Utilization of the Maternal Health Services Provided By Primary Health Centers: A Study With Reference to Mulavukadu Panchayath



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Utilization of the Maternal Health Services Provided By Primary Health CentrEs: A Study With Reference to Mulavukadu Panchayath

Thesis submitted to St. Teresa's College (Autonomous), Ernakulam in fulfillment of the requirements for the award of the degree of Master of Arts in Sociology

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CERTIFICATE

I certify that the thesis entitled "Utilization of the Maternal Health Services Provided By Primary Health Centers: A Study With Reference to Mulavukadu Panchayath" is a record of bonafide research work carried out by Arunima Sanal Kumar, under my guidance and supervision. The thesis is worth submitting in fulfillment of the requirements for the award of the degree of Master of Arts in Sociology.

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DECLARATION

I, Arunima Sanal Kumar, hereby declare that the thesis entitled "Utilization of the Maternal Health Services Provided By Primary Health Centres: A Study With Reference to Mulavukadu Panchayath" is a bonafide record of independent research work carried out by me under the supervision and guidance of Dr. Sajitha Kurup. I further declare that this thesis has not been previously submitted for the award of any degree, diploma, associateship or other similar title.

Ernakulam

Date: 31/03/2023

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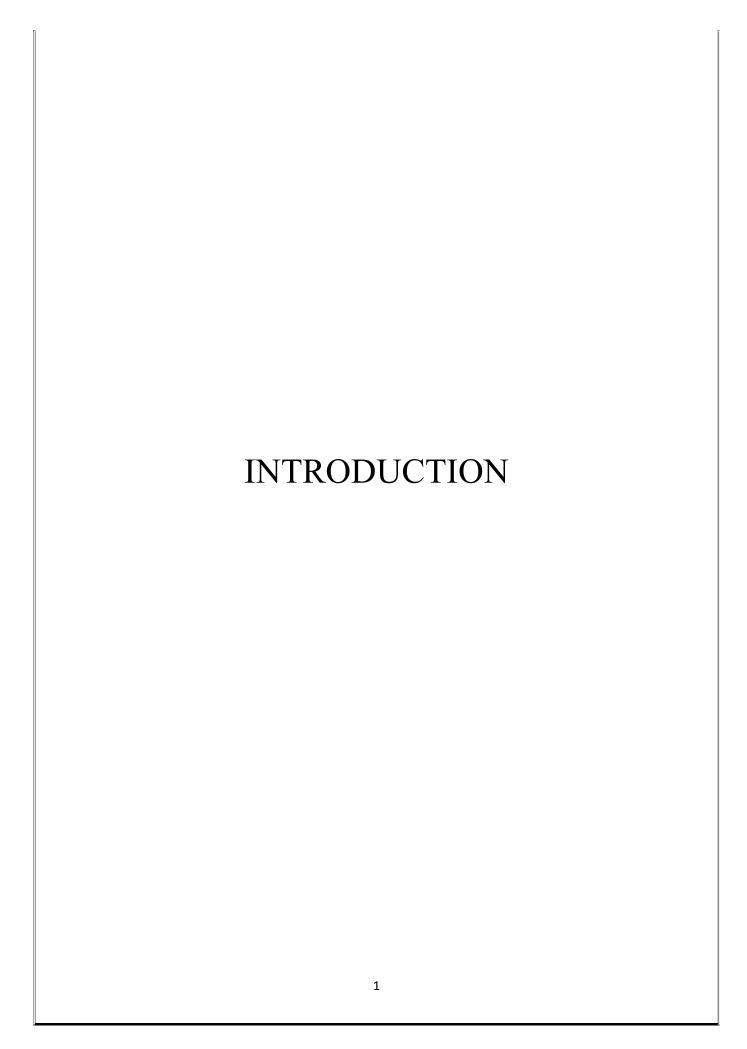
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Contents

Sl no.	Title	Page no.
1	Introduction	1-12
2	Review of literature	13-16
3	Methodology	17-20
4	Analysis and interpretation	21-56
5	Findings and conclusion	57-64
6	Bibliography	65-66
7	Appendix	67-72

List Of Figures

Figure no.	Title of the figure	Page no.
4.1	Age of the respondents	22
4.2	Religion of the respondents	23
4.3	Caste of the respondents	24
4.5	Occupation of the respondents	26
4.6	Economic category	27
4.8	Distance from PHC	29
4.10	Awareness about the services provided by the PHC	31
4.11	Awareness about the location of the PHC	32
4.13	Awareness regarding visitations from the PHC	34
4.15	Accessibility of the PHC	35
4.19	Effectiveness of services of the health workers	39
4.23	Immunization of babies	41
4.25	Vaccinations taken from PHC	44
4.27	Notification regarding the immunization schedule	46
4.29	Awareness about the nutrition services provided by PHC	47
4.33	Antenatal check ups	52
4.37	Problems faced by the patients	56



CHAPTER 1

INTRODUCTION

WHO defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (WHO,1978). Health of the population is really the base upon which all the happiness and all the power as a state depends upon. A healthy community is the foundation upon which an economically tenable society can be built up. Because unhealthy people cannot be expected to make any sustainable contribution.

Jean Dreeze and Amarthya Sen (1996) viewed health from two perspectives "health is wealth, also health generates wealth. The saying that health is wealth shows the growing significance of health. Health is valued on its own; it is the chief component of economic development"^[1].

Good health is an important aspect of a person's overall quality of life, and it can be influenced by various factors such as genetics, lifestyle, diet, and environment. Maintaining good health involves taking care of the body through proper nutrition, exercise, and hygiene, and managing stress, as well as seeking medical attention when necessary. Additionally, staying up-to-date on vaccinations and screenings can help prevent or detect health problems early on, allowing for prompt and effective treatment.

Maternal Health

Maternal and child health (MCH) care can simply be defined as the health care service given to mothers (especially women in their child bearing age) and babies. The targets for Maternal and Child Health are the women in their reproductive age groups, i.e., 15 - 49 years of age, babies, school age population and adolescents.

Maternal health refers to the health of women during pregnancy, childbirth, and the postpartum period. It is an important aspect of women's overall health and well-being, as well as a key factor in the health and survival of their children.

Pregnancy and childbirth can be a time of great physical and emotional stress for women, and it is important that they receive proper care and support to ensure the best possible outcome for both mother and baby. This includes access to pre-natal care, which can help detect and treat any potential health problems early on, as well as proper nutrition, exercise, and stress management.

During childbirth, it is important that women have access to skilled birth attendants and emergency obstetric care, as well as pain management options. After childbirth, women need support for their physical and emotional recovery, as well as for their role as new mothers. This can include access to family planning services, support for breastfeeding, and information and resources for infant care.

Improving maternal health is a crucial aspect of global public health and is a goal of many organizations and initiatives, such as the United Nations' Millennium Development Goals. Efforts to improve maternal health include increasing access to reproductive health services, improving health systems, and empowering women through education and economic opportunities.

All around the world, specifically in the developing countries, there is a rising concern and intensifying interest in maternal and child health care. This dedication towards MCH care had gained further strength after the World Summit for Children, 1991, which provided vital consideration and outlined crucial areas to be addressed in the allocation of Maternal and Child Health Care services.

Maternal and child health services (MCH) are primarily promotive and preventive. They give opportunities for the early recognition of mothers and infants at high risk of morbidity and mortality. A healthy mother and child makes up a vital part of the community health, especially in the developing countries. Maternal and child health have seen a wide array of changes, according to the demand and need of the community. Hence, in this study, an attempt has been made to assess the Maternal & Child Health (MCH) practices, utilization and if married women were satisfied with these services in a rural area, with particular reference to Mulavukadu panchayat in Ernakulam district.

Maternal Health in UN Agenda

The gulf between the risk of maternal deaths between developed and developing countries is considered as the most remarkable health divide in the world. Maternal healthcare remains a major challenge to the global public health system, especially in developing countries.

One of the main challenges faced by the World in the present continue to remain the health of women and children. Advancement in the achievement of maternal health is one of the target goals of the third Sustainable Development Goals (SDGs) adopted by the United Nations. Around half a million women internationally, are estimated to die each year from the complications arising during pregnancy and childbirth. More than half of the maternal and child deaths occur in African nations, followed by Asia. Majority of these deaths are caused by complications during or just after delivery and the vast majority of the complications can be avoided if proper care services are provided at the time of need. The utilization of maternal health care services depends upon several other factors than just their mere existence.

Maternal health is a key part of the United Nations (UN) agenda and is seen as an important aspect of overall global health and well-being. The UN has made several commitments and set several goals aimed at improving maternal health and reducing maternal mortality worldwide.

One of the key commitments made by the UN is the Millennium Development Goals (MDGs), which were established in 2000 and had a deadline of 2015. One of the eight MDGs was to reduce the maternal mortality ratio by three-quarters between 1990 and 2015. Although this goal was not fully achieved, significant progress was made in many countries, particularly in terms of increasing access to reproductive health services and improving maternal health care.

The UN also established the Every Woman Every Child initiative in 2010, which is a global movement aimed at mobilizing and intensifying action by governments, civil society, the private sector, and the UN system to address the major health challenges facing women and children. One of the key objectives of this initiative is to improve maternal health and reduce maternal mortality.

More recently, the UN adopted the Sustainable Development Goals (SDGs) in 2015, which include a specific goal (SDG 3) on ensuring healthy lives and promoting well-being for all at all ages. Target 3.1 of the SDGs is to reduce the global maternal mortality ratio to less than 70 per 100,000 live births by 2030.

Improving maternal health is a complex and multifaceted issue that requires a concerted effort from governments, health systems, civil society, and the international community. The UN continues to play a key role in advocating for and supporting initiatives aimed at improving maternal health and reducing maternal mortality worldwide.

