Chapter III

METHODOLOGY:

"There is nothing either good or bad, but thinking makes it so."

- *Shakespeare (Hamlet)*

Globally around 400 million people are suffering from mental illnesses. This contributes 12% to the global burden of diseases and an analysis of trends indicates this will increase to 15% by 2020 (World Health Report, 2001). In India around 5 crore people are affected with Mental disorder.

There have been some recent studies that reveal considerable changes in public attitudes toward mental illness (Pakhale, 2012). This improvement in attitudes has been attributed to public education programs by mental health professionals and the mass media. Evaluation of attitudes and beliefs about mental illness will aid in their understanding, recognition, prevention and management. Also the common people and their attitudes toward people with mental illness are important for the implementation of public sensitization concerning mental illness. Although there is a large number of related research work from around the world, little is known about public attitudes and beliefs in Assam, a state from the north eastern part of India, as there is no research work to that effect as yet. An exploratory study would bring to light the existing attitudes and beliefs toward the people with mental illness in Assam.

3.1. Geographical Coverage:

The present study was done on the population of Assam. Assam serves as a major gateway to the northeastern corner of India. It shares borders with the countries of Bhutan and Bangladesh and is surrounded by the states of Arunachal Pradesh, Nagaland, Manipur, Mizoram,
Tripura and Meghalaya, which together with Assam, are called the Seven Sister States of the country. The state of Sikkim was recently added to the North East and now this geographical area is called as “Seven Sisters with One Brother”.

Assam is the meeting ground of diverse cultures. The people of the state are an intermix of various racial stocks such as Mongoloid, Indo-Burmese, Indo-Iranian and Aryan. The Assamese culture is a rich and exotic tapestry of all these races, evolved through a long assimilative process. There are in total 32 districts in Assam with the capital being Dispur.

**Figure no. 3.1: District Map of Assam**

![District Map of Assam](https://www.google.co.in/search?q=map+of+assam+with+all+32+districts)

As the state of Assam is the study area, it has been divided into three zones as Upper Assam, Central Assam and Lower Assam. From each zone two representative districts have been selected purposively-

Upper Assam- Jorhat District and Lakhimpur District,
Central Assam – Sonitpur District and Morigaon District,

Lower Assam – Kamrup District and Bangaigaon District,

Thus, each zone includes two districts and each district was divided into two settings, that is rural and urban. The map of Assam on previous page shows the 6 districts scattered across the State. Table 3.1 gives the districts along with the habitats falling under urban and rural settings.

3.1.1: Town and villages selected for the study:

There were 15 towns selected for the study and 23 villages from 6 different districts. Those are listed below in the table number 3.1.

**Table 3.1: Towns and villages selected for the study**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Districts</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bongaigaon</td>
<td>Bongaigaon, Abhayapuri</td>
<td>Chapaguri, Dawkanagar, Fuchulupara</td>
</tr>
<tr>
<td>2</td>
<td>Kamrup</td>
<td>Guwahati</td>
<td>Boko, Chhaygaon, Rampur, Bezera</td>
</tr>
<tr>
<td>3</td>
<td>Morigaon</td>
<td>Jagiroad, Nakhola, Mayong</td>
<td>Karaiguri, Neli, Sapkati, Singimari</td>
</tr>
<tr>
<td>4</td>
<td>Sonitpur</td>
<td>Tezpur, Bishwanath Chariali, Gahpur</td>
<td>Alisinga, Balichapor, Na-pam, Dolabari</td>
</tr>
<tr>
<td>5</td>
<td>Jorhat</td>
<td>Jorhat, Titabor, Mariani</td>
<td>Borigaon, Choladhara, Kakojan, Pulibar</td>
</tr>
<tr>
<td>6</td>
<td>Lakhimpur</td>
<td>North Lakhimpur, Bihpuria, Dhokuwakhana</td>
<td>Athakatia, Tinikuria, Panigaon, Bocha Gaon</td>
</tr>
</tbody>
</table>

3.2: Sample of the study:
Survey method has been applied with mixed sampling technique. The data have been collected in three stages and as such it is a Multi-Stage sampling procedure.

