupt sexual intimacy as well, making a bad situation even worse. The hurdles in investigations, diagnosis and treatment of infertile couples affect marital relationships and sexual relationships adversely, resulting in low quality of marital life. As duration of infertility increases, infertile couples are not in a position to comfort each other since both are equally in distress. The marital relationships can be strained because of the fear that the fertile partner will leave the infertile partner. It can also alienate the couples from friends and relatives, cutting off sources of support. Also, since such couples are always irritable, tense, and angry they get a reputation as being
‘difficult individuals’ (Valerie and Hart, 2002). In order to escape from social questions related to childlessness, couples generally avoid social situations where children are present. Infertile couples demonstrate social withdrawal and isolation due to the social stigma of infertility. Altogether, the general wellbeing of couples deteriorates markedly as they experience unpleasant emotions, negative moods and poor life satisfaction.

Psychological distress has got negative effects on general endocrinology and glandular functions. This further alters reproductive endocrinology and reproductive functions. This could be explained in the light of study findings of Harlow, Fahy and Talbolt (1996). They have reported that in response to stress, the hypothalamus produces a hormone called Corticotrophin Releasing Factor (CRF) which activates the hypothalamic-pituitary-adrenal (HPA) system. This system releases neurotransmitters (chemical messengers) called catecholamines, as well as cortisol, the primary stress hormone. Stress boosts levels of stress hormones such as cortisol that inhibit the body’s main sex hormone, Gonadotrophin Releasing Hormone (GnRH). Subsequently it suppresses sperm count, ovulation and sexual activity. Since the hypothalamus regulates both stress responses as well as the sex hormones, it is easy to see how biologically stress could cause infertility in some women. Seibel and Taymor (1982) reported that excessive stress may even lead to complete suppression of the menstrual cycle, and this is often seen in female marathon runners, who develop ‘runner's amenorrhea’. In less severe cases, it could cause an ovulation or irregular menstrual cycles. Speroff, Glass and Kase (1994) revealed that when activated by stress, the pituitary gland also produces
increased amounts of prolactin, and elevated levels of prolactin could cause irregular ovulation. Since the female reproductive tract contains catecholamine receptors catecholamines produced in response to stress may potentially affect reproductive functions. It could interfere with the transport of gametes through the fallopian tubes or by altering uterine blood flow (Moller and Fallstrom 1991). Kedem, Bartoov, Mikuhncer and Shkolnik, (1992) and Mc Grady (2008) have found that stress can reduce sperm counts as well. Testicular biopsies obtained from prisoners awaiting execution who were obviously under extreme stress, revealed complete spermatogenetic arrest in all cases. Researchers have also found significantly lower semen volume and sperm concentration in such men. Valerie and Hart (2002) also reported that in addition to these direct effects, stress can also suppress libido, cause erectile dysfunction, and result in a reduction in the frequency of intercourse, which in turn could also reduce fertility. Also many women start overeating in response to the stress of infertility. The increased fat cells then disrupt the hormonal balance, making a bad situation even worse.

Stress and infertility often have a circular relationship, and they can aggravate each other, setting up a vicious cycle. Infertile couples, who are under stress because of their infertility, start blaming themselves for their infertility. This increases their stress levels and further aggravates the problem. As one mind-body expert has said, “Stress causes illness causes more stress which causes more illness” (Hassani, 2010).

In brief although infertility has an effect on a couple’s mental health, different psychological factors have been shown to affect the reproductive ability
of both partners. Proposed mechanisms through which stress could directly affect infertility involve the physiology of the depressed state such as elevated prolactin levels, disruption of the hypothalamic-pituitary-adrenal axis and thyroid dysfunction. Depression is associated with abnormal regulation of luteinizing hormone which in turn regulates ovulation. Changes in immune function associated with stress and depression may also adversely affect reproductive functions. Since stress is also associated with similar physiological changes, this poses the possibility that a history of high levels of cumulative stress associated with recurrent depression or anxiety may also be a causative factor of infertility. Therefore ignoring the psychological factors related to infertility and merely considering these problems as medical will create huge obstacles in understanding human beings as an integrative whole. There is no doubt that infertility like other physiological phenomenon has social and psychological aspects and it is classified in the realm of behavioural sciences (Hassani, 2010; Deka and Sarma, 2010).