Primary Health Centers (PHCs)

Primary Health Care is essential health care made universally accessible to individuals and families in the community. It is provided by means acceptable to them and at a cost that is affordable to the community and country. It is an integral part of the country's health care system, at the same time it is the nucleus of the overall social and economic development of the community. It is the initial contact of individuals, family and the community with the national health care system. The PHCs have brought health care as close as possible to where people live and work, and it primarily constitutes the basic element of a continuing health care process. PHC plays a major role in tackling the main health problems of the community, providing diagnostic, preventive, curative, supportive and rehabilitative services accordingly.

Primary Health Care can simply be defined as a set of universally accessible and affordable first-level services that promote health, prevent disease, and provide promotive, curative, rehabilitative and supportive services.

Primary health centers (PHCs) play a crucial role in giving maternal health services to communities, especially in rural and remote areas. Maternal health services at PHCs typically include:

Antenatal care: This includes regular check-ups during pregnancy, monitoring of the mother's and baby's health, and providing advice and support on issues such as nutrition, exercise, and stress management.

Safe delivery services: PHCs may provide basic obstetric care and facilities for normal delivery, as well as referrals to higher-level facilities for complicated deliveries.

Postpartum care: After delivery, PHCs may provide care and support to new mothers, including treatment of any postpartum complications and support for breastfeeding.

Family planning services: PHCs may provide information and counseling on family planning options, as well as access to a range of contraceptive methods.

Reproductive health services: PHCs may provide services related to reproductive health, including screening and treatment for sexually transmitted infections (STIs) and gynecological issues.

Maternal and child health services: PHCs may also provide services for the health and well-being of mothers and children, including immunization, treatment of minor illnesses, and management of chronic conditions.

The availability of maternal health services at PHCs is crucial in ensuring that women have access to quality care during pregnancy and childbirth. This can help to reduce maternal mortality and morbidity and improve the health and survival of mothers and their children.

In addition to providing essential maternal health services, PHCs can also play an important role in promoting health education and behaviour change in communities, strengthening health systems, and providing a link to more specialized care when needed.

Adequate and quality Maternal and Child Health (MNCH) care is considered indispensable for the alleviation of maternal and child mortality.

The percentage of deaths resulting from complications during pregnancy or childbirth is known as maternal mortality. Maternal mortality is the term used to describe the death of a woman due to a pregnancy-related complication or within 42 days of giving birth, arising from issues that are connected to or made worse by the management of the pregnancy but not from accidents or incidental factors.

The general well-being of expectant women and young children falls under the category of maternal health care. Given that it covers medical treatment during and after pregnancy as well as educational, social, and nutritional services, maternal healthcare is comprehensive. This research looks at the potential causes of why many expectant and nursing mothers forgo getting the necessary antenatal and postnatal care.

By the year 2000 and beyond, all people would have access to basic health care (PHC).

Men and women face many similar health issues; however, because of these variations, women's health requires special consideration. Pregnancy and childbirth have historically been significant causes of female mortality and impairment. The health and standing of women in society are largely determined by maternal mortality.1 Due to its insight into not only the health of women but also the immediate survival of newborns and the long-term well-being of children they bear, maternal health has direct implications on families, communities, and the entire nation. Due to the direct, indirect, and negative effects on productivity, maternal morbidity and mortality have an economic influence on the family and the society.2 Over 90% of maternal deaths globally are concentrated in Asia and Africa. One-fourth of all maternal fatalities occurred in India alone. At least 15 million women per year, or about 30 more women for every pregnant woman who dies, experience injuries, infections, or impairments during pregnancy or childbirth.

Maternal Mortality Ratio (MMR) reduction is still a concern for world health. Despite significant advancement over the past 15 years, the MMR remains elevated, particularly in Low Middle Income Countries (LMICs) [1]. The public health development adopting a crosscutting strategy to pertinent target is prominently featured in the 2030 Agenda for Sustainable Development Goals (SDGs) [1,2]. Maternal Mortality Ratio (MMR) reduction is still a concern for world health. Despite significant advancement over the past 15 years, the MMR remains elevated, particularly in Low Middle Income Countries (LMICs) [1]. The public health development adopting a cross-cutting strategy to pertinent target is prominently featured in the 2030 Agenda for Sustainable Development Goals (SDGs) [1,2].

In order to serve the requirements of the urban poor population, urban primary health centers were established as part of the National Urban Mission. Kerala put this plan into action in 2014. The distribution of UPHCs was determined by the percentage of urban residents in each region. Kerala had built 83 UPHCs by 2019 spread across its 14 districts. Based on the needs of the people, changes have been made in service provision. The study here documents the level of utilization of services of UPHCs in the State at the district level during the period 2021-22 and assesses the satisfaction on service delivery in the beneficiary perspective on five domains: Human resources, diagnostic or Lab facilities, functioning of Pharmacy, infrastructure and treatment services based on location of UPHCs in urban (town/city limits), coastal areas and slums. Regardless of where the UPHC is located, the urban impoverished primarily use its services.

By offering superior maternal health care services, good maternal health and maternal deaths can be improved. In spite of government initiatives to improve maternal and child health, India still has high rates of maternal mortality and morbidity. This may be due to a number of factors, one of which is the underutilization or delay in obtaining maternal health care services, particularly among the rural poor and urban slum population, which may be caused by a lack of knowledge or access to health care services.3 The implementation of the program requires understanding of the community's beliefs and customs regarding maternity care during pregnancy, delivery, and the postnatal time.

Each year, more than 150 million pregnancies occur in underdeveloped nations, and an estimated 500,000 of these women pass away due to complications with pregnancy. More than seven million pregnancies that end in stillbirths or infant deaths within the first week of life are also caused by maternal health issues. The death of a pregnant woman has additional effects because it puts her family and society through severe economic and social hardship. Most women in developing nations don't have access to modern health care services, which increases the number of deaths from avoidable problems aside from their health issues.

Five fundamental concepts led to the focus on primary healthcare. The first was the acknowledgement of the value of cross-sectoral activity for the advancement of health. This developed from the discussion of development in the middle of the 1960s, which acknowledged that the poor did not inevitably benefit from economic growth as economists had too readily assumed, and that the main challenge facing development was how to meet the basic needs of the underprivileged. Economic and social developments were closely linked and not distinct from one another. The second reason was the realization, based on the results of earlier programs, that targeted, isolated mass campaigns against specific diseases controlled from the center could not effectively fight the major infectious diseases.

Support from the local population and medical personnel was necessary for all health programs. Thirdly, curative action should not be distinguished from prophylactic and promotional action. Most established and developing nations alike had experienced this development of services. Fourth, there was proof that a variety of health initiatives existed but that they did not benefit millions of people worldwide despite being both inexpensive and highly effective. Last but not least, it demonstrated a strong reaction to the health professionals' authoritarian effort to impose health on the general population.

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In India, the idea of a Primary Health Center (PHC) is not novel. In order to provide the rural population with integrated curative and preventive health care that is as close to the people as possible, with a focus on preventive and promotive aspects of health care, the Bhore Committee introduced the idea of a PHC as a basic health unit in 1946.

The utilization of maternal health services provided by primary health centers (PHCs) can vary greatly depending on a range of factors, including the availability and quality of services, accessibility, affordability, and cultural attitudes towards maternal health and care-seeking behaviours.

In many developing countries, low utilization of maternal health services provided by PHCs can be a major challenge. This may be due to a lack of awareness about the services available, or a lack of trust in the quality of care provided. Other factors, such as poverty, cultural attitudes towards maternal health and care-seeking behaviors, and geographical barriers, can also limit access to and utilization of maternal health services at PHCs.

However, where PHCs are well-functioning and provide high-quality services, utilization rates can be high. For example, where PHCs provide comprehensive maternal health services, including ante-natal care, safe delivery services, and postpartum care, women are more likely to attend for care during pregnancy and childbirth, and to use the services provided.

In addition, community-based programs and health promotion activities can play an important role in increasing awareness about the importance of maternal health and the services available at PHCs. This can help to increase utilization rates, improve the health and well-being of mothers and their children, and reduce maternal mortality and morbidity.

Overall, improving the utilization of maternal health services provided by PHCs requires a multi-faceted approach that addresses the underlying social, cultural, and economic barriers to care-seeking, as well as improving the availability and quality of services provided.

SIGNIFICANCE OF THE STUDY

Maternal health is a critical component of overall health and well-being, and is essential for the health and survival of mothers and their children. The significance of maternal health can be seen in several key areas:

Improved health outcomes for mothers: Good maternal health during pregnancy and childbirth can improve the health and survival of mothers, reduce maternal mortality and morbidity, and help to prevent and manage complications such as postpartum bleeding, infection, and preeclampsia.

Improved health outcomes for children: Maternal health during pregnancy and childbirth has a direct impact on the health and survival of children. Children born to mothers who receive quality care during pregnancy and childbirth are more likely to have better birth outcomes, including a reduced risk of low birth weight, preterm birth, and stillbirth.

Improved economic outcomes: Good maternal health can have positive economic impacts, including reduced health care costs, improved productivity, and increased income and economic growth.

Improved social outcomes: Maternal health is closely linked to the overall well-being of families and communities. Women who receive quality maternal health care are more likely to be healthy, empowered, and able to participate in their communities, which can have positive impacts on social cohesion, gender equality, and human development.

Achieving global health goals: Improving maternal health is an important component of global health goals, including the Sustainable Development Goals (SDGs) and the Millennium Development Goals (MDGs). Achieving these goals requires a focus on improving maternal health, reducing maternal mortality and morbidity, and ensuring that all women have access to quality maternal health care.

Overall, the significance of maternal health cannot be overstated, and ensuring that all women have access to quality maternal health care is essential for achieving global health goals and improving the health and well-being of mothers and their children.