The sampling was done following a multi-stage Sampling Technique.

- **First Stage Unit (FSU)** – First, from the three zones of Assam two districts from each zone were included. Total six districts were selected randomly.

- **Second Stage Unit (SSU)** – From each district two settings that is ‘urban’ and ‘rural’ were selected by purposive sampling.

- **Third Stage Unit (TSU)** – Stratified Random Sampling with equal allocation was carried out by gender and age for 120 participants from each setting.

The distribution of the sample for the study is \( n = 240 \) per district and \((240\times2)\) \( n = 480 \) per zone. Two districts were selected from each zone. Per district the respondents includes both male \((n=120)\) and female \((n=120)\) between the age group 21 years to 40 years \((n=120)\) and 41 years to 60 years \((n=120)\). The distribution of the samples were according to Rural \((n=120)\) and Urban \((n=120)\). With the total sample size of 120 x 2= 240 x 2=480 x 3=1440 was equally distributed.

### 3.2.1: Multi stage Sampling

The multi staged sampling procedure followed and sample size have been shown in the following figure 3.2:-

**Figure 3.2. Sampling Chart:**
3.2.2: Inclusion Criteria:
There were some inclusion criteria set for the study which were followed to maintain the homogeneity and reduce the sampling error. Figure 3.3 illustrates the criteria.

**Figure 3.3: Inclusion Criteria**

- The participants were between the age group of 21 years to 40 years and 41 years to 60 years.
- The participant was not suffering from any mental illness at the time of collecting data.
- The participants were only those who gave consent.

### 3.3. Research Design:

A 2x2x2 factorial design (Table 3.2) was followed in the present research. The three independent variables had two levels each as shown in the Table 3.2.

**Table 3.2. Factorial Design for one district:**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting</td>
<td></td>
<td>21yrs - 40yrs</td>
<td>41yrs - 60yrs</td>
</tr>
<tr>
<td>Urban</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Rural</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td><strong>60</strong></td>
<td><strong>60</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>
3.3.1. **Variables:** As per the objective of the research there are 3 independent variables and 3 dependent variables. These are shown in the table number 3.3 below.

Table 3.3.

<table>
<thead>
<tr>
<th>Independent Variable (s):</th>
<th>Dependent Variable (s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Setting (Urban and Rural)</td>
<td>1. Acceptance</td>
</tr>
<tr>
<td>2. Gender (Male and Female)</td>
<td>2. Knowledge and Exposure</td>
</tr>
<tr>
<td>3. Age (21 years to 40 years and 41 years to 60 years)</td>
<td>3. Stigma and Discrimination</td>
</tr>
</tbody>
</table>

3.3.2. **Control of extraneous variables:**

There were some variables which were controlled as extraneous variables to maintain the homogeneity and reduce the sampling error. Figure 3.4 depicts the steps taken.

Figure 3.4: **Control of extraneous variables:**
• Noise and temperature were controlled through indoor setting.

• Fake responses were controlled through maintenance of confidentiality assured to the participants.

• None of the participants were forced to participate, informed consent was taken. This ruled out unauthentic responses.

• Incomplete forms were rejected.

3.4: Study Tools:

The following tools were used for data collection-

The tools were translated into Assamese language (regional language) for local adaptation.

1. Personal Identification Sheet

2. Semi-structured Questionnaire

3. A Case Vignette

3.4.1: Short Description of the tools:

1. Personal Identification sheet

The personal identification sheet was used to collect respondent’s personal data like age, gender, locality, marital status, educational qualification, type of family, occupational status, exposure to mental disorders (illness).

