

CHAPTER-III

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Research methodology is the most important section of the research study, which enables the researcher to get a blueprint for research undertaken by him. This is a systematic procedure by which researcher starts from identification of a problem to its final conclusion. Research is the systematic investigation and study of materials and sources to establish facts and reach the new conclusion, so it shapes people's understanding of the world around them. "Research methodology is the systematic, theoretical analysis of the methods applied to a field of study. It comprises the theoretical analysis of the body of methods and principles associated with a branch of knowledge (Irny & Rose, 2005)."

Research methodology deals with a range of ways to make the most out of solving key research problems. It is a composite of philosophies, ideals, and foundations that drive the actions, the methods that will be used.

This chapter deals with hypotheses, objectives, operational definitions, area of study, research approach, research design, universe and sampling procedure, sampling technique, tool used, collection of data and analysis of data etc.

3.2 HYPOTHESES

In research, a hypothesis is a suggested explanation of phenomena. It is usually considered as a principle instrument in the research. Its main function is to suggest new experiments and observations. Hypothesis reflects upon the causal relationship between two and more variables and is usually generalized as a tentative statement the validity of which has to be tested during research.

H1: The mother's education affects the religious practices that are performed after the birth of baby.

H2: The home remedies for the neonate are positively associated with mother's level of education. .

H3: The mother's education affects the time of baby should be given breast milk.

H4: The mother's education is positively associated with breastfeeding to the baby.

H5: The massaging practices for the neonate are directly related with mother's education.

3.3 OBJECTIVES OF THE STUDY

The general objective of the study is to focus upon the study of newborn care with special focus on community practices among married women. The specific objectives of the study are as under:

- To know the socio-demographic profile of respondents.
- To know the knowledge, attitude, and practices of the community regarding newborn care among mothers.
- To identify the common behaviour related to newborn care in the community.
- To know about traditions, local practices, customs, the relevant terminology used regarding newborn care among mothers.
- To make recommendations for such programme and strategies that can work as the catalyst in reducing IMR in the slum areas.
- To find out the space wherein professional social worker can discharge their duties in light of the roles assigned to them.

3.4 OPERATIONAL DEFINITIONS

For the purpose of this study:

- **Newborn care** refers to the care given to the baby by her mother since birth till one year. It comprises immediate care after birth, Breastfeeding, Immunization, and Home Remedies.
- **Knowledge** refers to the level of understanding about newborn care by mother.

- **Attitude** refers to the feeling or opinion about newborn care on the part of mother.
- **Community Practices** refer to the activities which are undertaken by the mother in relation to the newborn care.
- **Mother** refers to a woman who is married and had 0-1 year neonate.

3.5 AREA OF STUDY

The present study has been conducted in Mawaiya urban slum area of Lucknow city.

3.5.1 ABOUT THE CITY OF LUCKNOW

Lucknow is the capital city of Uttar Pradesh. It has always been a multicultural city. Lucknow district has the second highest urban population (over 66%) in the Uttar Pradesh. Also, Lucknow city is one of the six million plus cities of the State. This metro city is the administrative headquarters of Lucknow District and Lucknow Division. The high rate of urbanization is attributed to its administrative, educative, trading, tourism and business based economic activities. Lucknow is a fascinating amalgam of scenic beauty, old historic city, and modern urban planning. Courtly manners, poetry, music, and fine cuisine patronized by the Persian-loving

Shia Nawabs of the city are well known amongst Indians and students of South Asian culture and history. Lucknow is popularly known as the City of Nawabs. It is also known as the Golden City of the East, Shiraz-i-Hind and The Constantinople of India.

3.5.2 LUCKNOW DISTRICT

As per census 2011, the urban population of Lucknow district is 3,037,718 which are over 6.8 percent of the total state's urban population. About 66 % population of Lucknow is urban. The urban sex ratio is 910 females per 1000 males. The average literacy rate in Lucknow urban is 84.1 percent, 87.3% for males and 80.5% for females.

