## Significance of Mohalla clinic as primary healthcare in terms of accessibility and out of pocket expenditure

A dissertation submitted to the university of Hyderabad in partial fulfilment of the degree of

## **Master Of Philosophy**

In

## **Economics**

By

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December 2022

Dedicated to my parents

## **CERTIFICATE**

This is to certify that the dissertation entitled "Significance of Mohalla clinic as primary healthcare in terms of accessibility and out of pocket expenditure" submitted by Kavitabh Kumar bearing Reg. No 19SEHL23 in partial fulfillment of the requirement for the award of Master of Philosophy in Economics is a bonafide work carried out by him/her under my/our supervision and guidance.

The thesis has not been submitted previously in part or in full to this or any other university or institution for the award of any degree or diploma.

Signature of the Supervisor/s

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**Head of the Department/entre** 

**Dean of the School** 

## **DECLARATION**

I Kavitabh Kumar hereby declare that this dissertation entitled "Significance of Mohalla clinic as primary healthcare in terms of accessibility and out of pocket expenditure" submitted by me under the guidance and supervision of Professor/Dr. J. MANOHAR RAO is a *bonafide* research work. I also declare that it has not been submitted previously in part or in full to this or any other university or institution for the award of any degree or diploma.

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Kavitabh Kumar

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## **Abbreviations**

2SFCA Two Step Floating Catchment Area ADCR Awareness, diagnosis care, referral

ANM Auxiliary Nurse Midwifery

ASHAs Accredited Social Health Activities
BPHS Basic Packages of Health Services

BPL Below Poverty Line

CALD culturally and linguistically diverse

CD Communicable Disease

CDMO Chief District Medical Officer
CHE Catastrophic Health Expenditure

Communicable, Maternal, Neonatal, Nutritional

CMNNDs Diseases

DAK Delhi Arogya Kosh
DAN Delhi Arogya Nidhi

DGHS Director General of Health Services
DGHS Delhi government health scheme

DHHS Department of Health and Human Services

DHS District Health System

DRC Democratic Republic of Congo GBD Global Burden of Disease GDP Gross Domestic Product

GIS Geographical Integrated System
GIS Geographic Information System

GK gate keeper

GP general practitioner HCS Health-care systems

HPSAs Health Professional Service Areas

INR Indian Rupee

LMIC Low and Middle-Income Countries

MMU Mobile Medical Unit

MPCI Monthly Per Capita Income
MUAs Medically Underserved Area

MUPs Medically Underserved Population

NCDs Non-Communicable Disease

NGO Non-Governmental Organisation
NHIS National Health Insurance Scheme

NHM National Health Mission
NHP National Health Policy

NHPS National Health Protection Scheme

NHS National Health Service

NRHM National Rural Health Mission

NSSO National Sample Survey Organization

NUHM National Urban Health Mission

NVBDCP national vector borne disease control programme

OAEs Own-account Enterprises

Organization for Economic Cooperation and

OECD Development

OOP Out- Of- Pocket

PPR Physicians to population ratio
RSBY Rashtriya Swasthya Bima Yojana

SEFs Socio-Economic Factor

SPSS Statistical Package For Social Science

UHC Universal Health Coverage WHO WORLD Health Organization

## **ABSTRACT**

In 2015 the first initiative, Mohalla Clinics, was launched to provide primary health care services at the doorstep. Mohalla Clinics aimed to improve and strengthen primary health care services. The same services were provided by the "Mobile Medical Unit" as a medical van. Mobile medical vans are used to provide treatment in clusters or slum areas. Since 2015, Mohalla Clinics has catered to the need for primary health care. Mohalla Clinics does not provide all primary health care services. Nevertheless, it covers most of the services as the name suggests "Mohalla Clinics," a clinic at their doorsteps or within walking distance. According to DELHI government source 2021, around 450 Mohalla Clinics are functioning across DELHI. Although Mohalla Clinics provides services to all people in DELHI, the initial focus was to provide health services in underserved areas in DELHI. The health services being provided are all free of cost: all 212 pathology tests and 110 medicine. During my primary survey interaction, people are now happy with the services and saving time and money. All kinds of people benefit from Mohalla Clinics services, but mostly older people and informal sector workers benefit in real terms. Another indirect impact on the big hospital is less overcrowding problems due to extensive primary health care service by Mohalla Clinics.

## **CHAPTER I**

## INTRODUCTION

"It is health that is real wealth and not pieces of gold and silver."

Mohandas K. Gandhi

Health has a most crucial role in life. Every living being or thing needs better health to survive for a long time. Health includes mental and physical health, and both have an equal role in living. It is hard to stay for an extended period or sustain for many years without good health; everyone goes about their daily routines. Everyone must be mentally and physically fit.

According to WHO, the definition "health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." Health is an essential part of our everyday life; it is a resource. It is not just an objective of living. "It is a positive concept with an emphasis on utilising personal capacities and engaging in dignified social life" (WHO, 1986). For day-to-day function, we need Physical health and mental health. Every human being needs physical health for performing different work in day to day our life. Physical health is directly related to the capacity or capability of a human. It is impossible for every human being to do any work with unfit health. Any physical productive work is affected by physical health. It is about the human organ part, whether a human can do any work or not. To understand the basics of physical health, a healthy person can perform well compared to an unhealthy person. Health is not just restricted to Physical health; it includes many things related to a broader conception of health. Health refers to the ability to maintain a sturdy life free from emotional, social, mental, and intellectual. It demands that the person develops or can handle stress, gain new skills, sustain relationships, and form a personality to be resilient and lead an independent life. Health is just not for only human beings. It also has the same importance to all living beings.

Disease and health are related to each other, and these two terms cannot be separated; we assume healthy people face less disease, which means healthy people

are prone to more minor illnesses, whereas unhealthy people are caught by disease easily. Every human being faces an illness that could be any kind (communicable, non-communicable, and rare) during a lifetime; a person cannot escape from disease.

The specification of disease might be severe or not extreme depending on the kind of disease. The disease also depends on people's lifestyles, age, and living environment. Lifestyle and environment impact people's health, such as people who smoke more and drink are more prone to cancer and kidney failure. Different types of disease impact health, whether severe or not. Diseases are separated into three parts (1) communicable, (2) non-communicable (3) rare diseases.

## 1.1 NON-COMMUNICABLE DISEASE

Every year, 41 million people succumb to non-communicable diseases, equivalent to 71% of all deaths globally (WHO,2021). Another name also knows these diseases, showing the severity of chronic diseases. The most common and primary of all non-communicable diseases are cardiovascular diseases (such as heart attacks and strokes), cancer, and chronic respiratory diseases such as chronic obstructive pulmonary disease, asthma, and diabetes.

Non-communicable diseases spare no one; they affect all age groups, and people across various regions and countries have equally affected. However, these diseases are often associated with older age groups. "Still, the evidence shows that 15 million deaths are attributed to non-communicable diseases, occurring between the ages of 30 and 69 years. Moreover, as per WHO" (2021), 85% of these deaths occur in low and middle-income countries. The most common causes are unhealthy diet, sedentary lifestyles (non-physical activity), tobacco consumption (chewing or smoking), other harmful addictions, and alcohol consumption which make children and the elderly vulnerable to various risks leading to non-communicable diseases. These diseases are connected to the development process, such as rapid and unplanned urbanization, the globalization of tastes and preferences (often imitating other unhealthy lifestyles), and finally, population aging. An unhealthy diet and physical non-activity raise blood pressure, increase blood glucose, elevate blood liquid, and cause widespread obesity (including even newborn children).

The socioeconomic consequences of non-communicable illness are; poverty, increased household costs, vulnerable and socially disadvantaged individuals dying sooner than persons of better social status, fast-trained household resources, and long and costly sickness. A meaningful way to tackle these non-communicable diseases is by reducing their risk factors.

The management or control process of NCDs includes various medical or observational procedures such as simple discovering, screening, and dealing the disease and providing proper access to palliative care for those who require it. Many of these essential high-impact NCDs can be intervened through a suitable delivery mechanism at the Primary Health Care level. This gives an opportunity to brace early detection and much-needed timely treatment. "Evidence suggests such intervention is a sustainable economic investment as it provides an ease to the patients and reduces the need for more expensive treatment. Nearly 5.8 million" (WHO, 2015) die from NCDs. To put it simply, one in every four Indians is at risk of dying from NCDs before the age of 70.

#### 1.2 THE COMMUNICABLE DISEASE

The contagion is due to airborne microorganisms, such as viruses and bacteria, or the spread also happens through blood and bodily fluids transmission. The terms infection and contagious are also used to describe infectious diseases. Influenza (also commonly known as flu) is an infectious respiratory illness triggered by the flu viruses; it causes mild to severe health conditions and can also lead to death.

Individuals who have flu often have little or all the symptoms, including high temperature, feverish chills, sore throat, cough, running or stuffy rose, body pains (to the bones), headaches, fatigue, etc. Some even develop vomiting, "lack of appetite, and diarrhea, which are more common among children than adults" (Burden of disease in India context National Commission on macroeconomic and health, September 2005). Vector-Borne Disease such as dengue, Kala Azar, Japanese encephalitis, etc., typically affects people living in unhygienic conditions, where public services relating to sanitation are absent or negligent; such conditions produce pathogens and insects which affect health. For example, Kala-Azar occurs due to sandfly bites.

A communicable disease causes certain NCDs. "We argue that the binary of communicable and NCDs is incorrect and that resources and policy attention focuses on strengthening the Primary Health care system that addresses (communicable, maternal, neonatal, and nutritional diseases) CMMNDs as well as NCDs and reduces the underlying risk factor." According to the "Lancet's global burden of illness study in 2016," NCDs account for 61.8% of all fatalities, whereas infectious diseases account for 27.5% of all deaths. By 2016, all Indian states have completed this epidemiological transformation. By 1990, the only states that had achieved the changeover were Kerala, Goa, and union territories other than Delhi. The burden across the world of diseases study scrutinizes 333 health circumstances and 84 factors associated with risk, including nutrition-related conditions in the infectious disease group.

In the age ranges 0-14 years, communicable illnesses caused 81 percent of all fatalities, but in the age groups 42-69 years, NCDs caused 73 percent of all deaths (WHO, 2021). Communicable and NCDs contribute significantly to disease burden and death in India. The integrated health system will aim to prevent, screen, and manage communicable diseases and NCDs early. Further, common risk factors such as lack of nutrition, predisposition to the incidence, and death caused by both communicable diseases and NCDs prevent their severity & progression. In providing Primary Health care services to the public domain India has a wide extensive network. However, the quality the government provides always falls short of meeting the requirements compared to developed countries. Indian PHCs suffer from budgetary constraints, human resources, lack of infrastructure, unethical conduct of higher officials, corruption, improper training, and accountability.

## 1.3 Primary Healthcare

WHO (1978) defined "The primary health care addresses the main health problems in the community, providing preventive, promotive, curative and rehabilitative services accordingly." The Alma-Ata Declaration, released 40 years ago, recognized the rise and necessity of Primary Health Care. At the conference held at Alma-Ata, the central issue discussed was expanding healthcare services in developing and underdeveloped countries. Currently, globally support for PHCs has doubled, and

some health goals have been highlighted to reduce the health Millennium development goal. The main target was to ensure the primary service initiatives were appropriately implemented in low and middle-income countries. Most primary care initiatives have a variety of components, ranging from financial reform to health service delivery to funding reform to community demand for health care i.e., increased health care utilization (Kruk et al., 2010). This particular focus of the Primary Health Care initiative in developing and underdeveloped countries has improved healthcare access to the people, particularly the poor and the marginalized, where the services were provided at a reasonable cost.

The "world health report 2008" distinguishes primary care from primary health care. The former refers to health care provisions given by the health system, whereas the latter is defined very broadly as "the mobilization of forces in the society – health professional and lay people, institution and civil society, around an agenda of transformation of a health system that is driven by the social value of equity, solidarity, and participation" (Alma-Ata Declaration, 1978; Kekki, 2006; Starfield, 1992).

To satisfy health-care needs and be effective, primary care providers have traditionally measured their contribution to reaching government goals i.e., "health system goals in general, healthy life, broad coverage, and equitable access to services by everyone regardless of their economic position the system's responsiveness, and finally financial protection" (WHO, 2000). "The report noted that a wide variety of measures involving primary care (e.g., number of on-duty physicians who can provide regular services and the availability of Community Health Centres which also focus on the necessary aspects of primary care) had increased coverage under preventive and curative services, realized health outcome and overall beneficial effects were felt in the society" (Franks and Fiscella, 1998; Starfield et al., 2005; Villalbi et al., 1999).

It is very challenging to access the contribution of primary care in developing and underdeveloped (or low-income and middle-income nations). One of the glaring differences between high-income and developing countries for accessing Primary Health Care contribution is in high-income countries; need-based technology and professional services are used regularly in these countries. In contrast, their services are not accessible in poor and middle-income countries. In 2004, the average

healthcare expenditure in developed nations was 3810 US\$. In comparison, it was 91 US dollars in lower-middle-income nations and 24 dollars in low-income countries (Schieber et al., 2007).

There is another alternative method to evaluating the effect of specific primary care services through experiments in developing countries on people's health and the overall health system (Kruk et al., 2010). In the last 30 years, there has been a subnational Reform, and programs have been implemented in which major programs strengthen Primary Health Care provision. Various ranges have been included, such as design, scope, size, and implementation path, which are directly focused on the significant aim of Alma-Ata.

Both the United-state and the United Kingdom have the identity of developed countries. Because of developed countries, it is essential to know how these two developed nations Run their health system. Our study focuses on Primary Health Care, so we will discuss their Primary Health care system and how these two Nations used their resources and ran their PHC. UK and US constitute 15 % of the World's Health population, and their Global Health expenditure is 87%. "The USA alone consumes 41 % of Global Health budget with 5% of the population in 1990, which is \$3,000 per person". In contrast, the amount of health expenditure is very low compared to the US, which is \$41 per person in the developing world. At the same time, "the UK spent just over \$1,000 per person in 1990 and has achieved better health outcomes and guaranteed access to care for all its citizens" (Fry, J. et al., 2018).

The sharp differences between construction in the USA and the UK, the National Health Services in the UK is based on a solid foundation of primary care. A manpower plan based on the health care need of its citizens and a global budget which, despite the figure enumerated above, is regarded as too small to meet the current demand. Despite the UK's low expenditure on health care per person, people receive good care at moderate cost.

On the other side, "the USA has neither a manpower plan nor a budget; the services which are provided free the payment with third-party reimbursement have separated supply from demand, and the medical profession, with its capacity to generate its ondemand, has further distorted market forces" (Fry, J. et al., 2018). The United States

spends the most on health care globally, but the health consequence for the established market economy, social class employment, and type of service is often lousy care at a high cost. Strong primary care leads to better utilization of health resources and better care. The distinction between these two developed countries on the health system is a better utilization of health services and includes effectiveness by the UK. The US and UK present their image more largely while the UK is strengthening and extending primary care. "In the US, elaborating Complex of the specialist's bundled managed care system" (Fry, J. et al., 2018). A better primary care system needs to be more efficient, with maximum utilization and maximum outcome.

# 1.4 ORIGIN OF MOHALLA CLINIC (MOBILE MEDICAL UNIT)

In rural and urban India, a mobile health van equipped with an MBBS doctor and medications is currently offering ADCR (awareness, diagnosis, care, and referral) as Primary Health care services. The programme was launched with the goal of providing free medical check-ups, required medicines, and, most importantly, healthcare facilities to those who, under normal circumstances, do not have access to needed medical assistance and excellent service. The medical van also provides services to underprivileged people in urban areas.

Support for MMU under the NHM (national health mission), which is now encompassing both NRHM (National rural health mission) and NUHM (National urban health mission), is a crucial strategy to institute access to Public Health Care, particularly for people living in locations that are remote, rugged, underserved and out of reach areas (MoHFW, Government of India, 2019). This strategy aims to provide healthcare to people's homes, particularly in rural, disadvantaged, and neglected areas.

MMU services have envisaged meeting the technical quality standard for a PHC. By providing a suggested or package designed by policy for services under thematic areas are Neonatal & Infant Health, Child & Maternal Health, Adolescent, Reproductive and Contraceptive Services, management of chronic & common communicable diseases, professional management of mental illnesses, dental hygiene,

and care, OPD care (simple and acute illness), ENT, geriatric care and emergency medicine (Ministry of Health and Family Welfare, Government of India). This service for the population living in a reiterate, inaccessible, and un-served or underserved area, mainly aims to deliver healthcare facilities to the doorstep.

As of December 2014, the country had over 1301 functioning MMUs spread across 368 districts. "In urban areas, MMUs would continue to be deployed in areas with limited or a complete lack of access to health care services, such areas including tribal areas, conflict-affected areas, hilly and desert areas, Iceland, flood affected and snow bound areas." The current government-approved norm per regulations is one MMU per district (10 lakh population). Mobile medical units have helped mobilize Healthcare to conduct screening and primary diagnosis and, in some instances, provide Complex medical treatment closer to people's homes.

The Healthcare System in the developing country is a broad umbrella of various institutions under public and private sector organizations and resources that are involved in providing primary health care services (Alliance HPSR, 2004). But, there are various challenges in the public health services in these countries. This is due to low capital (finance in particular), lack of trained human resources, low institutional capacity, weak health information systems, inequity and corruption, unequal provision of services, lack of community participation, and opaque government rules and conduct (transparency is lacking) and finally accountability (APHA, 2008).

