Chapter IV

METHODOLOGY

The methodology is the arrangement of conditions for collection and analysis of data in a manner that aims to explain the findings of research. It is the conceptual structure within which research is conducted. The methodology consists of the following items:

a. Statement of the problem.
b. Significance of the study.
c. Objectives of the study.
d. The procedures and techniques to be used for collecting data.
e. The methods to be used in processing and analyzing the data.

Statement of the Problem

The people’s life span is determined by their status of health. In other words, if a person lives for a long period, it is presumed that he maintains good health. In contemporary times, a fantastic breakthrough in the medical field comes in a long way to save people from deadly diseases and sustain their survival for a considerable period of time. The main causes of diseases may not be identified without knowing a host of social practices associated with the life of people. The medical experts can identify the biological/pathological causes of the diseases, but they will not able to identify social causes. The social scientists, especially sociologists are competent to work on social causes of the diseases because, by and large, they address to social practices associated with the life of people and analyze how these practices contribute to their diseases.
Significance of the Study

Medical treatment will prevent the diseases for a certain period of time or sometimes cure them permanently. Unless people change their attitude to the social practices associated with their life, they cannot stop the frequenting diseases mostly caused by those practices. However environment is also a crucial factor very much associated with the diseases. People who follow a series of social practices in a degrading environment would suffer from serious health problems.

This study mainly focuses on the relationship between the social practices of the people and their health problems. Very limited studies on this problem have been done so far. Hence the present study is more relevant at the present time.

Objectives of the Study

The objectives of the present study are as follows.

1. To study the variations in the distribution of diseases in the sample villages with respect to socio-demographic composition of people in these villages.
2. To analyze the relationship between those diseases and the environment of the sample villages.
3. To examine the relationship between the social practices of people and their diseases.

Hypotheses

With the above variables the cause-effect relationship was expressed in the form of hypotheses.

(i) The diseases of the sample population vary with their socio-demographic composition.
(ii) The disease pattern depends on the location of sample villages.

(iii) The proportion of morbidity of sample population depends on the environmental conditions of their settlements.

(iv) The health problems of the people are associated with their social practices.

Variables of the Study

The important variables were classified as follows:

**Dependent variables**

1. Disease

**Independent variables**

1. Socio-demographic variables such as age, sex, educational status, community in terms of FC(Forward Class), BC(Backward Class), MBC(Most Backward Class) and SC(Scheduled Caste), income, family size and occupation.

2. Environmental variables such as, types of house, types of water and sanitary condition in and around their homes.

3. Social practices include betel chewing, fasting and types of treatment, particularly traditional way of treating their diseases.

4. Other variables are unhealthy practices (smoking, drinking and snuffing), and food practices/habits.

Design of the Study

Every research starts with one direction to achieve the goal. The research design helps the researcher not to move away from the direction of the research. Descriptive
Research Design was followed to study the problem as it was found appropriate to the present study.

**Choice of the Study Area**

The study covers both coastal and inland villages in Tirunelveli District. The researcher selected the sample villages in and around the Kudankulam Nuclear Power Plant site. Chettikulam, a panchayat village, situated near the power plant. The researcher selected Chettikulam village panchayat by Simple Random Sampling with the help of lottery method.
MAP 1

TIRUNELVELI DISTRICT OF TAMILNADU
MAP 2

VALLIYOOR BLOCK OF TIRUNELVELI DISTRICT, TAMILNADU
MAP 3

CHETTIKULAM PANCHAYAT VILLAGE IN VALLIYOOR BLOCK OF
TIRUNELVELI DISTRICT, TAMILNADU
### TABLE 4.1
SAMPLE VILLAGES BY POPULATION AND THEIR PARTICIPATION IN MEDICAL CAMP

