Chapter III:
Methodology
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Methodology

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A chapter on the research methodology is very pivotal for the reading community as this acts as a blueprint of how the entire research was carried out. This chapter has a lot in store for research experts, passionate students as well as curious laymen. It talks about the problem under study, the objectives and hypotheses, the procedure followed. Research methodology also gives information on what tools were used, what was the sample size, the statistical analyses carried out. The scientific community lays emphasis on the methodology followed as a proper research design can make the results more reliable.

This chapter deals with the sampling details, the design, tests employed for gathering the data, procedure for conducting the study and the statistical methods used for analysis.

**Statement of the Problem:**

A study on Stress; as a predictor of Quality of Life, Life Satisfaction and Sexuality among infertile couples undergoing the treatment of infertility.

**Objectives:**

*The following objectives were laid down for the present study;*

1) To study the couples undergoing the different treatments of infertility on their levels of

- Infertility related Stress
- Quality of Life
- Life Satisfaction
- Sexuality
2) To explore the variance in infertility related stress (Social Concern, Sexual Concern, Relationship Concern, Rejection of Childfree Lifestyle, Need for Parenthood and Global Stress) between couples (Husband and Wife) having infertility problem and undergoing treatment of infertility.

- To explore the variance in the social concern dimension of the infertility related stress between couples having infertility problem and undergoing treatment of infertility.
- To explore the variance in the sexual concern dimension of the infertility related stress between couples having infertility problem and undergoing treatment of infertility.
- To explore the variance in the relationship concern dimension of the infertility related stress between couples having infertility problem and undergoing treatment of infertility.
- To explore the variance in the rejection of childfree lifestyle dimension of the infertility related stress between couples having infertility problem and undergoing treatment of infertility.
- To explore the variance in the need for parenthood dimension of the infertility related stress between couples having infertility problem and undergoing treatment of infertility.

3) To explore the variation in infertility related stress (Social Concern, Sexual Concern, Relationship Concern, Rejection of Childfree Lifestyle, Need For Parenthood and Global Stress) among infertile couples with regard to their method of treatment. (IUI and IVF)

- To explore the variation in the social concern dimension of the infertility related stress among infertile couples with regard to their method of treatment. (IUI and IVF)
- To explore the variation in the sexual concern dimension of the infertility related stress among infertile couples with regard to their method of treatment. (IUI and IVF)
• To explore the variation in the relationship concern dimension of the infertility related stress among infertile couples with regard to their method of treatment. (IUI and IVF)

• To explore the variation in the rejection of childfree lifestyle dimension of the infertility related stress among infertile couples with regard to their method of treatment. (IUI and IVF)

• To explore the variation in the need for parenthood dimension of the infertility related stress among infertile couples with regard to their method of treatment. (IUI and IVF)

4) To study the difference in infertility related stress (Social concern, Sexual Concern, Relationship Concern, Rejection of Childfree Lifestyle, Need for Parenthood and Global Stress) between the couples (husband and wife) in relation to either of infertility treatment involved in; IUI or IVF.

• To study the difference in the social concern dimension of the infertility related stress between the couples (husband and wife) in relation to either of infertility treatment involves in; IUI or IVF.

• To study the difference in the sexual concern dimension of the infertility related stress between the couples (husband and wife) in relation to either of infertility treatment involves in; IUI or IVF.

• To study the difference in the relationship concern dimension of the infertility related stress between the couples (husband and wife) in relation to either of infertility treatment involves in; IUI or IVF.

• To study the difference in the rejection of childfree lifestyle dimension of the infertility related stress between the couples (husband and wife) in relation to either of infertility treatment involves in; IUI or IVF.

• To study the difference in the need for parenthood dimension of the infertility related stress between the couples (husband and wife) in relation to either of infertility treatment involves in; IUI or IVF.
5) To analyze the predictive value of infertility related stress (Social Concern, Sexual Concern, Relationship Concern, Rejection of Childfree Lifestyle, Need for Parenthood and Global Stress) for Quality of Life of infertile couples.

• To analyze the predictive value of the social concern dimension of the infertility related stress for Quality of Life of infertile couples.

• To analyze the predictive value of the sexual concern dimension of the infertility related stress for Quality of Life of infertile couples.

