# RESEARCH DESIGN AND METHODOLOGY

The design of the study was descriptive with an ethnographic approach to gain in-depth understanding on the issue of infertility and its perception amongst individuals who experience it. Ethnographic research is oriented towards people's perceptions about their lives, relationships and their environment as represented by their actions. Ethnography is thus a description that closely resembles the original cultural reality. This description is theory-driven and assists in the development and verification of theory in order to account for human behavior. The ethnographic approach is empirical and describes representations of the world as structured by the participants and not the researcher (Uzzell, 1995).

The ethnographic approach was adopted to capture the cultural realities of involuntary childlessness as constructed by the participants. It was felt that the qualitative nature of the research would help cull out the nuances of infertility in terms of the lived experiences of individuals

## Research Locality and the Study Group

The study group comprised individuals from the urban middle/upper middle social class of Vadodara, a cosmopolitan city in the state of Gujarat, with a population of nearly 35 lakhs. The city has a fairly large cultural variation and people of different religions have settled here. The middle/upper middle class constitutes a large part of the population with a range of incomes. It becomes difficult to define a class, especially the middle/upper middle-income groups on the basis of few variables such as income, education or occupation, as these families do not share a common life style The life style is also determined by the caste group to which they belong, the locality in which they reside and their own attitudes and values that guide behaviors. In Vadodara, the middle/upper middle-income groups are the educated mass, and most of them constitute the 'service and the business class'. They usually own property in terms of a house or apartment and each family possesses at least a two-wheeler vehicle, which is either shared by the family or, in many cases, owned individually. Most of the women, irrespective of whether they are employed outside the home or not, have their own two-wheeler vehicles or at least know how to ride, thereby facilitating their mobility

### *The Participant Groups*

The participant groups constituted women and men from the middle/upper middle-income group residing in Baroda city, and experiencing involuntary childlessness; and practicing gynecologists and urologists. The table below portrays the sample composition.

*Table 1*

***Sample Composition***

| **Participant Groups** | **Gender** | | **Total n** |
|---|---|---|---|
| | **Men** | **Women** | |
| Individuals experiencing infertility - Treatment seeking group | 20 | 20 | 40 |
| Individuals experiencing infertility – Non Treatment seeking group | 05 | 10 | 15 |
| Doctors (Urologists (3) and Gynaecologists (7)) | 5 | 5 | 10 |
| Total | 30 | 35 | 65 |

The participants experiencing involuntary childlessness consisted of two groups: one group included participants who were seeking treatment for infertility during the phase of the research, and the other group constituted participants who had sought treatment for infertility earlier, but had discontinued the treatment with a decision not to pursue it in the future. These two groups were selected to gain an understanding of the experience of involuntary childlessness in terms of treatment seeking and coping, and the impact on self

Men and women (not necessarily husband and wife) who were childless either due to self or spousal infertility, formed the two groups. Data obtained from these interviews provided understanding of the experience of involuntary childlessness.

The number of participants in the two groups was determined by the willingness of the participants to contribute to the research within the stipulated time of data collection.

The health system that plays a significant role in extending treatment for infertility was also included. The attitude and approach of the medical practitioners was thought to be equally important, next to medicines. Hence, gynecologists and urologists were included in the study to describe the role of the health system in infertility treatment. Private practitioners were approached as it was assumed that they provide services to the middle/upper middle-income groups. Ten doctors (gynecologists and urologists) either running infertility clinics or dealing with cases of infertility were interviewed to gain a perspective of the health system regarding views of childlessness (in the larger socio-cultural context) and the treatment procedures. Urologists were included in the sample group as men approach or may be referred to urologists for male dysfunctional errors.

### *Criteria for Sample Selection*

The study participants were selected on the basis of specific criteria. Individuals having a family income of at least Rs. 8,000 per month and 12th standard education were included. The participants from the treatment-seeking group should have been married for at least one year, whereas the non- treatment seeking group should have been married for at least eight years to ensure that they had sought treatment at some point of time, either for self or for spousal infertility. The criteria for sample selection were adhered, to maintain homogeneity of the group.