Table No. 3.1: Lucknow District and Lucknow Urban in Census 2011

Description	Lucknow District 2011	Lucknow Urban 2011
Actual Population	4588	455 3
Male	2407	897 1
Female	2180	558 1
Population Decadal Growth Rate	25.8	30.9
Sex Ratio (Per 1000)	906	910
Child Sex Ratio (0-6 Age)	913	902

Source: 2011 census (P)

Table No. 3.2 Demographic profile of Lucknow City

Total Population of city (in lakhs)	2817105	<i>Source: Census 2011</i>
Slum Population (in lakhs)	1097110	<i>Source: RSAC</i>
Slum Population as percentage of urban population	40.20%	
Number of Notified Slums	610	<i>Source: DUDA</i>
No. of Slum Households	2,26,400	<i>Source: RSAC</i>

Source: www.census2011.co.in/city.php

3.5.3 HEALTH INFRASTRUCTURE

Unlike in the rural areas, where the health department has a wide network of primary health care facilities providing reproductive and child health services, the urban slums lack is basic health infrastructure and outreach services. Thus, they are often bypassed even by national programmes providing immunization, safe motherhood and family planning services. The sparse health coverage provided by health facilities like urban family welfare centers, health posts, and maternity homes in cities is used more for emergencies and curative services. Often these facilities are far from their service area,

poorly staffed, with inadequate space and supply of medicines and equipment. Urban local bodies like municipal corporations and Nagar panchayats are also expected to provide health care, but resource scarcity restricts them to only providing sanitation services. NGOs and private trusts are also few and their services far from satisfactory. In the present study area of research, following scenario emerges in respect of health facilities available:

Table No. 3.3 Health Facility in Mawaiya slum

Name & Type of Facility	Managing Authority	Location of Health Facility	Population Covered by the Facility	Services Provided	Human Resources available
Urban Family Welfare Centre, Naka	State Health Department	Harbhaj Ram Kripa Devi Trust, Naka, Lko.	50000	FP, Counselling, OPD, Immunization	MO (MBBS)-1, H.S. (M)-1, H.S. (F)-1, H.W. (M)-1, UDC-1, LDC-1, Partti. Sweeper-1

As per above table, most of the mothers get health services from Harbhaj Ram Kripa Devi Trust Hospital, Naka, Lucknow which comes under state health department. This hospital covers around 50,000 urban slum populations. The hospital is equipped with the facility of family planning, counseling, OPD (Out Door Patient) and immunization services.

3.5.4 NEWBORN SURVIVAL IN URBAN SLUM

Urbanization is spreading rapidly throughout the developing world. Slums in urban areas pose special health problems due to poverty, overcrowding, and unhygienic surroundings of an environment, lack of proper healthcare and existence of the organizational infrastructure. The main reasons for newborn mortality are sepsis, asphyxia and perinatal prematurity, home deliveries, late recognition of neonatal diseases, delay in seeking medical help and inappropriate treatment for newborns. Measures to reduce child mortality in newborns should focus on urban health education; improve the traditional practice of childbirth and institutional birth, and to ensure the quality of care in the perinatal period. The success of a comprehensive health strategy would require planned health infrastructure, strengthen and unify the existing health care program and facilities; formation and development of a referral system with the active participation of the community.

3.6 RESEARCH APPROACH

In order to quantify the data and generalize the results from collected sample, quantitative research approach has been used.

3.7 RESEARCH DESIGN

The design is the structure of any scientific work giving direction and systematizing the research.

The Research Design refers to the overall strategy that is chosen to integrate the different components of the study in a coherent and logical way, thereby, ensuring effective addressing of the research problem. It constitutes the blueprint for the collection, measurement, and analysis of data.

Research Design is the master plan specifying the methods and procedures for collecting and analyzing the needed information. It is the planning of various phases and the procedure relating to the formulation of research efforts. Research design plans to be observed, how it is to be observed, where it is to be observed, how to record the

observation, how to analyze and generalize them. Research design facilitates on the smooth running of the research operations, making research more efficient, and yielding out more information with minimum efforts, time and money. A research design is basically an outline for doing research work. It generally describes how the research was carried out. It details the various procedures which are necessary for obtaining the data and information to solve pre-defined research problems. The research design outlines the basic foundation on which the present research is carried out (Malhotra, 1999).

Descriptive research studies are designed to obtain information concerning the current status of a given phenomenon. They are concerned with the existing conditions or relationships, prevailing practices, current beliefs, points of view or attitudes, the process that is going on and their effects and the developing trends. In descriptive research, the subject is being observed in a completely natural and unchanged natural environment. A researcher is interested in describing a particular situation or phenomena under his study. Descriptive research design covers the characteristics of people, materials, socio-economic characteristics such as their age, education, marital status, and income etc. The qualitative nature data is mostly collected from knowledge, attitude, beliefs, and opinion of the people.