• To analyze the predictive value of the relationship concern dimension of the infertility related stress for Quality of Life of infertile couples.

• To analyze the predictive value of the rejection of childfree lifestyle dimension of the infertility related stress for Quality of Life of infertile couples.

• To analyze the predictive value of the need for parenthood dimension of the infertility related stress for Quality of Life of infertile couples.

6) To ascertain the infertility related stress (Social Concern, Sexual Concern, Relationship Concern, Rejection of Childfree Lifestyle, Need for Parenthood and Global Stress) as a predictor of infertile couples’ Life Satisfaction.

• To ascertain the social concern dimension of the infertility related stress as a predictor of infertile couples Life Satisfaction.

• To ascertain the sexual concern dimension of the infertility related stress as a predictor of infertile couples Life Satisfaction.

• To ascertain the relationship concern dimension of the infertility related stress as a predictor of infertile couples Life Satisfaction.

• To ascertain the rejection of childfree lifestyle dimension of the infertility related stress as a predictor of infertile couples Life Satisfaction.

• To ascertain the need for parenthood dimension of the infertility related stress as a predictor of infertile couples Life Satisfaction.
7) To investigate the introduced variance in infertile couples’ appraisal of sexuality from their infertility related stress (Social Concern, Sexual Concern, Relationship Concern, Rejection of Childfree Lifestyle, Need for Parenthood and Global Stress).

- To investigate the introduced variance in infertile couples’ appraisal of sexuality from their social concern dimension of the infertility related stress.
- To investigate the introduced variance in infertile couples’ appraisal of sexuality from their sexual concern dimension of the infertility related stress.
- To investigate the introduced variance in infertile couples’ appraisal of sexuality from their relationship concern dimension of the infertility related stress.
- To investigate the introduced variance in infertile couples’ appraisal of sexuality from their rejection of childfree lifestyle dimension of the infertility related stress.
- To investigate the introduced variance in infertile couples’ appraisal of sexuality from their need for parenthood dimension of the infertility related stress.

**Hypotheses**

*Looking to the above objectives, the following hypotheses were framed in order to develop a better insight into the variables under investigation.*

a) The incidence of infertility related stress (Social Concern, Sexual Concern, Relationship Concern, Rejection of Childfree Lifestyle, Need for Parenthood and Global Stress) for gender difference of infertile couple would be more pronounced in favor of wives as compared to husbands.

- The incidence of the social concern dimension of the infertility related stress for gender difference of infertile couple would be more pronounced in favor of wives as compared to husbands.
• The incidence of the sexual concern dimension of the infertility related stress for gender difference of infertile couple would be more pronounced in favor of wives as compared to husbands.

• The incidence of the relationship concern dimension of the infertility related stress for gender difference of infertile couple would be more pronounced in favor of wives as compared to husbands.

• The incidence of the rejection of childfree lifestyle dimension of the infertility related stress for gender difference of infertile couple would be more pronounced in favor of wives as compared to husbands.

• The incidence of the need for parenthood dimension of the infertility related stress for gender difference of infertile couple would be more pronounced in favor of wives as compared to husbands.

b) There will be significant variation in level of infertility related stress (Social Concern, Sexual Concern, Relationship Concern, Rejection of Childfree Lifestyle, Need For Parenthood and Global Stress) among infertile couples with regard to their method of treatment.

• There will be significant variation in level of the social concern dimension of the infertility related stress among infertile couples with regard to their method of treatment.

• There will be significant variation in level of the sexual concern dimension of the infertility related stress among infertile couples with regard to their method of treatment.

• There will be significant variation in level of the relationship concern dimension of the infertility related stress among infertile couples with regard to their method of treatment.

• There will be significant variation in level of the rejection of childfree lifestyle dimension of the infertility related stress among infertile couples with regard to their method of treatment.
• There will be significant variation in level of the need for parenthood dimension of the infertility related stress among infertile couples with regard to their method of treatment.

c) There will be significant interaction between gender difference of couple and method of treatment on measure of infertility related stress (Social Concern, Sexual Concern, Relationship Concern, Rejection of Childfree Lifestyle, Need For Parenthood and Global Stress).

• There will be significant interaction between gender difference of couple and method of treatment on measure of the social concern dimension of the infertility related stress.