This study was aimed to know the utilization of maternal health care services during antenatal, delivery and postnatal period and factors affecting them.

REVIEW OF LITERATURE	
13	

CHAPTER 2

REVIEW OF LITERATURE

This chapter presents a review of available literature pertaining to maternal health and health related issues. The purpose of this review is to describe the literature relevant to this investigation. The focus of this study is centered on the utilization of the maternal health services by primary health centers. Relevant studies pertaining to this are presented to have a thorough comprehension of topic under investigation.

Even though they are confident in its definition, most people find it challenging to define the word "health." Most cultures share a similar theme: health.

The World Health Organization (WHO, 1978)^[1] defines health as:

"Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."

According to this meaning, being healthy is a holistic idea that encompasses more than just the absence of disease or illness. It covers a person's total physical, mental, and social well-being and recognizes that these factors are interrelated and cannot be taken into account separately. The WHO bases its global initiatives to promote health and enhance health outcomes on this concept. Although this meaning is appealing, it is arbitrary and difficult to evaluate (Deon Filmer, er al. 2000)^[2].

Dubos (1965)^[3] defined health saying: "In order to operate at its best, health entails a constant adaptation to the environment and the relative absence of pain and discomfort". The ecological notion of health refers to this.

As stated in the first five year plan (1951)^[4], "Health is a positive state of well being in which harmonious development of mental and physical capacities of the individuals lead to the enjoyment of a rich and full life. It implies adjustment of the, individuals to his total environment.

The Alma Ata conference defined primary health care as "essential health' care based on scientifically sound and socially acceptable methods and technology made universally acceptable to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development of in a spirit of self reliance and self determination" (WHO, 1978)^[1]. It forms an integral part both of the country's health system of which it is the nucleus and of the over all social and economic development of the community (WHO, 1979)^[5]".

According to Coleking (1981)^[6], "Primary Health Care is a concept as well as a plan of action". Its philosophical merits stem from the values it upholds, and its strategy is comprised of extensive initiatives both inside and outside the health field that are intended to improve health.. In the words of Segall (1983)^[7] "Primary Health Care incorporates certain democratic principles such as community involvement, individual and collective responsibility for health and self reliance. These imply that implementation of health policy cannot be left to the mechanization of the state to formulate programs.

Maternal health refers to the health of women during pregnancy, childbirth and the postnatal period. Each stage should be a positive experience, ensuring women and their babies reach their full potential for health and well-being (WHO, 2016)^[8].

Maternal health has been defined as safe motherhood, narrowly defined to mean ensuring that all women receive the care they need to be safe and healthy through pregnancy and childbirth (Family Care International, 2000)^[9].

Maternal health services, refers to healthcare services provided to women during pregnancy, childbirth, and the postpartum period to promote, protect, and support their physical, emotional, and social well-being. These services include preconception care, prenatal care, labor and delivery care, and postpartum care. The goal of maternal health services is to ensure safe and healthy pregnancy outcomes for mothers and their babies (Lowdermilk, D. L., Cashion, M. C., Perry, S. E., Alden, K. R., & Olshansky, E. 2019)^[10].

Although important progress has been made in the last two decades, about 295 000 women died during and following pregnancy and childbirth in 2017. This number is unacceptably high. (WHO, 2016)^[8].

The health indicator that shows the greatest disparity between developed and developing nations is maternal mortality, with nearly all maternal deaths (95%) happening in Africa and

Asia (UNFPA, 2004)^[11]. The global maternal mortality ratio was estimated to be 400 per 100,000 live births in 2000. MMR are highest in Africa (830), followed by Asia (330), Oceania (240), Latin America and the Caribbean (190) and the developed countries (20) (UNFPA, 2004)^[11].

The notion of mothers and children as vulnerable groups was also central to the primary health care movement launched at Alma Ata in 1978 (World Health Report, 2005)^[12]. This approach emphasized health as a human right, highlighting equity in resource distribution, expanded access through decentralized services aimed at promoting local health needs and community involvement, and the provision of preventive and promotive health care (Cooper et al, 2004)^[13].

Paris and Lillard (1994)^[14] found that delivering a baby with in a health care institution in Malaysia reduced the probability that the baby would subsequently die. In Malaysia, Da Vanza (1984)^[15] found that the distance to medical care was related to infant mortality rate, but that low birth weight was correlated with the distance to care.

Maternal health care services in Kerala, India are considered to be some of the best in the country. The state has made significant investments in healthcare infrastructure and has implemented various programs and initiatives aimed at improving maternal and child health.

Additionally, the state has implemented several programs to increase access to maternal health services, particularly in rural areas. For example, the Janani Suraksha Yojana program provides financial incentives to women to deliver their babies in health facilities, and the Kudumbashree program trains women as community health workers to provide maternal and child health services at the community level.

Zachariah and Patel (1983)^[16] compared infant mortality in three district of Kerala and found that infant survival was mostly influenced by mothers education.

Thankappan et al. $(2005)^{[17]}$ made an effort to determine the state of service delivery in the areas of health and family welfare with a focus on reproductive and children's health and recommendations to redesign the system for more effective client-centered services.

RESEARCH METHODOLOGY
17

CHAPTER 3

RESEARCH METHODOLOGY

Maternal health care services in Kerala, India are considered to be some of the best in the country. The state has made significant investments in healthcare infrastructure and has implemented various programs and initiatives aimed at improving maternal and child health.

Kerala has a high number of healthcare facilities, including hospitals, health centers, and clinics, which provide a range of maternal health services, including prenatal care, delivery care, postpartum care, and family planning services. Kerala also has a strong network of trained healthcare workers, including midwives and gynecologists, who provide these services.

Overall, the combination of a strong healthcare infrastructure, well-trained healthcare workers, and targeted programs have contributed to a high level of maternal health in Kerala, with low rates of maternal mortality and high rates of institutional deliveries. However, there are still challenges in providing maternal health services to all women in the state, particularly those in remote and underserved areas, and efforts continue to be made to improve access to these services for all women in Kerala.

General Objective

• The general objective of this research is to study the patterns of utilization of maternal health care services provided by the primary health centres in Mulavukadu Panchayath.

Specific Objectives

The objectives of the study are:

- To find out the socio-economic profile of the respondents.
- To find out the awareness level among women about the maternal health services provided by the primary health centers.
- To examine the level of utilization of immunization services for babies up to 6 months by mothers.
- To examine the usage of nutrition services provided in primary health centres by women.

• To find out the level of satisfaction among women about the maternal health services provided by the primary health centres.

Clarification of concepts

Utilization:

According to the Oxford English Dictionary, Utilization is the process of using something in a useful and efficient manner...

In this study, utilization is the act of making effective use of resources or services rendered by the Primary Health Centres by mothers who had their delivery in the past 6 months.

Maternal health services:

In this study, the maternal health services refers to the services provided by a hospital or health centre to care for the health of a women during pregnancy, childbirth and the postpartum period.

Primary health centres:

The Collins Dictionary defines primary health centers as the local government-owned facilities where the public can receive medical treatment.

The primary health centres, also referred to as public health centres, are the healthcare facilities in India, located at rural and urban areas, that are owned by the government of India.

Variables

<u>Independent variables</u>

- Age
- Educational qualification
- Occupation
- Family Income
- Type of family
- Religion

Dependent variables

Level of satisfaction

Universe and Sample

Universe

The universe of the study consist of pregnant women and mothers who had their delivery in the past 6 months in Mulavukadu Panchayath. There are 75 pregnant women and 74 mothers who had their delivery in the past 6 months.

Sample

Sample size is 108 women who are residing in the Mulavukadu Panchayath.

Sampling Method

• The technique of simple random sampling will be used.

Tool of Data Collection

• In this study, the Interview schedule method will be adopted for data collection. The interview schedule will focus on the opinions of the respondents towards Maternal Health Services provided by the Primary Health Centres.

DATA ANALYSIS AND INTERPRETATION

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

The process of assigning meaning to the collected information and determining the conclusions, significance, and implications of the findings is known as data analysis and interpretation. Researchers can categorise, manipulate, and summarise data with the help of data analysis to find answers to important issues. The process of evaluating data and drawing pertinent conclusions from it using different analytical techniques is known as data interpretation.

4.1 Age of the respondents

Figure 4.1

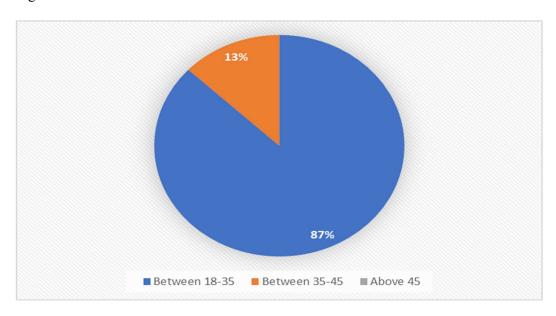


Fig4.1 depicts that 87% of the respondents are aged between 18-35 years of age whereas the remaining 13% are aged between 35-45 years. All the respondents of the study are married women.

