

CHAPTER-III

RESEARCH METHODOLOGY

A proper '*Modus Operandi*' or 'Methodology' plays a very significant role in research work. The systematic methodology of a research will draw a meaningful conclusion. An acquaintance of conceptualization definitions of the concepts used in the study, *locale* of investigation, research design, sampling design, types of data used in the study, tool of data collection, sources of data, method of data collection, etc. are discussed in this chapter. For any research work, the 'Methodology' is the back bone.

Title of the study:

The Performance of Accredited Social Health Activists (ASHAs) in Mother-Child Health Care (MCH) Services with Special Reference to Ernakulam District, Kerala.

Statement of the Problem and *Rationale* of the Study:

The Millennium Declaration adopted by United Nations in September 2000 reaffirmed the commitment to gender equality in overall sustainable development. The maternal and child health goals are particularly important. Maternal and reproductive health status have an important influence on child health outcome. The Millennium Development Goals to improve maternal health reinforces decades of international commitment and national efforts to address the problems associated with reproductive health, safe motherhood and family planning. The central and state governments have set goals more ambitious than MDGs.

Launched on 12th April 2005, the NRHM is an ambitious equity oriented initiative of the government of India. Global experience shows that women, even when briefly trained can successfully increase the coverage of health care, particularly if they are locally recruited and made accountable to the local clients (Global Equity Initiative, 2004). The introduction of ASHA, is thus an important

and welcome step. The NRHM envisages that every village will have an ASHA chosen by and accountable to the Panchayat. ASHAs are women health volunteers working on MCH (Mother-Child Health care services) under NRHM, trained to give proper care for mothers & children to avoid the morbidity. It is essential to investigate the role performance of ASHAs who act as link between the community and public health system. The present study on “ The Performance of Accredited Social Health Activists (ASHAs) in Mother-Child Health Care Services with Special Reference to Ernakulam District, Kerala” has been taken up to analyze the health status of mothers & children in Kerala and role of ASHAs in providing MCH services.

The number of Low Birth Weight children & lifestyle diseases are also high in Kerala. The LBW children and pre-term children have more chance to get affected with morbidity due to their less immunity compare with normal children and they have more chance to affect with mother’s morbidity during pregnancy and delivery. Proper care given to the mother at Antenatal, Natal and Post-Natal stages by doing proper checkup and measures in order to the particular environment of Kerala’s morbidity can be avoided morbidity level among mothers and children. ASHAs are trained to give proper care for mothers & children to avoid the morbidity. She has given training to advice expectant mothers on nutritious diet that to avoid low birth weight and other abnormalities both for mother and children. The ASHA has to make aware mothers and their families on the measures to avoid all type of morbidities related to pregnancy, delivery and postnatal periods and child care. The present study is an effort to analyze the performance made by ASHA to fulfill her role in Mother-Child health Care Services. And it also analyses the fulfillment of MCH indicators in the service area of tribal field and in the non-service area of tribal field.

The deprivation is also higher in Ernakulam district for the SC&ST people in Kerala. ASHA will be trained to work as an interface between the community and public health system. Selected ASHA will be given capacity building training to enhance her effectiveness. ASHA have some roles and responsibilities. ASHA

is mainly supposed to work for mothers & children. They have to visit homes of their beneficiaries and to provide the services.

In the scenario of high morbidity in Kerala, the researcher has made an attempt to analyze the health of Mothers who have children in the age of 0-5 years, expectant mothers and children in the age of 0-5 years as well as the Mother-Child Health Care Services provided by NRHM and the role played by ASHA in the outreach of MCH services among them.

The number of Low Birth Weight (LBW) children & lifestyle diseases are high in Kerala. The LBW children and pre-term children have more chance to get affected with morbidity due to less immunity compared to normal children. Proper care should be given to the mothers during Antenatal, Natal and Post-Natal stages which will save the mothers and children from morbidity.

In the above context certain research questions crop-up

Research Questions

- What is the background of ASHA?
- Are the ASHAs given induction training?
- What are the types of services rendered by ASHAs in the study area?
- Do the ASHAs create awareness among mothers and their families on all type of morbidities related to pregnancy, delivery and postnatal periods and child care?
- Are the ASHAs involved in preparation of village health plans?
- Are the ASHAs given performance-based incentives?
- What is the percentage of population covered by ASHAs in rural, urban and tribal areas?
- Do the ASHAs fulfill their roles & responsibilities in MCH services?
- To what extent ASHAs intervene with the health problems faced by mothers and children in the study area?