Mobile medical units provide Healthcare services, and in this approach, they intend to strive to deliver quality, affordable Healthcare. MMUs have the potential to revolutionize the element of access to health care in low-income countries. The literature further suggests that these "Mobile Medical Unit has occupied and are placed to play an essential role in ensuring Primary Health care services are accessed by the masses but also provide specialized healthcare services in rural areas" (Badholm, 2007; Nicolan et al., 2009; Mauad and Silva et al., 2011). Mobile clinics also provide services such as testing and referral for HIV, vector-borne diseases like Malaria, and STDs, and facilitating tuberculosis screening (Sushma et al., 2012). Mobile health vans have played and continue to play a vital role in delivering healthcare provisions to the marginalized section in the urban localities as well.

## 1.5 Mohalla Clinic

The Mohalla clinic initiative was launched in July 2015 by the government of Delhi, one clinic was started in a slum locality. The initial successes of the mobile vans or mobile medical units (MMU) gave rise to the idea of Mohalla Clinic. These mobile medical units exist across almost all districts of India and various parts of the world. The mobile vans operate as well-equipped clinics that provide health care in disadvantaged regions, with a doctor and essential personnel delivering medications and other supplies to individuals via adequately modified facilities or other types of vehicles.

Currently, the number of Mohalla clinics in Delhi as of march 2020 is 450, of which 30 of them are running in double shifts. Mohalla clinics, currently, are either set up in rented properties or portacabins. Medical facilities are being provided from 8 am to 2 pm, from Monday to Saturday. "Each clinic has four staff, including doctor, nurse, pharmacist, and office assistant" (DGHS Delhi annual report, 2020).

Primary medical care is based on established treatment procedures, which include curative instances such as common ailments such as fever, diarrhoea, skin disorders, respiratory difficulties, and so on.. All lab investigations are to be carried out by the clinic's laboratory. "These empaneled laboratories do nearly 212 kinds of free diagnostic tests, and the patients receive free drugs listed around 109 from the essential drug list of the Delhi government for health-related issues" (Lahariya, 2017).

"Mohalla clinics provide services such as antenatal and postnatal cure of pregnant women, assessment of nutritional status and counseling and a preventive and promotive component of national/state health programs." In the Mohalla clinics, the doctor in these clinics also helps a patient with good advice or guidance related to health diseases. These clinics are also aware of people about clean and safe drinking water, hygiene, and nutrition. These clinics increased access to health facilities as part of the government's policy to provide facilities at people's doorsteps, thus have made them more accessible.

To illustrate further, during outbreaks of illnesses such as dengue and chikungunya in Delhi, when health facilities were overloaded, the Mohalla Clinics became a key point of access for regular check and tests. This was indeed a great relief for the health institutions and the people; this way, Mohalla clinics played a major role in ending the health crisis at the earliest. Many states in India, such as Maharashtra, Gujarat, Madhya Pradesh, Karnataka, and municipal corporations in Pune, have taken a keen interest in starting a variant of these clinics.

Mohalla Clinic is a neighborhood facility providing free primary healthcare to the national capital's residents. As per the official reports, till November 2019 these clinics have provided medical assistance to more than two crore OPD patients and along with that, it has conducted 18 lakh tests.

## 1.6 Objective Of This Study

The Mohalla clinic aims to provide primary health care services at your door steps, so this research is about whether services at door steps or not.

As the name Mohalla clinic means a clinic providing services in the local area, our objective is to find how much time and transportation cost people save when the clinic is just a few steps away.

Finding opportunity costs of different occupational groups

Another aims to find how much money people are saving since the Mohalla clinic was established and Compare before and after out-of-pocket expenditure. More than 10% of out-of-pocket expenditures are considered catastrophic spending.

How Mohalla clinic works in the local area, especially for people who work in unorganized sectors such as Labourer, field worker, Gardner, etc.?

## 1.7 The hypothesis of the study

Null Hypothesis (H0): The walkable distance to Mohalla clinic is less than or equal to 2 km

The out-of-pocket expenditure for medicine, user fee, and transport costs is less than 10% of total income.

Alternate Hypothesis (H1): The walkable distance to Mohalla clinic is more than 2 km.

The out-of-pocket expenditure for medicine, user fee, and transport costs is more than 10% of total income.

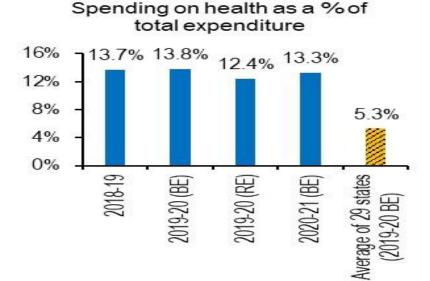
## 1.8 Limitation of the study

Purposive sampling was utilized for data collection in this study, indicating that all people were not considered randomly. Due to time and money constraints, only selected areas were surveyed for data collection. The recalling method has been used for average health expenditure on doctor's consultation fees, medicine fees, and transport costs. This average data is from before the establishment of the Mohalla clinic.

## 1.9 Delhi Budget And Health Expenditure 2021

Financial resources are a significant factor in boosting the service sector. Better health financial resources make the service sector efficient. Health is a part of the service sector. Better public health expenditure makes the health sector efficient boosts health services and strengthens the health services. A service sector cannot work efficiently without adequate funds. Adequate Health expenditure helps to make good infrastructure, ensure a full supply of medical equipment and medicine and improve the quality of care. Better health services increase productivity and citizens' good health and economic productivity. Good healthcare leads to good quality of human capital supported by adequate health expenditure.

#### Bar Graph 1.1



Sources: State Budget Documents 2019-20 and 2020-21 (Annual Financial Statement); PRS.

Delhi has allotted 13.3% of its budget for healthcare in 2020–21, which is much more than the average state allocation (5.3 percent). The above bar graph (1.1) shows that health expenditure is more than double the average of all of India's states.

Table -1.1

SCHEME EXPENDITURE UNDER MEDICAL & PUBLIC HEALTH SECTOR BY DELHI GOVT.

S. No	Year	Total	<b>Expenditure</b> on	%
		Expenditure	Schemes/Programmes	Expenditure
		on all		
		Schemes		
1.	2011-12	13642.55	1651.88	12.11
2.	2012-13	13237.51	1529.15	11.55
3.	2013-14	13964.28	1611.63	11.54
4.	2014-15	13979.67	2166.67	15.50
5.	2015-16	14960.54	2024.83	14.59
6.	2016-17	14355.03	2095.36	14.68
7.	2017-18	14400.99	1912.42	13.28

8.	2018-19	15672.03	2333.64	14.89
9.	2019-20	20307.02	2363.53	11.64

Source: Delhi Economic Survey 2020

The above table 1.1 depicts the health expenditure in percentage, showing that in 2014-15 health expenditure was highest in terms of percentage of health expenditure. After 2014-15 the health expenditure is decreasing except 2016-17 and 2018-19 in percentage. However, the actual amount in terms of rupees has increased continuously. Total expenditure on all schemes has also increased since 2011-12.

PER CAPITA EXPENDITURE ON MEDICAL & PUBLIC HEALTH IN DELHI BY
GNCTD

(in ₹)

Year	Per Capita expenditure on M&PH Sector
2012-13	1572.86
2013-14	1675.97
2014-15	1996.49
2015-16	1962.37
2016-17	2133.83
2017-18	2455.85
2018-19	2801.84
2019-20(RE)	3028.55

Source: Annual Financial Statement, Delhi Budget

According to the aforementioned data, per capita expenditure on Medical & Public Health in Delhi has climbed by 93 percent over the previous eight years, reaching 3029 in 2019-20 from 1573 in 2012-13. Table 1.2 shows that per capita expenditure has increased continuously since 2012.

## 1.10 Annual health report 2018-2019

Delhi is a historic city that has gradually grown to the position of a metropolis throughout the years. According to the 2011 census, "the total population of Delhi was 167.53 lakh people dispersed in 1483 square kilometers". In 2011, Delhi had the greatest population density in India among all states/union territories, at 11297 people

per square kilometer (Census, 2011). People come from different parts of India to find work and get settled in Delhi, which serves as an economic development hub. For basic and secondary healthcare services, the Delhi government has built a 4-tier health care infrastructure model, with Mohalla clinics and Polyclinics at tiers 1 and 2. Health Infrastructure in Delhi consists of Hospitals, Primary Health centers, Dispensaries, Maternity Homes & sub-center, Polyclinics, Nursing Homes, Special Clinics, and Medical Colleges as on 31st March 2020. As per the annual report 2020, Delhi Govt provides primary health care services through its 995 dispensaries, 496 Aam Aadmi Mohalla Clinics, 181 Allopathic, 46 Ayurvedic, 22 Unani & 107 Homeopathic Dispensaries, and other clinics.

In 2018, the Infant Mortality Rate, Neo-Natal Mortality Rate, and Under Five Mortality Rate in Delhi were 13, 10, and 19, respectively, compared to the All India values of 32, 23, and 36. Delhi's total fertility rate (TFR) of 1.5 is among the lowest in India (All India level is 2.2). Similarly, Delhi has the lowest crude death rate in the country, at 3.3%. 57 Per capita health spending in Delhi has risen from 1996 in 2014-15 to 3029 in 2019-20.

The different agency provides health services in Delhi, such as the center and state government, NGO, non-government, AYUSH, etc. The apex body or department in Delhi that provides primary and secondary health facilities is The Director General of Health Services (DGHS), under the jurisdiction of the department of health and family welfare, the government of NCT of Delhi. The director general of health services controls and monitors healthcare facilities, including school health clinics, AAMCs, mobile health clinics, dispensaries & health centers, and policlinics. The Health System in Delhi has connected through various health agencies in which dispensaries play a major role in a well-connected health system to provide better healthcare services.

#### 1.1.1 Mobile Health Scheme

Because lack of employment, food, and basic facilities in rural areas also forced people to move to urban areas, rapid urbanization leads to migration. People migrated in small groups of unauthorized colonies called the J.J cluster for food, employment, and basic facilities. People live in cluster colonies due to deprivation and poverty,

living in vulnerable conditions, maintaining a low standard of living and due to lack of proper medical facilities incidence of disease in the population has increased (Annual Health Report 2019-2020). In the last two decades, migration from rural to urban has increased rapidly, resulting in more dense urban areas. It is not easy for civic bodies to provide civic amenities in unauthorized colonies because the unsystematic structure of these colonies makes it hard to provide civic amenities.

Delhi government took many initiatives to provide healthcare facilities in the peripheral areas of society. A mobile health scheme is one among them to strengthen healthcare services in unauthorized and J.J cluster areas. Mobile health schemes covering Delhi's underserved regions also provide services at the doorstep. In the initial stage, "around 20 mobile dispensaries were launched to cover various J.J clusters all over the Delhi weekly in 1989" (Annual health report, Delhi, 2019-2020).

A mobile health scheme is different from other healthcare facilities because of its outreach to the targeted population. It is also a social initiative. In this scheme, mobility is the most significant plus point. Mobile dispensaries provide treatment and general for illnesses and symptoms & pains; "it can be incorporated for the promotion and awareness of any government health scheme" (Annual Health Report, Delhi, 2019-2020).

#### 1.1.2 Delhi health insurance scheme

Delhi Arogya Kosh

"Delhi Arogya Kosh" (DAK) is a recognised organisation that gives financial aid to eligible persons and needy patients in the amount of Rs 5 lakh for any illness/treatment.

Delhi Arogya Nidhi

The Delhi Arogya Nidhi (DAN) initiative gives financial help of up to Rs 1.5 lakh to poor patients who have a national food security card or an income certificate of up to Rs 1 lakh per annum issued by the revenue department for illness treatment in government hospitals exclusively.

#### Delhi Government Employee's Health Scheme

This is a Delhi government scheme that was started in April 1997. This scheme provides comprehensive medical facilities for Delhi government employees, pensioners, and dependents. This scheme includes health facilities (hospitals and dispensaries) run by the Govt of NCT of Delhi, local bodies, MCD NDMC, Delhi cantonment board, and central Govt health facilities. In addition, some Empaneled and referral health facilities come under this scheme.

#### Accredited social health activities (ASHAs)

The job assigned to ASHA workers is facilitating and mobilizing the community members to access the available healthcare service (Annual health report, Delhi, 2019-2020). The Asha workers have been trained with the knowledge and skill that provide a kind of support system to the health system. "The ASHA workers go door to door to give awareness to mothers about new-born also make Aware the community about sanitation, disease, cleanness, hygiene, infection control practices, and help in the field-level implementation of national health programs, facilitate check-ups of senior citizens, cataract surgeries, etc." (Annual health report, Delhi, 2019-2020).

## 1.12 Comparision Of Delhi Health Scheme and Ayushman Bharat Yojana

"Ayushman Bharat yojana also known as Ayushman Bharat Pradhan Mantri yojana also referred to as Ayushman Bharat national health protection scheme (NHPS) of the government of India." This scheme mainly provides free access to healthcare for 10 crore households and 50 crore people in the country. PM-JAY secondary care for requirements of professional and specialist treatment and those needing emergency hospitalization provide tertiary healthcare (PM-JAY).

The initiative is part of the Indian government's national health strategy. The ministry of health and family welfare introduced the health programme in September 2018. This health-care programme is funded jointly by the federal government and the states. This health program is specially dedicated to poor or vulnerable people to provide direct health benefits. . It is also known as a poverty alleviation programme because its beneficiaries are low-income Indians. This program is dedicated to the poor because more than 6 crore people get into the poverty trap yearly because of outof-pocket health expenditures (Press Trust of India, Nov 2018). In this program, states are free to participate or not in Ayushman Bharat Yojana. Initially, the Delhi government had not participated because the Delhi government claimed that its health scheme was 10 times better than Ayushman Bharat (The Hindu, June 2019). Despite political hurdles blame-game on policy, Delhi participated or joined the program in march 2020. Beneficiaries of the PM-JAY Arogya Yojana receive an E-card that can be used to obtain services at any impaneled hospital, public or private, throughout the country. Beneficiaries can stroll into a hospital with their E-card and receive cashless care.

The finding of the 71st round of the National Sample survey organization (NSSO) showed a staggering 85.9 percent of the rural household do not have access to any healthcare insurance or assurance. In urban areas, 82 percent of households do not have access to healthcare insurance or assurance. The cash benefit is up to 5 lac for secondary and tertiary care services per family. The significance of the Ayushman Bharat Yojana is to avail health services free of cost in private or public health centers anywhere in India. Beneficiaries of this scheme can seek medical treatment without fear of incurring financial hardship.

There is also a limitation of the Ayushman Bharat Yojana; due to certain limitations, Delhi had not joined the program initially but later joined in march 2020. According to the Delhi government, the Delhi health scheme is ten times better than the Ayushman Bharat Yojana. The benefits of the Delhi health scheme are irrespective of the household's monthly income. Delhi government reports say that this central government health scheme only covers 10% of the population of Delhi. "A citizen with an income greater than \$10,000 outside the ambit but less than the minimum wage of the middle class outside the scope."

## **CHAPTER II**

## LITERATURE REVIEW

#### 2.0 INTRODUCTION OF CHAPTER

This chapter includes those articles, journals, books, and reports which are more relevant to our study. The first study we go through is health economics, which tries to understand the basics of health and how health is associated with economics. The basic terminology of health economics has been explored. This study focuses on primary healthcare, so different articles and journals have been reviewed to gain a deep and basic understanding of primary healthcare. Later in this study, the role of health organizations like "WHO" has been considered, and different published reports of "WHO" related to health and primary healthcare have been reviewed. The objective of this study includes the role of primary healthcare in terms of accessibility and out-of-pocket expenditure, so an associated study on accessibility and out-of-pocket expenditure has been gone through. This literature review is divided into three parts, including the different dimensions of healthcare and healthcare services.

Along with three chapters, various health reports have also been included. In the first chapter, we discussed the role of primary healthcare and the importance of primary healthcare in the healthcare system. The second chapter is about healthcare accessibility, which includes the various dimensions of accessibility in the healthcare system. The third chapter is about out-of-pocket expenditure, which explores the cost of health at the primary healthcare level.

In the world, the highest share of healthcare of GDP is spent by the U.S. in 2019, the Organization For Economic Cooperation And Development (OECD) released data on US and Switzerland. However, the US share in healthcare is the highest, but the best quality of care is not ranked the highest. Despite the high share of healthcare in GDP, the high cost is born by the public from their disposable income and those with

private health insurance. Norway maintains rank 3rd among OECD countries, but this country stands as the highest nation in terms of healthcare services even though public health expenditure is less than the US and SWITZERLAND. In the last decade, the premium for health insurance has increased due to two important reasons, lifestyle changes and government policy. In the previous two decades, healthcare quality has improved with the help of technology; surgical procedures, therapies, and diagnostic techniques have continuously improved in the context of medical treatment.

Along with advanced technology in the healthcare sector, treatment cost has also increased. The utilization of advanced medical treatment has raised out-of-pocket expenditure. Rising cost makes access to health services far away. The high cost of medical treatment creates an extra burden on the household, which leads to health services' inaccessibility. Most products and services are influenced by financial affordability, and there are several reasons why some people do not have health insurance. As healthcare quality increases, utilization of health services will also increase. When health utilization services increase, the household expenditure on health also improves.

Donabedian (1971), in his paper, put two viewpoints "libertarian" and "egalitarian." According to libertarian, "Society's reward system and at the margin at least, people should be able to use their income and wealth to get more or better healthcare than what their fellow citizens wish they should." In the egalitarian view, "access to healthcare is every citizen's right and ought to be influenced by income or wealth."

#### 2.1 Bhore committee

In 1943, the first committee was formed regarding the health condition in India. Sir Joseph Bhore, head of the Health Survey and Development Committee, was appointed by the Government of India in 1943 to assess India's health status. Sir Joseph served as chairman of the committee. The main motive of the committee was to integrate corrective and preventive medicine at all levels. At that time committee recommended model some models for health services in India. The committee's main goal was "to serve a then-existing position regarding the country's health condition

and Health Organization and to provide recommendations for future elements to improve India's public health system" (Duggal R, 1991).