4.2 Religion of the respondents

Figure 4.2

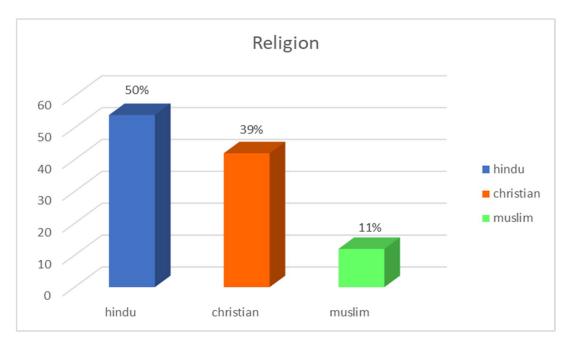
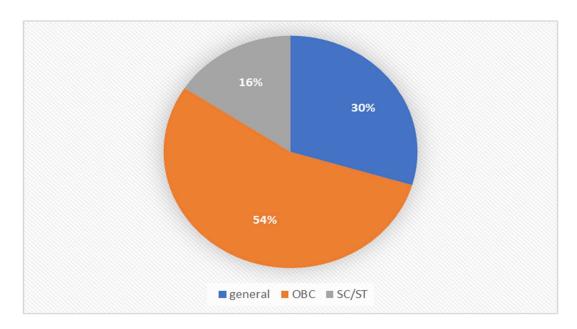


Figure 4.2 shows the religious afflictions of the respondents. 50% of the respondents are Hindus. Hindus dominate the sample, whereas Christians constitute 39% followed by Muslims with 11%.

4.3 Caste of the respondents

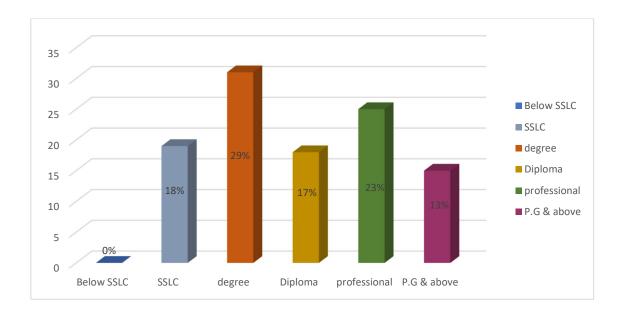
Figure 4.3



The diagram shows the caste of the respondents. Majority of the respondents, that is 54%, belongs to the OBC category. 30% of the respondents belongs to the general category, whereas 16% of the sample are SC/ST.

4.4 Educational qualifications of the respondents

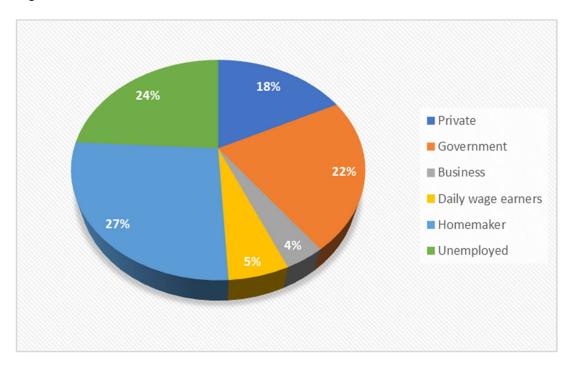
Figure 4.4



The figure depicts the educational qualifications of the respondents. Looking on the educational background, we can observe that all are literate. 19% have SSLC education.29% of the respondents are graduates and 13% are post graduates. 23% are professionals, whereas 17% of the respondents possesses diploma.

4.5 Occupation of the respondents

Figure 4.5



In the occupation side, those who approach the PHCs are constituted by 24% unemployed, 27% homemakers, 5% daily wage earners, 4% business people, 22% government servants, and 18% people with private jobs.

4.6 Economic category

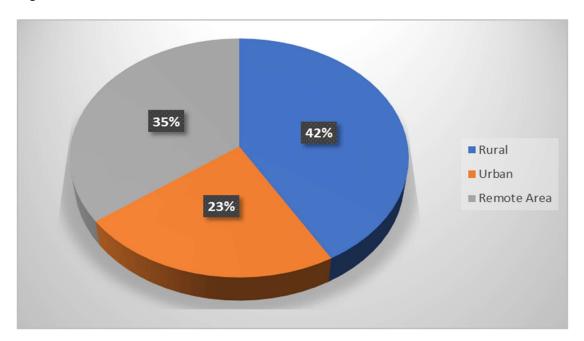
Figure 4.6



The diagram depicts the economic background of the respondents. In this study, about 58% of the respondents comes from BPL background and 42% from APL background. This shows that majority of the participants availing the services of the PHC belongs to the lower middle class families.

4.7 Area of residence

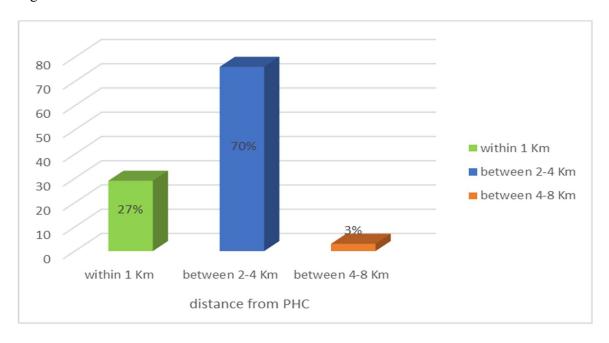
Figure 4.7



The figure shows the area of residence of the respondents. 35% of the respondents are found to be living in remote area whereas 42% is living in rural area. Only 23% of the participants are living in the urban area. Thus, only 23% percentage of the participants have private institutions in the vicinity of their home.

4.8 Distance from PHC

Figure 4.8



70% of the households are located at a distance of about 2-4 Km from the PHC. 27% of the respondents have households within 1Km distance from the PHC whereas 3% lives at a distance of about 4-8 Km from the PHC.

4.9Income of the respondents

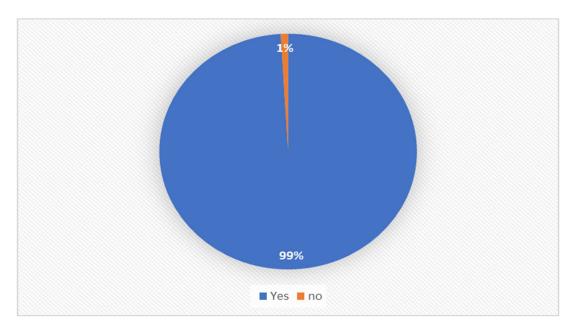
Table 4.9

Characteristics	Group	Frequency	Percentage
	Less than 10,000	10	9
	10,000-20,000	29	27
Income	20,000-50,000	56	52
	50,000-1,00,000	11	10
	Above 1 lakh	2	2
Total		108	100

The figure shows the monthly income of the respondents. 9% earn less than 10,000 rupees a month, 27% earn between 10,000-20,000 rupees, 52% earn between 20,000-50,000 rupees. Only 10% earns between 50,000-1 lakh and a mere 2% earns above 1 lakh rupees. The table shows that majority of the respondents belongs to middle class families.

4.10 Awareness about the services provided by the PHC

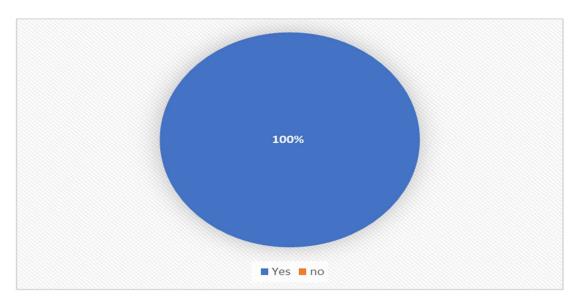
Figure 4.10



99% of the respondents are aware of the services provided by the PHCs, especially regarding the maternal services. 1% of the respondents were not aware of the services provided by the Primary Health Centers in their locality.

4.11 Awareness about the location of the PHC

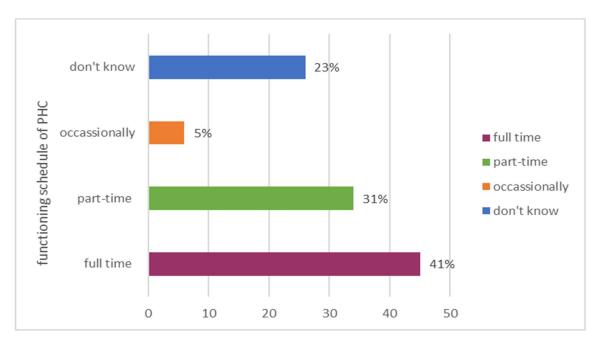
Figure 4.11



All respondents are aware of the location of the Primary Health Centre.

4.12 Awareness about the functioning schedule of the PHC

Figure 4.12



The figure shows the awareness of the respondents regarding the functioning schedule of the Primary Health Center. 41% of the respondents are aware that the Primary Health Center operates full time. 23% are unaware of the functioning schedule of the PHC. This may be one of the reasons for the lessening of the service utilisation of the PHC.

4.13 Awareness regarding visitations from the PHC

Figure 4.13

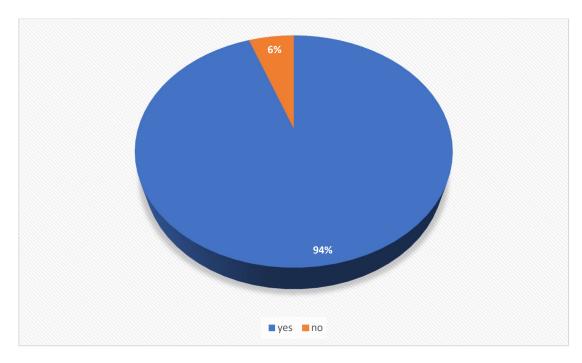
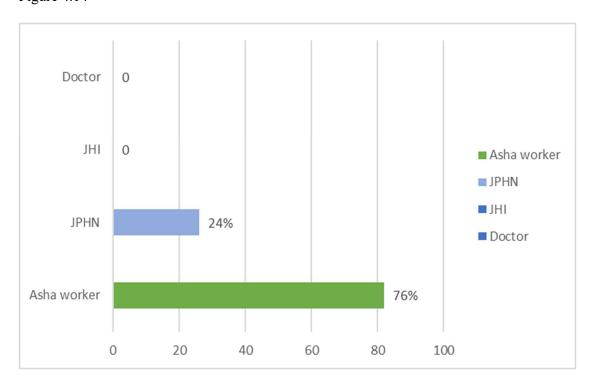


Figure 4.14



The figure 4.13 shows the level of awareness of the respondents regarding the visitations from the Primary Health Center. 94% of the participants are aware about the visitations whereas 6% are not aware of the visit. The figure 4.14 depicts that 76% of the households were visited by the Asha workers whereas 24% of the respondents got a visit from the Junior Public Health Nurses.