- What are the expectations of mother beneficiaries (both the expectant mothers and mothers with children in the age of 0-5 years) on ASHA?
- What are the problems faced by ASHAs?

To analyze the above questions, the study was undertaken in three health blocks of Ernakulam district with the following objectives:

Objectives of the Study:

1. To analyze the status quo of ASHAs in Kerala.
2. To investigate the health problems faced by mothers (expectant mothers and mothers having children of 0-5 years) and children (0-5 years).
3. To study the problems faced by mothers in accessing the health services delivered through ASHA in the study area.
4. To analyze the role performance and role expectations of ASHAs in the study area.
5. To investigate the problems faced by ASHAs in the study area.
6. To suggest measures for the better performance of ASHAs in mother-child health care services.

Hypothesis of the study

1. There is no significant difference with regard to the performance of ASHAs in Mother-Child Health care services between Urban and Tribal areas.

Operational Definitions:

National Rural Health Mission: NRHM is a comprehensive health care programme which covers most of the disease control programmes and some preventive programmes under it and with a grass root level health volunteer or Accredited Social Health Activist (ASHA).

ASHA: A woman resident of the village who got trained to bring out the health care services into people or the one, who is able to link the people with govt. health care programmes.

Arogyakeralam: The National Rural Health Mission is functioning in Kerala with respect to its specialties in morbidities and social factors, known as 'Arogyakeralam'.

Mother-Child Health: The stage of well-being of mother and child during the Ante-Natal, Natal and Post-Natal periods and for the child, his/her health up to 5 years.

Expectant Mother: A lady from the stage of getting conceived to the moment before delivery.

Morbidity: It can be defined as the status of a person having a disease or diseases.

Ante-Natal Care (ANC): The pregnancy related health care services provided by a doctor or health worker in a health care institution or at home along with the concern and care from family side.

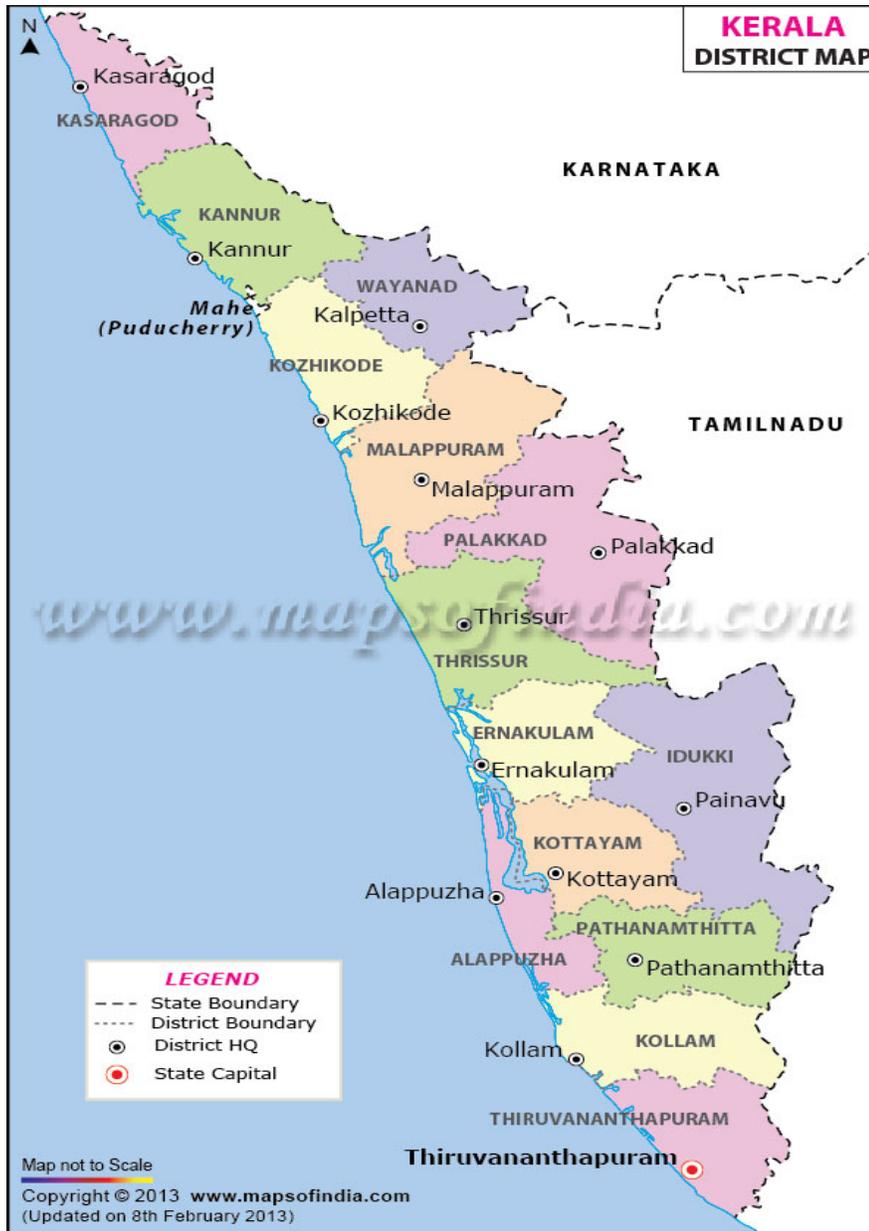
Delivery Care: The health care provided by a doctor or a trained person at delivery in a health care institution or at home.