## Method of Data Collection

In-depth individual interviews were used for data collection (see Annexures II, III and IV for the interview schedules) to elicit a holistic perspective of the perceptions and experiences related to infertility and childlessness. This method was selected to remain as open as possible and adaptable to the interviewees' disposition and experiences, during the interview. Importantly it suited the nature of the issue being studied as well as the context.

### *The Tool*

The interview schedules were prepared in English and were then translated into Hindi and Gujarati languages to be used as per the convenience of the participants. However, most of the participants preferred to respond in English. The tools were pre-tested with one doctoral student from the department and one individual representing the society. This was done in order to check the validity of the empirical questions. Again the tool was reframed in congruence with the objectives of the research; exercises were done to cross check that the questions framed for the interviews fulfilled the objectives of the research. This exercise helped to finalize the interview schedule Additionally, the tool was also reviewed by experts from the field of Gender Studies (see Annexure V) and was modified based on the suggestions obtained.

### *Treatment Seeking Group and Non-treatment Seeking Group*

Following are the main domains included in the interview schedule for the interviews with individuals experiencing involuntary childlessness:

- Meaning of parenthood
- Meaning of infertility
- Explanations for infertility
- Treatment seeking behaviors
- Feelings regarding the process of seeking treatment, type of treatment and its expected outcome
- Feelings and experiences with artificial reproductive technologies
- Spousal reaction/support
- Family reaction/support
- Societal reaction/support
- Coping behaviors

The first group of individuals was selected through practicing gynecologists. A few gynecologists were approached and oriented to the research. Their help was requested in seeking consent from their clients who were willing to participate in the study. Handouts describing the nature of the study and assurance of complete confidentiality were given to the individuals during the initial part of the interview (see Annexures VI, VII, VIII and IX). Most gynecologists had requested their receptionists or assistants to introduce the researcher to the willing participants.

The second group of individuals was identified by the snowball method. They were briefed about the study verbally as well as given the handout describing the nature of the study and were assured of complete confidentiality. Written or oral consent was obtained from the participants, depending upon their preference (see Annexure VIII).

The interviews were then carried out as per the convenience of the participants, either at the clinics or at their homes. The duration of each interview was approximately half an hour to one hour. Majority of the interviews with the treatment-seeking group were clinic based.

Initially it was proposed that two meetings would be carried out with each individual, an initial meeting for rapport building and the next meeting for the actual interview. However, the respondents were not willing to meet for a second time, probably due to the sensitive nature of the issue under investigation as well as the stigma associated with it. Hence, only one session was conducted for each interview.

### *Gynecologists and Urologists*

The interview schedule for the interviews with the gynecologists and urologists was based on the following aspects:

- Perception of involuntary childlessness (Perceptions of themselves as individuals who are part of the Indian culture and as health providers/doctors; referring to their experiences with their patients)
- Explanations for involuntary childlessness

- Psychosocial implications of involuntary childlessness and coping behaviors
- Role of the new reproductive technologies
- Role of the health system

Interviews with the gynecologists and urologists were carried out during mutually convenient timings.

The interviews were conducted in English, Hindi or Gujarati, as per the preference and comfort of the respondents. Interviews were tape recorded, transcribed and then translated into English, retaining the verbatim responses. Wherever the participants hesitated about tape recording the interview, running notes were taken, which were later expanded.

## Ethical Considerations

Care was taken to respect and protect the participants' autonomy, rights and dignity throughout the process of the research (CEHAT, 2000)

- Informed consent (refer Annexure VIII)
- Prior permission to record interviews
- Protection of autonomy, right and dignity throughout the process
- Assurance of confidentiality
- Right not to answer any question
- Right to leave the research at any point of time
- Privacy at the time of data collection

Informed consent was obtained from voluntary participants All information and records provided by the participants were kept confidential by assigning codes to the data. The participants were informed that they had the right to discontinue their participation in the research at any point of time. During the interviews, if the participant did not feel like responding to any particular question, he or she had the right to say so. The recorded interviews were subsequently erased.