4.15 Accessibility of the PHC

Figure 4.15

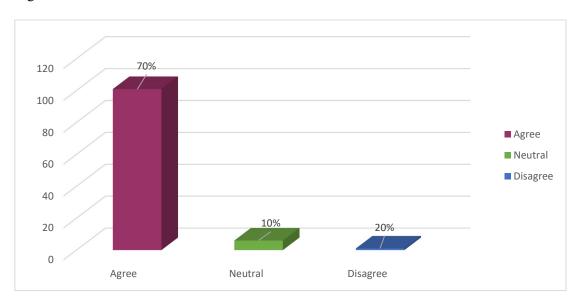
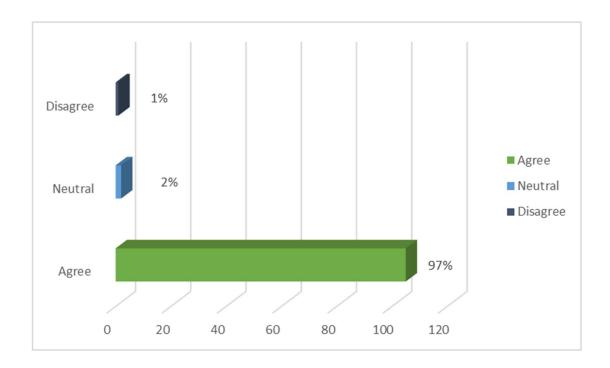


Figure 4.15 shows the accessibility of the Primary Health Center by the respondents. 70% of the respondents agrees that the Primary Health Center is easily accessible to them in terms of distance from the households. But most of them face difficulties in reaching the PHC due to poor infrastructure of the roads. 20% are in disagreement with the easy accessibility of the PHC due to the same reason.

4.16 Cost of the PHC

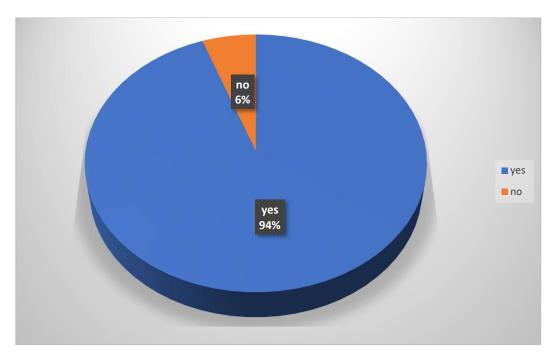
Figure 4.16



97% of the respondents agree that the cost of the PHC are affordable and 2% responded neutral. 1% of the respondents are in disagreement that the Primary Health Center is affordable.

4.17 Awareness about the maternal services provided by the PHC

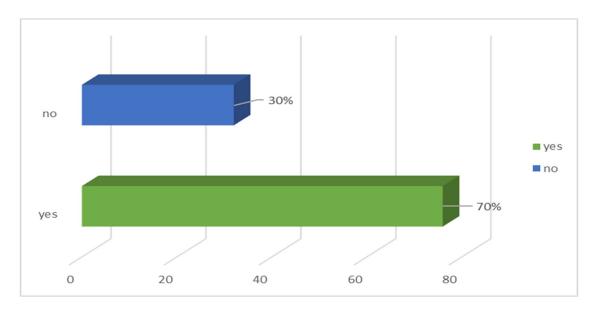
Figure 4.17



94% of the respondents are aware about the maternal services provided by the Primary Health Center whereas 6% are not aware of the maternal services provided by primary health centres.

4.18 Availability of maternal service awareness class

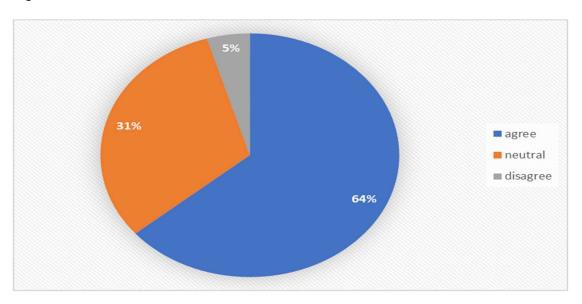
Figure 4.18



70% of the respondents received maternal services awareness class from the PHC whereas 30% didn't get any awareness class about the maternal services.

4.19 Effectiveness of services of the health workers

Figure 4.19



64% of the respondents agree that the services of the health workers providing maternal health awareness to the society are very effective and 31% responded neutral. 5% are in disagreement with the statement.

4.20 Maternal health care awareness camps

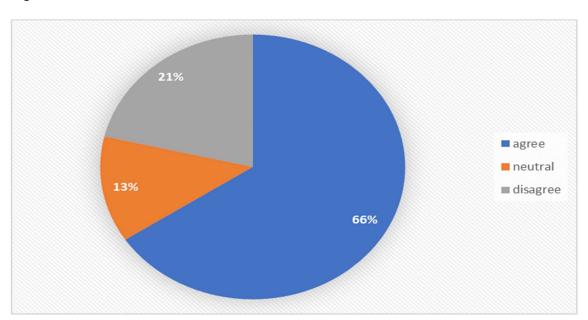
Table 4.20

Categories	Frequency	Percentage
Agree	65	60
Neutral	27	25
Disagree	16	15
Total	108	100

60% of the respondents agree that Maternal health care awareness camps are conducted in their ward regularly and 15% responded neutral. 25% of the respondents disagrees that maternal health awareness class are conducted regularly.

4.21 Effectiveness of maternal services of the PHC during covid-19 pandemic

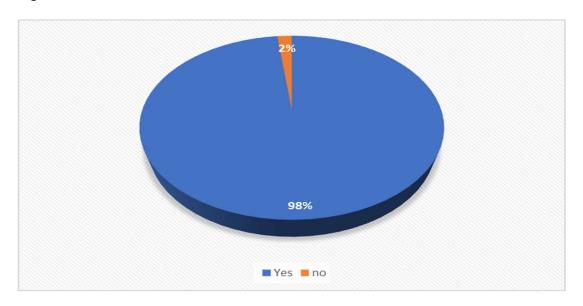
Figure 4.21



66% of the respondents agree that the maternal services of PHC were very effective during the covid-19 pandemic and 13% responded neutral. 21% of the participants responded that the maternal services of PHC were ineffective during the covid-19 pandemic.

4.22 Awareness about the immunization services provided by PHC

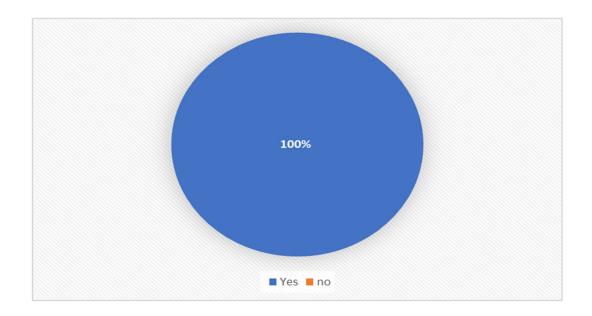
Figure 4.22



98% of the respondents are aware about the immunization services provided by PHC whereas 2% are not aware.

4.23 Immunization of babies

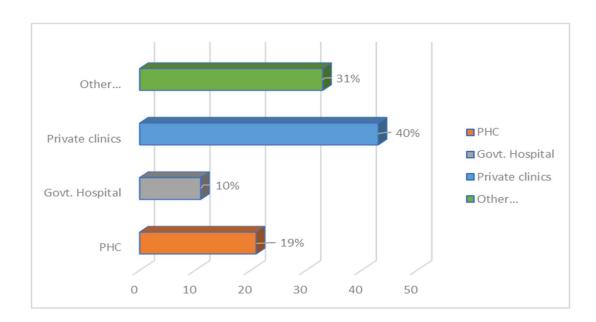
Figure 4.23



All the participants had availed correct immunization for the babies.

4.24 Health care institution from which immunization was taken

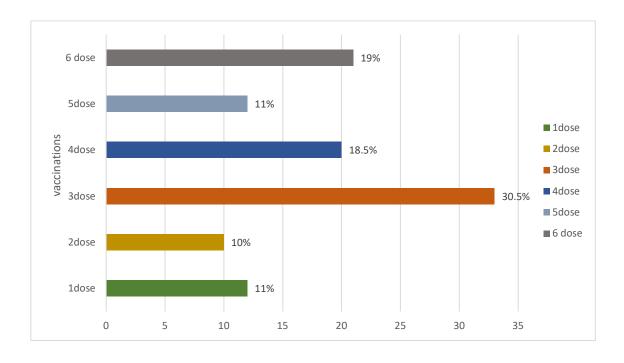
Figure 4.24



40% of the respondents had availed immunization services for their children provided by private clinics, 19% from PHC, 10% from Govt. hospital. 31% of the respondents had taken the immunization for their children from other health care institutions.