Post-Natal Care (PNC): The health care provided by doctor or a health worker after delivery for the mother and child along with the concern and care from family side.

Performance of ASHAs: The execution of assigned duties by ASHAs.

Research Design: The study is based on descriptive design and was conducted in Ernakulam district of Kerala which was purposively selected for the study. The study has adopted Multi-stage random sampling.

Locale of the Investigation: The State Kerala; -shows the study area, Ernakulam District



Source: www.mapsofindia.com



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The Peripheral Characteristics of Kerala: It is a tourism state, especially health tourism. Kerala is the first state in India which adopted 'tourism' as a business. The 'Ayurveda' based health tourism of Kerala is very famous in all around the world. The total area of the small beautiful state is 38,863sq.km. Western Ghats at the east, Arabic ocean in the west, the state- Karnataka at north-east and Tamil Nadu at south-east are the borders of Kerala. Thiruvananthapuram is the capital. The literacy rate is 93.91% and population is 3, 33, 87,677 (Census Report, 2011). There are 14 districts with 5 city corporations, 60 municipalities, 152 block panchayats & 978 gram panchayats. Kerala is one of the state in India at where gets good rain. It determines & controls the ecosystem of Kerala. The state is blessed with forty four rivers and the biggest of them is 'Periyar'. The state has thirty four backwater resources too. But nowadays, the water resources are faced by the problem of pollution from

industries. The river 'Periyar' used to show colour change frequently (Anju A. Kumar et.al. 2011). The state's 48% is filled with hill stations.

Ernakulam- The peripheral characteristics: It is one of the districts in Kerala. Ernakulam district formed on 1st April 1958 carving areas of erstwhile Travancore-Kochi-Malabar Kingdoms. Thrissur district at north, Idukki district at east, Kottayam & Alappuzha at south part and Arabic Ocean at west are the borders. The district consists of the mainland Ernakulam, the man made Willington Island, Mattanchery, Fort Kochi, world's most populous area of Vypeen Island, Bolghatty Palace etc. It is the business capital of Kerala. Most of the industries are functioning in the coast of Periyar. The river 'Periyar' is flowing through all the Taluks except Muvattupuzha Taluk. Hence the major water resource of the district is the river 'Periyar'. There is one corporation (Kochi) and eleven municipalities. Average rainfall yearly is 3431.8 mm and 139 rain days.

Sampling Design: Among the 29 states in India, Kerala was selected due to the high morbidity level. Among the 14 districts in Kerala, Ernakulam district was selected due to high level of morbidity. Among the 19 health blocks in Ernakulam district, three blocks namely, Vengoor (rural), Angamaly (urban) and Varappetty (tribal) were selected based on random sampling. All the ASHAs in the selected PHCs/CHCs in each health block, Kodanad PHC-rural, Angamaly CHC-urban, Kuttambuzha PHC-tribal, were included for the study based on census method. The selection of the beneficiaries was done based on stratified random sampling. On the whole 594 respondents were selected for the study.

There were 14 tribal settings in total and it had a population of 4148 with 1733 houses. There were 360 mother beneficiaries (both pregnant mothers and mothers having children in the age of 0-5 years) in total. Only 62 of them could receive the services of ASHAs. They had to travel more than one hour for a hospital and they were facing transportation problems due to the wild animals, lack of vehicles and lack of proper roads into the interior places of tribal settings. The 62 non-beneficiaries of ASHAs were also taken as respondents for a

comparison of the health status of Mother and Child between the beneficiaries of ASHAs and non-beneficiaries of ASHAs.