The increased general wellbeing experienced after adoption carries the possibility of improved reproductive physiology, endocrinology and higher fertility. Harlow, Fahy and Talbolt (1996) on analysing the psychosomatic effects of infertility, found that psychological stress alters levels of hormones cortisol, prolactin, and progesterone which influence reproductive functions in women. Abnormal hormone levels have an adverse effect on conception. There is a vicious cycle between psychological distress, reproductive functions and infertility. Adoption is thought to break this vicious cycle, thereby improving general psychological wellbeing among couples. The improvement in the psychological
wellbeing may not bring about any change in the structural anomaly in the reproductive system. However, psychological wellbeing is a factor which can disrupt or enhance psychogenic infertility. It may help infertility problems of an unexplained or hormonal nature at least. The results of the study point out that the occurrence of spontaneous conception after adoption is a reality. One can explain the phenomena of spontaneous conception after adoption meaningfully only with the help of psychological dimensions in the case of infertile couples.

Infertile couples experience improved general wellbeing due to positive effects of adoption on the quality of life. The general wellbeing of couples has a clinical perspective and psychological perspective. Clinical perspective defines wellbeing as absence of negative clinical conditions like anxiety and depression. Psychological perspective is the prevalence of positive attributes. It include some of general characteristics like a positive affect or life satisfaction, personal optimisation, prosocial behaviours, optimism, positive spouse relationships and a balance of attributes in multiple dimensions. Altogether infertile couples as adoptive parents experience positive levels of pleasant emotions. They demonstrate relatively low levels of negative moods (Weir, 2004).

Spontaneous conception after adoption can be explained in terms of breaking the vicious cycle that exists between stress and infertility. A schematic model can be developed to explain spontaneous conception that is observed after adoption in the present study. The schematic model developed based on the findings of the present study to explain spontaneous conception after adoption is given in Figure 5.
Figure 5. Schematic Model explaining Spontaneous Conception after Adoption.

High quality of life and improved general wellbeing occur among couples as a result of adoption. This in turn results in positive changes in total human physiology related to all systems of the body. This can be explained in connection with the findings of Speroff, Glass and Kase (1994). They reported that positive
changes in the general endocrine system results in production and regulation and functions of hormones in the following manner. The hypothalamus produces GnRH (Gonadotrophin Releasing Hormones) which stimulates the pituitary gland. The pituitary gland secretes peripheral hormones namely luteinizing hormone and follicle stimulating hormone. This in turn stimulates production of testosterone and estradiol. These hormones control menstrual cycles, ovulation, reproduction and fertilisation. Significant reduction in psychological distress as a result of adoption alters the levels of cortisol, prolactin, and progesterone to an optimum level. A marked reduction of stress corrects hyperprolactinemia which is one common endocrinological abnormality behind infertility. Reduction in stress also rectifies the altered reproductive functions like vaginismus, erectile disorders, and low sexual desire which interfere with conception (Harlow, Fahy and Talbolt, 1996).

Normalisation of reproductive endocrinology and physiology can also result in a favourable outcome of infertility treatment and continuation of pregnancy after conception. The effect of relaxation and improved general wellbeing could also improve fertility rate in couples with subfertility. Hence reduction of stress can enhance pregnancy rates, irrespective of subtypes of functional infertility. Many of the infertile couples with functional infertility, on failure of treatment modalities are certified as structural infertility for the sake of child adoption. Such couples could be benefited if the psychological component of infertility is taken care of in a better way. Studies to establish correlations between levels of stress and reproductive endocrinology in various phases of infertility treatment are necessary for evidence based conclusions with regard to the findings
in the present study. The relationship between levels of stress and reproductive hormones could be done in couples before and after adoption. Estimation of hormonal levels in relation to stress levels may be done in couples with success and failure of infertility treatment. These types of studies are also applicable in evaluating or modifying the effectiveness of counselling packages used for infertility treatment and adoption counselling.

However, more complex mechanisms may be at play, and researchers still don’t completely understand how stress interacts with the reproductive system. This is a story which is still unfolding, and during the last 20 years, the new field of psychoneuroimmunology has emerged, which focuses on how mind can affect the body. Research has shown that the brain produces special molecules called neuropeptides, in response to emotions. These peptides can interact with every cell of the body by either degenerating or protecting, including the immune system. In this view, the mind and the body are not only connected, but inseparable, so that it is hardly surprising that stress can have a negative influence on fertility (Speroff, Glass and Kase, 1994).