The committee presented a proposal including four primary goals. Also, more importance was given to preventive care. In subject operative treatment, the main recommendation has been given as follows; Unification of preventive and curative services at all levels of administration, Expansion of Primary Health Care (PHC) in Two Stages. For a population of 40,000, a single Primary Health Centre was proposed as a short-term option. Two physicians, a single nurse, four nurses, four midwives, four trained daises, two sanitary inspectors, two health workers, one pharmacist, and fifteen additional class IV people were to staff each PHC. The first was established in 1952, and subsidiary health centres were also intended to support PHCs while also coordinating and regulating their activities. A long-term strategy (also known as the 3 million plan) calls for the construction of primary health units with 75-bed hospitals for every 10,000 to 20,000 inhabitants, as well as auxiliary units with 650-bed hospitals clustered around district hospitals with 2500 beds. Significant changes in medical education have been implemented, including three months of preventive and social medicine training to generate social physicians. "A violation of the license in medical practice etc., qualification and their replacement by a single structured Bachelor of medicine and bachelor of surgery degree" (Government of India, Health Survey and Development (Bhore) Committee, 1946). The All-India Institute of Medical Sciences, a significant government institution for postgraduate medical education and research, was established in 1956. (AIIMS). "The committee's suggestion, which the government of newly independent India accepted in 1952, was essential in bringing about public health reform connected to the peripheral health center in India". Primary Health Centre was built across the nation to integrate "Promotive, Preventive, Curative, And Rehabilitative services to the entire urban and rural population" as an integral component of the wider community development program.

## 2.2 This literature review studies the different aspects of services related to primary Health Care.

#### The First One Is Effectiveness

To evaluate the performance of healthcare services, examine the availability and inclusion of Health Services provided by various Health Care models. Ranges of preventive and creative services have been established as the primary aim for achieving the target of access and coverage of health facilities in low and middle-income countries. The achievement of primary health care has been set up by many countries like Cuba or Iran, Sri Lanka, and Kerala (India). "In Iran, the government establishment of a primary care facility network led to the average of 85% of the rural population within 20 years" (Nasseri et al., 1991).

Sri Lanka, a developing nation compared to industrialized countries, has provided primary care to all its citizens and has a utilization rate similar to that of an industrialized nation. "In recent time, several Latin American countries have invested in primary care exposition with the impressive result" (Withanachchi & Uchida, 2006).

Afghanistan, Rwanda, the Democratic Republic of the Congo, and Liberia were among the post-conflict countries implementing basic health-care packages (BPHS). "An integrated set of essential services generally provided at primary care facilities as the vehicle for Rapid scaling access with encouraging early result in utilization of maternal and child health services in Afghanistan and Rwanda, despite ongoing insecurity" (John Hopkins University and IIHMR, 2006). The training and widespread use of non-physician clinics in Africa has enhanced access to primary care across rural Africa.

#### IMPROVED HEALTH

Health improvement is seen to be beneficial. Healthcare services that provide high-quality care Primary care vulnerable mortality, particularly infant mortality and infectious illness mortality, accounts for the majority of health improvement. "Several decades of primary care expansion in Costa Rica has been credited for child mortality better than wealthier Neighbors" (Unger J Pierre et al., 2008).

#### RESPONSIVENESS

Due to a shortage of data on the responsiveness component of primary care performance, a quasi-experimental or experimental study design was utilised to investigate the association between primary care efficiency and responsiveness. One research focuses on rural healthcare delivery, which improves convenience and public trust in the healthcare system. "The introduction of a family physician charged with a continuous and single source of care for most of the family health needs has been associated with a high level of patient satisfaction in Poland and Estonia" (Kalda et al., 2004; Kalda, 2000; Lember, 2007).

#### HEALTH SYSTEM STRENGTHENING

The importance can be understood so that primary care coverage is extensive. Several steps have been taken to strengthen the Primary Health Care system and broaden its area. Several primary Healthcare initiatives have been taken to expand its services which involves capacity "Building, Planning, budgeting, and management" at both the Central and district level.

#### **EQUITY**

Equity in health care services is a central problem for service utilization and health outcome. For example, "Costa Rica and Brazil selected electronically disadvantaged areas of their countries for the implementation of their primary care utilities as a result of reducing the gap in access to services between rich and poor" (Rosero, 2004). The problem of inequality seems to be prevalent mainly in the rural area; that's why primary care initiative focuses on rural area. Healthcare service inequity might be minimised by boosting the availability of generalist physicians to rural regions, establishing rural clinics, and providing Rural Health Insurance. "As a recent relative mortality among the poor rich gap in mortality decreased by more than half between 1990&2000" (Vapattanawong et al., 2007). The concept of equity is hampered by understanding fewer health workers and the shortage of infrastructure facilities.

#### FINANCIAL PROTECTION

The services provided at Primary Health Care Centre are not free of cost; it is funded by direct tax-based financing. It is necessary that funding should be adequate so that the supply of services cannot stop or continue for long. Adequate support is essential for shielding families from poverty and the high expense of obtaining family health care. "This is demonstrated by the model of the primary care system in Kerala and Sri Lanka, where underfunding of primary care delivery in rural areas is rising out-of-pocket spending for the poor who are forced to use private providers to travel further to get quality Healthcare" (Varatharajan et al., 2004; Withanachchi and Uchida, 2006). The financial strain of primary care is an essential factor that can lower the expense of over-treatment, particularly for the significant use of drugs and multi-provider. For example, "the use of facilities offering IMCI was found to be associated with lower out-of-pocket payments by families compared to known IMCI facilities, primarily due to more rational drug use" (Manzi et al., 2005).

#### **COST OF PROVIDING CARE**

There is research on the cost of delivering primary care in developing countries. Studies in nations such as Cuba, Sri Lanka, and Kerala (India) suggest that giving universal coverage and high health results is inexpensive. Health-related resources do not allow specialised care options, and comparative study is impossible. "The commission on macroeconomics and health has calculated that it costs USD 35- USD 40 per capita to provide a wide range of essential health services" (WHO, 2001).

#### 2.3 Astana Declaration 2018

In Astana, Kazakhstan, a conference on primary healthcare was conducted in October 2018, bringing together the chief of state and government to adopt a new statement. The first conference was held on at the Alma Ata declaration, which mainly focussed on building the Primary Healthcare system. in the new declaration, a more comprehensive scope has been adopted for Primary Healthcare. Global Primary HealthCare(2018) Conference emphasises the importance of primary care in addressing modern health challenges, renewing commitment to primary care, and achieving coverage for everyone.

The Astana declaration has considered three major commitments; the first one is "make bold political choices for health across all sectors." With the WHO as a guiding framework, this declaration intends to encourage cross-sectoral action via

health in all policies." "It includes new stakeholders, their accountabilities and how to mitigate conflict of interest since there is a prevalent concern in the health sector" (Institute Of Medicine, 2009). Current PHC concerns will be addressed by new stakeholders, who will also ensure accountability.

The second commitment is to establish long-term Primary Healthcare. The primary objective of secondary commitment is the efficacious and inventiveness of PHC. Primary Healthcare is still new research in Switzerland and a few other countries. High-income countries have developed their Primary Health care system through innovation, technology, and new knowledge.

The third commitment is to "empower individuals and communities." In this declaration, a few things also have been considered, such as empowerment and health literacy. The public's role and awareness are very important for Primary Health Care to control disease and prevent and promote health diseases.

In Astana declaration also includes patient participation in promoting the use of Technologies like digital health. "In line with this, the NHS England plans to implement on a national scale an evidence-based program based on a smartphone application that targets behavioral change and helps patients adopt the healthiest lifestyle, including weight loss" (Jungo K T et al., 2020).

According to the Global burden of disease (GBD) study 2015, "India ranks 145 out of 195 countries in the Healthcare access and quality index" (Lancet, 2017). Healthcare gap in India between state political will. "The purpose of the Aam Aadmi Mohalla Clinic (AAMC) is to provide quality Primary Health Care to the community at their doorstep" (Rao 2016).

## 2.4 National health policy 2015

In this literature review, National health policy -2015 has also been studied to understand the country's health policy.

National health policy aims to improve the health system's performance because of so many gaps in the system. Even though too many approaches have been introduced in the past, the healthcare system has been facing or continuously adjusting to gaps in the health system. Many infectious diseases could be stopped by spreading communicable diseases in the community or could prevent by better treatment, but due to system failure, better healthcare services could not provide.

The main goal of the National Health Policy (2015) is to clarify, strengthen, and prioritize the government's role in directing the health system in all of its aspects, including investments in healthcare, the organization, and financing of healthcare services, the control of illness and the promotion of healthy lifestyles through the transaction, access to advanced technology, human resource development, medical pluralism, and the development of the knowledge base required for being able to manage the health system. Leakages, bad governance, and ineffective money usage have been more of an issue in some poorer governments. "India was fortunate to have a national health service plan before the independence, but it missed the bus due to inadequate resources" (foundation for research in community health Bombay,1991).

Health applies to everyone, urban or rural. In the previous four decades, migration to cities and the urban population have grown. Increased slum populations were a result of unplanned urbanization. In urban or city locations, slums have been established due to the massive population growth in slums. An enormous increase in slum neighborhoods led to health issues. The unplanned structure of slums and the non-availability of better basic facilities (like sanitation, water, and electricity) led to increased disease in slum localities. People living in slums belong to the poor category; their income level is low, and they work in an unorganized sector. "This section of the population has poorer health outcomes due to adverse social determinants and poor access to healthcare facilities, despite living close to many public and private hospitals" (NHP, 2015). In 2013, the national urban health mission planned to strengthen primary health care with the help of urban ASHAs, ANM, and a primary health care network. "Due to the selective approach, several essential services especially for chronic illness was not obtainable or at best only available at overcrowded district and medical college hospital resulting in physical and financial hardship and poor quality of care" (NHP Draft, 2015).

#### Public financed health insurance - NHP 2015 Draft

This program established health insurance plans to provide access to hospitalization services and to shield households from exorbitant medical costs. This policy introduced Rashtriya Swasthya Bima Yojana (RSBY) in 2008. 55 million people were covered in 2003-04 to about 370 million in 2014. 180 million out of 370 belonged to the (Below Poverty Line) BPL category. Later the scheme RSBY was converted to the ministry of health &welfare.

# 2.5 The private sector in health

Today, the private sector provides around 60% inpatient treatment and 80% outpatient care. According to NSSO estimates, up to 40% of private care may be provided by unlicensed, unofficial caregivers. Own-account enterprises (OAEs), regularly operated household firms that offer health services without hiring staff make up 72% of all private healthcare businesses. "Healthcare cost of a household exceeding 10% of its total monthly consumption expenditure or 40% of its non-food consumption expenditure is designated catastrophic health expenditure and is declared an unacceptable level of healthcare cost" (NHP,2015).

Different studies show that most of the health expenditure is being made from personal income, that is, out-of-pocket expenses. "In all world, out-of-pocket health expenditure is 1% of GDP" (Jean Dreze, 2019). In the last two decades, Out-of-pocket expenses make up the majority of health spending, and most health services are provided by profit-driven, commercial organizations. Health care is being provided by the private player and the Federal government, but Private Health Services are more costly than the government. The main motive behind the expensive services is to earn more profit; the Private Health sector is profit-oriented. The reason for high charges by the Private Health sector is ineffective regulation. When the Federal government loses control over the Private Health service sector, they exploit more; mostly, people from poor or vulnerable groups face more exploitation. "In the absence of any effective regulation of the private sector, patents are highly vulnerable to exploitation." Private Health Service providers charge High for treatment because there are less competition in the health market and fewer Health Care workers for health services. The inefficiency of a competitive market in the healthcare industry, as well as how orthodox economics understands it in terms of efficiency and equity.

"India's record is particularly dismal in the specific field of Public Health, which refers to activities such as epidemiological surveillance, immunization, waste management, water supply, and sanitation" (Jean Dreze,2019). India's public health data is insufficient to help appropriately plan the health care system. Exact information about public health help in finding gaps in health policies. Epidemiological surveillance is necessary to make a robust health care system.

India does not perform well in the Healthcare sector compared to other countries. India's rank is deficient. Different studies and WHO reports state that India's health sector performance is not so good. India does poorly in this regard not only when compared to China (as well as any nation) or nearly any east Asian country, but even when compared to its neighbor in South Asia, with the possible exception of Pakistan. India is an emerging and fast-growing country (except a few countries). India's GDP is much higher than other countries, but in terms of health care services, water supply and sanitation are worst compared to China, Bangladesh, and Sri Lanka.

Over the last two to three decades, the picture of Healthcare has changed in India. Over the years; Healthcare facilities have increased; however, private facilities have taken over Government Health Care facilities. "The basic characteristics of the Indian Healthcare system (highly privatized and very ineffective) have not changed in the last 25 years" (Jean Dreze, 2019). Even the total share of India's health sector of GDP is very less. A report by the National Health Account Estimate states. Government health expenditure has increased From 1.15 percent in 2014 to 1.35 percent in 2018, has increased.

"The National Commission minimum program of the United Progressive Alliance, government promise to raise public expenditure on health 2% to 3% of GDP" (Jean Dreze, 2019). still, India is not expanding an Adequate part of its GDP on healthcare facilities. India's spending on health care is less than the target. According to the "NITI" Aayog report, India spent 1.5 % of GDP on Healthcare, 2018-19. both state and union governments are spending less than the targeted amount or share of GDP. According to NHM, India's health sector spending should be 3% by 2025. in European countries, spending/ share of GDP in the health sector is 7% to 8%.

For state and union governments, there is a need to change action policy or modify the existing plan so that services could be further improved. Chhattisgarh created the "MITANIN" program for female community health workers in 2002, eventually serving as a model for the national growth of Accredited social health activists (ASHA).

#### 2.6 HEALTH AS A FUNDAMENTAL RIGHT

In the past three decades, many Health Care programs have been launched for the improvement of Healthcare, such as the "National Rural Health Mission" launch in 2005-06. this program aimed to sustain progress in backward and rural areas. Later, it was further extended to urban areas. Janani Suraksha Yojana was also launched to improve institutional delivery and reduce maternal mortality. This program led to an abrupt substantial increase in institutional deliveries and a Rapid decline in maternal mortality in the last few years.

#### 2.7 HEALTH CHECKUP

Health is an essential part of our life that is least talked about in our society. Reason about least talk in less awareness about health. Society often neglects behavior for health. According to this book (Sense and Solidarity) by JEAN DREZE, "300 opinion article analyses in Hindi newspaper, Jan To June 2008, it emerged not one of these article deal with the health-related matter". It seems the negligent behavior of the Indian population. In the last two-three decades, Healthcare services have increased by private Healthcare services have rapidly increased than public healthcare services. In India, the private sector dominates or is highly privatized in the health system. Only 15% of India's overall health spending is public; "the remaining 85% is private, such as over-the-counter sales from pharmacy shops. by contrast, the ratio of public expenditure to total health expenditure is 40% in East Asia, 50% in Latin America, 75% in Europe, and as high as 85% in Britain" (Jean Dreze,2019). This data shows that public expenditure in India is deficient all world.

In every health care system, PHC has a significant role in providing Healthcare services to nearby people to a large extent. Primary Health Care supports health care services at the primary level. A study by the International Institute for Population

Sciences shows an accurate picture of Primary healthcare in India. "69% of primary health center (PHCs) has at least one bed, 20% have a telephone, and 12% enjoy regular maintenance" (Jean Dreze,2019). This show that our Primary Health Centre is in deplorable condition even the situation of poor state must be worst. This kind of service by PHC impact the utilization of health services. Even a Harvard study also found that (the absence of health workers ranges between 35 and 58 percent) in different Indian states.

In India, many poor and Middle Class consist of more population, but due to the lowest health services and worst conditions, Health care facilities do not provide access to decent health services, even for well-off families. "The technology and the expertise exist, but public facilities are highly inefficient, and private services are Virtually unregulated, leaving patent at the mercy of unscrupulous practitioners" (Jean Dreze,2019). In India, Private markets are unregulated, and not any strict control on them, even many politicians and Big corporate, money has invested in their private Healthcare market. Making more profit makes them more greedy and reluctant to clear services, increasing extra patient costs. "Fraud, overmedication, and unnecessary surgery are the bread and butter of the Private Health sector" (Jean Dreze,2019). Based on a 2003-2004 assessment of health services in Mumbai, around 65 percent of births in the private sector result in a caesarean section, compared to 9 percent in the public sector (the latter is close to WHO norms). This study shows how the private sector indulges in making more money without concern for people's losses.

Different state has different health policy and quality of health care services. Some states, Kerala, Tamilnadu, and Himachal, have good health policies, quality of services, and adequate stock of medicine are reasonable as compared to other states. They have an entire healthcare service staff and are well-behaved with the patient. In Tamil Nadu, the social barrier between patients and healthcare professionals appears to be lower than in Northern India. In Tamil Nadu, according to the survey( 2003-04), in NFHS, 99% of birth preceded by antenatal check-ups, and 89% of children are fully vaccinated, compared to 35% and 21%, respectively (Jean Dreze, 2019).

A comparison of Asian countries with India, specifically neighborhood countries such as Pakistan, Bangladesh, Nepal, and Sri Lanka, gives a piece of unique information on health indicators between these countries. India is the most populous

country among neighborhood countries; GDP is higher than the neighboring country, and it is also in a better position in terms of natural resources, but health indicator is not good in India compared to neighboring countries. In India, the infant mortality rate is 67, and in Bangladesh, 51 per thousand live births. According to the human development report (2003- 04), 95% of Infant in Bangladesh are vaccinated against tuberculosis, and 77% are vaccinated against measles. India's figure is 81% and 67%, respectively, similarly access to water to 97% of the population in Bangladesh, in India only 84% have access to "improved water sources" Bangladesh has 48% excess sanitation compared to India, 28%. "Bangladesh is no Paradise of Human Development like India; it is still one of the most deprived countries in the world" (Jean Dreze,2019), but Bangladesh's social indicators are improving rapidly. Despite much faster growth, India is still facing the social and financial issues of different sectors of the economy.