It determines the nature of a situation as it exists at the time of the study. The aim of descriptive research is to describe "what exists" with respect to variables or conditions in a situation

Diagnostic research is concerned with discovering and analyzing the causes of a problem. It examines variables leading to diagnose the causes of the problem (Gracious T., 2010).

Here researcher wants to know about the root causes of the problem. He describes the factors responsible for the problem. He describes the factors responsible for the problematic situation. It is a problem-solving research design that consists mainly:

1. Emergence of the problem
2. Diagnosis of the problem
3. Solution to the problem

4. Suggestion for the problem solution

In the present study, the descriptive cum diagnostic research design has been used, keeping this in mind it's usefulness in describing a particular situation or phenomena and also knows the root causes of the problem.

3.8 UNIVERSE AND SAMPLING

The population or universe represents the entire group of units which is the focus of the study. The universe consists of all survey elements that qualify for inclusion in the research study. The precise definition of the universe for a particular study is set by the research question, which specifies who or what is of interest. The universe may be individual, group of people, organizations, or even objects.

The Universe is a collection, population, or set of entities, items, or quantities (grouped together on the basis of common or defining characteristics or features) from which a representative sample is drawn for comparison or measurement.

In present study, slum areas of Lucknow city are the universe. Among these slum areas, Mavaiya slum area has been purposively selected for the study. This comprise of five Anganwadi centers namely mavaiya-1 (kasai bada ke pass), mavaiya-2 (chouraha ke pass), mavaiya-3 (bhojpuri akhada ke pass), mavaiya-4 (nale ke pass crossing ke pass), mavaiya-5 (sharma aata chakke ke bagal mein) with the help of Anganwadi workers, researcher identified the sampling units i.e. the mothers who had 0-1 year neonate.

3.9 SAMPLING TECHNIQUE

Sampling is an act, process or technique of selecting a representative part of the population for the purpose of determining parameters or characteristics of the whole population. Sampling is also the process of selecting units (e.g. people, organization) from a population of interests so that by studying the sample we may fairly generalize our results back to the population from which they were chosen.

Sampling design is a procedure/technique that helps researchers in choosing samples from the desired population. Kothari (2004) stated that sampling is a very important

process in research and that the sampling design should be determined before gathering data. In research, two types of sampling technique required i.e. probability and non-probability sampling. However, probability sampling does not assure a representative sample of the population chosen systematically (Tayie, 2005). So, to meet the research objectives of this study, non-probability sampling technique i.e. purposive sampling has been used. The main reason to select purposive sampling technique is to focus on particular characteristics of a population that are of interest to the researcher. Though, the procedure for deciding prospective respondent who was based on purposive sampling, care was taken to make the sample representative i.e. to incorporate the respondent with varied backgrounds in the study.

3.10 SAMPLE SIZE

In research studies, the determination of sampling size is most important. This present study is based on 200 sample size. 200 women who are having one-year-old neonate have been selected for the present research work.