The study is based on Multi-stage random sampling.

Stage	Particulars		Reason
Stage I (State)	Kerala		High morbidity state
Stage II (District)	Ernakulam		High deprivation of SC&ST communities, high level of morbidity.
Stage III (Health Blocks)	Vengoor Health Block Angamaly Health Block Varappetty Health Block		Rural Health Block Urban Health Block Tribal Health Block (Randomly selected)
Stage IV (selection of PHC/CHC)	Rural- Kodanad PHC Urban-Angamaly CHC Tribal-Kuttambuzha PHC		Randomly selected
Stage IV (Selection of ASHAs)	All the ASHAs functioning in the study area	158 respondents in the Panchayat area (rural)	Census method
		17 respondents in the Municipality area(urban)	
		2 respondents in the tribal area.	
Sub total		177	
Stage V (Selection of beneficiaries)	10% from the total beneficiaries in rural and urban areas.	223- Sample size (2225 total respondents in the rural area.)	Stratified Random Sampling
		247-sample size (2465 is the total respondents in the urban area)	
	All the beneficiaries (100%) in tribal area (62 beneficiaries)	62-total beneficiaries of ASHA	Purposive sampling due to low number of respondents
	62 non-beneficiaries of ASHAs has taken in the no-service area for the	62 non-beneficiaries of ASHA	Purposive sampling to keep uniformity in sampling.

	comparative study for the tribal area.		
Sub total		594	
Total sample size		177+594=771	

Sampling Population

Area	Total population under the Health Block (ASHA)	Total Beneficiaries under the PHC/CHC	Sample
Rural	158	2225	223 (10%)
Urban	17	2465	247 (10%)
Tribal	2	62	62(100%)
Tribal (no-service area of ASHAs)	-	298	62(Equal sample has taken for the comparison of ASHA's beneficiaries and non-beneficiaries)
Total respondents	177		594

Sources of Data: The data have been collected from both the primary and secondary sources. Journals, books, reports, newspapers, magazines, government circulars & booklets collected from district office of NRHM and PHCs and websites constituted the secondary sources for the research data. The researcher made sure that the documents used for the study are genuine, reliable and pertinent. The primary sources of the data were ASHAs, Pregnant mother & Mother (having children in the age of 0-5 years) beneficiaries, PHC, CHC, Taluk Hospital, Anganwadis, Panchayat Office, Municipality Office, NRHM field staffs, officials of NRHM District and Head offices.

Tools used for Data Collection: Review of literature available on mother-child health and ASHAs from various journals and research reports were the sources of information helpful for the construction of tool. Two Interview Schedules, bearing on the objectives of the study were prepared. The first schedule was addressed to the ASHAs and it comprised of the items relating to their roles & responsibilities in mother-child health.

