CHAPTER - III

RESEARCH METHODOLOGY

Research methodology is the logical set of systematic procedures which enables a researcher to frame the basic design of any study. It functions to scientifically devise the data collection and analysis process so as to make conclusions based on reasonable possibilities as opposed to fantastic possibilities. This chapter deals with the methodology that has been adopted to carry out the present study. It encompasses rational of the study, objectives, research questions, research design, sampling, construction of data collection tools, methods and process of data collection, nature of analysis etc. The limitations of the present study are also included here. It is important to note that there is no specific methodology for doing research on governance in health care. It depends on the topic, the purpose of the study, the data available and the experience as well as capability of the researcher.

3.1 Scope and Importance:

Health is the most essential component of human life. Better health status leads to better productivity. The development of the health is holistic process related to the overall growth and development of Socio-economic factors. Over the last few decades, there has been a tremendous improvement in the quality of healthcare services in India. This is illustrated by the significant improvement in healthcare indicators such as life expectancy at birth, infant mortality rates, maternal mortality rate, etc. The statistics reflects that in the year 1990 the male life expectancy at birth was estimated at 57 and female life expectancy was 58 and in the year 2008 male life expectancy was estimated at 63 and female life expectancy was 66 (World Health Statistics, 2010). The improvement in the healthcare indicators is a direct result of the improved penetration of healthcare services provided by both government and private hospitals in India. There is a noted increase in the number of allopathic doctors with recognized medical qualifications in India. This is illustrated from the fact that in the year 2009 the numbers of doctors have increased up to 757377 from 660856 in 2005 (National Health Profile, 2009). However, India is facing a serious challenge to meet the continuous growing demand of health care facilities to its population, especially in

rural areas. Rural population lacks access to even basic resources such as clean drinking water, proper housing and sanitation faculties etc. which ultimately increases the burden of chronic illness. Over this period India's achievements in the field of rural health care delivery have been less than satisfactory and that burden of diseases among the rural Indian population remains high. This can be attributed to the fact that there is a disparity in healthcare indicators between the rural and urban population. In the year 2007 the crude death rate in rural area was 8.0 and in urban areas it was estimated to 6.0; the infant mortality rate was 61.0 in rural areas and it was estimated to 37.0 in urban areas. However, as a part of its socially progressive Common Minimum Programme, the UPA Government launched the National Rural Health Mission (NRHM) in 2005 to resolve the issues of accessibility and affordability of health care to rural people. The primary focus of this initiative is on 18 states that have low public health indicators and inadequate infrastructure. Assam is one of the prominent states among these. The health condition in Cachar district of Assam is very deplorable due to its poor health infrastructural facility, service delivery system and weak manpower resources The statistics itself shows the deplorable health condition of the people of this region. As per the annual health survey 2012-2013, the crude death rate for Assam was estimated at 7 where as in Cachar it was 7.3. Beside these, the study conducted by planning commission of India (2011) found that health care facilities of Assam such as PHC/CHC cannot provide proper health care services to the beneficiaries due to limited facilities, lack of expertise and poor governance. This has opened a new arena for the researcher to understand the governance of health care services provided by NRHM at Primary Health Centre level as NRHM operates through PHCs, which is the entry point between community and the medical officer. BPHCs have the major responsibility of providing both preventive and curative health care services to the large section of people.

Under this backdrop it is in need to study the administrative set up and service delivery pattern, beneficiaries access and use of treatment, attitudes of professionals and Para professionals under NRHM, limitations and problems in rendering services and to suggest measures for the better delivery of services to cater the health needs of rural people of this region.

3.2 Objectives of the Study:

The core concern of the research study is to explore the relationship between governance and health system performance under NRHM. The major objectives of the study are:

- To know the service delivery pattern and administrative set up under NRHM
- To study the socio-economic condition of the patients visiting for Block Primary Health Centres (BPHCs)
- To understand the nature and types of services offered by BPHC
- To know the perception of patients towards the services of BPHC
- To find out the role and intervention of grass root actors-PRI, ANM and ASHA in governing BPHC
- To ascertain the problems and challenges faced by BPHC in maintaining good governance in the delivery of health care services

3.3 Research Question:

- Is there any particular trend in availing services on the basis of social identities viz. caste or religion?
- What is the scope of social work intervention for better governance through BPHCs under NRHM?

3.4 Operational Definition of the Key Terms:

3.4 (A) Service Delivery Pattern: For the purpose of this study, service delivery pattern refers to a set of principles, strategies, approaches and standards that used to guide the design and development of services delivered through NRHM to cater the health needs of end users.

3.4 (B) Administrative Setup: For the purpose of this study, administrative setup refers to the hierarchical structures of NRHM that determines the communication

flow, roles, powers andresponsibilities of authority at National, State and District level.