The sheet consisted of the domains as cited above with multiple options.
2. Semi-structured questionnaire

A semi-structured questionnaire was developed by Snigdha Ghosh and Dr. Indranee Phookan Borooah, 2012, to acquire additional information on attitudes and beliefs towards people with Mental Illness, in support of the vignette, to meet the objective of the study. The questionnaire was developed in English and Assamese as well. A pilot study was done and the irrelevant questions were removed from the questionnaire. The relevant questions were set and the questionnaire was finalized. The questions included fell under the following categories:

i) **Attitudes & Beliefs reflecting acceptance toward mental illness** - the category consists of 8 items.

ii) **Attitudes & Beliefs reflecting knowledge and exposure toward mental illness** - the category consists of 5 items.

iii) **Attitudes & Beliefs reflecting stigma & discrimination toward mental illness** - the category consists of 16 items.

The responses are on a 3 point scale. Along each item options are given as agree/undecided/disagree together with their corresponding points as 3, 2, 1 respectively. The subject has to read each statement carefully and has to tick the response which she/he thinks to be the most suited for him/her.

For example: agree      undecided       disagree

            3     2          1

The tool, semi-structured questionnaire has been developed by the authors to support the vignette as the items in the vignette scale referred particularly to a person suffering from schizophrenia. Therefore, to have a clearer and broader picture on attitudes and beliefs toward
mental illness, items referring to situations in the local settings has been included in the semi-structured questionnaire.

A Case Vignette

The case vignette used in the research depicted a case on schizophrenia developed in an Australian study by Jorm et al. (2007) has been selected for use in this study, “Influences on young people's stigmatizing attitudes towards peers with mental disorders: national survey of young Australians and their parents”. by Anthony F. Jorm, PhD, DSc and Anne Marie Wright, BAppSc (OT), MMedSc (HProm), ORYGEN Research Centre, University of Melbourne, Victoria, Australia.

The original case vignette -

‘John is a 15-year-old who lives at home with his parents. He has been attending school irregularly over the past year and has recently stopped attending altogether. Over the past 6 months he has stopped seeing his friends and begun locking himself in his bedroom and refusing to eat with the family or to have a bath. His parents also hear him walking about in his bedroom at night while they are in bed. Even though they know he is alone, they have heard him shouting and arguing as if someone else is there. When they try to encourage him to do more things, he whispers that he won’t leave home because he is being spied upon by the neighbor. They realize he is not taking drugs because he never sees anyone or goes anywhere.’

The vignette, had been prepared to meet DSM-IV criteria and validated by mental health professionals, has been slightly modified to suit the respondents of Assam. The vignette refers to a 19 years old girl named Aroti –

“Aroti is a 19-year-old who lives at home with her parents. She has been attending school irregularly over the past year and has recently stopped attending altogether. Over the past 6 months she has stopped seeing her friends and begun locking herself in her bedroom and refusing to eat with the family or to have a bath. Her parents also hear her walking about in her bedroom at night while they are in bed. Even though they know she is alone, they have heard her shouting and arguing as if someone else is there. When they try to encourage her to do more
things, she whispers that she won’t leave home because she is being spied upon by the neighbor. They realize she is not taking drugs because she never sees anyone or goes anywhere.”

The vignette was defined and split in sets of questions-

i) **Attitudes & Beliefs reflecting acceptance of persons with mental illness** - the category consists of 5 items to be responded to on 4 point scale, which ranges from ‘yes definitely’, to definitely not’. Along each item options are given as yes definitely/ yes probably/ probably not/ definitely not together with their corresponding points as 4, 3, 2, 1 respectively. The subject has to read each state statement carefully and have to tick the response which s/he thinks to be the most suited for him/ her.

For example: yes definitely yes probably probably not definitely not

\[
\begin{array}{cccc}
4 & 3 & 2 & 1 \\
\end{array}
\]

ii) **Attitudes & Beliefs reflecting knowledge and exposure to people with mental illness** - the category consists of 4 items to be responded to on 2 point scale, as ‘yes’ or ‘no’. Along each item options are given as yes and no with their corresponding points as 2 and 1 respectively. The subject has to read each state statement carefully and have to tick the response which s/he thinks to be the most suited for him/ her.