4.25 Vaccinations taken from PHC

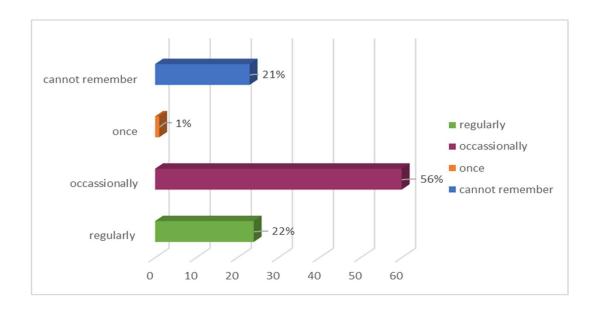
Figure 4.25



19% of the respondents had taken 6 doses of vaccination for their children from PHC, 11% had taken 5 doses from PHC, 18.5% had taken 4 doses of vaccination, 30.5% had taken 3 doses, 10% had taken 2 doses and 11% had taken 1 dose of vaccination from the PHC.

4.26 Visitation of ASHA worker

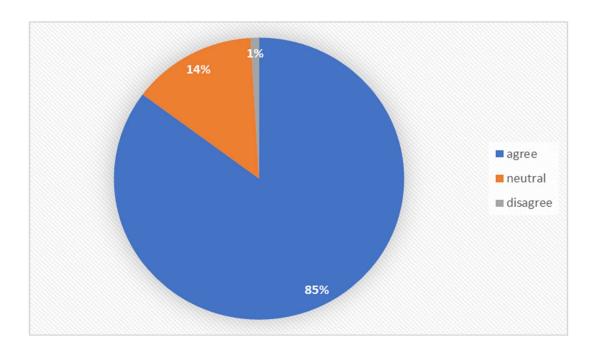
Figure 4.26



The figure shows the frequency of visitation by the Asha workers. 56% of the respondents acknowledged that the Asha workers visited them occasionally, whereas 22% responded that they visited regularly. 21% of the respondents cannot remember the frequency of visit while 1% received a visit only once.

4.27 Notification regarding the immunization schedule

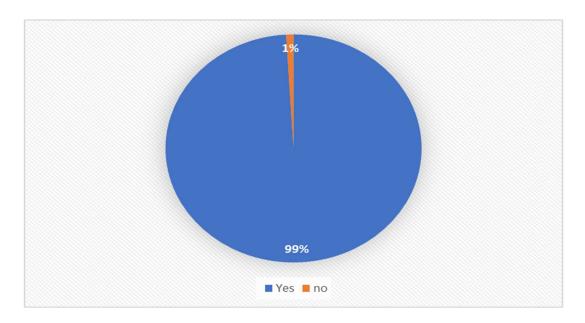
Figure 4.27



85% of the respondents agree that they received correct notification regarding the immunization schedule from the PHC, while 14% responded neutral. Only 1% of the respondents had a disagreement with the statement.

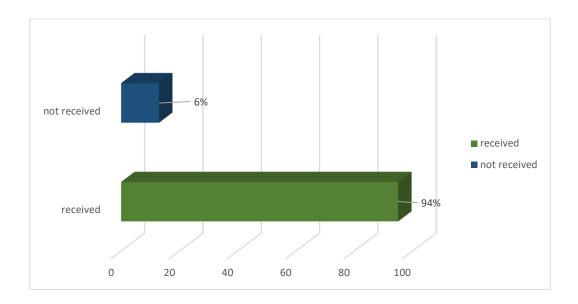
4.28 Affordability of immunization services

Figure 4.28



99% of the respondents agree that the immunization services provided by primary health centres are affordable while only 1% denied the same.

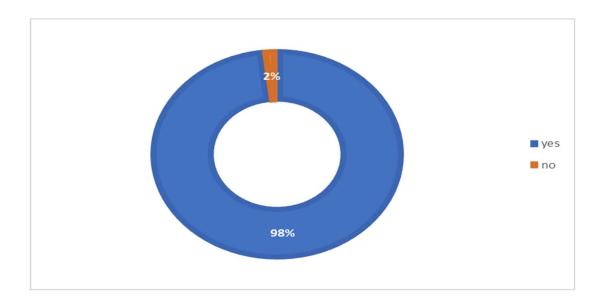
4.29 Awareness about the nutrition services provided by PHC Figure 4.29



94% of the respondents are aware of the nutrition services provided by PHC for pregnant women. The remaining 6% are not aware of the nutrition services provided by the PHC.

4.30 Availability of iron and folic acid tablets

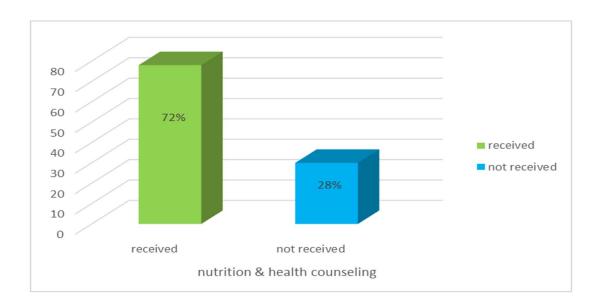
Figure 4.30



98% of the respondents received iron and folic acid tablets from PHC whereas 2% were denied the same.

4.31 Nutrition and health counselling

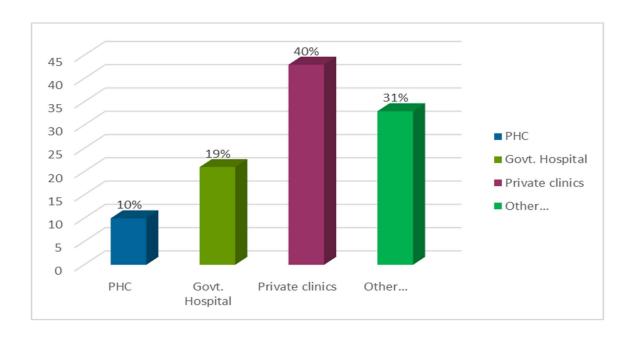
Figure 4.31



Only 72% of the respondents received nutrition and health counselling during pregnancy and 28% didn't received the counseling.

4.32 Emergency treatment centers

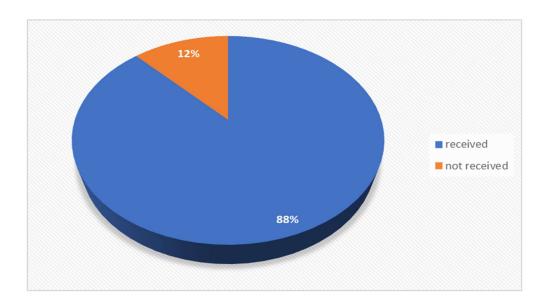
Figure 4.32



40% of the respondents avail emergency treatment from private clinics, 19% from govt. hospital, and 31% from other health care institutions. Only 10% of the participants avail emergency treatment from the Primary Health Center.

4.33 Antenatal check ups

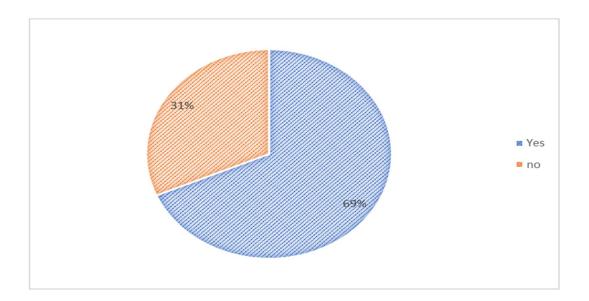
Figure 4.33



88% of the respondents had received a minimum of 4 antenatal check ups from the PHC whereas 12% did not received the same.

4.34 Counselling on new born care and breastfeeding

Figure 4.34



69% of the respondents received counselling on new born care and breastfeeding while 31% did not received the counselling.

4.35 Staff behaviour and patient satisfaction

Figure 4.35

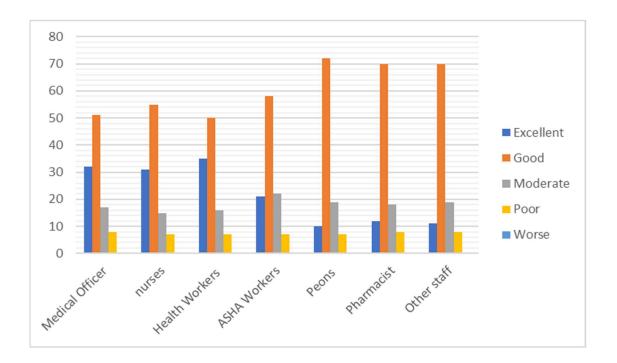


Figure 4.32 depicts the level of satisfaction of the respondents about the behaviour of different categories of the staff in the PHC. Respondents are satisfied with the medical officer, nurses, health workers, Asha workers, peons, pharmacist and other staff, since majority of the participants rated them good.

4.36 Patient satisfaction for the maternal health care and facilities provided in the PHC

Figure 4.36

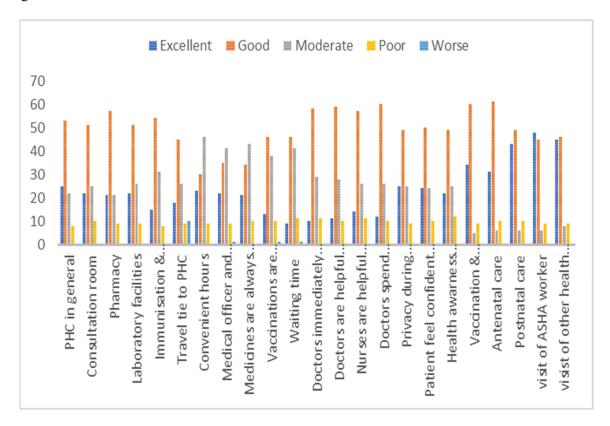
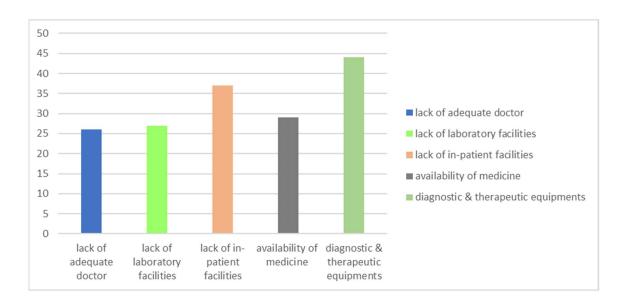


Figure 4.33 illustrates the level of Patient satisfaction for the maternal health care and facilities provided in the PHC. It is found that the respondents are satisfied with the PHCs in general, consultation room, pharmacy, laboratory facilities, immunisation & nutrition services etc. But they are only moderately satisfied with the availability of medicines, convenient working hours and availability of medical and other staffs. The participants are highly satisfied with the vaccination & immunization services, antenatal care, postnatal care and the visits of Asha workers.