SCHEMATIC REPRESENTATION OF THE STUDY

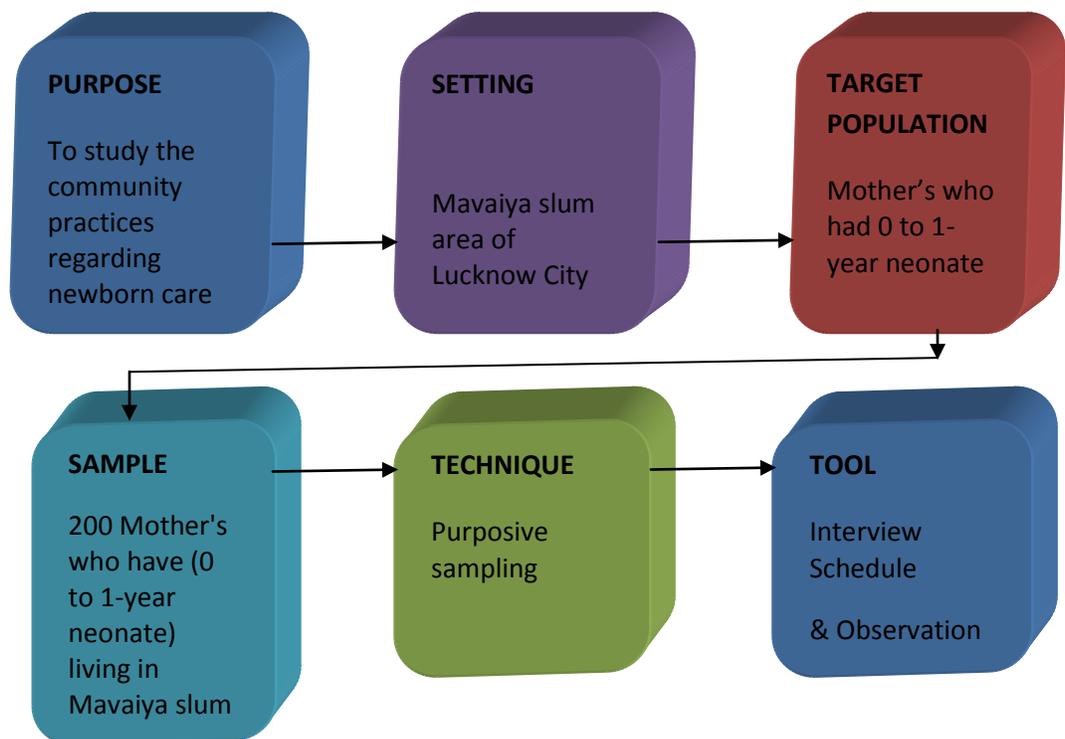


Figure 3.1: Schematic Representation of The Study

3.11 SOURCES OF DATA

For the purpose of study both the documentary and field sources of data have been used. The field sources include the data collected by the researcher by interviewing the respondents through the interview schedule. The documentary sources include the data collected by the researcher from the available literature in its various forms e.g. the reports, research, articles, magazines etc.

3.12 TOOLS OF DATA COLLECTION

Data required for the research study have been collected by using interview schedule as a research tool on socio-demographic factors, delivery practices, knowledge, attitude, and practices regarding newborn care, danger signs of the sick newborn as well as traditional practices. Researcher's own observation was also counted during collection of data from the field.

3.12.1 INTERVIEW SCHEDULE

The researcher has prepared interview schedule for the purpose of collection of primary data. The interview schedule has been divided into three sections namely; socio-demographic profile, ante-natal care and delivery care, newborn care knowledge, attitude, and practices. Socio-demographic profile section covers personal details of the respondents like age, education, education status, living standards. Antenatal care and delivery care section covers registration during pregnancy, TT immunization and nutritional status, delivery place, type and delivery practices in the community. Newborn care practices section covers the knowledge, attitude, and practices regarding newborn care.

3.13 PILOT STUDY

A pilot study is a small scale preliminary study conducted in order to evaluate the feasibility, time, cost, adverse events and effect size in an attempt to predict an appropriate sample and improve upon the study design prior to performance of the full scale. As a standard scientific tool for soft research, it allows scientists to conduct a

preliminary analysis before committing to a full- experiment. A pilot study is an investigation of small sample size by which we check the appropriateness of tool i.e. inconsistencies if any in the research tool (herein Interview Schedule) are removed. The researcher conducted the pilot study in the selected slum area of Lucknow city.

3.14 PROCESSING OF DATA

Processing of the data involves editing, coding, classification, and tabulation. Editing of data ensures completeness, error-freeness, readability and worthiness of being assigned a code. Coding of data is translating answers into numerical values. It is necessary for efficient analysis and through it, the several replies may be reduced to a small number of classes which contain the critical information required for analysis. Coding decisions should usually be taken at the designing stage of the questionnaire. Coding is the process/ operation by which data/responses are organized into classes/ categories and numerals or other symbols are given to each item according to the class in which it falls.

In the process of tabulation, the data are put together in some kinds of tables and may undergo some other form of statistical tools. It is the process of summarising raw data and displaying it in compact form for further analysis.

The data collected by interviewing the respondents through the structured interview schedule have been suitably edited, coded, classified and tabulated.

3.15 ANALYSIS AND INTERPRETATION

The utility of a study depends upon the proper analysis of collected information through various research methods. Analysis of data refers to analyzing the collected information in its spectral possible dimensions. Interpretation is the process of making sense of numerical data that has been collected, analyzed and presented. A common method of assessing numerical data is known as statistical analysis. Interpretation refers to the task of drawing inferences from the collected facts after an analytical and or experimental study.

3.16 STATISTICAL TREATMENT

In view of the nature of the study, simple statistics percentages and the chi-square test have been used to determine the utilization of various components of the newborn care practices among mothers who live in the urban slum area of Lucknow city.