3.4 (C) Socio-Economic Conditions: Socio economic condition is used as an umbrella term to cover wide variety of interrelated social and economic factors. In this study, socioeconomic conditionrefers to income, expenditure, basic facilities for surviving, and life-style and living arrangements for women from reproductive age group.

3.4 (D) Patients: For the purpose of this study, patient refers to one who receives medical attention, care or treatment from BPHCs.

3.4 (E) Perceptions of Patients: For the purpose of this study, perception refers to the views of patients towards the services received from BPHC.

3.4 (F) Governance: Governance is the process through which authority manages its affairs at all levels. In this study, Governance is the process through which services of NRHM are delivered.

3.4 (G) Health Care: The services rendered by members of the health professions for the prevention, treatment, and management of illness and the preservation of mental and physical well-being of patient.

3.5 Research Design:

The term design means “drawing an outline”. Research design is the broad framework through which the goals of research will be achieved. Thus it can be said that a research design is the logical and systematic planning in directing the research. In accordance with the objectives, the present study is exploratory in nature. This research design has been found more appropriate for the present study as it aims to explore the implication of governance in health care performance. Exploratory study is helpful for more precise investigation and for developing hypothesis.

3.6 Universe of the Study:

The district of Cachar constitutes the field of study. In Cachar district there are eight BPHCs located to ensure better delivery of health services in this region. These centres are located in Udarbondh, Borkhola, Bikrampur, Lakhipur, Harinagar, Jalalpur, Sonai and Dholai Blocks. BPHC operates through NRHM in entire Cachar district of Assam will be the universe for the present study. The study has covered all eight BPHCs in Cachar district of Assam. The eight Blocks selected in the present study has served two primary purposes of sampling viz.- Adequacy and Representation.

3.7 Sampling:

A sample as the name implies is a smaller representation of larger whole. For the present study Multi Stage Random Sampling method has been adopted. Cachar district has total **eight BPHCs** namely Udarbondh, Bikrampur, Borkhola, Sonai, Dolai, Lakhipur, Harinagar and Jalalpur. At the first stage, the researcher has selected allthe eight BPHCs for the study. There are Sub-Centres (SCs) under each BPHC. The number of Sub-Centres varies from 15-20. Each Sub-Centre approximately covers 5000 population. At the second stage, the researcher has selected **eight Sub- Centres**, one from each Block purposively keeping the following characteristics in mind.

- One Sub-Centre has been identified which is very close to the BPHC.
- One Sub-Centre has been identified which is very close to the Silchar Medical College and Hospital. (SMCH)
- One Sub-Centre has been chosen which has deep rural characteristics (region-wise) and has interior location.
- One Sub- Centre has been chosen which is situated in Tribal area.
- One Sub-Centre has been selected which is situated in Tea Garden area.
- One Sub-Centre has been chosen which is situated within the 10 km. radius of BPHC.

- One Sub Centre has been selected which is a Medical Sub Centre.
- One has been selected which is adjacent to the Assam (Central) University Silchar.

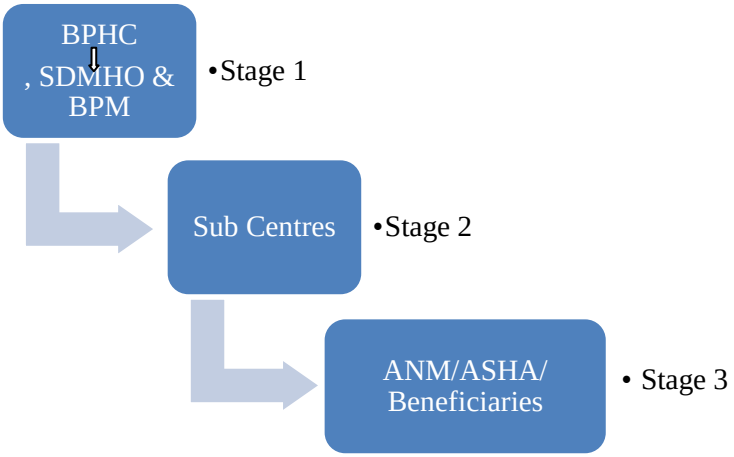

Figure 3.1: The Three Tier selection of Respondents

So, considering the above facts, Dumurghat Sub-Centre has been identified with close proximity to Udarbondh BPHC. Sabashpur Sub-Centre has been selected with close proximity to SMCH, Lathimara Sub-Centre is selected which is situated in interior location, Digerfulertal Sub-Centre is selected which is situated in tribal area, Lalang Sub Centre is selected which is situated in Tea- garden area, Burunga Sub-Centre is selected which is situated within the 10 k M. radius of BPHC, Dolu Sub-Centre is selected which is recognised as medical Sub centre and Irongmara Sub- Centre is selected purposively due to its existence surrounded by Assam (Central) University Silchar.