Another important factor in our social system is women. in society, men and women play an equal role in building our community. "A woman who is confined to the house has never been to school, is not allowed to visit a Health Centre on her own, and received no special attention during pregnancy is not well placed to look after her children's health or her own for that matter" (Jean Dreze,2019). To make a strong economic and social system, a country needs to empower women so that a country would catch up to a better place in the world. Not empowering a woman faces certain hindrances to development and also ruins the well-being of a nation. For the development and betterment of people's lives, the country needs to increase female participation in different sectors such as the workplace, school, and representation in Parliament, which would make the equality and equal growth of all human beings.

The burden specifies the costs associated with a specific disease. Different types of diseases incur different amounts of health expenditure; expected life years depend on the kind of disease, such as HIV and cancer, which causes every death. The burden of the chronic disease accounts for 53% of that, and 36% of fatalities are distributable to communicable diseases, maternal and perinatal disorders, and the nutritional deficiency (Balarajan Y et al., 2011). Variation of disease causes catastrophic expenditure and OOP expenditure. Data in India related to disease vary with region, Caste, Gender, and social-economic condition. "Caste in India represents a social

stratification: categories routinely used for population-based monitoring are scheduled castes, Scheduled tribe, other backward class, and other castes. Scheduled tribe 8% and scheduled caste 16% is considered the most socially disadvantaged group in India" (Balarajan Y et al., 2011).

There are significant social-economic disparities in access to healthcare in India because of caste. Access to health care services, inequality in wealth, and out-of-pocket expenditure also vary in indifferent caste and category; "for example, the infant mortality rate was 82 per 1000 live birth in the poorest wealth quantile and 34 per 1000 livebirth in the wealthiest wealth quantile in 2005-06" (Balarajan Y et al., 2011).

In India, the existence or participation of Healthcare services has more in the Private Health sector. Participation by the private sector led to more services provided by them which led to more utilization of private healthcare services; this led to more expenditure by people on using Private Health Services. "More than three-quarters of health spending in India is paid privately" (Balarajan Y et al., 2011). Therefore, out-of-pocket medical expenses significantly contribute to healthcare disparities and a lack of financial risk management for medical emergencies. High expenditure on health services creates financial distress for people, which leads to social inequality.

Last two decades, health services have increased in both public and private sectors, but in the private sector, the rapid increase of health services has increased more than in the public sector. Rapid growth in the health sector and health services quality of their care also increase along with out-of-pocket expenditure has increased too much. "expenditure for drug, which represent 70 to 80% of out-of-pocket expenditure for outpatients has been increasing with time at a rate that is at least twice as fast as the general price increase" (Balarajan Y et al., 2011).

A five-year strategy has been established to improve health services. The health study and development committee published a report in 1946 that laid out a comprehensive proposal in order to provide health services by government-run agencies to all the population across India at affordable prices. "The need for Universal, comprehensive care was reiterated in the first official National health policy purpose in 1983". A detailed five-year plan aims to strengthen Primary Health

Care, decentralize the health system, and reduce the burden of the public sector by expanding the private sector. A second national health policy was introduced in 2002 with the same goals based on actual capacity consideration. In 2009, "the Government of India drafted a National Health bill for the legal system to recognize the right to health and right to health care with a stated recognization to address the social determinants of health" (Balarajan Y et al., 2011).

# **CHAPTER III**

# **METHODOLOGY**

In this research, important social-economic characteristics of a patient have been selected. The patients' total income, education level, religion, caste, and occupation were selected to capture their socioeconomic status. The interview was held according to the convenience of the respondent. After self-introduction, the purpose of the interview was to mention that it was conveyed to them that the investigator would confidently ensure the information sought from them. Questions consisted of both open-ended and close-ended; as a result, they allowed a free flow of responses. During the interview, the process was free flow between interviewer and respondent, and an effort was made to avoid himself dominating the interaction process. The questionnaire used the health aspect and the household's social-economic profile.

The research methodology that how research has been conducted and the method that has been conducted systematically and scientifically. Research methodology depicts how data is being collected, what sources and tools to use, and what statistical tools and sampling processes have been adopted in data collection.

Secondary data have been used to evaluate the health status in the state and published and unpublished sources have been utilized for secondary data to discuss the study's objective.

The research methodology covers the Research Design, description of the location, population, sample, sampling strategy, creation of tools, pilot study, data collecting procedure, and data analysis. The current study aims to examine the function of the Mohalla clinic, how it is accessible, and how much money is saved by providing free healthcare services. Considering the nature of the research, the investigator adopted a descriptive survey design for data collection to accomplish the objective. A research study is an attempt to collect information from a member of the population on one or more variables. Descriptive research entails gathering data to test a hypothesis or answer questions about the study's urgency.

Delhi is the capital of India, also a territory having a population of more than 1.65 crores. Delhi is the fifth most populous city in the world, having 29259 people per square mile("Demographia World Urban Areas, 17th Annual Edition"). This city is very populated in terms of its land area. The city consists of both rural and urban areas. The population of this city has different living statuses; people live in slums, contentment areas, in unauthorized and authorized colonies.

Sample selection plays a vital role in conducting any kind of research. The process of picking a segment of a population in which the full population is represented is known as sampling. Due to time, cost, and other factors, it is impossible to take every person to collect data. The investigators selected purposive or judgment sampling from the different sampling techniques for selecting random Mohalla clinics. The researcher decides what information is needed and then looks for sources who can and are willing to provide it based on their skill or experience. The reason to choose the purposive sampling method is to survey Mohalla clinics situated in clusters or underserved areas.

To generate quantitative information, 20 Mohalla clinics were randomly selected for an in-depth interview. Health workers render service to the community through Asha and Anganwadi workers; they were omitted while generating information because the focus of this study was only on the Mohalla clinic. In this study for data collection and analysis, different literature reviews related to Primary Health care and the performance of primary Healthcare within or outside the country.

"A pilot study or pilot experiment or pilot project is a small-scale preliminary study conducted to evaluate the feasibility, duration, cost, adverse events and improve upon the study design before the performance of a full-scale research project" (L Thabane, J ma, R chu et al., 2010). The Pilot study gives a small idea of what you will do in a future project or study. A pilot study is also essential to acquire preliminary information about the study and also help to study design. It also helps to develop a basic understanding of the study. For data collection, the chief district medical officer(CDMO) consent was obtained from Delhi. The Pilot study was conducted in January 2020. three Mohalla clinics Were selected for a pilot study, which was not included in the main study. In-depth interviews were conducted, and focus interview discussion guides and the in-depth interview schedule were pilot-tested. The pilot

research revealed no serious flaws in the study's design, and the tools were determined to be practical. For this study pilot study was done before going to the actual survey; for the pilot study, 3 Mohalla clinics had been selected which serve the JJ cluster and unauthorized population. In January month, on different dates, the investigator visited Mohalla Clinic in the morning time because, in the morning, the Mohalla clinic's timing is 8 a.m. to 2 p.m. Monday to Saturday. During the Morning hours, there was more patience because people went to work, so in the morning, there was more crowd of people even many people used to wait outside the Mohalla clinic for their turn. The pilot study also helped us to frame relevant and professional questionnaires for a pilot study.

Data was collected over a period of two months, from January 18 to 15 march 2020. for an in-depth interview, patients were personally contacted before this investigator personally contacted the medical officer in charge of the selected sub-Centre Mohalla Clinic and took permission to interview patients who had visited the Mohalla clinic. During the data collection process, the investigator explained the study's purpose, showed their responses' confidence and obtained consent. The investigator further verified the facility of Mohalla clinic regarding the availability and utilization of facilities. In the focus or in-depth interview, important socialeconomic characteristic of the patient was selected. The element selected for the captured social-economic status were total income of household or patient, education level, religion, caste, age, and occupation. For data collection or focus interviews, a prepaid questionnaire was used for primary data collection. The questionnaire was prepared in Hindi and English according to patient convenience because, in Delhi, people know Hindi and English despite belonging to a different religion or region. Secondary data was also collected from various sources on out-of-pocket expenditure data. Secondary data have been used to evaluate the health status in Delhi. Published and unpublished data sources were used for data collection and secondary data to discuss the study's objective.

During in-depth interviews, the recalling method was used to collect data on outof-pocket expenditure, consultancy fees, transportation, and medical costs. All this data is on an average basis. Before the Mohalla clinic, people used to visit government hospitals or private clinics, so the recalling method was used to collect data on those variables.

The quantitative data gathered were recorded serially in an excel sheet based on the identification number. In an excel sheet, the data were categorized based on the many variables analyzed. The data was analyzed based on the aim and hypothesis using a suitable statistical approach and SPSS. This approach computed frequency, percentage, Arithmetic mean, and standard deviation using the statical technique described below. Data on expenditure was gathered in Indian rupees, and categorical data were obtained using frequency and percentage. Age, gender, educational achievement, and monthly per capita consumer spending are the independent variables considered in the analysis. Education attainment includes (zero education, primary education, secondary education, and higher secondary education) and higher levels of education, as well as a location of living (rural or urban) and kind of health care provider (public or private).

# 3.0 Sampling Procedure

sampling is a part of the population that shows representation; we know that it is impossible to include or interview all populations so an appropriate sample has been taken to represent the population. The sampling procedure is more time-consuming and more costly. Despite this, it is the best way to represent all populations. Sampling has been used to test the hypothesis; in this study, a purposive sampling technique has been used. The word stratified means choosing from various subgroups. In this technique, the population has been divided into subgroups. The sample collected from the population is about a specific group that the investigator wants to include in collecting data or information. This is the best way to conduct data when you want to make inferences about the population.

# 3.1 Tools To Analysis

Both Quantitative and Qualitative data have been collected for analysis. Quantitative data such as occupation, family member, BPL card, education level, gender, etc., variables have been taken for study, quantitative data such as waiting out in the hospital, transportation cost, Consulting and medicine cost, etc. data have been

collected for analysis (Kaul) define data analysis as, "studying the organized material in order to discover the inherent fact." Different angles are used to analyze data while exploring relevant or purposeful facts. The variable taken in the study consist of different measurement scales nominal, ordinal, interval, and ratio to analyse data in different ways. Another important use of data analysis is establishing or generating empirical relationships among the variables. For the statical calculation, descriptive statistics have been used to analyze data, and descriptive statistics include the study is the measure of Central tendency, in Central tendency Arthematic mean, median and mode have been used, a measure of variability include range measure of relative proportion used to calculate percentile and percentage rank analysis of variance. Below all these table of data results based on primary data.

#### 3.2 Data Results

Table 3.1 Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Female	1	224	57.3	57.3	57.3
male	2	167	42.7	42.7	100.0
	Total	391	100.0	100.0	

Table 3.2

**Statistics** 

**AGE** 

N	Valid	391
	Missing	0
Mean		43.72

Median	44.00
Mode	55

Table 3.3

Descriptive Statistics

		Minimu	Maximu		
	N	m	m	Mean	Std. Deviation
AGE	391	17	76	43.72	13.570
Valid N (listwise)	391				

This study includes 399 people from 20 Mohalla clinics; each clinic selected 20 people for the primary study except for one clinic in which we surveyed only 19 people. Out of a total, 170 people were male, 229 were female, 42.6 percent were male, and 57.4 were female. The total of all respondents' average age is 43.18 years. The highest age is 76 years, and the lowest is 16 years. Treatment taken from the Mohalla clinic for the age group over 50 years is 31.3 percent, which means one-third of people in the old age group seek treatment at the Mohalla clinic.

# **Occupational Groups**

Table 3.4
OCCUPATIONAL GROUP

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	171	43.7	43.7	43.7

2	35	9.0	9.0	52.7
3	21	5.4	5.4	58.1
4	39	10.0	10.0	68.0
5	17	4.3	4.3	72.4
6	63	16.1	16.1	88.5
7	36	9.2	9.2	97.7
8	9	2.3	2.3	100.0
Total	391	100.0	100.0	

People in Delhi engage in different work, so in this study, different groups were being made for data analysis. Group 1 consist of housewife, and group 2 consist of those people who earn a fixed salary and works in the organized sector, but the amount is small in terms of rupee (supporting staff, sweeper, ASHA workers, security guard, B.M.C workers, computer operator, peon, private job, sales boy, sales girl, social worker, etc.). group 3 (auto driver, taxi driver, transporter). Group 4 (dependent, not able to work). Group 5 (barber, beautician, carpenter, electrician, tailor, contractor). Group 6 (daily wager, factory workers, welding workers, Gardner, hawker, labourer, machine worker, maid, mechanic, motor mechanic, optician worker, selai centre, small shop). Group 7 (business field worker, self-business, and big shop owner, retired). Group 8 (govt employee, Pvt employee). in all these occupational groups, the highest frequency is Housewife, that is 171 and 43.7 in percentage. The second highest frequency belongs to group 6th, 63 people, and 16.1 in percentage, and the third highest in group 4th, 10 percent. All these groups 1, 6, and 4 contribute around 80% of all occupation groups. The bar graph 1.0 show the highest position for group 1<sup>st</sup> and 6th is the second highest. From the bar graph, the bar of occupations 2, 4, and 7 are almost similar.

# Bar Graph 3.0

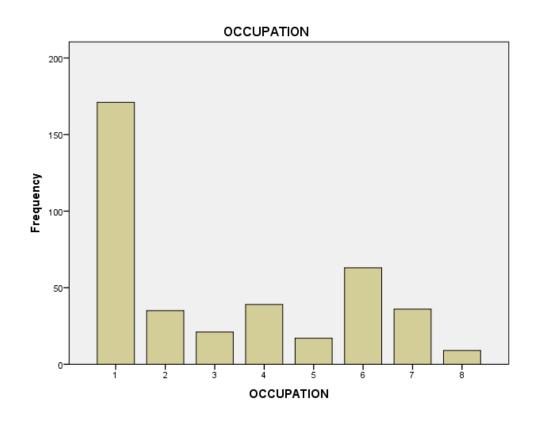


Table 3.5

		FAMILY MONTHLY INCOME Mean
	1	11974
	2	12757
	3	12214
	4	16859
	5	13706
	6	9752
	7	22444
	<i>'</i>	[

Table 1.7 shows the mean income of different occupational groups. The above table depicts that the lowest mean income belongs to group 6, which is 9752. People in the 6th group work in the informal sector, such as labourer, welding workers, motor mechanics, etc. those who work in the informal sector don't get jobs regularly; this is why their income is low. Group 8<sup>th</sup> has the Lowest percentage, i.e., 2.3%. People in this group belongs to government employee and Pvt. MNC employee and their average earnings are more than 38000.

Table 3.6
Waiting hours in the hospital

Num of people	391
	0
Mean	4.765
Median	5.000
Mode	6.0
Minimum	.0
Maximum	8.0

**Table 3.7**Waiting hours in hospital

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	.0	15	3.8	3.8	3.8
	1.0	19	4.9	4.9	8.7
	2.0	23	5.9	5.9	14.6

3.0	37	9.5	9.5	24.0
4.0	42	10.7	10.7	34.8
5.0	81	20.7	20.7	55.5
6.0	105	26.9	26.9	82.4
7.0	68	17.4	17.4	99.7
8.0	1	.3	.3	100.0
Total	391	100.0	100.0	

In Delhi, people are engaged both formal and informal job sectors. Those people who are engaged in an unorganized sector, earn less; they work such as rickshaw pullers, field boys, Labor, etc. for them, it is hard to do more expenses on treatment of medical services primarily for the private sector. They earn wages by doing all-day work, which is not fixed. People work in an unorganized sector, and taking a leave for a hospital visit is hard. An analysis of the primary survey, people who work in an unorganized sector such as labor, factory worker, or hawker Consist 16.1 after 43.7% belong to the homemaker. These people work as labor, factory workers, and field workers earn wages if they take leave for a day, then they earn nothing because they earn per day basis. Before the setting up of the Mohalla clinic, people used to go to the government hospital for medical treatment, but there was an overcrowding problem; more people meant more time to spend and wait to turn for treatment. Table 1.8, from data analysis, we found that they used to wait for 7 to 8hrs maximum for complete cure. Based on data analysis, people used to spend 4.7hr for treatment. The mode value is 6 hr, which makeup 26.9%. People told us that when they used to visit a government hospital, their whole day got wasted; after that, they could not find work. Data analysis also shows the waiting hour for patients when they used to visit government hospitals. According to the Data, analyses average waiting hours is 4.7 hours per visit in the government hospital, median and mode value is 5 hrs and 6hrs, respectively. According to people, when they used to visit government hospitals, they lost the entire day, which is a loss of per day income for those who earn daily basis.

### 3.3 Distance Covered During Hospitals Visit

Table 3.8

Distance Covered During Treatment

N	391
Mean	8.3
Median	8.0
Mode	6.0
Minimum	.0
Maximum	30.0

Before Mohalla clinic facilities, people used to go to a government hospital which was usually not nearby their house. They used to travel too far to take government health facilities. Data show that people used to travel 8.3 km on average this value has taken going to and coming from government health facilities. The highest value for distance covered during government health facilities visits is 30 km. Data show that only 7% of people take 0 value, which means government health facilities are nearby or within walking distance, such as government dispensaries. Going too far for availing of government health services is hard for people to belong to an age group of over 50 years. For the people, age group 50 to 60-year average value of distance covered for health services is 8.3 km, and for those over 60 years of age is 7.3 km. It is hard for people whose age is over 60 years to go far for health services.