3.17 PRINCIPLES OF SOCIAL WORK APPLIED

The researcher has used the basic principles of social work during their research work. These principles are:

- **The principle of Acceptance:** Social work researcher accepts the client (respondent) as he/she is and with all his/her limitations. The client is also taken into confidence to accept the social work researcher because he/she is the one who is helping him/her to overcome the problem situation.
- **The principle of Individualization:** This principle believes that no two persons are alike in all qualities and traits. The problem of two persons may be the same but the causes of problems are different. Therefore, each individual client (respondent) should be treated as a separate entity and for solving their problem complete information is required.
- **The principle of Communication:** Communication is a two-way process. There must be a proper communication between social work researcher and the client (respondent). This helps, in a proper understanding of each other. By the communication, social work researcher can understand the client's problem.
- **The principle of Self-determination:** This principle emphasizes the client's right to self-determination. Because every individual has right to assess that what is good for him/her. In another word, social work researcher cannot impose decision or solution on the client.
- **The principle of Confidentiality:** This principle applies to the preservation of the secret of the information gathered by the concerning client (respondent). The

researcher also convinces the respondent not to share with anyone the confidential nature of information's without his/her consent. In case if it so requires.

- **The principle of Non-judgmental Attitude:** The non-judgmental attitude is the quality of establishing a relationship with the client. It implies taking decision open mindedly that free of any bias on the grounds of caste, creed, color, education, religion, status etc. of the respondents.

3.18 LIMITATIONS OF THE STUDY

This study has been basically based on primary data directly gather from the selected respondents. As a result, responses to some community practices and the impact of health facilities were not accessed. TBA is also a key part of delivering the baby that has been not interviewed. As a piece of social work research, a process of intervention should have been included in the study. However, it couldn't be done in view of the nature of the study. The study have been limited to 200 respondents may not be able to give extensive and exhaustive results relating to the topic of research. The study is confiding to urban slum area and the sample is chosen from this urban area only. It does not cover the rural aspect. The sample may not be completely representative because the study is based on only 200 respondents (mother's who have 0-1 year neonate). The findings of the study can be challenged by any prospective researcher who carries out similar nature of research with more wide sample and locale.

3.19 ETHICAL CONSIDERATION

This study has been conducted in a slum area of Lucknow City. The women who had one year child were the respondents of the study. The main focus of the study was to know the impact of community practices on newborn care among mothers. The Ethical clearance was obtained from the departmental research committee, University of Lucknow. The Department of Social Work has been also given the consideration regarding the research topic. A verbal informed consent was taken from the respondents, and also discussed the study purpose, benefits, and possible outcomes. A study

participant was assured that the information which has been collected by the researcher will be kept confidential.