• There will be significant interaction between gender difference of couple and method of treatment on measure of the sexual concern dimension of the infertility related stress.

• There will be significant interaction between gender difference of couple and method of treatment on measure of the relationship concern dimension of the infertility related stress.

• There will be significant interaction between gender difference of couple and method of treatment on measure of the rejection of childfree lifestyle dimension of the infertility related stress.

• There will be significant interaction between gender difference of couple and method of treatment on measure of the need for parenthood dimension of the infertility related stress.

d) Infertility related stress (Social Concern, Sexual Concern, Relationship Concern, Rejection of Childfree Lifestyle, Need For Parenthood and Global Stress) will be a significant predictor of Quality of Life for infertile couples.

• The social concern dimension of the infertility related stress will be a significant predictor of Quality of Life for infertile couples.

• The sexual concern dimension of the infertility related stress will be a significant predictor of Quality of Life for infertile couples.
• The relationship concern dimension of the infertility related stress will be a significant predictor of Quality of Life for infertile couples.
• The rejection of childfree dimension of the infertility related stress will be a significant predictor of Quality of Life for infertile couples.
• The need for parenthood dimension of the infertility related stress will be a significant predictor of Quality of Life for infertile couples.

e) The variance in infertile couples' Life Satisfaction will be significantly predicted from their Infertility related stress (Social Concern, Sexual Concern, Relationship Concern, Rejection of Childfree Lifestyle, Need For Parenthood and Global Stress).
• The variance in infertile couples' Life Satisfaction will be significantly predicted by the social concern dimension of their infertility related stress.
• The variance in infertile couples' Life Satisfaction will be significantly predicted by the sexual concern dimension of their infertility related stress.
• The variance in infertile couples' Life Satisfaction will be significantly predicted by the relationship concern dimension of their infertility related stress.
• The variance in infertile couples' Life Satisfaction will be significantly predicted by the rejection of childfree lifestyle dimension of their infertility related stress.
• The variance in infertile couples' Life Satisfaction will be significantly predicted by the need for parenthood dimension of their infertility related stress.

f) Infertility related stress (Social Concern, Sexual Concern, Relationship Concern, Rejection of Childfree Lifestyle, Need For Parenthood and Global Stress) significantly influences the appraisal of sexuality for infertile couples.
• The social concern dimension of the infertility related stress significantly influences the appraisal of sexuality for infertile couples.
• The sexual concern dimension of the infertility related stress significantly influences the appraisal of sexuality for infertile couples.
• The relationship concern dimension of the infertility related stress significantly influences the appraisal of sexuality for infertile couples.
The rejection of childfree lifestyle dimension of the infertility related stress significantly influences the appraisal of sexuality for infertile couples.

The need for parenthood dimension of the infertility related stress significantly influences the appraisal of sexuality for infertile couples.

Methodology

Selection of Sample:

In the present study the considered sample included diagnosed infertile couples attending a fertility clinic called Nova IVI Fertility situated in Ahmedabad, Gujarat. 150 infertile couples undergoing either the treatment of IUI or IVF from all over India visiting the infertility clinic were approached for data collection out of which 125 couples finally gave co-operation but data for 5 couples was discarded as it was incomplete. So finally the whole sample comprised of total 120 couples involved in either IUI or IVF treatment of infertility. The married male (Husband) and females (Wives) who are unable to conceive within 12 months of their intention and trial to become pregnant and visiting infertility clinics for their infertility treatment are couples who can be termed as facing the problem of infertility. Non probability purposive sampling technique was used in selecting these infertile couples. Couple selection per treatment was equally distributed. Hence whole sample constituted with four experimental groups namely wife pursuing IUI treatment, husband pursuing IUI treatment, wife pursuing IVF treatment and husband pursuing IVF treatment. Each experimental group consisted of 60 participants. The distribution of total sample is depicted as follows-
Table 3.1
Sample Distribution

<table>
<thead>
<tr>
<th>Infertile couple</th>
<th>Type of Treatment for Infertility</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IUI</td>
<td></td>
</tr>
<tr>
<td>Wives (Female)</td>
<td>n= 60</td>
<td>120</td>
</tr>
<tr>
<td>Husbands (Male)</td>
<td>n= 60</td>
<td>120</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>240</td>
</tr>
</tbody>
</table>