# 3.4 Out-Of-Pocket Health Expenditure

**Table 3.9** 

# Private healthcare expenditure per visit

N	Valid	391
	Missing	0
Mean		218.3
Median		200.0
Mode		200
Std. Deviation		155.6
Minimum		0
Maximum		1000

Table 3.10

Monthly Total Medical Expenditure

N	Valid	391
	Missing	0
Mean		703.5038

Median	600.0000
Mode	600.00
Std. Deviation	588.77600
Minimum	.00
Maximum	3000.00

The average Private Health expenditure is INR 218, and the maximum health expenditure is INR 1000. Before setting up the Mohalla clinic, people used to go to either a private clinic or a government hospital and dispensary. Because of the long-distance public health centre, people usually used to go to Private Health centres. Different Private Health Centres charges a different fee for the treatment and medicine. Private health clinics or Health centres charge too much, which is not affordable for people who earn wages or have low income. The highest frequency of Private Health expenditure is 79 times, 20.2%, which is INR 200 second highest frequency of private health expenditure is 53 times, 13.6%, INR 300. Private Health expenditure reduces the consumption level of other goods and affects all occupational and age groups. For those above 60 years of age group, It is hard for them to bear high out-of-pocket expenditure on treatment and medicine because, after 60 years of age, they become dependent or unable to do any work.

## 3.5 Transportation Cost

Table 3.11

Transportation cost on per visit in public hospital

N	Valid	391
	Missing	0
Mean		67.62

Median	50.00
Mode	50
Std. Deviation	51.939
Minimum	0
Maximum	300

Health facilities for every people are not within walking distance or nearby at the home region to region and state to State Health Services very. In Delhi, health facilities are not at the doorstep; health facilities are very at a different distance, somewhere it is too far, or somewhere it is nearby at home or within walking distance. People of Delhi usually use a different mode of transportation to reach the public health centre, and the cost of transportation also varies with the spread of public health facilities. Data shows that people usually use a different mode of transportation according to their income level and the distance between their homes and health facilities. The average value of transportation cost is 67.5, whereas the maximum transportation cost is 300, and the highest frequency of transportation cost is INR 50, which is 79 times.

# 3.6 Total Out-Of-Pocket Expenditure And Monthly Visit

Monthly Medical Expenditure of Private Clinic

**Table 3.12** 

Within The Great Emperior of Till value Clime		
N	Valid	391
	Missing	0
Mean		703.5038
Median		600.0000
Mode		600.00
Std. Deviation	n	588.77600
Minimum		.00
1		

Maximum	3000.00
---------	---------

**Table 3.13** 

Age group		Monthly visits to Mohalla clinic  Mean value
(18-30)	1.00	3
(31-40)	2.00	3
(41-50)	3.00	3
(51-60)	4.00	4
60+	5.00	5

Table 3.14

Monthly Visits To Mohalla Clinic

N	Valid	391
	Missing	0
Mean		3.26
Median		3.00

Mode	2
Std. Deviation	1.427
Minimum	1
Maximum	7

Since the Mohalla clinic's establishment, people have been taking treatment from Mohalla clinic frequently for the last five years. Data results show that the average monthly visit by a family of one household is 3.26, the median value of 3 visits, and the maximum is 7 visits per month. People of all communities taking treatment from Mohalla clinic regularly visit the Mohalla clinic, mostly age groups of 50 to 60 years and above 60 years using various services free of cost. The highest visit is for the age group above 60 years, with an average of 5 visits per month, and an age group of 50 to 60-year visits per month.

Mohalla clinic provides Primary Health Care Services, and after the setup of the Mohalla clinic, people are taking treatment from Mohalla clinic regularly because of Mohalla clinic. Many people are saving their transportation costs, Private Health expenditure, and precious time. We have calculated the total monthly Private Health expenditure by multiplying by visits. The data result shows average out-of-pocket expenditure and transportation cost is INR 703 and the total percentage of income is 8.3 %; the highest value of out-of-pocket expenditure is 3000 per month.

# 3.7 Opportunity Cost And Loss Of Income In Different Occupational Groups

#### **Table 3.15**

The average loss of a percentage of income in different Occupational groups

Avg	expenditure	of
inco	me in percentage	

		Mean
OCCUPATION	1	10.5
	2	10.8
	3	9.5
	4	15.5
	5	8.4
	6	10.9
	7	10.5
	8	7.0

Table 3.16
Average monthly loss of income in percentage due to illness

N	Valid	390
	Missing	1
Mean		10.880
Median		10.000
Mode		6.7
Std. Deviation		4.7617
Minimum		3.3
Maximum		23.3

Table 1.15 depicts the loss of income in terms of percentage if they take leave for medical treatment or visit a government hospital. The highest percentage is 15.5 in group 4, and the second highest percentage value is 10.9 in group 6. People in group 6

work in the informal sector. The average loss of monthly income is 10.8, and the median value is 10. Visiting a government hospital leads to a waste of a full day; table 1.8 shows that the average time is 5hr when the patient visits a government hospital for primary care. Visiting public hospitals means a loss of full-day income for those who work in the informal sector because they don't get daily work. People on a contractual job in the formal sector also lose their per-day income because taking leave for a day will cut their per-day income.

## 3.8 Conclusion of Methodology

The hypothesis has been tested using mean value of data. Data analysis satisfies the null hypothesis that the accessibility of Mohalla clinic is at their doorsteps. Earlier, people used to visit a public hospital that was too far and took lots of time in all processes. Now people are saving on medical and non-medical costs. The second hypothesis satisfies the alternate hypothesis that is loss of monthly income is 10.8% of total income. It was an alarming situation for those who work in the informal sector. For those dependent and working on a contractual basis, paying more than 10% of their income for primary medical treatment was hard. Data show that monthly expenditure on primary health treatment is more than 10% which is 10.8%. Data analysis satisfies the alternate hypothesis that out-of-pocket expenditure is more than 10% of their monthly income. In this study, we have compared out-of-pocket expenditure with the NSSO 75<sup>th</sup> scheduled. Data analysis shows that the average outof-pocket expenditure visiting a private clinic per ailment is 212 rupees compared with the NSSO data of Delhi, which is 667 rupees. This average out-of-pocket expenditure includes doctor fees and medicine costs per ailment non-hospitalized. The national average is higher than our data analysis. In Delhi, the average medical expenditure per ailment is 667 per NSSO 75<sup>th</sup> scheduled. Mohalla clinic is effective in terms of saving time, medical cost and providing primary healthcare service to the large numbers of people.

# **CHAPTER IV**

# **ACCESSIBILITY**

"Accessibility as the condition of being approached in this sense accessibility is a characteristic of something that can really reach entered or used" (Jeannie L. Haggerty Darcya, 2011). On the issue of quality and healthcare access, India was stood at 145<sup>th</sup> out of 180 countries (global burden of disease, 2016).

It is a moment or state in which something becomes accessible and how simple it is to access something. Accessibility of products and services also relies on time and distance accessibility. What kind of or manner people use to acquire that facility sometimes depends on how we got there. These two are essential factors to measure the accessibility of Medical Services and how much time it takes to get the service. Accessible at various times has a distinct influence on the service users wish to use. Accessibility is directly related to the services at a particular time.

Distance is also an essential aspect of particular services and a significant factor in measuring the accessibility of services. As much as the distance is far from the service centre, it will take more time to get access to services, so how distance is more or less will impact the services; therefore, accessibility of services will take more or less time depending on the distance. Donabedian (1973) describes "accessibility as the characteristic of the health system that impedes or promotes service utilization." if the accessibility of Health Services is readily approachable, it will increase the utilization and promotion of Health Services. Raising awareness among the people about their health condition and promoting health services should be necessary to create awareness about the health and health service so that more people could use more health services and decrease disease among people.

Another important aspect of accessibility is Geographic availability, price, organization, and acceptability. There is a direct impact on health services of these characteristics. This is not a separate part but also another important factor that makes health services easily accessible. How people use or reach these characteristics is essential for health services.

"From this perspective, evaluation of accessibility is amenable to both objective and subjective assessment of the Geographic and temporal availability of service, their organization availability, their cost and their social and cultural accessibility levels" (Levesque,2006). Accessibility must be evaluated so that we can replace it with our objective. If our purpose is precise and clear to complete it in a timely, so we need to ascertain that acceptability is amenable. Amenability of accessibility help to determine our objective and subjective. Accessibility of Health Services also depends on whether the service is temporarily available. Where service is temporarily available, people do not rely much on them. The accessibility of health services is also related to organizational availability, whether the organization is private or public. A country, state, or city having a high income, prefer Private Health facility, whereas low-income people usually prefer public health facility. Typically Private Healthcare provides services at a high price and better service; despite that, they charge High to earn more profit. Public Health Care provides services at a meager fee for free. Still, the services they provide are not satisfactory or not so good. in a developing country where the income of people is very low. The high population creates many challenges for the government; high consumption, low-income do not leave a piece of hard work for Health care expenditure.

Another aspect of social and cultural acceptability. India has a different culture from another state, their historical tradition, eating Culture, and traditional treatment practices. Treatment of disease using long back historic home remedies still exists in the Adivasi community. They believe in their age-old traditions in medication using Herbs and all. In Adivasi culture, they often prefer to use home remedies and avoid going to modern Healthcare facilities. Generally, it is hard for them to accept modern health facilities because of age-old belief in the treatment. In India, people belong to the Adivasi community; they believe less in modern medical practices and prefer traditional health home remedies; even in rural regions, people also practice home remedies for disease treatment. Let's take the case of Choti Mata(chicken pox), in which people do not go to a hospital or health centre and use home remedies for the treatment of "chicken pox" they believe that if they go to a modern Health Centre, then their Devi Bura man Jayegi and will have to face a negative or lousy consequence for that, so people must accept the modern Health Care those who belong to different social and cultural tradition.

A consensus statement developed by Primary Health Care specialists from across Canada to create an operational definition of the PHC attributes to be evaluated. A distinct definition of accessibility, first contact emerges; how easily a person can acquire essential care "including guidance and support" from a doctor of choice within a specified time relevant to the severity of the condition is referred to as accessibility. This is unique to PHC and is one of its primary functions. In first contact accessibility, this approach is based on the need for medical care; whether needs belong to doctor advice or support should be emphasized. The accessibility is fulfilled when the patients take proper advice and support from the doctor. This first contact accessibility approach determines that the patent gets full medical and appropriate advice without facing any harmless is an essential feature when a patent needs medical help. It is first which helps to get medical consultation at the initial stage. first contact accessibility is an initial situation when patients seek medical care and how it is easy for a patent to get medical support and advice. (Haggerty et al., 2007). Our study fulfills the condition of first contact; since the Mohalla clinic has established in Delhi, it has become easy for the patient to seek direct medical consultation and services at doorsteps. Easy accessibility of Mohalla clinic save time and cost for primary healthcare treatment. It becomes easy for the patient to approach the doctor for advice and medical care.

Accessibility of Health care becomes more accessible when the geographic location is easily approachable because it saves cost and time. Public Health Care is provided by the government, which covers its entire population for Health care services. The government tries to make all possible efforts so that all population gets access to Healthcare. Challenges are faced by the public institution or Federal government when they set up the health centre at a different place. After all, different geographical location has different characteristics. Government strategies and plans have been affected due to different locations and regional factors when setting up health centre in that region.

Location affects how easily services can be accessed. The quick treatment of patients results from the health care centre easy accessibility. The geography and the healthcare delivery system are directly related. This study is about Nigeria, whose main focus was to make a better primary health system. The state government

established the district health system (DHS) in 1999 to boost the Nigerian National Health System, a primary health care delivery system. Enugu's DHS managed healthrelated responsibilities such as management, preventative health treatment of various alignments, and interaction sharing. DHS in Enugu has achieved success in all tasks. The DHS And "state Ministry of Health in 2005 surveyed to map out of the spatial distribution of all the Healthcare facilities in state" (Ifeanyi R et al., 2012). it is about solving the primary healthcare problem related to the accessibility and location of health facilities. "In Enugu" over the year, the demand for Health care has increased with the growing population; as the population grows, the need for different facilities also has increased. In Enugu urban area, the population grows, demand for Health care has also increased, and traffic congestion has become a problem of accessibility for different facilities. However, the situation for accessibility of Health care differs from other facilities because the pain cannot be bear for a long time. To tackle the problem of traffic congestion" and to Far the speed of accessibility (Geographic Information System) GIS technique has been developed. Because privately-owned services are costly, access to health amenities in an urban region is challenging due to population increase. This has led to the overutilization of the existing PHC facility within the urban Centre. The fast-growing population in the "Enugu" urban area also with fast-growing economic activities, leads to traffic congestion and stops accessibility of health care. Due to that circumstance, various issues have arisen, including slow emergency and treatment response, rapid illness spread, high infant and increasing maternal mortality rate, quack medicine, self-medication without doctor advice, and patient support of pharmacies in metropolitan areas. Overutilization of services creates overcrowding problems that lead to treatment delays.

For GIS, different tool had developed; some hardware and software tools were used to find out the location and improve the accessibility of Healthcare. Primary data is acquired through field visitation, and a secondary dataset is obtained from Enugu urban area map. Satellite imagery and base map were also used. The data set involves the three-stage "(1) conceptual design, (2) logical design, (3) physical design". In the Enugu urban location, they have created a network to make easy communication during an emergency. Using this "GIS" technique, software-hardware networks were

connected with the help of a data set so those routes could be clear during an emergency.

The government, policymakers, NGOs, and the private player have a key goal of accessibility which helps to complete the need for Health Services. Norris and Aiken (2006) says that healthcare access is a complicated matter. "it is as if everyone is writing about it (access), but no one is saying what it is." Another important factor for access is "it is multidimensional" there is the various dimension of access. The most important are availability, accessibility, affordability, accommodation, acceptability (Metthew M, 2012). Accessibility may very depend from country to country or vary in different regions. Various other indicator has been used to measure accessibility, in which one approach is spatial accessibility. There are two primary components of hospital accessibility. The number of services offered in relation to the size of the population and secondly proximity of services delivered in relation to population location. Luo and Wang (2006) developed the two-step floating catchment area (2SFCA) technique in response to "the constraints of current measurements of hospital accessibility." The emergence of 2SFCA is a shortcoming in the measure of spital accessibility. In this shortcoming, the world provider or physician-population ratio has been recognized.

The 2SFCA methodology or method is built upon, and it covers all cross-border movements and all boundaries that encompass a larger area. The PPR Framework has been used under the 2SFCA. The catchment size is determined by a maximum travel time and distance, where all services or people within that catchment are deemed acceptable and close to a certain population. Beyond the catchment region, all places are inaccessible. The two-step floating catchment area(2SFCA) method measures the population within the catchment with each service provider. In step two, measure services have existed within the catchment of each people. 2SFCA approach is attached with the Same assumption.

The 2SFCA's major strength is that it does not consider pre-defined regional boundaries. Within a catchment, distance degradation is insignificant, and the size of all populations and services are considered as they existed. This research investigates and assesses the 2SFCA in the context of Primary Health Care access.

"Primary Health Care is cost-effective because it covers large outpatient care and easier to deliver services than specialist therefore if PHC is equitably distributed, it can play an important role in preventing disease and decreasing health inequality on a large scale in society" (Guagliardo, 2004). The accessibility of PHC consists of two major dimensions, (1) potential and (2) realized potential. When all barriers to PHC are abolished, accessibility is realized when a deprived resident lines up in time with a willing and capable Health Care delivery, where real or actual Access follows. Health services consist of five main components "availability, accessibility, affordability, acceptability, accommodation," III IV V comes under the category of non-spatial barrier and display social-economic factor. The first two comes under the spatial category. "accessibility is travel impedance (distance or time) between residential or demand area and PHC services or destination" (B Nasser et al., 2005). Whether the services of PHC are equally distributed depends on access and availability, considered "spatial accessibility." WHO and UNICEF (1978) describe PHC accessibility as global, regardless of where individuals live or work. A study is based on spatial accessibility to PHC services in New Zealand. This study determines the minimum level of time and closest distance to the PHC center by road network. According to the New Zealand Ministry of Health (2001), PHC services must be provided to 95 percent of the population in New Zealand during regular business hours (within 30 minutes commute time) and after hours (within 60 minutes commute time. The most essential factors in determining the shortest travel time and distance to the PHC center are road connectivity, rural or urban region, and road type. This study finding says that 95% of the population can Primary Health Care facilities within 30 minutes drive during the business day.

An unnecessary hospitalization (AH) is one that could have been avoided with prompt and appropriate use of outpatient treatment. Avoidable hospitalization is widely used for chronic disease management, including diabetes, asthma, other acute diseases, pneumonia, and appendicitis. Available hospitalization gives us a reference for Primary Health Care in which such disease could be treated. The term used an unavoidable hospitalization might have been prevented via effective utilization of care (Rosano A et al., 2012). avoidable hospitalization is when outpatient care should be shifted to Primary Health Care. Many authors have noted how income level, insurance status, race and ethnicity, and socioeconomic factors significantly influence the

association between hospitalization for ACSCs (ACSH) and primary care quality (SEFs).

The role of services provided by Health care may vary from country to country or state to state. In Beveridgian, Primary Health care services exist at High-Tech hospitals' bottom and top levels. This system is a pyramid shape hierarchical bureaucracy. In Bismarck, where the state's role influences significantly less, healthcare provider and (social) insurance seems strong enough. In the United States. Uninsured and underinsured persons confront a barrier to accessing primary care since the HCS lacks universal eligibility to health care coverage (Bart D et al.,2012). in the USA, insurance services have been furnished by both public and private players but are predominance by the private sector. There is also a difference between GP and GK in terms of access to the hospitalization in which GP acts as a gatekeeper while the patent has to take references from a specialist. In contrast, non-GK can seek direct HC facilities from a specialist without the authorization of a GP.