The schematic model (figure 5) proposed in the discussion is helpful in explaining spontaneous conception after adoption. Though the present study do not collect data on psychoneuroimmunology, neuropeptides or reproductive endocrinology, the findings in the present study throw light into the role of these factors on infertility and management of infertility. It paves way for a new area of research in the field of infertility and spontaneous conception.
6.5 Summary and Conclusion

The present study has been designed to investigate the effect of adoption on quality of life of infertile couples. Dependent variables in the study are psychological distress, social adjustment and quality of marital life. The study aims to find out the difference in levels of these three variables among experimental group at three months, six months and one year after adoption. The study also considered the impact of the socio demographic and clinical variables on psychological distress, social adjustment and quality of marital life among infertile couples. It also aims to explain the phenomena behind spontaneous conception after adoption. The summary of the study, summary of major findings of the study, suggestions and recommendations are presented below.

6.5.1 Methodology in brief

Quasi experimental pre post control group design is adopted for the study. A total of 200 couples (100 each in experimental and control group) participated in the study. In the experimental group, 100 infertile couples who opted for adoption are drawn from selected adoption centres registered under Government of Kerala. 100 infertile couples who do not plan for adoption constituted sample for the control group and are drawn from selected Infertility Speciality Hospitals in Kerala.

All together four tools are used for the collection of data. They consisted of General Health Questionnaire, Social Adjustment Inventory, Marital Quality Scale, Socio Demographic Data Sheet and Clinical Data Sheet to measure Psychological Distress, Social Adjustment, Quality of Marital Life, Socio Demographic variables and Clinical variables in the study.
The data collected using these tools were analysed using the following statistical techniques.

a. Computation of frequency distribution, percentage, means and standard deviations

b. Critical Ratio

c. Anova – Repeated measures

d. Test of Least Significant Difference for Post hoc comparison

e. Anova – One way

6.5.2 Major findings of the study

The major findings of the study are given below.

Psychological distress before and after adoption

1. There is a significant reduction in psychological distress among infertile couples of experimental group after adoption of child (p<0.001). In both experimental and control group as well as in different pre test and post test conditions, females experienced more distress compared to males.

2. The rate of psychological distress differ significantly among experimental group at 3 months, 6 months and one year after adoption (p<0.001). The distress level reduced at three months after adoption (post test 1), slightly increased at six months (post test 2) and remarkably decreased after one year of adoption.

3. Age of sample is not found to be an influencing factor in determining psychological distress among infertile couples.
4. Gender of the sample emerged as a significant factor influencing psychological distress of infertile couples (p < 0.001). Females experienced more distress compared to males.

5. In determining psychological distress of infertile couples, religion is not found to be an influencing factor.

6. Educational level of the sample emerged as a significant factor influencing psychological distress of infertile couples (p < 0.001). Subjects with lower educational level demonstrated higher distress.

7. There is significant difference in psychological distress between infertile couples with regard to their occupational status (p< 0.001). The unemployed group experienced high distress.

8. Monthly income is not an influencing variable on psychological distress of infertile couples.

9. Family history of infertility is not exerting a significant influence on psychological distress among infertile couples.

10. Environmental factors affecting infertility among the sample did not emerge as a significant variable influencing psychological distress of infertile couples.

11. Type of infertility is not found an influencing variable on psychological distress of infertile couples.

12. Type of treatment taken by infertile couples is not found to be influencing the psychological distress.
13. Cause of infertility among the sample did not emerge as a significant variable influencing psychological distress of infertile couples.

**Social adjustment before and after adoption**

1. There is statistically significant increase in social adjustment among infertile couples of experimental group after adoption of child (P<0.001). In both experimental and control group as well as in different pre test post test conditions, females experienced less social adjustment compared to males.

2. The levels of social adjustment differ significantly among experimental group at 3 months, 6 months and one year after adoption (P< 0.001). Social adjustment increased at three months, (post test-1), very slightly decreased at six months (posttest-2) and a sizable increase is found (post test-3) after one year of adoption.

3. Age of sample is not found to be an influencing variable on social adjustment among infertile couples.

4. Gender of the sample emerged as a significant variable influencing social adjustment of infertile couples (p < 0.001). Females experience low social adjustment compared to males.

5. Religion is not found to be an influencing variable on social adjustment among infertile couples.

6. Educational level of the sample is not found as a significant variable influencing social adjustment of infertile couples.
7. There is no significant difference in social adjustment between infertile couples with regard to their occupational status.

8. Income is not found to be an influencing variable on social adjustment of infertile couples.

9. Family history of infertility is not exerting a significant influence on social adjustment among infertile couples.

10. Environmental factors affecting infertility among the sample did not emerge as a significant variable influencing social adjustment of infertile couples.

11. Type of infertility is not found an influencing variable on social adjustment of infertile couples.

12. Type of treatment taken by infertile couples is not found to be influencing the social adjustment.

13. Cause of infertility of the sample did not emerge as a significant variable influencing social adjustment of infertile couples.