Inclusion & Exclusion Criteria of Sample;

Inclusion criteria
- Couples selected were diagnosed as infertile by the gynecologist
- They had no prior children
- Undergoing IUI or IVF for 1st or 2nd time
- Aged between 21-50 years

Exclusion criteria:
- Unwilling to participate in the study
- Unable to understand English, Hindi or Gujarati as a language
- Couples with any psychopathology present in them
Sample Profile;

Sample profile included different characteristics of participants which are depicted as follows;

Table 3.2
Sample profile based on different Characteristics

<table>
<thead>
<tr>
<th>Sample Criteria</th>
<th>No. of subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>240</td>
</tr>
<tr>
<td>Range - 21-50 Years</td>
<td></td>
</tr>
<tr>
<td>Mean - 31.04 Years</td>
<td></td>
</tr>
<tr>
<td>SD – 4.62 Years</td>
<td></td>
</tr>
<tr>
<td>Infertile Couples</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>120</td>
</tr>
<tr>
<td>Female</td>
<td>120</td>
</tr>
<tr>
<td>Total</td>
<td>240</td>
</tr>
<tr>
<td>Infertility Type-</td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>182</td>
</tr>
<tr>
<td>Secondary</td>
<td>58</td>
</tr>
<tr>
<td>Total</td>
<td>240</td>
</tr>
<tr>
<td>Family Type-</td>
<td></td>
</tr>
<tr>
<td>Joint</td>
<td>156</td>
</tr>
<tr>
<td>Nuclear</td>
<td>84</td>
</tr>
<tr>
<td>Total</td>
<td>240</td>
</tr>
</tbody>
</table>

Participants were 120 couples which included 120 wives and 120 husbands with an age range 21 to 50 years who were identified as having either primary or secondary infertility. The mean age of the considered sample of infertile couple
was 31.04 (SD = 4.62). One hundred and eight two participants that is 91 couples out of 120 were identified as having Primary infertility and 58 participants means 29 couples were identified as having secondary infertility. Nearly half of the sample reported they were from joint family and rest reported their family type as nuclear.

**Variables:**

The variables considered in this investigation are described as follows-

**Table 3.3**

*Description of Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category of Variable</th>
<th>No. of Level</th>
<th>Name of Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Couple</td>
<td>Independent</td>
<td>2</td>
<td>Husband, Wife</td>
</tr>
<tr>
<td>Type of Treatment for Infertility</td>
<td>Independent</td>
<td>2</td>
<td>IUI, IVF</td>
</tr>
<tr>
<td>Infertility Related Stress</td>
<td>Independent &amp; Dependent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of Life</td>
<td>Dependent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>Dependent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexuality</td>
<td>Dependent</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Research Design:

Following research design were employed to reach out to the objectives of the study-

1. **2X2 Factorial Design** - To study the main effect of gender differences of the couple and type of infertility treatment and also their interaction effect on infertility related stress, 2 X 2 factorial design was used as depicted below-

   **Table 3.4**

   **2×2 factorial design**

<table>
<thead>
<tr>
<th>Infertile Couple A</th>
<th>Type of Infertility Treatment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IUI (B1)</td>
<td></td>
</tr>
<tr>
<td>Wives (A1)</td>
<td>A1B1 n = 60</td>
<td>120</td>
</tr>
<tr>
<td>Husband (A2)</td>
<td>A2B1 n = 60</td>
<td>120</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>240</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Infertile Couple A</th>
<th>Type of Infertility Treatment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IVF (B2)</td>
<td></td>
</tr>
<tr>
<td>Wives (A1)</td>
<td>A1B2 n = 60</td>
<td>120</td>
</tr>
<tr>
<td>Husband (A2)</td>
<td>A2B2 n = 60</td>
<td>120</td>
</tr>
</tbody>
</table>

**Four Experimental groups were as follows**-


A2B1 - Husband pursuing Intra uterine insemination (IUI) treatment of infertility.