For example: yes no

\[
\begin{array}{cc}
2 & 1 \\
\end{array}
\]

iii) **Attitudes & Beliefs reflecting stigma, discrimination and beliefs toward people with mental illness** - the category consists of 7 items to be responded to on 5 point scale,
which ranges from ‘strongly agree’, to strongly disagree’. Along each item options are given as strongly agree/ agree/ neither agree nor disagree/ disagree/ strongly disagree together with their corresponding points as 5, 4, 3, 2, 1 respectively. The subject has to read each state statement carefully and have to tick the response which s/he thinks to be the most suited for him/ her.

For example:

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neither agree nor disagree</th>
<th>disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

3.5: Local Adaptation of the study tools:

English version of the study tools were translated into simple Assamese and the Assamese version of the tools were translated back again into English to ensure proper and meaningful translation of the test items. The translation was checked by experts on the subject. The meaning of the different items of the tool of the two versions remained the same. This process was followed to ascertain the face validity of the tool.

3.6: Ethical Issues to be considered:

The following steps were taken for ensuring quality data and for protection of human rights:

- That the activities undertaken were for research purpose was conveyed to the participants.
- Informed consent was obtained from all the participants and no one was forced to participate in the study.
- Confidentiality of information was ensured.
The participants were told that they could withdraw from the study at any time without any obligation, even after giving consent, if they wished so.

Debriefing.

3.7: Procedure:

As the total sample is distributed in three zones of the state, one by one zone were selected and the data were collected. Initially a blue print for the process to be followed for collecting data was planned and data collection has been started with the Zone 2. At first approach was made to the person known to the researcher, residing at the respective districts and then the researcher visited and resided there for collection of the responses. Researcher visited households for individual responses. Clubs, health camps, social institutions such as Naamghars etc. were visited and data were also collected in groups. The instructions and explanations given to the participants started with introduction of the researcher, and then they were provided with the questionnaires and informed that the responses would be kept totally confidential. They were assured that their responses would be used only for research purpose, and that they are not compelled to respond. It was added that filling the questionnaire depicts their consent and willingness to participate in the study. Then they were asked to fill the questionnaire and if any of them did not understand any of the items they were explained.

At first the Personal Identification Questionnaire was given then the Semi Structured Questionnaire. Then after a 5 - minute break the Case Vignette was provided. As they completed, the questionnaire were collected and they were thanked for their participation, time and responses. The total time taken to complete the process of response for each individual was approximately 30 minutes, the time fluctuating by ± 10 minutes with different places.

As Zone 2 was selected to complete first, the districts of that zone were visited and the towns and villages under each district were completed. Once Zone 2 was completed Zone 1 was visited and then Zone 3 was completed following the same process.
3.8: Data Analysis:

After data collection, all the questionnaires were subjected to scrutiny and after careful scrutiny 53 questionnaires were found to be incomplete and thus were rejected. Other participants were visited then to get their responses so as to maintain equal size of the sample. Finally total of 1440 questionnaires were finalized with equal distribution.

In addition to frequencies, percentages of the responses were calculated and the Chi-square test was then applied.

3.9: Problems Faced:

Since mental illness is still associated with a lot of stigma many participants felt discomfort and reluctance during answering the questions and some of the participants left many items unanswered. Thus, those incomplete questionnaires were rejected. The major difficulty was to get an adequate number of participants for the study. Going to the naamghars, clubs and health camps and convincing the people to participate in the study, hindering their ongoing program/ work was also very difficult.

There were a lot of seasonal difficulties faced during the research work, specifically at the time of data collection. Such as floods; cultivation time, when the people in the rural areas are very much busy and are not able to spare their time; festive season, when all the people are busy in the markets and some in the worship places.

There were some socio-political factors which also created problem in the work. The frequent ‘bandhs’ which affects communication from one place to another; communal riots and ethnic violence also became hurdles in the process of data collection and the entire work.

The results obtained from analyzing the data collected have been interpreted and discussed in the following chapter.