The quality of marital life before and after adoption

1. There is a statistically significant increase in marital quality among infertile couples of experimental group after adoption of child (P<0.001). In different pre test and post test conditions, females experienced less marital quality compared to males in the experimental and control groups.

2. The quality of marital life changes among experimental group at 3 months, 6 months and one year after adoption (P< 0.001). Marital quality increased
at three months, (post test-1), slightly increased at six months (post test-2) and a sizable increase is found (post test-3) after one year of adoption.

3. There is significant increase in all twelve subscale variables of marital quality among infertile couples of experimental group after adoption of child (P< 0.001).

4. Age of sample is not found to be an influencing variable on quality of marital life among infertile couples.

5. Gender of the sample emerged as a significant variable influencing quality of marital life of infertile couples (p < 0.001). Females experience low quality of marital life compared to males.

6. Religion is not found to be an influencing variable on quality of marital life of infertile couples.

7. Educational level of the sample is not found as a significant variable influencing quality of marital life of infertile couples.

8. There is no significant difference in quality of marital life between infertile couples with regard to their occupational status.

9. Income is not found to be an influencing variable on quality of marital life of infertile couples.

10. Family history of infertility is not exerting a significant influence on quality of marital life among infertile couples.
11. Environmental factors affecting infertility among the sample did not emerge as a significant variable influencing quality of marital life of infertile couples.

12. Type of infertility is not found an influencing variable on quality of marital life of infertile couples.

13. Type of treatment taken by infertile couples is not found to be influencing the quality of marital life.

14. Cause of infertility among the sample did not emerge as a significant variable influencing quality of marital life of infertile couples.

**Spontaneous conception after adoption**

1. Spontaneous conception after adoption is a reality and the incidence observed among the experimental group is 4%.

**6.5.3 Conclusions**

Based on analysis of data and the results in the study following conclusions are drawn.

1. Infertility is a major cause of psychological distress among couples and adoption of child result in reduction of distress experienced by infertile couples.

2. The level of psychological distress varies at many points after adoption and it takes about one year to experience a significant reduction in level of distress among couples after adoption.
3. Social maladjustment is associated with infertility and adoption enhances social adjustment among couples.

4. Social adjustment level differs at various points after adoption and it takes about one year to experience a significant increase in social adjustment level among couples after adoption.

5. Infertility results in impaired marital quality among couples and adoption enhances the marital quality.

6. Marital quality steadily increases at various points after adoption and a significant increase is observed by one year of adoption.

7. Women among the infertile couples experience higher distress, lower social adjustment and lower marital quality than men.

8. Spontaneous conception among infertile couples is a reality and it can be explained in terms of improvement in quality of life as a result of adoption.

9. Further studies are required to throw more light into the physiological and endocrine changes that are accompanied by adoption as a result of increase in the general wellbeing of couples.

6.6 Implications of the study

The study assessed the quality of life of couples before and after adoption of a child. The dependent variables for the assessment of quality of life of infertile couples in the study are psychological distress, social adjustment and quality of marital life. It is found that high levels of psychological distress of couples resulted
in an impairment in their social adjustment and quality of marital life. The results of the study reveal that there is significant increase in quality of life of couples after adoption with regard to all dependent variables. Present study also observed that four out of hundred couples conceived spontaneously after adoption among the experimental group.

Many researchers in several studies pointed out a vicious cycle existing between psychological stress and infertility. When infertile couples are in severe distress, untoward emotions such as frustration, anger, guilt and isolation occur. These negative emotions result in altered endocrinology of human body including the reproductive system of infertile couples. Altered reproductive functions further contribute to infertility and the cycle continues. Any factors which break this vicious cycle can be a cure to this type of psychogenic infertility.

The results of the study indicate that adoption resulted in reduction of psychological distress to a significant level. It can be concluded that adoption of a child might have resulted in breaking the vicious cycle between stress and infertility. This is evident from the finding of the study with regard to spontaneous conception among four couples in the experimental group. This can be explained in the light of general wellbeing experienced by the couples after adoption. Adoption result in reduction of psychological distress due to infertility. This also improves social adjustment and quality of marital life among couples. As a result, general wellbeing and quality of life among couples are enhanced. The better quality of life among infertile couples after adoption optimises the endocrinology and
reproductive physiology. Thus spontaneous conception after adoption can be explained in the light of better quality of life after adoption.