CONCEPTUAL FRAMEWORK FOR NEWBORN CARE AMONG MOTHERS

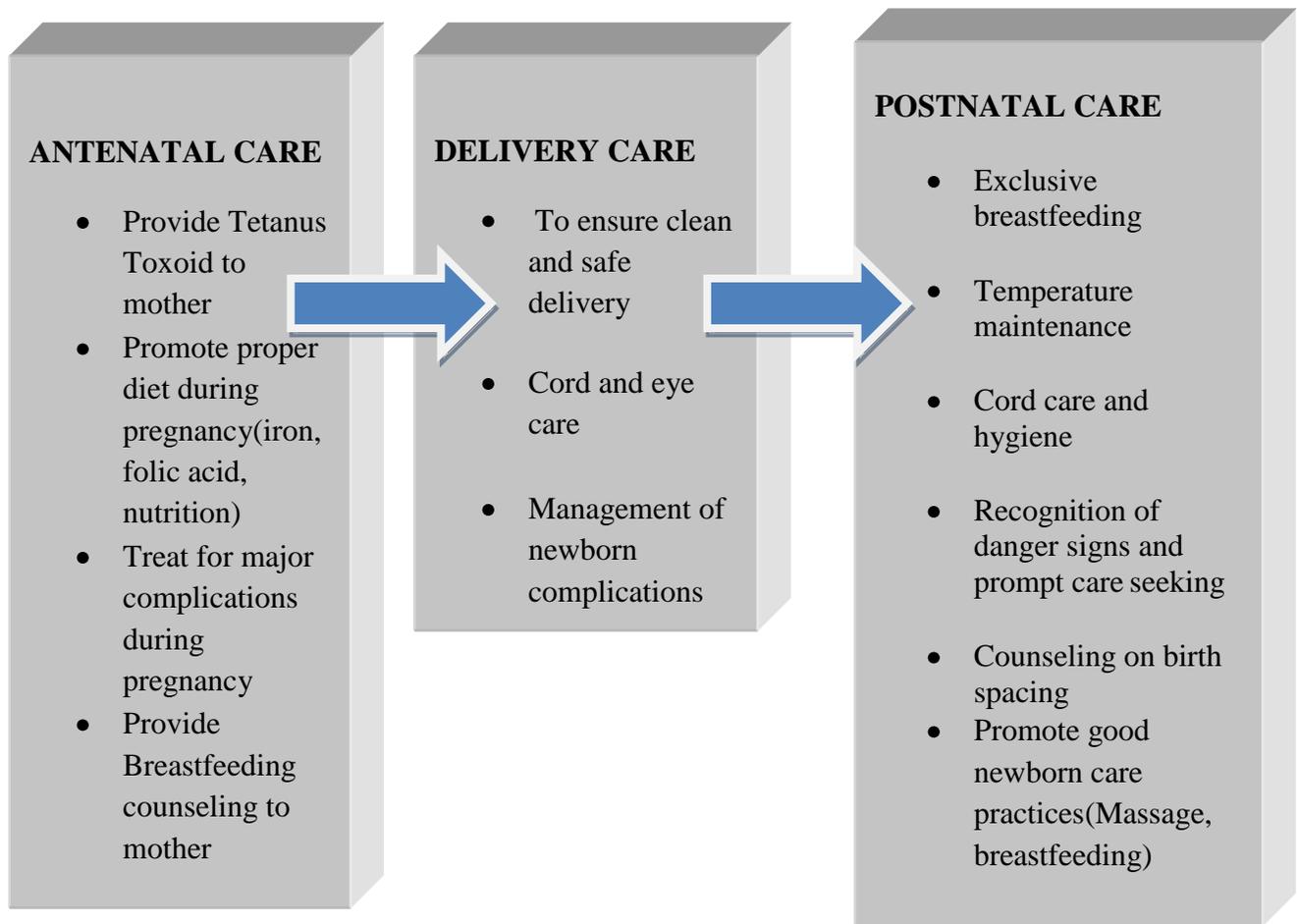


Figure 3.2: Conceptual Framework for Newborn Care

The above-given framework explores Newborn care with three major aspects that influence the infant mortality rate and better health outcomes for the child. The three major aspects that influence newborn care are:

- (i) Antenatal care (ii) Delivery care (iii) Postnatal care

These three aspects are interconnected with each other and make an impact on the neonatal health outcomes, which in turn directly or indirectly influences the newborn care, the mother should know about these aspects so that during pregnancy and delivery care infant mortality rate can be reduced.

According to above-outlined framework, listed below are the variables which have been taken into consideration to carry out the analysis according to the stated objectives:-

1. ANTENATAL CARE

- Provide Tetanus Toxoid to mother
- Promote proper diet during pregnancy(iron, folic acid, nutrition)
- Treatment for major complications during pregnancy
- Provide Breastfeeding counseling to mother

2. DELIVERY CARE

- To ensure clean and safe delivery
- Cord and eye care
- Management of newborn complications

3. POSTNATAL CARE

- Exclusive breastfeeding
- Temperature maintenance
- Cord care and hygiene
- Recognition of danger signs and prompt care seeking
- Counselling on birth spacing
- Promote good newborn care practices(Massage, breastfeeding)

In line with the above conceptual framework, the present research study attempted to examine the newborn care community practices among mothers through the linkages in antenatal care, delivery care, and postnatal care. The knowledge of these aspects would be helpful in gaining effective health services and reducing infant mortality.

In this study, Antenatal care includes Tetanus Toxoid to the mother, diet during pregnancy (iron, folic acid, and nutrition), and treatment for major complications during pregnancy and counseling to mother about breastfeeding. Delivery care includes clean and safe delivery, cord and eye care and management of newborn complications. Postnatal care includes exclusive breastfeeding, temperature maintenance, cord care and hygiene, recognition of danger signs, counseling on birth spacing and to promote good newborn care practices (Massage, breastfeeding, home remedies).

The framework is represented by the chain of three boxes containing antenatal care, delivery care, and postnatal care. These boxes represent information that may be very useful for mothers in order to care for the newborn in the community. This framework can be used to modify the behaviors of mothers regarding newborn care and processes within a healthcare delivery unit to improve neonatal health outcomes. The knowledge and attitude of mothers regarding newborn care can improve the health status of a newborn in the urban slum community.