Proximity to care is also linked to increased utilization of healthcare facilities. "Improving geographical access to Primary Health Care can directly affect adverse health outcomes" (Perry &Gesler, 2000). It is essential to investigate the geographical accessibility of PHC for other services. "The identification of deficiencies in coverage and the population with United access to care can inform the settings of new facilities and resource allocation" (Joseph & Phillips, 1984). The health service does vary depending on the mode of way to use weather walking distance or using public transport and using private transportation "(impedance the friction of distance) can be represented by Euclidean, distance along a road network, travel time or travel cost" (Frank T, Brice G, et al., 2006). "Variable in the use of Health Service has more strongly associated with road distance and estimated travel time with Euclidean distance" (Martin D et al., 1998).

Healthcare usage is a significant predictor of reducing sickness problems and morbidity. "levels of utilization, however, are far from equal, either socially or geographically" (Grass, 1972; Anderson & Newman, 1973; Knox, 1982; Mayhew & leonardy, 1982; Joseph & Phillips, 1984). Avoidance or neglect of Health Care utilization can have significant effects in the future, potentially putting a person in a position to incur a hefty expense on disease. However, healthcare utilization may

differ across developed and poor countries. In extreme circumstances, they may impede access to specialised treatment and contribute to mortality inequalities.

"Ensuring even and equitable access to the utilization of Health Services is, however, difficult for whilst the demand for a service is by individuals who are dispersed across Geographic space and differ in their morbidity and other characteristics, the service is avoidable at fixed location" (Pinch, 1985). it is hard to establish a system for healthcare services due to different geographical areas, so the system could not provide equitable access to Health care facilities. In our society, social factors have a role in influencing access to and consumption of health care. As a result, social factors have a big role in deciding access to health care, even when clinical or actual need is similar, resulting in significant geographic variance in usage rates. It is necessary to provide vital information regarding access and provision of Health care services to make a proper plan to reduce inequality in Health care services. Rosenstock (1966) "highlighted the psychological and motivational determinants of Health Service utilization and that emotional, rather than cognitive, beliefs' of an individual are an essential part of understanding utilization." Individual views are very significant in accessing and using Health Services if you are susceptible to specific illnesses. The utilization level of Health care would be less if people's approach toward the traditional health system still existed. They hesitate to take modern health facilities because of their conventional beliefs; however, in the last 40 years, people's beliefs about modern Healthcare have shifted as people gain education and awareness. Despite this, barriers such as distance, the expense of health care, transportation, and inconvenience continue to limit utilization.

"Socio-culture and environment determinants of utilization are highlighted in frameworks proposed by Suchman (1964a, 1965a, 1965b 1966), which emphasizes that the level of people's health knowledge is vital in influencing utilization and that will vary amongst the different social- economic, and monetary group" (Field K S,2001). People are generally attached to their society and follow their socio-culture and environment, so it is hard to create an instant climate to track modern health service utilization.

Anderson(1968); Aday& Anderson, (1974) The life-cycle determinants "focuses on the conditions which affect the level of service use." Family composition (i.e. age,

sex, size, and marital status), the social framework (occupation, socioeconomic class, education, and culture), and health beliefs regarding attitude toward practitioners, disease, and health care are all factors that encourage usage. Other elements, such as family resources (money, savings, insurance, and access to a regular provider of care) and if the broader public has appropriate resources, play an enabling role.

In Anderson's (1995) model, it appears that a behavioral model of healthcare use is evolving, and people's roles in social groups have moved toward healthcare utilization. The key component in Andersen's model concerns the ways, environment, population, lifestyle factors, and health outcomes, yet the model is challenging to implement due to stringent data requirements.

In the last 30 to 40 years, people's perception or their behavior has changed as the social environment changed. As health care services and facilities have been increasing, demand for Healthcare utilization is also continuously increasing. They are moving toward Modern Healthcare. Current reforms in funding allocation to health authorities in England and Scotland are being implemented based on the Framework provided by Cars-hill et al., (1994). In changing environment toward health care utilization started in developing countries where resources were allocated to the health authority, and the supply for Health care increased consequently with demand. "A measure of demand is derived based on a component of need and supply" (Smith et al., 1994; Sheldon et al., 1994; Peacock and Smith, 1995; Sheldon, 1997).

Usage behavior was analyzed in connection to two important primary measures: frequency of utilization (once a week, once a fortnight, once a month, or twice a year) whenever is necessary and relying on home visits (regularly, occasionally, never). The notion of accessibility was characterized by assessing each item's barrier level (high, medium, low). Those with the easiest access to the service may be expected to use it more frequently (due to fewer obstacles to overcome). Those that utilise the service the most, however, may have developed a more effective way of excess, notwithstanding whatever other restrictions that may exist.

"Access to Healthcare varies across space because access to health care is affected by where health professionals locate (supply) and where people reside (demand), and neither professionals nor Population is uniformly distributed" (Luo W, 2003). Space is very important in terms of Health Services (supply) availability. Also, the density of the population (demand) affects the services. Different geographical locations measure or are affected by the demand and supply of Health care services. It is a major component of accessibility to reach easily of Health Care Centre. Physician scarcity has been particularly noticeable in rural areas and impoverished urban communities.

The demand and supply of Health care services also depend on the population density of a specific location. High population density necessitates additional healthcare services, sometimes insufficient to meet all healthcare demands.

Table 4.0

NUMBER OF HEALTH OUTLETS UNDER GNCT OF DELHI DURING THE YEAR
2019-20 AND PREVIOUS YEARS.

S.	Year	200	200	201	201	201	201	201	201	201	201	201	201
N	health	8-	9-10	0-11	1-12	2-13	3-14	4-15	5-16	6-17	7-18	8-19	9-
0.	outlets	09											202
													0
1	Allopathic	214	220	234	247	256	260	260	242	245	242	241	241
	Dispensaries												
2	Mohalla								107	162	166	189	485
	clinics												
3	polyclin								23	24	24	24	25
	ics												
4	hospital	35	38	38	38	39	39	39	38	38	38	38	38
	S												
5	Mobile	72	90	90	90	90	90	43	43	24	24	24	22
	health												
	clinics												
6	School	28	32	34	93	100	100	68	70	59	55	58	60
	Health												
	clinics/												

Referral						
centres						

Source: Delhi Annual Report 2019-20

Delhi is a highly densely populated union territory with 11320 people per square kilometer as compared to the national level of 382 people per square km. The above table 3.17 depict that government health facilities are sufficient to provide a city's health services. In Delhi, having a good health infrastructure does not cater to health needs because of the high population. During data collection, we found while interviewing respondents who said before the Mohalla clinic; that they used to visit government hospitals where they had to wait for long hours because of the long queue. On average, for 6 to 7 hr, they had to wait for a doctor interaction. The delay in treatment or seeking doctor advice is overcrowding or high hospital population density. Access to these causes inefficiency in the healthcare industry. Different geographical locations with the population density across the country have to fulfill all the demand and supply of Health care facilities. Many studies have shown an inefficiency in rural and urban health facilities, specifically in developing countries. The shortage of physicians causes the inadequacy of better health facilities.

"Access to Healthcare may be classified according to two dichotomous dimensions potential versus reveal and spatial versus aspatial) into four categories: potential excess, potential aspatial access, revealed spatial access, and revealed aspatial access" (Khan,1992). "Revealed accessibility focus on actual use of Health care services whereas potential accessibility signifies the probable entry into the Healthcare system but does not ensure the automatic utilization of the offered services" (Joseph and Phillips, 1984; Khan, 1992; Philips, 1990; Thouez et al., 1988). Spatial excess emphasizes the relevance of spatial access by emphasizing non-geographic barriers or facilitators such as social class, money, ethnicity, age, gender, and so on.

Revealed accessibility reveals the actual utilization of Health Care Services, whether they exist in actuality or not at a specific level. The main target of revealed accessibility is to measure the actual use of services by the facilitator of health, no matter whether services are provided by the public or private. Revealed accessibility determines the utilization level of health service, which varies in different situations

in the health care environment. Potential accessibility primarily focuses on a barrier or a facilitator. A particular wall comes when health services are introduced because of social-economic factors. The situation is considered related to non-Geographic hurdles or facilitators of the social and economic factors. "The measure of potential spatial accessibility includes regional availability and regional accessibility" (Joseph & Phillips, 1984).

The RAA (regional availability approach) considered the demand-supply model of Health care, which are Express population-to-practitioner ratio. It is more specific about the region to express population-to-practitioners in the context of demand and supply of Health care. Regional healthcare availability is more beneficial to the healthcare supply and demand paradigm. The relationship of demand versus supply is more Complex within the specific region because it is difficult to measure the exact gravity of demand and supply of Health care.

The regional accessibility plan included the possibility of Complex interaction between supply and demand located in diverse locations, making it more complex and requiring more data. The health department of US Department of Health and human services (DHHS) used two tools to identify shortage areas (Gao, 1995, Lee, 1991). One designates "health professional shortage areas (HPSAs) and other medically underserved areas or populations (MUAs/MUPs)," both are being used to calculate the population-to-primary-care physician ratio inside a rational service area. This is the basic indicator to measure regional availability of Primary Health care of potential spatial access.

HPSAs can include different categories of the population; e.g, low-income for the minority of the groups and MUAs have infant mortality rate, income level, and age. The concern with regional measures is that they cannot be able to reveal detailed spatial discrepancies within these important rational services areas such as a region or a country. They are based on the assumption that those boundaries are impervious; actual interaction across limitations is not adequately accounted. Access to health care is interconnected with the supply of resources. Resources in close proximity to the community also depend upon the distance and ease of travel.

The Australian health system faced considerable hurdles in supplying this rising population with accessible, categorically competent treatment (Manderson L and Allotey P, 2003). In Australia, people from Overseas lives in this country in a different region. Australian and Overseas people live together but represent different cultures, languages, and social cultures. Their diversity is a barrier to health services because their historical belief and commitment to their culture make them unreachable to health services. The diversity of people set their opinions and are reluctant to avoid modern health services. Culturally and linguistically diverse (CALD) groups of people hardly engage in the health system. Despite several intercultural programs addressing many of these hurdles, CALD groups are hesitant to engage with the health system, exacerbating existing health inequalities. "utilization rate of Health and preventive services have revealed that CALD, the community is underutilized health service" (Jenkins et al., 1996).

The CALD group is culturally committed to their beliefs; they believe in their traditional medicine, a home remedy that persisted for many years. They set a notion and assume that modern health service is against their culture and their society; due to this, they avoid Health Services and underutilize the health services. Another key reason is the communication problem, which prevents people from seeking health care. A longitudinal survey conducted by Kelkar et al. (1999) confirms that a lack of English proficiency is a barrier to using health care services. Chinese have a long history in medicine; they have an old traditional health system that is socially and culturally attached to it. A United Kingdom study (Watt et al., 1933) of the "health care experience and health behavior of Chinese immigrants found that the underutilization and sometimes inappropriate use of Health Services was due to language, communication difficulties faced by many of Chinese participant" (Henderson S; Kendall E, 2011). There is too little support the Literature to view that "attitudes, perspective, health belief, and health-seeking behaviour are shaped by one ethnicity and culture" (Bates and Edwards, 1992; Bates et al., 1995; Berger, 1998; Payer, 1998; Wacker et al., 2005).

This research examined people from various cultural backgrounds and their health systems and utilization. The study aims to create a better health care delivery system and a healthier CALD population. The study found that three common barriers existed

in CALD communities, "(1) unfamiliarity with services related to health and difficulty of accessing them, (2) the need for a doctor to accept the traditional healing methods along with orthodox medicine, and, (3) language problems impeding effective communication with health professional highlighting the need for more effective use of interpreter" (Henderson S; Kendall E, 2011). In the study, Focus Group has taken to study for Healthcare accessibility. Four CALD communities are "Sudanese, Afghani, Pacific islander, and Burmese people."

#### Theme-1 Unfamiliarity With Health Services And Access Difficulties

According to reports, Sudanese arrived in Australia with an understanding of health services. They know or know how to get a specialist; they stated that the doctor's behavior was cooperative, friendly, and highly trained. Afghani Focus Group details supplied by Afghan respondents based on their understanding that they are unaware of the availability of health care. The Afghani participant understood the need for Health Services but forgot their appointment times. For older Afghani people, it was not easy to access, so they went with children to attend an appointment with the doctor. Pacific islanders share the same situation with these Pacific islanders who lack knowledge about health services. They face difficulties accessing health services due to unfamiliar with the health system. Focus Participants in the Burmese group expressed a lack of information about appropriate health care, but they have more knowledge about the GP than other groups.

Theme-2, Doctors must accept traditional healthcare methods alongside Modern medicine.

When a family member became ill, respondents in all four groups stated they attempted to employ traditional therapies from their nation first. All four communities desired that the doctor acknowledge and consider their conventional medical approach. "Sudanese Focus Group reported that their health belief, cultural value, and traditional health treatment were often overlooked by an Australian health professional" (Henderson S; Kendall E, 2011). The Australian health professional did not give much importance to their beliefs, cultural values, and traditional health treatment; they avoided and did not try to understand their health system. Sometimes

traditional health systems work more than modern ones; this kind of introduction establishes a conflict between patients and doctors when they neglect others.

Afghani Focus Group, according to Afghani people, uses their traditional health treatment alongside Australian doctors. They avoided going to the doctor for treatment, but they tried their home remedy; consequently, they faced a negative impact on their health. They gave preference to self-medication; still, they were in pain. Their reluctant behavior would more harm to neglecting or not visiting to doctor. Pacific Islander Focus Group members have turned to singing and dancing when ill, believing such activities will restore their health. Burmese Focus Group these people first prefer their traditional health system; they use natural medicine and avoid going to an Australian doctor.

The demand and supply of Healthcare services also depend on the population density of a specific location. The high density of the Population asks for more Healthcare services which are sometimes inadequate to fulfill all health services demands. Access to these creates an inefficient situation in the Healthcare market. Different geographical locations vary with the population density across the country, which has to fulfill all the demand and supply of healthcare facilities. Many studies have revealed that health facilities in rural and urban regions are inefficient, particularly in developing nations. The shortage of physicians causes the inadequacy of better health facilities. This article focuses on the consequence of four shocks on the household economy. A rising body of evidence suggests that paying for healthcare can swiftly become a Catastrophic health expenditure (Kawabata et al., 2002; Pradhan and Prescott, 2002; Ranson, 2002).

## **CHAPTER V**

## **OUT-OF-POCKET EXPENDITURE**

Illness or disease imposes a financial burden on people, the household, and the healthcare system. Sickness makes it impossible for a person to work and reduces their productivity at work. "Health affects domestic economic growth directly through labour productivity and the economic burden of illnesses" (WHO, 2004). Better health promotes physical fitness, enhances life expectancy, and assures productivity. The disease comes with a cost; when you seek medical attention to recover from an illness, you must pay a fee; even the expense of health care may jeopardize your future earnings. "Indeed, in most societies, the disease creates not only out-of-pocket expenditure but also out-of-pocket expenditure for their families" (Uplekar et al., 2001). It also undermines income production, putting future economic well-being at risk. Even many countries made an effort to use free health services,", especially in a developing country where the majority of people are impoverished," yet this kind of policy has a minimal positive outcome. People in society make investments in their health in exchange for future benefits.

Health is not about having a fit physique; it is a type of asset with monetary value. The out-of-pocket expenditure or treatment cost is a kind of necessary burden that is paid without any condition. People suffering from the disease cannot wait too long for treatment; this kind of situation creates anxiety and fear. It is a no-choice circumstance in which a severe illness occurs, leaving no choice for treatment and requiring more than their income, and you must afford "with no choice" to save our dear life.

"The failure of public investment in health to cover the entire spectrum of Health Care needs is reflected best in the worsening situation in terms of cost and impoverishment due to health care costs" (National health policy,2015). "From 2011 to 2012, the share of out-of-pocket expenditure on Health care as a proportion of total

household monthly per capita expenditure was 6.9% in the rural area and 8.5% in the urban area" (NHP,2015).

Demographic transition is difficult for the health system, particularly in low and middle-income countries (LMIC), as well as for a country's social system. According to the research, "older people made up 69 percent of the global population (World Bank 2009-2010), with an annual growth rate of 2.1 percent in low-income nations and 1.3 percent in lower-to-middle-income countries". As the older population grew, so did their usage of health services, health expenditures, health budget, and per capita health expenditure. "The overall health spending in a high-income nation is around 11.2 percent of GDP, but the health spending in India is only 4.2 percent of GDP, with 67.2 % of that expenditure paid directly by the patient and their family as out-of-pocket payments" (WHO, 2010).

"Studies from other LMIC have also documented that out-of-pocket expenditure is more than their government expenditure on health and that advancing age is positively correlated with high out-of-pocket expenditure" (Somkotra and Lagrada, 2009; You and Kobayashi,2011). The difference between high-income and low and middleincome countries is income level along with Population and limited resources. When the Population is high in a country, it becomes tough to distribute the limited resources among the Population, and it becomes more challenging for policymakers when more people become older than more resources are distributed among more people of older age. As we all know, their production level decreases as people get older. It's become a hardship because you're consuming more and giving or producing less. "Cross Nation study has reported that health service utilization by older people in LMIC declines when the proportion of health visits requiring out-of-pocket expenditure increases" (Albanese et al.,2011). When people grow old, the need for health services increases because as people age, their health begins to deteriorate, increasing the likelihood of illness. As people age, their immunity levels start to decline, making it more difficult to fight off illnesses, and increasing the possibility of infection. As people aged, they demanded more healthcare services. The high frequency of chronic diseases and the resulting impairment raise the demand for health care among the elderly in LMICs.