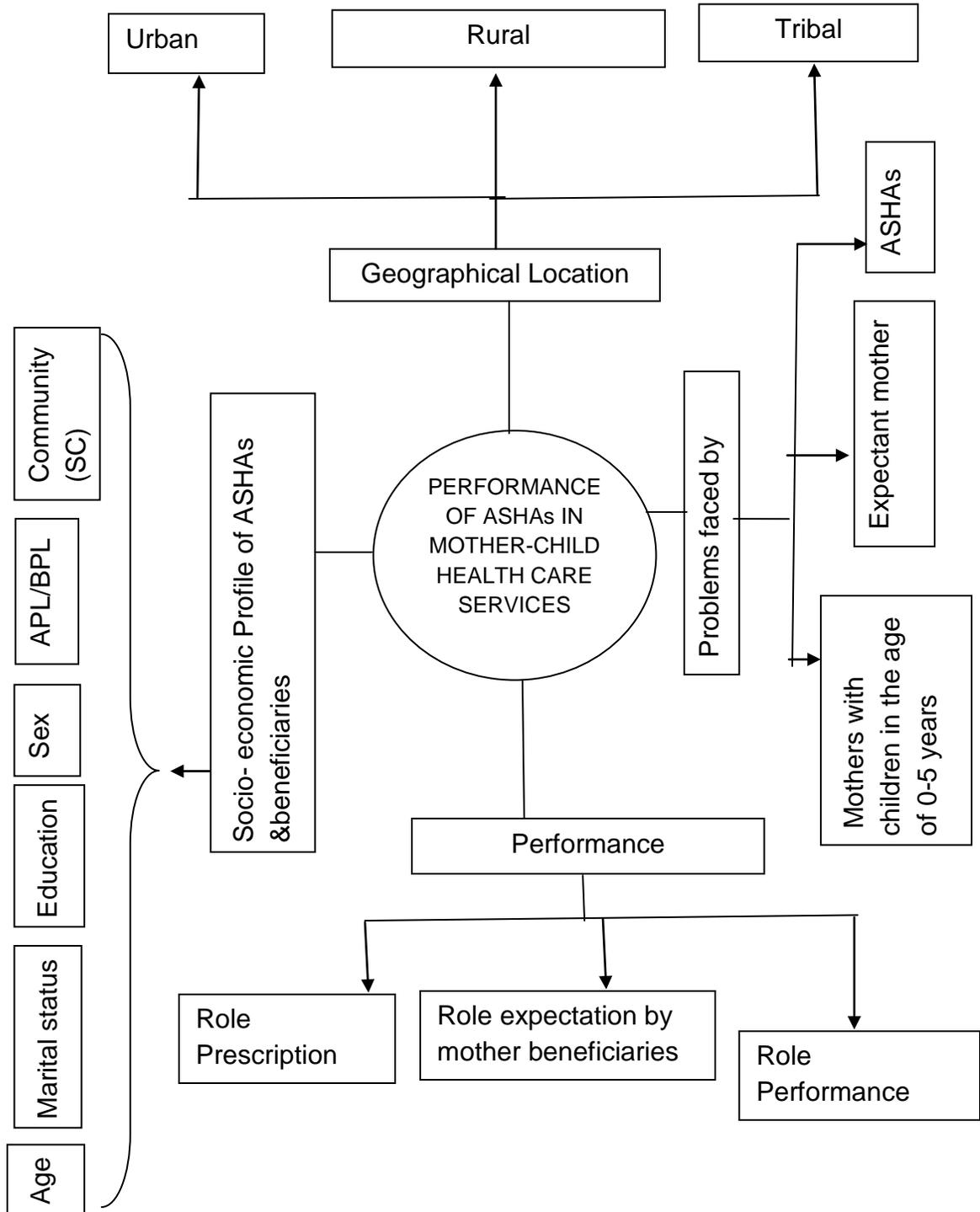
The second interview schedule addressed the respondents comprised of questions relating socio-economic profile of consisting of age, caste, religion, educational status, marital status, economic status, occupation and the health problems, health needs & services received from ASHAs etc.

Pre-testing of the Schedule: Pre-testing of the schedule was carried out with the 257 or 1/3rd of the total sample which enabled the investigator to identify those items which were ambiguous. The ambiguous items were deleted and the schedules were finalized. Test-retest method was used to find out the reliability of the tool.

Method of Data Collection: The data were collected by interviewing the selected respondents. The interview method was selected as it is the most suitable method for gathering first-hand information from mothers having children in the age of 0-5 years and expectant (pregnant) mothers. After identifying the respondents the investigator met them individually and explained the mode of data collection. A good rapport was built-up and mutually agreeable timings were fixed with the respondents for the interview.

Data Analysis: The collected data were analyzed with the technical tool 'SPSS 15.0' version.

ANALYTICAL FRAME WORK



Chapterization of the Thesis

The present study is organized into eight chapters as given below:

1. Chapter1 gives an overview of the National Rural Health Mission, Indian health system, Kerala health system-infrastructure, morbidity and a brief introduction of ASHAs.
2. Chapter 2 presents the reviewof Indian and international literature on mother-child health in India & Kerala. This chapter identifies the research gap and issues for investigation.
3. Chapter 3 presents the research design of the study.
4. Chapter 4 gives an account of Arogyakeralam & ASHA's role in MCH.
5. Chapter 5 features the socio-economic profile of mother respondents (expectant mother and mothers with children in the age of 0-5 years) and investigates the performance of ASHAs in rural, urban and tribal areas of selected districts.
6. Chapter 6 investigates the socio-economic profile of ASHAs, their roles & responsibilities in MCH, and the problems faced in the rural, urban &tribal areas of selected district.
7. Chapter 7 presents the findings, conclusion and suggestions to strengthen the role of ASHAs.