The researcher assumes complete responsibility for ensuring the protection and promotion of the interests and rights of participants while sharing or making public the available data in any form.

## Data Analysis

The data was analyzed qualitatively. Frequencies were calculated for the socio-demographic variables and a few other domains where it was felt necessary.

### *Forming Analytical Categories and Coding the Data*

Microanalysis was done to formulate the initial categories. Mnemonic codes were formed based on the initial categories, which finally lead to evolving conceptual and analytical categories that could be located in the text, to make sense of the scope and coverage of the data.

**Micro analysis** involves careful minute observation and interpretation of data. It is necessary to generate initial categories and to suggest relationship among categories (Mason, 1996)

**Mnemonic codes** e.g.,

| <u>Category</u> | <u>Code</u> |
|---|---|
| Importance of parenthood | Imp_Pthd |
| Cause of infertility | cau_inf |

Coding was done at three levels. Open coding was essential to make sense of the vast amount of qualitative data. This helped to code the data in the initial phase, following which axial coding was done to draw specific categories and sub-categories. Selective coding was done to finally evolve categories that addressed the research questions and the objectives of the research.

**Open coding:** Data is broken down into discrete parts and closely examined and compared for similarities and differences. Subsequently similar events related in meanings are grouped together under the same categories.

**Axial coding** involves resemblance of the data. Categories are related to the sub categories to form precise and complete explanations about the phenomenon.

**Selective coding:** Categories are revisited for integration and refinement of categories and sub- categories.

(Strauss & Corbin, 1996).

### *Establishing Reliability*

Inter-coder reliability was established following the procedures outlined below

a. Interviews were selected at random from each group of participants.

b Preliminary codes were formulated based on the salient domains of the interview schedule.

c. Three different researchers working in the same area then coded the interview separately based on the pre-formulated coding categories.

d. The coded interviews were compared in terms of the categories and the meanings attached to these. Discrepancies were discussed to derive at a common understanding.

e. A final list of codes was developed.

The following steps were followed for qualitative analysis.

1. Each interview was coded according to the pre-decided categories. The coded responses were then transferred into matrices so as to view the responses of each participant on a given category together. This process helped in forming the tables.
2. Culling out patterns of responses related to the following major dimensions:
   - Meaning of parenthood.
   - Meaning of involuntary childlessness.
   - Explanations for involuntary childlessness.
   - Treatment seeking process.
   - Coping behaviors.

Following the above, a gender analysis framework (adapted from the gender analysis framework given by the Department of International Development (DFID) (1999), Liverpool was applied to obtain an account of how gender impinges in the arena of infertility and childlessness.

## Limitations of the Study

The research focuses on the middle/upper middle income groups of the society, and the treatment-seeking group was selected from private clinics only. There may be individuals seeking treatment from government hospitals as well, but the present research does not address this aspect.

Most of the interviews were clinic based, and so there is a possibility that a few participants might have inadvertently felt pressured to give their consent, although efforts were made to ensure privacy. The clinic-based interviews were also shorter in duration as compared to the home-based interviews, which could have been due to the nature of the setting.

The interviews were conducted in one session, which did not provide ample time to build adequate rapport with the participants, which is necessary especially for an issue like infertility. We had sought their consent for at least two meetings, but later the participants were not willing to meet for the second session.

Most of the interviews were conducted in English, which was not the mother tongue of the participants and this might have implications on their expressions of feelings related to the sensitive issue of involuntary childlessness. The research does not claim to make any generalizations based on the current data, yet it highlights certain trends in the perceptions of infertility among a specific section of the Indian society.