The need for service utilization gets more for people belonging to old age. As stated above, chances for more senior people to get increased for Health care services because older people face more illnesses, so they ask for more health services. More disease means more health services. "As health services utilization increases, health expenditure also increases. more than 40% of the household income being spent on health" (WHO, 2011). Older people with a high risk of illnesses make many visits to Health Care Centre, increasing their healthcare expenditure. When the number of Health Services visits increases, it gets closer to catastrophic health expenditure. The optimal threshold for defining catastrophic spending has been contested, and many studies related to health economics have used thresholds ranging from 5% to 60% (Wyszewianski, 1986; Wagstaff and V Doorslear, 2003; Xu et al., 2003). "As catastrophic expenditure Ranges from 5% to 60%, expenditure for older people varies according to their Healthcare needs even at 5% to 10%. Spending on health becomes more difficult for older individuals when their earnings fall, and they do very little work, or, as many older people become dependent, making it difficult to spend more on health, resulting in a major financial crisis. With their low-income level, their marginal expenditure becomes high because of more health services utilization and health expenses.

"Unlike high-income countries in LMIC, health expenditure accounting for as little as 10% of the income or consumption expenditure of the household may lead to impoverished and financial debts" (Bonu et al., 2007; Limwattananon et al., 2007). This research was conducted in the Indian state of Tamil Nadu. India's government and commercial sectors offer healthcare services, and Siddha, Ayurveda, homeopathy, and Unani are all practiced. Service which the government supplies for free in terms of consultancy and essential medication, but the problem is these services are Limited in terms which causes to more toward the Private Health Care Services. The private sector has a motive to provide Healthcare services at a different cost and earn more profit as health care services of the public sector in Limited terms elderly persons to shift to private healthcare, which causes spending for health services and medication. It takes the area of Kaniyambadi block in Tamilnadu in which both Government and private provide Primary Health care services. This study takes these people who are above 60 years. In this study, these people spend more than 10% of expenditure expenses to a higher risk of Hunger. According to this research, lack of formal

education, TB, diabetes, and dementia continue to raise the likelihood of catastrophic health spending.

This study evaluates how OOP and expenditures on catastrophic health relate to rural older people in India. It is critical to distinguish between excessive out-of-pocket expenses and devastating expenses. These aged people who lack the utmost financial resources ensured social security, and Health Insurance schemes face more health expenditure. People in this study who spent 10% of their income on health services were more likely to experience food insecurity, despair, and suicidal thoughts. "Finding confirm the alarming prevalence of catastrophic health expenditure in LMIC" (Xu et al., 2003). People who are illiterate or have a low level of education suffer higher healthcare costs. In this study, education was found to be highly significant in reducing catastrophic and out-of-pocket expenses. Education has a good relationship with comprehending the indicators of healthcare usage.

A study was done in 2007 in Odisha state on the Chikungunya outbreak in that state. The relationship in this study about the Chikungunya and loss of productivity at that time. "Chikungunya is a Vector-Borne Disease usually characterized by fever, headache, fatigue, nausea, vomiting, muscle pain, rash, and joint pain." in 2007, when Chikungunya was an outbreak, Africa and Asia were mostly affected during the period. This disease rarely becomes a cause of death but affects economic loss and causes substantial morbidity. This disease first emerged in the southern part of India; after that, it spread across India.

"As per the data from "NVBDCP," about 1.4 million suspected and 1985 confirmed Chikungunya cases were reported during the year 2006 from 15 states and union territories" (Gopalan and Das., 2009). The different study states that India is a developing country, and financial resources are constrained, so it was not easy for India's Healthcare system to face such challenges and to provide standardized drugs and vaccines across all affected regions in India. When such disease occurred instantly, facing such challenges and offering better healthcare services was difficult. This unavailability of prompt Healthcare imposed a further economic burden on the health system and households due to delays in treatment or mismanagement of treatment processes (Gopalan and Das., 2009). When any pandemic emerges

instantly, it creates an extra burden on the Economy, even somehow; it creates panic among people.

During that period, there were 1.7 % confirmed cases and around 0.5 % of suspected cases of Chikungunya (2006-2007). This was the first time such disease emerged, creating an extra health service burden in Orissa. When any disease appears instantly, it becomes tough to fight that situation. Also, the management system has to face more challenges in preventing diseases and finding a way to manage all resources and systems. Various dimensions of economic burden (patient side treatment cost, productive Less, government side cost of prevention, control, and management, etc.) of Vector-Borne diseases such as Malaria, dengue, and kala-azar, have been explored in the context of different countries, including India (Gopalan and Das., 2009)

This study focused on the financial repercussions of the Chikungunya outbreak at the household level regarding OOP healthcare expenses and income loss due to productivity loss in Orissa State, India. The cross-sectional study was conducted to assess how out-of-pocket expenditure is related to loss of productivity during when Chikungunya outbreak in Orissa, India. one specific village was selected where the number of cases was highest at 495 cases, reported by the Department of Health and Family Welfare. The catastrophic expenditure value is taken as more than 10% of the total monthly household income

Loss of productivity- variables (work hours and days) were taken to calculate the loss of productivity and loss of income. There was considerable loss of productive time even after the respondent commenced the work (Gopalan & Das., 2009). Those people who were discharged or recovered from disease Faced less working hours than they do. They could work only a few hours less than their capacity, subsequently losing income. During the outbreak, patients took services from different Health Care providers such as public only 20%, private only 49%, and public and private 31%; among them, most people preferred private Healthcare services 49%.

Most of the female respondents incurred costs during the illness compared to males. A total of 149 out of 150 have spent more than 10% as a definition of catastrophic Healthcare expenditure. Because of illnesses, the median acute phase of

35 days was lost with income with a median of US \$75. The usual working hour was 9 hours before the illness, and after the illness is reduced to 6 hours, which means a loss of 3 hours per day income. Mostly females had lost workdays as comparatively males.

This study focuses on catastrophic expenditure, which has placed a financial strain on households, primarily those unwell for an extended period. Out-of-pocket healthcare costs have been identified as a significant source of poverty (Kawabata K et al., 2002). Higher out-of-pocket expenditure would create a situation of poverty, and economic and social equity would be disturbed. It is challenging for those who worked as laborers; for them, "you will earn in a day will have bread by night." Financial protection is necessary for labourers when they have no financial security or don't have financial help from the public sector. When any disease happens instantly, it creates confusion among people, government, and healthcare providers, making it difficult to cope with this situation for management. Only two government institutions had Chikungunya virus-related treatment facilities during that Chikungunya outbreak. This situation shows the inadequacy of the government in the public health sector that could not provide the proper treatment to all Populations.

In 2007, the Chikungunya pandemic affected the southern state of Kerala. Whenever a pandemic comes, it brings more challenges to the Healthcare system and creates more problems for the healthcare system. The disease comes along with sacrifices such as the cost of Health Care. Incurred out-of-pocket expenses force people into a depth of poverty. The study got that the out-of-pocket expenditure related to health was high during that time for taking Healthcare services from tertiary care hospitals. "Chikungunya is a disease with significant morbidity, typically presenting with fever and incapacitating arthralgia which is erratic, relapsing and incapacitating in nature" (Robinson, 1955; Pialoux et al., 2007; Lakshmi et al., 2008). "The report from the reunion island also suggests that this is a public Health problem with the significant economic burden for both individual patients and the society" (Soumahoro et al., 2011).

During the Chikungunya outbreak, the Kerala state was most affected by this disease, with 55.8 % of the cases reported by the state in 2007. In contrast, in 2006, only 5.8 % of Chikungunya cases were reported in Kerala state, India.

"It has also been proven that Chikungunya is caused by Kerala's household and environmental conditions, and has had a significant influence on the state's morbidity pattern" (Anish et al., 2011; VijayKumar et al., 2011). The different tropical region has different disease pattern that causes excess burden of financial or economic cost, which also vary with the people living condition. Less information about the situation increases the load on the healthcare system, and less information about the disease makes it difficult to measure and diagnose the disease. Finding the treatment for any condition facilitates good planning and aids in the equitable distribution of resources in Healthcare services.

This survey discovered that 47.4 percent of out-of-pocket spending on health is for medicine, 17.2 percent for transportation, 16.6 percent for consultation, and 9.9 percent for diagnostic. The person who attended Public Health Care facilities (45.5%) and private provided facilities (44.4%) almost the same Healthcare facilities were taken by people of five districts. Expenditure in private health institutions, particularly tertiary care hospitals, was high. 91% of people approach modern medicine physicians, while 2.3 % approach homeopathy. In 29.75 percent of the Chikungunya cases, OOP health costs exceeded the research subject's "Monthly Per Capital Income (MPCI)." "About 24.9 % OOP exceeding their monthly income and 16.9% the OOP was more than doubled their monthly income" (K Vijaykumar, TS Anish, et al., 2013). Essentially, OOP catastrophic health expenditure affects societal and economic welfare, particularly for low-income households (people below the poverty line). In addition, health-care costs rise with age, with the elderly bearing the brunt of the burden "however their finding is in contrast with a study in Orissa, India, where the expenditure for investigation was predominant" (Gopalan and Das, 2009). The increasing use of government facilities during this epidemic may have been one of the causes that restricted the community's out-of-pocket health spending.

### **Table 5.0**

# Month and year-wise Situation of Chikungunya cases from 2014 to 2019(up to 31.12.2019)

<del>-1</del> +														
	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total

75

2014	0	0	0	0	0	0	2	1	1	1	3	0	8
2015	0	0	0	0	0	0	0	0	1	16	12	35	64
2016	0	0	0	0	0	0	1	431	3825	2860	518	125	7760
2017	18	13	23	7	35	12	42	98	90	164	43	14	559
2018	0	3	0	1	9	3	19	9	35	54	28	4	165
2019	0	2	1	1	1	5	9	3	65	56	109	41	293
Source: Delhi Annual Report 2019-20													

Source: Delhi Annual Report 2019-20

In 2016, there was a high prevalence of Dengue, Malaria, and Chikungunya in Delhi. It was the highest reported number of cases in Delhi in that decade. A study based on Orrisa and Kerala shows that these mosquito-borne viral disease causes a loss of income and productivity. Table 5.0 shows the highest number of chikungunya cases in 2015, after which cases of chikungunya started falling in succeeding years. One of the main reasons that cases fall down after 2016 could be Mohalla clinic because of early detection and proper diagnosis test. Early detection and screening of diseases cease the spreading of disease that could be done by strengthening of the primary healthcare system.

The basic meaning of out-of-pocket expenditure is to financing their health expenditure to avoid serious illness or to avoid loss of life. "advocates of user fees and direct payment for Health care services which are forms of out-of-pocket health payment, have rescinded their argument and now agree that user fees should be removed due to its negative impact on poor people" (WHO, Geneva, 2005). According to the World Bank, OOP costs for health care determined whether a household was

poor or not. All over the world, people use health services so that they can pay for different treatments, which depends on the country and the kind of user fee they charge. All people pay for their well-being of health, but it is bothersome for poor people, especially in an underdeveloped and developing country. People who belong to poor countries face most of the problems related to health in their country where health service is not excellent and inadequate. Financial crunch and resource allocation are major problems in underdeveloped and middle-income countries. World Health Organisation (WHO, 2010) reckons over 150 million people are globally pushed into poverty due to out-of-pocket health payments. Due to high out-of-pocket payments, most emerging countries face poverty, and more resources go into tackling this issue; these countries become more impoverished due to OOP expenses.

Study based on country Nigeria, a poor country. In 2005 Nigeria launched a scheme name National Health Insurance Scheme to provide "Access to good health care services and also ensure the protection of household from the financial burden of out-of-pocket health payment" (Aregbeshola and Khan, June 2018). Despite this (NHIS), reports say that only 5% of people come under this scheme. Also, there are Federal government workers who are insured. People insured with Private Health Insurance are only 3%; basically, 90% of the Population do not have any Health Insurance Scheme, so they Pay Health expenditures only from their pocket. WHO and World Bank statistics supported 90% of people. "A household living below the poverty line often do not use health care services when needed" (WHO, 2005; Preker A et al., 2002). Those people who are below the poverty line hardly use health facilities due to fear of health payment which disbalances their household budget, so they try to avoid health expenses as much as possible. "out-of-pocket health payment is capable of making household income catastrophic health expenditure, and this can exacerbate the level of poverty" (Aregbeshola and Khan, June 2018). Out-of-pocket expenditure increases the depth of poverty which causes fewer expenses on the consumption of other goods and services. "out-of-pocket health payment is regarded as catastrophic when health expenditure affects the ability of a household to purchase essential non-medical goods and services" (Deaton A, 1997). OOP expenditure deteriorates the non-health expenses which affect in many ways such as their food consumption, education, etc. reducing food consumption directly affects the health which causes malnutrition among the people, especially in children and mothers, and

the standard of living and Welfare are also affected by OOP expenditure. OOP directly impacts life in many ways, whether social or financial. This study is based on Nigeria, an emerging country with a high number of people. Nigeria is Africa's most populous country, with a population of around 186 million people and a GDP of \$405.1 billion in 2016. Much progress has been made in Nigeria's health sector, but Nigeria's health care system remains dysfunctional and inequitable. Health services were provided by both the private and Public Health sectors. The private health sector dominates in healthcare services, about 60%, while 40% comes from the public sector. According to many studies, the biggest problem in Nigeria's public health sector is budget allocation, inefficient management systems, and insufficient coordination in the health sector.

"Primary Health care system, which is expected to be the foundation of the country's health system, has failed to provide basic health care services to the Population due to problems of poor budgetary allocation decaying and poor infrastructure, poor governance structure, poor Service Delivery and Poor health worker performance" (Kress et al., 2016). We can understand that Primary Health Care played a foundational role in the Health care sector; it reduced the burden of disease and also provided a support system for secondary and tertiary care health services. An adequate and efficient Primary Health care system covers most of the Population and provides or spreads knowledge and awareness about health. Nigeria is considered to have poor health indicators, with a life expectancy of 47.7 years, which is much lower than the African region's national average. The under-5 mortality rate was 108.8 percent per 1000 live births in 2017, the maternal mortality rate was 814 percent per 100,000 live births, the infant mortality rate was 69 percent per 1000 live births, and the neonatal mortality rate was 34.3 percent per live birth. This empirical data show that Nigeria's health is not as good as other poor, predominantly South Asian countries. The only reason for the worst condition of health in Nigerian is because of the worst health system in Nigeria; their management and health system or not in a position or capacity to provide better health care facilities.

High out-of-pocket spending indicates that healthcare costs are borne entirely by the patient and not by the government. Households can meet their costs without the assistance of the government. This study says that most out-of-pocket expenses are from the household side and less from the government. The study represents that 95% of health expenses go to Private Health Services. Data (95%) concluded that Private Health Service has a better and more vigorous health system than the government health system. A national survey and household survey data show minimal evidence of Nigeria's catastrophic and impoverishing effect of OOP health spending. This indicates that data based on the catastrophic and impoverishing effect of out-of-pocket are insufficient and not adequate. Detailed and proper data are necessary for government and policymakers to frame good policy on the health system also to have better management. Pertinent evidence contributes to the development of programs. From its beginning in 2005, this research attempts to follow developments in financial risk protection and examine the impact of health financing performance, such as NHIS. The influence of health payments on catastrophic health expenses and poverty in Nigeria is investigated in this study. "Wagstaff Van Doorslaer" utilized this adjusted poverty approach that relies on household spending net of out-of-pocket expenditure on Healthcare to measure the impoverishing effect.

This study shows that 5% to 40% of catastrophic health payments are at the threshold level. "At the threshold of 5% and 10% of total consumption expenditure catastrophic to headcount ratio is 18.2 % and 16.4 %, respectively" (Aregbeshola and Khan, 2018). Only 20.5 percent of families got catastrophic health benefits, compared to 13.7 percent under the 40% non-food spending requirement. Because of the impoverishing effect of out-of-pocket health-care payments, the World Bank has established a poverty limit of 1.2 dollars per day. Only 0.8% of households are not poor, while 98.7 percent fall below the poverty line. There is a chance that 0.8% of people who are above the poverty line would be a push if they do more OOP health expenditure. According to the research, Nigeria experienced the most devastating effect of OOP health payment compared to other African nations. "A possible explanation is that for the household may seek low-quality care, avoid seeking health care at all or resort to self-medication due to inability to pay for health care services" (Kimani. D.N et al., 2016). Nigeria introduced NHIS in 2005, but this scheme could not achieve its target or could not reduce the burden of out-of-pocket expenses among the household. Over a decade after the NHIS was introduced, fewer than 10% of the Nigerian population was insured in both the formal and informal sectors, suggesting

that 90% of Nigerians were not covered by the NHIS plan and had to pay OOP expenses out of their own wallets.

"Out-of-pocket expenditure remains the major source of Health care financing in India (2/3 of the total health spending) financial burden varies enormously across disease and by the economic well-being of the household" (Kastor A et al., 2017). Out-of-pocket expenditure has relevance regarding communicable and noncommunicable diseases. Infectious and non-communicable diseases consist of expenditure, but the non-communicable disease has more OOP health expenditure even though most of the death cases causes by the non-communicable disease. According to the WHO (2017), 40 million people die each year due to NCDs (70 percent of all deaths), which is expected to rise to 52 million by 2030. Because of poor health systems and infrastructure, as well as a lack of health workers, the majority of NCD mortality occurs in low and middle-income nations. These low and middle-income country has several reasons for the most deaths. In LMI countries, the population is very high, so the working Population in these countries is also high. The people in the age group (15 - 65) years most affected by NCDs in these countries. Also, it is a loss for the government because they are working people who contribute to the economy in economic Terms. Most deaths in working groups impact the growth of the economy. For every country, it is crucial to take the necessary step to treat or prevent NCD, which is the economic loss of a nation. Every country needs to save every life because it is a loss economically and socially. "The changing disease pattern is associated with increased hospitalization, and rising Healthcare cost globally nationally and locally" (Kastor A et al., 2017). Healthcare expenses are classified into two types: indirect costs and direct costs. Direct costs include doctors, prescriptions, and treatment fees, among other things. Lost earnings, working hours, time, and caregiver care are examples of indirect costs. When a person becomes unwell, the cost incurred is determined by the type of disease. The cost expenditure incurred on treatment is also a loss of household expenditure. The cost varies according to the severity of the illness. "In low and middle-income countries, out-ofpocket expenditure is the major source of financing health care and is catastrophic to many households" (Weraphong J, 2013; Ghosh S, 2011). Healthcare services in "LMIC" nations are insufficient; public healthcare services are inadequate to fulfill the whole population.