Later from each Sub-centre total 25 patients from reproductive age group who has at-least one child have been selected randomly (those who had enrolled as regular service users provided by ASHAs). It would constitute a group of total (8x25) =**200 respondents** for the study.

The figure below shows the final sampling design in details:

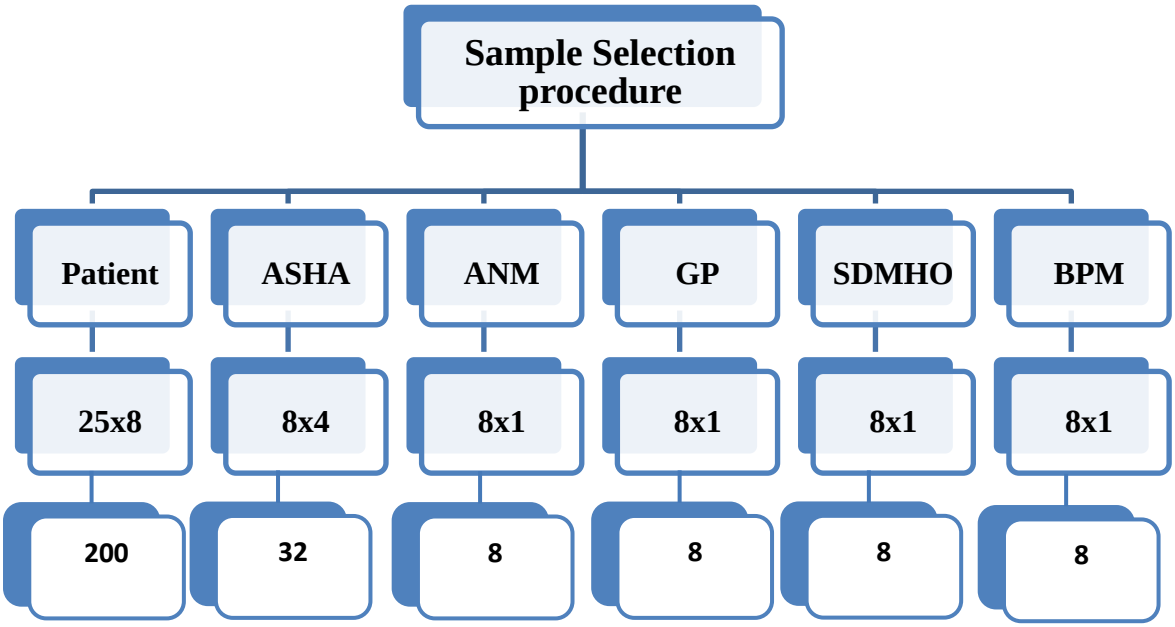

Figure 3.2: Numerical Division of Different Category of Respondents

To be precise from each Sub-Centres 4 ASHAs were randomly selected which finally has constituted a group of total 4x8= **32 ASHAs**. Each Sub-Centres falls under one G.P and one GP member was selected for the study. So, total **eight G.P** members were covered under the study. Moreover, from each sub-centre the researcher has interacted with one ANM purposively and total **eight ANMs** were studied. For the purpose of the study the researcher has also interacted with **eight Sub Divisional Medical & Health Officer** (SDMHO) and **eight Block Program Manager (BPM)** from each BPHC to know their roles and challenges faced by them in governing BPHCs.

Table 3.1: Sample Selection

Purposively Sampling BPHCs and Sub Centres		Randomly Selected Samples					
Name of the BPHCS	**Name of the Sub-Centres**	**Selected number of Beneficiaries/Patients**	**ASHA**	**ANM**	**GP**	**SDMHO**	**BPM**
Udharbondh	Domurghat Sub Centres	25	4	1	1	1	1
Borkhola	Dolu medical Sub-Centres	25	4	1	1	1	1
Bikrampur	Burunga Sub Centre	25	4	1	1	1	1
Jalalpur	Lathimara Sub-Centres	25	4	1	1	1	1
Dholai	Irongmara	25	4	1	1	1	1
Sonai	Sabashpur	25	4	1	1	1	1
Lakhipur	DigerFulertal	25	4	1	1	1	1
Harinagar	Lalang	25	4	1	1	1	1
Total		200	32	8	8	8	8

3.8 Tools of Data Collection

Data collection is not just a procedure of acquiring the required data from the field. It involves a deeper process of the researcher's engagement with the sources of data and assigning meanings not only to the data but also to the experiences the researcher come across during the process. Development of data collection tools follows systematic processes using a framework whereby the objectives of the study are to be broken into smaller components. For the purpose of the present study, sources of data in relation to these components and possible methods to elicit data from these identified sources have been identified; detailed tools have been prepared based on the objectives and research questions. The following framework has been used in preparing the data collection tools.