2. **Single Group Different Measures Design**

To identify the role of infertility related stress to predict quality of life, life satisfaction and sexuality of infertile couples undergoing the treatment of infertility, the present study dealt with single group different measures design (Type of within Group Design). In this design a group of 120 couples (240 participants that is 120 wives and 120 husbands) were measured on all considered aspects. The design is depicted below-

**Table 3.5**

**Within group design**

<table>
<thead>
<tr>
<th>N</th>
<th>Infertility Related Stress</th>
<th>Quality of life</th>
<th>Life Satisfaction</th>
<th>Sexuality</th>
</tr>
</thead>
<tbody>
<tr>
<td>480</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Tools:

To collect the data following tests were used.

*Table 3.6*

*List of Tests*

<table>
<thead>
<tr>
<th>Aspect studies</th>
<th>Test and scale</th>
<th>Developed by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infertility related stress</td>
<td>Fertility problem inventory (FPI)</td>
<td>Christopher Newton in 1999</td>
</tr>
<tr>
<td>Quality of life</td>
<td>Fertility Quality of Life Questionnaire (FertiQoL)</td>
<td>Joint effort of European Society of Human Reproduction and Embryology (ESHRE) and the American Society of Reproductive Medicine (ASRM). (2008)</td>
</tr>
<tr>
<td>Life satisfaction</td>
<td>Life Satisfaction Scale</td>
<td>Dr. Q.G. Alam &amp; Dr. RamjiSrivastava in 2001</td>
</tr>
<tr>
<td>Sexuality</td>
<td>Sexuality Scale</td>
<td>P. Kumar, in 1987</td>
</tr>
</tbody>
</table>
Description of the Tools:

Fertility problem inventory (FPI)

To measure the level of a couple’s infertility stress, Christopher Newton developed the FPI in 1999. The final form contains 46 items. The attitudes and beliefs of the infertile patients were inspected by conducting an extensive review of literature related to infertility. With the help of this, a preliminary questionnaire was developed. This search helped in identifying the infertility related themes which resulted in seven relevant domains including social concern, sexual concern, relationship concern, role loss, role failure, need for parenthood, and rejection of childfree lifestyle. Patients or couples taking the test were asked to indicate their agreement with each question using a six-point Likert scale ranging from “strongly disagree” to “strongly agree” (Newton, 1999). The resultant questionnaire had 84-items which addressed each of the seven domains or themes. The FPI was then finalized after an extensive test-development period. During this period, a “sequential strategy of scale construction” was employed for FPI. Items which were reported as 1,2,5 or 6 by 95% of males or females were considered to “discriminate inadequately among respondents and were discarded”. Convergent and discriminant validity were enhanced by eliminating items that had high co-relation with any scale other than the scale for which they were intended. Questions or statements that generated socially desirable responses were also removed. The final questionnaire consisted of five scales namely social concern, sexual concern, relationship concern, need for parenthood, and rejection of childfree lifestyle. Newton et al., (1999) noted that because “role loss and role failure showed unacceptably high correlations both with social concern (.81 and .72 respectively) and with each other (.77)” both scales were eliminated. Each one of the five scales had relatively homogenous items which indicated moderate to high reliability.
Norms:
The test was administered on 1149 males and 1153 females and the different norms were found for men and women by finding the mean and standard deviation of each of the subscale and then converting the raw score obtained into percentiles ranging from 16 percentile to 98 percentile.

Reliability and Validity:
The internal consistency of each scale was found to be as follows: social concern = .87, sexual concern = .77, relationship concern = .82, rejection of childfree lifestyle = .80, need for parenthood = .84, and global stress = .93. Test-retest correlations were also performed after a gap of 30 days which showed moderate to high reliability; global stress was .83 for women and .84 for men. A Cronbach’s alpha for each item with its dimension was found as 0.801 which indicated a strong reliability.

Administration, Scoring and Interpretation:
This test is a paper-pencil based test and can be administered to people facing the problem of infertility. There is no particular time assigned to complete the test but it doesn't take more than 15-20 minutes for its completion.