4.37 Problems faced by the patients

Figure 4.37



The figure depicts that around 33% of the respondents reported lack of diagnostic & therapeutic equipment as the main problem they face. 28% consider lack of in-patient facilities and 20% consider lack of laboratory facilities as the main problems. 22% said that lack of availability of medicine as the main problem while remaining 17% responded that lack of adequate doctors is the major problem they face.

FINDINGS & CONCLUSION	
57	

CHAPTER 5

FINDINGS AND CONCLUSION

The study entitled "Utilization Of The Maternal Health Services Provided By Primary Health Centres: A Study With Reference To Mulavukadu Panchayath" aims to investigate the performance of Primary Health Centres (PHCs) by analysing the data from the patient and household surveys. The study provides information about the current state of PHCs, the quality of health care provided by the PHC, and the community's perception of PHCs in Kerala.

This study is of immense relevance since the maternal health is essential for promoting the health and well-being of mothers and their children, as well as for promoting economic and social development. Improving maternal health requires a comprehensive approach that includes improving access to healthcare services, empowering women, and promoting gender equality. Utilization of maternal health services in primary health centers (PHCs) in India is a concern for the government and health organizations. Despite the availability of maternal health services in PHCs, many women still face challenges in accessing and utilizing these services, leading to poor maternal health outcomes in the country.

The study was carried out by using interview schedule, selecting representative sample from the population considered. Ernakulam district was selected, and from this district 2 PHC's were identified. A sample of 108 respondents were selected for assessing the utilization of maternal services based on patient satisfaction.

Among the 108 respondents 87% are aged between 18-35 years of age whereas the remaining 13% are aged between 35-45 years. All the respondents of the study are married women. When religious-wise analysis is done, Hindus dominate in the sample with about 50 percent, Muslims with 11 percent and Christians with 39 percent. Majority of the respondents, that is 54%, belongs to the OBC category. 30% of the respondents belongs to the general category, whereas 16% of the sample are SC/ST. Regarding economic background, about 58 percent of the respondents come from BPL background. Looking on the educational background, all respondents are literate, 19% have SSLC education.29% of the respondents are graduates and

13% are post graduates. 23% are professionals, whereas 17% of the respondents possesses diploma.

In the occupation side, those who approach the PHCs are constituted by 24% unemployed, 27% homemakers, 5% daily wage earners, 4% business people, 22% government servants, and 18% people with private jobs. Among the 108 respondents 35% of the respondents are found to be living in remote area whereas 42% is living in rural area. Only 23% of the participants are living in the urban area. Thus, only 23% percentage of the participants have private institutions in the vicinity of their home.

Majority of the respondents belongs to middle class families. Only 10% earns between 50,000-1 lakh and a mere 2% earns above 1 lakh rupees. 9% earn less than 10,000 rupees a month, 27% earn between 10,000-20,000 rupees, 52% earn between 20,000-50,000 rupees.

Among the respondents 99% are aware of the services provided by the PHC, especially the maternal services. All are aware of the location of the PHC. But most of them don't know the functioning schedule of the primary health centre. 41% of the respondents are aware that the Primary Health Center operates full time. 23% are unaware of the functioning schedule of the PHC. This may be one of the reasons for the lessening of the service utilisation of the PHC.

94% of the participants are aware about the visitations whereas 6% are not aware of the visit. The figure 4.14 depicts that 76% of the households were visited by the Asha workers whereas 24% of the respondents got a visit from the Junior Public Health Nurses. Also 70% of the respondents agrees that the Primary Health Center is easily accessible to them in terms of distance from the households. But most of them face difficulties in reaching the PHC due to poor infrastructure of the roads. 20% are in disagreement with the easy accessibility of the PHC due to the same reason.

Looking at the cost of the services in the PHC, majority responds that it is affordable since most of the services are free of cost. Similarly 94% of the respondents are aware about the maternal services provided by the Primary Health Center whereas 6% are not aware of the maternal services provided by primary health centres. The lack of awareness may also contribute to declining utilisation of primary health centers. Only 70% of the respondents received maternal services awareness class from the PHC whereas 30% didn't get any

awareness class about the maternal services. PHCs should involve the community in maternal health services, including educating women and their families about maternal health care and promoting maternal health-seeking behaviour.

Among the participants, only 60% of the respondents agree that Maternal health care awareness camps are conducted in their ward regularly and 15% responded neutral. 25% of the respondents disagrees that maternal health awareness class are conducted regularly.

All the participants had availed correct immunization for the babies. 98% of the respondents are aware about the immunization services provided by PHC whereas 2% are not aware. 19% of the respondents had taken 6 doses of vaccination for their children from PHC, 11% had taken 5 doses from PHC, 18.5% had taken 4 doses of vaccination, 30.5% had taken 3 doses, 10% had taken 2 doses and 11% had taken 1 dose of vaccination from the PHC. The remaining vaccinations were taken from other private health care institutions. This is mainly attributed to the lack of availability of vaccinations from the PHCs. 85% of the respondents agree that they received correct notification regarding the immunization schedule from the PHC, while 14% responded neutral. Only 1% of the respondents had a disagreement with the statement.

The services provided by the Asha workers are found to be satisfying. 56% of the respondents acknowledged that the Asha workers visited them occasionally, whereas 22% responded that they visited regularly.

94% of the respondents are aware of the nutrition services provided by PHC for pregnant women. The remaining 6% are not aware of the nutrition services provided by the PHC. 98% of the respondents received iron and folic acid tablets from PHC whereas 2% were denied the same. Only 72% of the respondents received nutrition and health counselling during pregnancy and 28% didn't received the counselling.

Among the participants, 40% of the respondents avail emergency treatment from private clinics, 19% from govt. hospital, and 31% from other health care institutions. Only 10% of the participants avail emergency treatment from the Primary Health Center. Lack of infrastructural facilities, availability of medicine and lack of sufficient doctors are some of the reasons attributed to this.

88% of the respondents had received a minimum of 4 antenatal check ups from the PHC whereas 12% did not received the same. 69% of the respondents received counselling on new born care and breastfeeding while 31% did not received the counselling.

The way that staff members behave when caring for patients has a big impact on how they respond. Patients should feel that their individuality is valued and that they are receiving quality care. Also, they ought to feel at ease speaking with the employees. Staff members must ensure that patients have privacy while in the PHC and must be prepared to act appropriately if a patient's dignity is threatened.

The level of satisfaction of the respondents about the behaviour of different categories of the staff in the PHC is analysed. Respondents are satisfied with the medical officer, nurses, health workers, Asha workers, peons, pharmacist and other staff, since majority of the participants rated them good. The medical care services provided provided by the staff to patients within PHCs are seen as effective, but the services provided to the society are found to be inadequate. In determining the level of medical care, the Primary Health Center's physical amenities are crucial. Positive first impressions of physical facilities, infrastructure, and conveniences make people feel better about the quality of the medical service. One of the key elements of a health system's structural quality is its infrastructure for providing healthcare.

It is found that the respondents are satisfied with the PHCs in general, consultation room, pharmacy, laboratory facilities, immunisation & nutrition services etc. But they are only moderately satisfied with the availability of medicines, convenient working hours and availability of medical and other staffs. The participants are highly satisfied with the vaccination & immunization services, antenatal care, postnatal care and the visits of Asha workers.

The figure 4.34 depicts that around 33% of the respondents reported lack of diagnostic & therapeutic equipment as the main problem they face. 28% consider lack of in-patient facilities and 20% consider lack of laboratory facilities as the main problems. 22% said that lack of availability of medicine as the main problem while remaining 17% responded that lack of adequate doctors is the major problem they face.



Suggestions

Improving maternal health services at primary health centers (PHCs) can help ensure that women receive the care they need to stay healthy during pregnancy, childbirth, and the postpartum period. Here are some suggestions to improve maternal services provided by PHCs:

- Ensure availability of trained staff: PHCs should have trained healthcare professionals, such as midwives, nurses, and doctors, who are knowledgeable about maternal health and skilled in providing maternal health services.
- ➤ Provide regular training and support: Healthcare professionals at PHCs should receive regular training and support to ensure that they are up to date with the latest best practices in maternal health care.
- Ensure adequate infrastructure: PHCs should have adequate infrastructure to provide quality maternal health services, including well-equipped delivery rooms, clean water supply, and proper sanitation facilities.
- ➤ Promote community involvement: PHCs should involve the community in maternal health services, including educating women and their families about maternal health care and promoting maternal health-seeking behavior.
- ➤ Offer antenatal and postnatal care: PHCs should provide comprehensive antenatal and postnatal care services, including routine check-ups, monitoring of fetal growth, counseling on nutrition, and management of complications.

- ➤ Improve referral system: PHCs should have a referral system in place to ensure that women with high-risk pregnancies or complications are referred to higher-level healthcare facilities for specialized care.
- ➤ Ensure availability of essential medicines and supplies: PHCs should have essential medicines and supplies for maternal health services, including oxytocin, magnesium sulfate, and clean delivery kits.
- Monitor and evaluate services: PHCs should monitor and evaluate maternal health services to ensure that they are effective and meet the needs of women in the community.