Table 3.2 Data Collection Framework

SL. No.	***Objectives***	***Components***	***Sources(s)***	***Method(s)***
1.	To know the service delivery pattern and administrative set up under NRHM.	Service delivery pattern and Administrative setup and under NRHM	NRHM Data, Reports and Books. Discussion with NRHM employees	Review of literature & Informal Discussion
2.	To study the Socio-economic condition of the patients visiting for BPHCs	Socio- economic condition of beneficiaries.	Patients taking services from Sub centre and BPHCs.	Semi-structured interview
3.	To understand the nature and types of services offered by BPHCs.	Nature and types of services provided by BPHCs.	Patients taking services from Sub centre and BPHCs	Semi-structured interview
4.	To know the perception of the patient towards the services of BPHCs	Perception of beneficiaries towards the services	Patients taking services from BPHCs	Semi-structured interview
5.	To find out the role and intervention of grassroots actors like PRI, ANM and ASHA in governing BPHCs	Role of PRI, ANM and ASHA in governing BPHCs	GP members	Informal Discussions
			ANM	Informal discussion
			ASHA	Semi-structured interview
6.	To ascertain the problems and challenges faced by BPHCs under NRHM in maintaining good governance in the delivery of health care services	Problems and challenges faced by BPHCs under NRHM in maintaining good governance in the delivery of health care services	NHM, Data, Reports and books.	Review of literature
			BPM and SDMHO BPHCs	Informal Discussions

As discussed in the above table the data has been collected primarily through Semi-structured interviews and informal discussions. The interview Schedule is the primary tools of data collection. For this study, the researcher has developed two different interview schedules for two different categories of respondents. First interview

schedule is used for beneficiaries taking services from Sub Centre and BPHCs. This interview schedule is consisting of three parts. First part covered the socio economic information such as age, caste, education, occupation, land holding, family income. The second section covered the nature and types of services offered by BPHC and the last part of schedule covered the perception of beneficiaries towards the services of BPHCs. Another Interview Schedule was used to know the role of ASHA in the delivery of health services to the beneficiaries. Most of the questions in both the schedules were close ended and in some cases open ended questions were also used. In the present study, interview guide was also used to collect information about the role and intervention of panchayat members and ANM in governing BPHC. Further, the study used interview schedule for having discussion with SDMHO and BPM regarding the challenges faced by them in governing BPHC. After formulation Interview schedule was pre-tested and was being modified as per the suggestion of SDMHO, Block Program Manager (BPM) and District Program Manager (DPM) of NRHM. Most of the open-ended questions were pre-coded after pre-testing the Schedule. Then the Schedule was structured.

3.9 Methods of Data Collection

In this study both qualitative and quantitative methods were applied. After planning and formulating the research design, data were collected from the patients taking services from BPHCs at their respective sub Centres. Beside this, primary data was also collected from ASHA, ANM, BPM, and SDMHO and from GP members. Semi-Structured interview and informal discussion was used to gather information based on the objectives of the present study. All relevant secondary information were collected from different sources like District Health Mission and joint director office, Cachar, Zilla parishad office of Cachar district, Directorate of Census, offices of eight respective BPHCs selected for the study. Effort was made to obtain correct answers from the respondents by explaining them each and every point in detail.

3.10 Analysis and Interpretation of Data

In the present study, qualitative and quantitative both kind of analysis were done. For first objective data were discussed qualitatively. Again for the second, third and fourth objectives, quantitative analysis were made. Initially the available data were recognized to develop a common framework for examining the same. The data, those were possible to code were identified and grouped from each interview schedule. Then data have been processed and interpreted through simple cross tabulation with frequency to understand the socio-economic condition, nature and types of services and perception of patients towards the services. Under the fifth objective both qualitative and quantitative analysis was made for the data pertaining to the role and intervention of grassroots stakeholders like PRI, ANM and ASHA. In the sixth objective, qualitative analysis was made to collect data related to the challenges faced by BPHC in governing its activities.In the present study, Secondary data has been analysed carefully and purposively by the researcher in order to strengthen the background of the study and for better interpretation of primary data.

3.11 Ethical Concerns:

To avoid any intended or unintended harm to the respondents

a) The present study will make attempts to keep the Information confidential.

b) Informed Consent has been sought from every respondent.

c) The information will be used exclusively for research purposes.

3.12 Limitations of the Study:

No study is free from limitations. The present study too has got certain limitations. This study is limited only in Cachar district of Assam. Besides, in this study, Mother and Child Health care services has been considered. Though NRHM has numerous other components but the present study has put its extensive focus on the Reproductive and Child Health care aspect of NRHM exclusively. In that regard multiple other components are not adequately emphasized upon, however keeping in mind the time and resource constraints of the Ph.D level study apart from the purely

academic nature of investigation these limitations also highlight the beauty of this study in terms of its precision, theoretical insight and further implications for research and study.