Calculations of mean FPI norms were done using the sample. For females the mean FPI scores of 0-97 indicate low infertility stress, scores of 98-132 indicate average infertility stress and the scores of 133-167 indicate moderately high infertility stress and scores of 168 or greater indicate extremely high amounts of infertility stress. For males the mean FPI scores of 0-87 indicate low infertility stress, scores of 88-113 indicate average infertility stress, 114-146 show moderately high infertility stress, and scores of 147 or greater indicate extremely high amounts of infertility stress.
Fertility Quality of Life Questionnaire (FertiQoL):

To evaluate the quality of life of infertile patients FertiQol is specially designed. It is made by experts from European Society of Human Reproduction and Embryology (ESHRE) and the American Society of Reproductive Medicine (ASRM). It is a self-report questionnaire having 24 core items that measure the quality of life and overall well-being related to fertility problems and infertility. In addition to that, it also has two items assessing overall perceptions of health and quality of life (Boivin et al., 2011). The Core FertiQoL and the Optional Treatment Module are the two main models that constitute the FertQoltool. The core FertiQol module comprises of 24 items whereas 10 items are included in the treatment FertiQoL module. The 24 items from the core FertiQoL are categorised into four domains which include the emotional, cognitive and physical (Marked as Mind/Body), relational and social domain. The impact of infertility on emotions, such as sadness, resentment, or grief is checked by the emotional domain of the core FertiQoL. The mind/body domain evaluates the influence of infertility on physical health, cognition and behaviour. The relational domain and the social domain are used to quantify the impact of infertility on partnership and on social aspects (e.g. social inclusion, expectations, and support), respectively. The optional treatment module consists of two domains which are used to assess the environment and tolerability for the treatment for infertility. The items from all the domains are randomly presented in the questionnaire.

Reliability and Validity:
Across the core sub-scales, Cronbach’s alphas assessing internal consistency range from .75-.90, with an overall Cronbach’s alpha of .92 for overall Core Fertility Quality of Life was found.(Boivin et al., 2011).

Administration, Scoring and Interpretation:
This scale can be administered individually or in a group. As such there is no time limit to complete the test and it is a 5 point likert scale, wherein the answer has to be given in ‘very poor’, ‘poor’, ‘neither good nor bad’, ‘good’, ‘very good’. The rating is done on a scale of 0 to 4. The sub-scales and total fertility scores are calculated and transformed to achieve a range of 0 to 100, where higher
scores indicate better QoL. FertiQol questionnaire is available in different languages but English version was used for this study. It takes approximately 10-15 minutes to complete the entire questionnaire. The core questions cover two broad domains of well-being across four subscales: Personal Quality of Life (Emotional; Mind-Body) and Interpersonal Quality of Life (Relational; Social). The tool is appropriate for use among both women and men with a variety of fertility treatment related statuses, including those who are not in treatment, those currently in treatment, and those who have completed treatment without a successful outcome, as well as individuals with infertility who are no longer childless (e.g., women with adopted children). The higher the score, higher the quality of life and vice versa.

**Life Satisfaction Scale:**
Satisfaction always makes a person happy and aroused. Life satisfaction or personal adjustment is something very essential for our lives, as the modern life is full of various kinds of stresses and so this concept has gained supreme significance.

The life satisfaction criteria of couples facing infertility and undergoing treatment were measured using the Life Satisfaction Scale developed by Dr. Q.G. Alam&Dr.RamjiSrivastava in 2001. It comprises of sixty items which includes six areas of overall life; health satisfaction, personal satisfaction, economic satisfaction, marital satisfaction and job satisfaction.

**Norms:**
The test was standardised on 875 adult males and females of Azamgarh. The sample was selected keeping various characteristics in mind like educational level, socio-economic status, intelligence and personality characteristics. The age range of the sample was between 18 years to 40 years.

**Reliability and Validity:**
Test-retest reliability was computed after a lapse of 6 weeks. The obtained quotient was .84 and validity of the scale was obtained by correlating it with
Saxena’ Adjustment Inventory and Srivastava Adjustment Inventory. The quotient obtained was .74 and .84 respectively.

Administration, Scoring and Interpretation:

It is a paper-pencil test which can be administered on an individual or a group. The responses to all the items in the questionnaire are to be given in Yes/No. ‘Yes’ indicates satisfaction and ‘no’ indicates dissatisfaction. There is no time limit for completion of the test but it takes about 20 minutes to complete it. For every ‘Yes’ response 1 mark is assigned and total marks are calculated. The raw score is then converted into ‘t’ score with 22.59 being the lowest ‘t’ score and 72.93 being the highest ‘t’ score. The t’ score between 22.59-38.29 indicate low satisfaction of life, between 39.37-55.03 indicate moderate satisfaction of life and between 56.15-72.93 indicate high satisfaction of life.