By implementing these suggestions, PHCs can improve the quality and availability of maternal health services, which can ultimately lead to better health outcomes for women and their newborns.

BIBLIOGRAPHY

Coleking .1981. "Primary Health Care: A look at its Current Meaning". Mimeo Publication.

Cooper, D., Morroni, C., Orner, P., Moodley, J., Harries, J., Cullingworth, L. and Hoffman, M. 2004. Ten Years of Democracy in South Africa: Documenting transformation in reproductive health policy and status. Reproductive Health Matters, Vol 12, No 24, 2004.

Da, Vanza, Julie. 1984. "A household survey of Child Mortality Determinants in Malasia". Population and Development Review. 10. p307-23

Deon Filmer, Jeffrey S.H. and Lant H.P. 2000. "Weak Links in The Chain A Diagnosis of Health Policy in Poor countries". Research Observer Vol. 15.

Dubos, R. 1968. "Man, Medicine and Environment". Harmondsworth, Pelican.

Family Care International, 2000. Sexual and Reproductive Health Briefing Cards. Family Care International, New York.

Government of India .1951. "First Five Year Plan": Government of India: Planning Commission. New Delhi. P.488.

Jean Dreeze and Amarthyasen. 1996. "Indian Development—Select'ed Regional Perspective. Studies in Development Economics Study Prepared by the World Institute for Development Economics Research of the United Nations. Oxford University Press

Lowdermilk, D. L., Cashion, M. C., Perry, S. E., Alden, K. R., & Olshansky, E. 2019. Maternity and Women's Health Care E-Book. Elsevier Health Sciences.

Paris W.A and Leo. A. Lillard 1994. "Health Inputs and Child Mortality in Malasia. Journal of Health economics Vol. 13 No: 4. p-455-89.

Segall, M.M. 1983. "Planning and Policies of resource Allocation for Primary Health care: Promotion of Meaningful National Policy". Social science and Medicines. Vol; XV1 1. p.1947-1960.

Thankappan, K. R., Sankara, S. P., Mohanan, N. V., & Rajappan, P. 2005. "Current Status of Service Delivery in the Health and Family Welfare Sector in Kerala – with particular reference to Reproductive and Child Health Programme". Achutha Menon Centre for Health Science Studies – Sree Chithra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram.

UNFPA and the University of Aberdeen. 2004. Maternal Mortality Update 2004: Delivering into Good Hands. UNFPA, New York.

WHO. Maternal health 2016 [Available from: http://www.who.int/maternal_child adolescent/topics/maternal/en/.

WHO .1978. "Alma-Ata 1978. Primary Health Care: Health For All Sr. No; 1. World Health Organisation. Geneva

WHO .1979. "World Health: Primary Health Care". World Health Organisation. Geneva. May. 1979. p-6

World Health Organization. Maternal Mortality; 2020. https://www.who.int/news-room/fact-sheets/detail/maternal-mortality [accessed 5 May 2020].

World Health Organization. SDG 3: Ensure healthy lives and promote wellbeing for all at all ages 2020; 2020. https://www.who.int/sdg/targets/en/ [accessed 5 May 2020].

World Health Organization. Social determinants approach to maternal deaths;2020. https://www.who.int/maternal_child_adolescent/epidemiology/maternal-death-surveillance/case-studies/india-social-determinants/en/ [accessed 5 May 2020].

World Health Organization. 2005. World Health Report 2005: Make Every Mother and Child Count. World Health Organization, Geneva.

Zacharia K.C. and Patel. S. 1983. "Trends and Determinants of Infant and Child Mortality in Kerala". Discussion Paper No: 82. Washington D. C. World Bank.

INTERVIEW SCHEDULE

UTILIZATION OF THE MATERNAL HEALTH SERVICES PROVIDED BY PRIMARY HEALTH CENTERS: A STUDY WITH REFERENCE TO MULAVUKADU PANCHAYATH

Part 1. Personal details

- 1. Name:
- 2. Age: i. Between 18-35 ii. Between 35-45 iii. Above 45
- 3. Gender: i. Male ii. Female
- 4. Marital status: i. Married ii. Single
- 5. Religion: i. Hindu ii. Christian iii. Muslim
- 6. Caste: i.SC/ST ii. OBC iii. General
- 7. Educational qualification: i. Below SSLC iii. SSLC iii. Degree iv. Diploma v. professional vi. P.G & above
- 8. Occupation: i. Private ii. Government iii. Business iv. Daily wage earners v. Homemaker vi. Unemployed
- 9. APL/BPL:
- 10. Area: i. Rural ii. Urban iii. Remote area
- 11. Distance from PHC: i. Within 1Km ii. Between 2-4Km iii. Between 4-8 Km iv. Above 8Km
- 12. Income level: i. less than 10,000 ii. 10,000-20,000 iii. 20,000-50,000 iv. 50,000-1,00,000 v. above 1 lakh

Part 2. Awareness level among women about PHC

- 1. Do you know the location of the PHC? Yes/No
- 2. Are you aware about the services provided by the PHC? Yes/No
- 3. Do you know the functioning schedule of the PHC?
 - i. Full time. ii. Part time iii. Occasionally iv. Don't know
- 4. Have anybody from the PHC visited your house in the previous year? Yes/No
- 5. Who all have visited your house?

- i. Asha worker ii. JPHN iii. JHI iv. Doctor
- 6. Can you easily reach the PHC? Agree/Neutral/Disagree
- 7. Is the cost of the PHC services affordable? Agree/Neutral/Disagree
- 8. Are you aware of the maternal services provided by the PHC? Yes/No
- 9. Did you get any maternal services awareness class? Yes/No
- 10. The services of the health workers providing maternal health awareness to the society are very effective.

Agree/Neutral/Disagree

11. Maternal health care awareness camps are conducted in our ward regularly.

Agree/Neutral/Disagree

12. The maternal services of PHC were very effective during the covid-19 pandemic.

Agree/Neutral/Disagree

Part 3. Immunization services for babies

- Are you aware of the immunization services provided by the PHC for babies?
 Yes/No
- 2. Did your baby has taken correct immunization?

Yes/No

- 3. From which health care institution immunization was taken?
 - i. PHC ii. Private clinics iii. Govt. Hospital iv. Other
- 4. How many vaccinations have been taken from PHC?
- 5. How often ASHA worker visited your house?
 - i. Regularly ii. Occasionally iii. Once iv. Cannot remember
- 6. Did the PHC provided correct notification regarding the immunization schedule?

Agree/Neutral/Disagree

7. Are the immunization services affordable at the PHC?

Yes/No

Part 4. Usage of nutrition services by women

 Are you aware of the nutrition services provided by PHC for pregnant women? Yes/No

5.	Did you receive a	minimum of	4 antenatal o	check ups?		
	Yes/No					
6.	. During the postpa	artum period, d	lid you rece	ive counselling	on new bor	rn care ar
	breastfeeding?					
	Yes/No					
	Part 5. Level of sa	atisfaction				
	1. How woul	ld you rate the	behaviour o	of the staff?		
sl		ld you rate the Excellent	behaviour of Good	of the staff? Moderate	Poor	Wor
sl no.	1. How woul Type of employees				Poor 2	Wor
	Type of	Excellent	Good	Moderate		
no.	Type of employees	Excellent	Good	Moderate		
no.	Type of employees Medical officer	Excellent	Good	Moderate		
no. 1. 2.	Type of employees Medical officer Nurses	Excellent	Good	Moderate		
no. 1. 2. 3.	Type of employees Medical officer Nurses Health workers	Excellent	Good	Moderate		
no. 1. 2. 3. 4.	Type of employees Medical officer Nurses Health workers ASHA workers	Excellent	Good	Moderate		Wors 1

2. Did you receive iron and folic acid tablets from PHC?

4. Where do you go for treatment during emergency?

3. Did you get any nutrition and health counselling during pregnancy?

Yes/No

Yes/No

2. How would you rate your satisfaction for the maternal health care and facilities provided in the PHC?

no.			Good	Moderate	Poor	Worse
110.	services	5	4	3	2	1
A	Tangible facilities					
1	PHC in general					
2	Consultation					
	room					
3	Pharmacy					
4	Laboratory					
	facilities					
5	Immunisation &					
	nutrition services					
			1		<u>'</u>	
В	MEASURES OF					
	ACCESSIBILITY					
1	Travel time to PHC					
2	Convenient hours					
С	ITEMS OF					
	AVAILABILITY					
1	Medical officer and	all				
	other staffs are avail	able				
2	Medicines are alway	'S				
	available					
3	Vaccinations are alw	ays				
	available					
D	MEASURES OF					
	RESPONSIVENESS	S				
1	Waiting time					
2	Doctors immediately	7				
	respond to patients					

Е	INDICATORS OF				
	EMPATHY				
1	Doctors are helpful and				
	respectful to patients				
2	Nurses are helpful and				
	respectful to patients				
F	INDICATORS OF				
	RELIABILITY				
1	Doctors spend enough				
	time in consultation				
G	FACTORS OF				
	ACCOUNTABILITY				
1	Privacy during treatment				
2	Patient feel confident and				
	satisfied with the medical				
	services				
Н	MATERNAL SERVICES				
1	Health awareness				
	programmes				
2	Vaccination and				
	immunization services				
3	Antenatal care				
4	Postnatal care				
5	Visit of ASHA workers				
6	Visit of other health	<u> </u>			
	workers				

3. Tick the major problem that you faced in the PHC?

	problems	Put a tick
		mark
1	Lack of adequate doctors	
2	Lack of laboratory facilities	
3	Lack of in-patient facilities	
4	Availability of medicines	
5	Diagnostic and therapeutic equipment	