<table>
<thead>
<tr>
<th>Village</th>
<th>Population</th>
<th>Number of People who attended the Medical Camp</th>
<th>Number of People who did not attend the Medical Camp</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kuttapuly</td>
<td>1688</td>
<td>259 (15.3)</td>
<td>1429 (84.7)</td>
<td>(100)</td>
</tr>
<tr>
<td>Perumanal</td>
<td>620</td>
<td>130 (21.0)</td>
<td>490 (79.0)</td>
<td>(100)</td>
</tr>
<tr>
<td>Chettikulam</td>
<td>1603</td>
<td>480 (29.9)</td>
<td>1123 (70.1)</td>
<td>(100)</td>
</tr>
<tr>
<td>Sriranganarayanapuram</td>
<td>1075</td>
<td>322 (30.0)</td>
<td>753 (70.0)</td>
<td>(100)</td>
</tr>
<tr>
<td>Total</td>
<td>4986</td>
<td>1191 (23.9)</td>
<td>3795 (76.1)</td>
<td>(100)</td>
</tr>
</tbody>
</table>

Note: The researcher was appointed as JRF in BRNS –Kudunkulam Project to conduct a survey on Health Status of people in villages located within 30km radius of Kudunkulam site around 30 kms. He was directed to do Ph.D in the same research area. The researcher organized 50 medical camps with an efficient medical team in the sample villages, which two villages are one is inland villages (Sriranganarayanapuram and Chettikulam) and other is coastal villages (Perumanal and Kuttapuly). For his doctoral program he organized medical camps in those areas with the financial support of the Board of
Research in Nuclear Sciences. The researcher for his doctoral program considered only the patients who were diagnosed by the doctors in the medical camps and left out the remaining people who did not attend the medical camps, because the researcher is a student of sociology and hence he is not competent to identify the diseases and causes for them. So the doctors identified the patients whose illness was taken for the present study.

**Selection of the Sample**

For this study four villages (2 coastal and 2 in-land villages) were selected. The entire population of these villages was enumerated and the required data were collected. By and large the household heads, either male or female, were interviewed to collect data pertaining to all the family members. Thus, in this case, the census method was followed. With the help of a medical team, the researcher conducted medical camps in the sample villages and identified the health problems of 1191 people who attended the camps. All the 1191 people also interviewed following the census method.

**Tools of Data Collection**

**Primary Data**

Interview Schedule was administered to collect data from the sample population. In addition to this, Observation, Focus Group Discussion and Case Study methods were used for collecting data for this study.

**Secondary Data**

The researcher also collected secondary data from books, journals, magazines, websites and the like which supplemented the primary data. Besides these some first hand information was also collected from the field and also from a few experts.
Duration of the Study

The field work was carried out during January 2007 - June 2007 without any interruption.

Data Processing and Analysis

After the field work, the filled up schedule was carefully scrutinized and edited in order to ensure accuracy, consistency and completeness. The researcher did the coding of the data manually. The classification, tabulation and further statistical treatment of data were done through SPSS. The data were qualitative and quantitative in nature. Qualitative data were converted into percentages. Most of the analyses were based on the responses presented in the form of frequency and tables. The tabulated data were systematically processed and interpreted on the basis of the objectives and hypotheses formulated. These interpretations were carefully studied and necessary conclusions were drawn. The data were analyzed by appropriate statistical tests, such as average, chi-square and analysis of variance. Based on the findings, the study has brought about valid inferences and finally provided concrete suggestions.

Limitation of the Study

Every research study suffers from certain constraints and limitations. The present study has the following constraints and limitations. This work has limited its scope to the study of the social practices and environment associated with the diseases only in four villages of Chettikulam panchayat due to the time and financial constraints.

Chapterization

The study was classified into eight chapters. The first chapter describes about the research concept of the problem. The second chapter deals with the patterns of diseases,
social causes and consequences of diseases besides explaining the morbidity pattern in India and its relationship with social variables. The third chapter discusses the review of literature collected from empirical studies, books, journals and other relevant sources. The fourth chapter explains the methodological aspects of the present study. It describes the selection of the study area, sampling frame, tools used for data collection and statistical tests used for analyzing the data. The fifth, sixth and seventh chapters elaborate the findings of the study in an analytical way keeping the objectives and as hypotheses base. The last chapter is based on the summary of the findings, conclusion, and some suggestions.