Sexuality Scale:

The sexual satisfaction was assessed using the sexuality scale developed by P. Kumar in 1987. This studies the sexuality status (Level of sexual satisfaction) of a married person.

Norms:
The total of the scores show the lowest to highest sexual satisfaction for the subjects. Even special percentile norms have been made for husbands and wives to measure the levels of sexual satisfaction.

Reliability and Validity:
The split-half and test-retest reliability was found to be .87 and .71 respectively. The scale validity was conformed by face and content validity method.

Administration, Scoring and Interpretation:

It has eight highly discriminative items and has a 3 point rating format which are too much, much and not that much. 1, 2 and 3 values are assigned as scores to the three response categories representing the 3 degree agreement with each item. The total score varies from 8 to 24, showing lowest to highest sexual satisfaction.
Procedure

To reach out to the objectives of the present study, cross sectional and Correlational design were employed. The target group for this study was infertile couples undergoing IUI or IVF as the treatment for infertility. To constitute the sample, first of all the list of various private and government infertility clinics was made and then one hospital of Ahmedabad city called Nova IVI Fertility which is considered to be one of the best fertility clinics all over was selected. The visit to the fertility clinic was done in order to take formal permission from the clinical director and to decide the availability of target group as per the inclusion criteria. To seek the permission, the main aim and objectives of the present study was explained to the infertility expert.

Purposive sampling technique was used to constitute the sample as only those infertile couples pursuing either of IUI or IVF infertility treatment in the clinic were included in sample.

A pilot study was undertaken for one month with 10 couples to assure the feasibility of the research process. Its successful completion paved a way to begin with actual data collection.

Before including any infertile couple in sample they were intimated about the purpose of study and then their consent to participate in this study was taken into consideration. Total 150 couples were approached for the study, but only 125 couples agreed to be a part of the study and gave the data but data of 5 couples being incomplete had to be discarded. As a result a total of 120 infertile couples (120 wives and 120 husbands) became the sample. Couple selection per treatment was equally distributed. In other words out of 120 couples, 60 undergoing the treatment of IUI was selected and the rest 60 couples undergoing IVF were selected. These selected couples were administered Fertility Problem Inventory (FPI) developed by Christopher Newton in 1999, Fertility Quality of Life Questionnaire (FertiQoL) developed by joint effort of expert from European Society of Human Reproduction and Embryology (ESHRE) and the American
Society of Reproductive Medicine (ASRM), Life Satisfaction Scale developed by Dr. Q.G. Alam & Dr. Ramji Srivastava (2001), and sexuality scale developed by P. Kumar in 1987.

Before conducting test on the considered sample, rapport building was done and they were also insured that their answers and identity will be kept confidential. Tests were administered one at a time in order to reduce fatigue and boredom effect. Husband and wife were made to sit separately in a quiet room of the hospital. To fill the test subjects were given general instructions regarding each test and administered after their assurance that they are able to fill response. Finally the data were obtained by using particular scoring pattern standardized for each test. The obtained data were further statistically analysed.

**Statistical Analysis:**

The following statistical techniques were used to analyse the data collected. The *Standardized computer package (SPSS Version 17.0) was used to analyse the results statistically.*

**Descriptive and Explorative Statistics -**

- Descriptive (Mean and Standard deviation) and explorative (Kolmogorov-Smirnov Test) statistics was carried out for all dependent variables namely Stress, Quality of Life, Life Satisfaction and Sexuality.

**Inferential Statistics -**

- F-test (Two way Analysis of Variance) was computed for gender difference of infertile couple (Wives & Husbands) and type of treatment (IUI & IVF) on measure of infertility related stress among these considered couples.
• Correlation Coefficient was computed to assess the relationship of stress (Social Concern, Sexual Concern, Relationship Concern, Rejection of Childfree, Lifestyle, Need For Parenthood, and Global Stress) with Quality of Life, Life Satisfaction and Sexuality among infertile couples.

• Step wise Multiple Regression analysis was carried out to know the relative contribution of stress (Social Concern, Sexual Concern, Relationship Concern, Rejection of Childfree, Lifestyle, Need For Parenthood, and Global Stress) in variance of Quality of Life, Life Satisfaction and Sexuality level for infertile couples.