The major implications of the study are focussed around the psychological component of infertility. Though physical causes of infertility are different, psychological component plays a significant role in the endocrinology and physiology of reproduction among couples. Adoption requires a medical certificate stating that the couple are unfit to reproduce children in the future. This indirectly means that nothing more could be done with regard to the physical component of infertility. In spite of this, the findings of the study reveal that four couples in the study reported spontaneous conception after adoption. This phenomena can only be explained with the help of psychological component of infertility. General wellbeing and better quality of life among couples after adoption has a bearing on psychological component of infertility to result in spontaneous conception.

The primary implication of the study is that couples who adopt a child has to be provided with appropriate post adoption support counselling in order to achieve optimum general wellbeing. Since post adoption period also bring distress in a different dimension, parents need to be helped for minimising the stress at various points after adoption. Their quality of life need to be maximised to favour optimum reproductive physiology and endocrinology. The effectiveness of existing adoption related counselling programmes need to be reassessed. The adoption centres need to plan for more frequent post adoption counselling programmes for the couples to identify and manage stress producing stimuli in the post adoption period. The dissemination of the findings of the study with regard to possibility of
spontaneous conception after adoption has to be done through effective post adoption counselling programmes. More effective programmes which can result in 'adoption like effect' may even result in spontaneous conception without adoption among the infertile couples. Such a situation can even reduce the rate of adoption and thereby the gravity of problems associated with adoption.

While considering adoption as one of the measure of breaking vicious cycle between stress and infertility, it is worth thinking about effective counselling and support packages which could have similar effects. If effective psychological support strategies are incorporated in different phases of infertility treatment, it is possible to improve general wellbeing and the outcome of treatment among such couples. Simultaneous evaluation of physical and psychological components of infertile couples can result in a higher success rate and better outcome of infertility treatment. It is vital on evaluating the physical, mental and economic impact of infertility treatment among couples. Effective counselling should be incorporated as a part of infertility treatment among all couples. Specialised counselling programmes need to be planned for couples with infertility who present with failure of infertility treatment modalities.

Another implication of the study is with regard to improving fertility rate among subfertile couples. Subfertility is a condition where couples report a short delay in conception where active investigations and treatment are not yet started. There are case reports that subfertile couples conceive during or after holidays and jolly trips. Psychological component of infertility alone plays a role here. In such cases also effective intervention packages can reduce the effects of vicious cycle
between stress and subfertility. Psychological component of infertility should be taken care of in the case of subfertile couples. This approach has an added advantage of helping such couples to be free from costly treatment modalities and associated side effects.

On summarising, the major implications of the study are related to

1. Post adoption support programmes to maximise quality of life after adoption among couples.

2. Importance to psychological component of infertility for increase in success rate of infertility treatment modalities.

3. Development of effective intervention packages to improve psychological wellbeing and to improve fertility rate among couples with subfertility.

6.7 Suggestions

1. Psychosocial component of infertility can be given equal importance as to physical components in the management of infertility treatment among couples.

2. Existing pre and post adoption counselling need to be modified and strengthened at specific points after adoption. This will help to maximise the quality of life of couples after adoption of child.

3. Infertility centres can modify existing counselling services to maximise the general wellbeing among couples. This will increase the success rate and outcome of various treatment modalities.
4. Adoption centres need to organise social awareness programmes to create positive attitude towards adoptive parents and children in the society.

5. Infertility centres can take initiative to arrange public awareness programmes to reduce social stigma towards infertility and infertile couples.

6. Follow up studies could be done to assess quality of life of couples after 5 years, 10 years and 15 years of adoption. This will help to understand the nature and intensity of related problems faced by the adoptive parents.

7. It is recommended that the infertility clinics need to organise specific supportive programmes for infertile couples with failure of treatment modalities.

6.8 Scope and Limitations

Scope

1. This is a study first of its kind in Kerala where there is negative attitude towards infertility due to the cultural specifications.

2. Findings of the study can be incorporated by infertility hospitals to strengthen neglected psychological component of infertility for better outcome of treatment modalities.

3. There is a wide scope for future studies related to alternative measures to adoption to maximise fertility related physiology and endocrinology among infertile couples.
Limitations

1. The size of the sample is only 100 each in the experimental and control group. To obtain one set of complete data, it needed one year. It took four years to complete the data collection. The sample size of the study is limited due to difficulties of availability of sample in the prescribed period of the study.

2. Three major dependent variables are used in the study to assess quality of life of couples. Other possible variables of physical health parameters were not included in the study.

3. Strict randomisation is not followed for selection of the sample for the study due to unavailability of enough samples.