"The health financing system in low and middle-income countries is weak, causing a majority of the household to Resort to selling assets, taking loans, borrowing money, and getting contributions from friends and relatives to meet their health expenses" (Sauerborn et al., 1996; Joe W 2015). People in low and middle-income countries fund or finance their Health Care expenses from various sources, consisting of organized and unorganized institutions to provide a loan with a high-interest rate. High interest is an extra burden to bear on Healthcare expenditure. An organized sector that provides loans is Bank, financial institution, government institution, etc.; an unorganized sector is a moneylender and family. Most moneylenders harass people during their recovery, but it is the only convenient way to obtain a loan for the desperate. India is in second place in terms of Population after China, a developing country where 55% of the Population indulges in agricultural activity. Due to the high population, most of the income is eaten by a vast Population and left less for capital accumulation.

Less amount of capital for a country could not finance or not easy to finance their economic system. "India is experiencing the triple burden of disease that is rising noncommunicable disease, increasing injuries and unfinished agenda of infectious disease in India." The non-communicable disease consists of "cardiovascular disease, cancer, chronic respiratory disease, diabetic" and is the leading cause of death (Kastor A et al., 2017). That shows that the pattern of non-communicable disease has changed in the last three decades; even non-communicable disease is rapidly increasing. "NCDs in India accounted for 50% of total death in 2004 and increased to 60% by 2014" (WHO,2014; Taylor, 2010). That means that the hospitalization rate must increase by some percentage. "The share of out-of-pocket expenditure on total health spending has remained stagnant during the period (71% in 2004 and 69% in 2014) at the same time; the household health spending is growing faster than the household consumption expenditure" (Mohanty SK et al., 2016). "An estimated 32 - 39 million people are pushed into poverty yearly due to health care payment". Many families face financial collapse and hardship as a result of healthcare costs. People are continuously spending much to bear the cost of Health care, which is continuously increasing because the government has not set any strict regulations on Private Health Care Services. Poor are becoming poorer because of less awareness about Healthcare, and their marginal expenditure on health care is continuously increasing. According to research, health expenditure is "disastrous for poor, less-educated, rural households, female-headed households, and households with older member"s. Many studies demonstrate that diabetes, TB, cancer, and other diseases contribute to most health spending; however, these only offer figures for narrow geographical regions with inadequate data and can be generalized.

Health spending is not only restricted to certain diseases; it may be high for infectious diseases, but some diseases cost a lot of money to treat, such as cancer. OOP expenditure varies with different diseases, the seriousness of the illness, and the participation of Health Care facilities provided by the government and private. OOP expenditure differs from the quality of care in rural or urban regions. Another important factor of OOP expenditure is the number of days a person has been hospitalised. "Cancer, heart disease, diabetes, and accidents" are not only costly but often need lengthy hospitalization and specialized care.

"Distress financing is defined as borrowing money, sale of properties/assets or contribution from friends and relative to cover the health care spending." This study is based in India, in which 71 rounds of NSSO data have been taken to analyze catastrophic and out-of-pocket expenditure in India. Different diseases and costs incurred have been examined. "The 16 categories included in the analyses are fever, gastrointestinal, injuries, genito, urinary disorder, heart disease, musculoskeletal, neurological, diarrhea, asthma, cancer, cataract hypertension, jaundice, respiratory disorder, diabetes and tuberculosis" (Kastor A et al., 2017). Two categories are divided into communicable and non-communicable. Explanatory variables included in the analysis include education, sex, age, and monthly per capita consumption expenditure. According to this poll, 62% of people use private health care services, whereas 38% use public health care facilities, and the hospitalisation rate in private healthcare facilities is substantially higher. "Out of the pocket of the total hospitalization cases in India, 38% due to communicable disease and 31% due to NCDs". The average duration of stay was 7 days in Hospital; the most prolonged period of stay for a cancer patient is 14.8 days, in public, 16.7, and in private, 13.6 days. "Average total spending, reimbursement, and OOP on hospitalization for all disease were (INR 20370), (INR 1160), and INR 1910 respectively". Only 5.7 percent of total hospitalization cost was reimbursed on average (2.8 percent in public hospitalization and 6.2 percent in private). Cancer had the greatest OOP, INR 57232, while Diarrhoea had the lowest, INR 5473. Males spend 24% more than females on hospitalisation. Individuals living in cities spent more money (INR 24107) than those living in rural regions. "Out of all the households who had any member hospitalized, 49% incurred catastrophic health expenditure. The highest incidence of CHE was reported for cancer (79%). The lowest for communicable disease 35%." (Kastor A et al., 2017). Estimated distress finance was much greater among people who sought treatment in private hospitals (32.7%) than in government hospitals (21.9%). "Distress financing was the highest for cancer hospitalization (42.5%)". The cost incurred for the treatment of non-communicable diseases is much higher than that of communicable diseases. In India, non-communicable diseases increase the extra burden on the household. The escalating burden of NCDs needs a disaggregated examination of financial disaster in India by particular disease and kind of health care provider. Higher Population uses private Health Centre (2278) where (1442) had used Public Health Care Centre. This study shows Private Health Centre is the leading provider of hospitalization.

"Making progress toward Universal health coverage (UHC) goals within the chronically under-resourced health system is challenging" (Laokri S et al., 2018). in low and middle-income countries, resources are limited, so most of the Healthcare expenditure is Borne by the household, such as consultation fees, health staff salaries, etc. There is the operating cost also they made huge expenditure on medicine. Understanding from the depth that people belonging to poor and middle-income countries have low-income and work in an unorganized sector, extra expenses such as health expenditure may not be feasible. "Reliance on out-of-pocket health financing does not constitute a planned health financing strategy per se, but rather a coping mechanism which attempts to ensure a sustainable model of Healthcare deliveries" (Laokri S et al., 2018). the initial care which is provided by primary care is very important to reduce out-of-pocket health expenditure to some extent. One of Primary Health Care's main goals is to prevent disease through an awareness program by PHC. Secondary and territory care cost more health expenditure by the cost born during Primary Health Care cannot be neglected. Some empirical data for obtaining OOP

expenditure for Primary Health Care may be found in research undertaken in the Democratic Republic of the Congo. Congolese families risk incurring catastrophic spending on Primary Health Care since they fund 40% of Health Services, with 90% paid for directly.

Even a tiny burden of uncertain activity disbalances the budget of the household. Uncertain expenditure such as Healthcare expenditure directly impacts the household consumption expenditure. An effective health system would reduce out-of-pocket expenditure. An effective and robust Primary Health Care Healthcare system would lessen the impact of out-of-pocket healthcare costs. Quality of care is essential for better utilization of Health care services. Many studies show that the quality of services at private providers is better than the Public Health Care facilities, but quality comes with a cost. Private health facilities provide good quality care service, but they also charge high for the services. Improving basic healthcare is part of the "Global Agenda for Universal" Several constitutional initiatives have been undertaken to improve access to health in the DRC. The National Health Sector Steering Committee has suggested several resolutions. "New Public Health legislation is being examined by the Parliament and discussed in the national assembly, and the country intends to adopt a potential ground-breaking UHC bill that would significantly impact the health sector" (Laokri S, et al., 2018). The sole mechanism of provisioning coverage of Health Care for all populations and lowering health costs are voluntary communitybased medical insurance. Giving more attention to health providing and better utilizing sufficient funds to help improve Access for all. The goal of this study is to quantify primary OOPs in the DRC, as well as to examine wealth-related disparities in health care usage and expenditure.

Individual likelihood of OOP expenditure on health care and associated financial burden demand-side factors health disparities inequalities household assets Housefull comparison ill-health condition care-seeking behaviour para medicals geographical area Central feature applied side factor availability of care service, and staff Healthcare affordability availability of Technology in health facilities accessibility of health facilities type medicine malpractices quality of care services health system-related pattern.

According to WHO, three fundamental barriers stop countries from reaching universal coverage; "scarcity of resources, people rely on direct payment during health emergencies, and inefficient and inequitable use of resources" (WHO, 2010). Among three, one of the major barriers is direct payment and OOP expenditure which makes accessing health services unreachable to patients. Immediate payment on health care services at the time of instant need create a catastrophic financial burden on the household. There should be a risk pool so that household health expenditure could be shifted to other resources such as health insurance or government. The disparity between rural and urban have unequal utilization and out-of-pocket spending on health services.

## **CHAPTER VI**

## CONCLUSION

Indian health services, especially the primary health system, include basic medical care and public health assistance to the largest democracy in the world. 'Since independence, India's primary healthcare system has developed, and the country now boasts a sophisticated network of around 200,000 public primary healthcare centers (Lahariya C, 2020). The initiative of the Indian government divided public health into an immediate health care system between the urban and rural areas. The urban health care system significantly provides more essential health services than the community health center (Samudayik Swasthya Kendra). Due to the inaccessibility of basic health facilities in remote villages, town health clinics are more responsible and thrive in the city. According to Lahariya, due to ill medical health facilities, patients either choose a higher level of government facilities for primary health care services or visit a private provider where they suffer a considerable loss of money. Still, both situations cannot be considered satisfactory for well-functioning health care (Lahariya C, 2020). In this case of the municipal workforce, this service needs different professional specialisation staff, including doctors, attendants, pharmacists, and other health services. The government has taken an important decision to promote overall healthcare by identifying these health matters. In 2005, the Indian government introduced the National Rural Health Mission to revive the public health system and address the rural population that needs basic health facilities. With the assigning funds under the range of programmes that include female nurses, ASHA workers (Accredited Social Health Activists) in every village, the provision of untied budgets to health facilities, and financial assistance to encourage village women to conduct delivery in government health facilities (Powell, T, Mills, et al., 2013). After strengthening the health progress, the government primary health care system received remarkable progress in Mohalla clinics and other municipal health care service programs (Li. X et al., 2017).

It was the political will when a new political party, Aam Admi Party (AAP), actively entered politics. They promised to develop a better system in Delhi before the election. The central focus was on health and education and optimizing the healthcare and education system. During the election campaign, the Mohalla clinic was discussed to be set up in every Mohalla. The target was to set up 1000 clinics in all of Delhi so that the reachable distance was within 2 kilometers. The Mohalla clinic is a kind of primary healthcare center, not precisely primary health care or community health care center. Before going into depth about the Mohalla clinic, discuss why primary health care is more important. "Primary healthcare addresses the main health problems in the community, providing promotive, preventing, curative and rehabilitative service accordingly" (WHO, 1978). Coverage through primary care is large if it effectively works. PHC has direct participation with the community, so promoting basic sanitation, safe drinking water, nutrition, and child and maternal care can cause prevention and control of the disease. There are two types of disease, communicable and non-communicable. Primary health care addresses most contagious diseases. To create a more robust health system, a better primary health care system must be established to support the better functioning of secondary and tertiary care. Generally, community health workers' primary health care services require skills and training that vary from country to country. Community health workers' involvement is directly related to the people, so workers need a better understanding of community health needs. Community participation is essential because it is necessary to enhance knowledge of health needs; they can realize their health needs, vital information about the healthiest lifestyle, and their contribution to health development. Take the example of Kerala, where community participation makes the health system efficient. "Mean by community participation is only utilization of community resources (money, manpower, etc.) to supplement what is otherwise available for the program" (Alma-Ata Declaration, September 1978). Community involvement can also empower communities by allowing them to take the initiative to recognize and resolve their health and development issues. Kerala adopted a project called NNPC (Neighborhood Network in Palliative Care), in which people had to spare 2 hours per week to care for sick people. After completing this "entry point" program (which includes an evaluation at the completion), volunteers are urged to establish groups of 10 to 15 community volunteers to assess chronically ill people's issues in their region and plan appropriate interventions. NNPC groups

work with primary care facilities. Doctors and nurses back NNPC group training and community care workers have built relationships between service providers and patients. Community participation is necessary; conventional medical practitioners and birth attendants are also found in different societies and countries. They are also a part of the local community, directly involved in the communities, and have high social standing. These indigenous providers can also become valuable partners in organizing community-wide initiatives to strengthen health if they support the professional health care system. They may be chosen as community health professionals in some places. The welfare of individuals and society depends on their direct participation. Alone primary health care cannot attain the goal of better health development. It needs the support of good hygienic conditions, proper nutrition levels, anti-poverty, safe drinking water, education, and good environmental conditions to improve human development. On one side, growth is attained by improving health status. Primary health care plays a significant role in controlling communicable diseases, reducing the disease burden on secondary and tertiary health sectors.

Before going into depth, it must be clear that Mohalla clinic is a part of a primary or community health center. The important term for primary healthcare is universal coverage. In India, primary healthcare coverage is 30000 population, whereas Mohalla clinic coverage is 15000 to 20000 population. Another thing is that PHC provides services related to immunization and animal bite vaccination, which are unavailable in the Mohalla clinic. The role of PHC is not only restricted to providing health services; it also "engages and empowers individuals, families, and community for increased social participation and enhanced self-care and self-reliance in health," whereas Mohalla clinic does not participate in these kinds of initiatives.

The initiative of Mohalla clinic is taken from the MMU (Mobile medical unit), which served basic primary health care facilities in underserved areas, cluster areas, Jhuggi, and Jhopri in Delhi. The medical van was equipped with an MBBS doctor, an assistant, and a pharmacist. The medical van makes rounds in underprivileged areas and serves medical facilities to poor people in urban localities all over India. At Initially level first Mohalla clinic started as a pilot project in a slum locality. After the first Mohalla clinic was successful, several clinics were opened in different localities in Delhi. As per the annual health report of Delhi in 2019-2020, a total of 450 Mohalla clinic has been working all over the state. As the Delhi government report,

"More than two crore people have availed Mohalla clinic services till 2019". A total of 109 drugs and 212 laboratory tests were provided free of cost (Lahariya C, 2017). Since Mohalla clinic offers primary health care services, people are getting direct benefits of medical services free of charge. These clinics are at a walkable distance, saving transportation costs and time. Mohalla clinic is accessible at the doorstep, which is easily approachable. People are now devoting significant medical consultant fees and medicine costs.

The primary health survey was conducted in 2020, from January to march, to collect a sample from the Mohalla clinic. Before conducting an actual survey, a pilot survey was conducted. A total of 20 Mohalla clinics were surveyed for primary data collection, and from each Mohalla clinic total of 20 people were interviewed. A total of 399 samples have been taken. In this study, out of 400 samples, 391 respondents were included, and 8 were excluded because they were students and the data that was taken was insufficient for data analysis. For data analysis, SPSS software has been used. In this study, the females were 224 and males 167, respectively. The average age is 43.3, the minimum age is 17, and the maximum is 76 years. Data analysis shows that one-third of people above 50+ those who visit the Mohalla clinic. Older people are easily caught by disease, and the number of diseases also increases as age increases.

People who visit the Mohalla clinic come from different occupational backgrounds. In this study, we made eight categories according to their occupation. People who work in the formal sector are government, private, and MNC employees. Also, some people work in the formal sector, but they are on a contractual basis earn between 10000 to 15000, such as security guards, computer operators, ASHA workers, sales boys, sales girls, etc. people who work in the informal sector are labourer, motor mechanic, small shop owner, maid, etc. those who are engaged in the informal sector do not get work regularly and have low earning. Mohalla clinic provides primary healthcare services in all parts of Delhi, irrespective of authorized or unauthorized areas. Before the Mohalla clinic, people visited government hospitals or private clinics. Visiting public hospitals took a whole day, from registration to treatment. From the data analysis, the average time visiting the public hospital is 5hrs, which means the patient or companion visiting with the patient must take leave for a whole day. Taking leave for a day is a loss of per day income for those who work in

the informal sector or earn daily. Visiting public hospitals is not only a loss of per day income but also a loss of money on transportation or non-medical expenditure. The average transportation cost was 67.6 rupees per visit. In data analysis, people above 50 years consist of 1/3 of the total sample. Older people often find it hard to travel long distances for medical services or visit public hospitals. Data analysis shows that frequency is higher for older people. The average monthly visit for seeking medical assistance from Mohalla clinic is 4.5 times for people who are above 50 years. People in older groups are dependent on their families. Out-of-pocket expenditure is 212 per ailment when a person visits a private clinic, and the maximum amount is 1000. Total monthly private out-of-pocket expenditure is an average of 703 rupees. Data results show that the average monthly loss of income was 10.8%. The loss of income is an opportunity cost if primary healthcare services are on a paid basis. "About 930 million people worldwide are at risk of falling into poverty due to out-of-pocket expenditure health spending of 10% or more of their household budget" (WHO, 2021). The spending per aliment has been compared with NSSO data 75<sup>th</sup> scheduled. In Delhi, people spend 212 rupees per ailment, whereas NSSO data shows 667 amounts per ailment in Delhi.

Bonu and Limwattananon (2007) Unlike in high-income countries, health spending of as low as 10% of family income or consumer expenditure can contribute to impoverishment and financial difficulties in LMIC. The optimal threshold for defining "catastrophic spending has been contested, and many health economic studies have used thresholds ranging from 5% to 60%" (Wyszewianski, 1986; Wagstaff & Van Doorslear, 2003; Xu et al., 2003). This study finding exhibits that monthly out-of-pocket expenditure on primary healthcare is an average of 10.8% of a total monthly income of a family. The highest expenditure is 15.5%, belonging to group 4, which constitutes dependent people. In group 6, people belong to the labourer class or work in the informal sector; monthly private health expenditure is 10.9% of their monthly income. People who don't get work regularly work basically for daily wagers; it is hard for them to do expenditure on medical services. Since Mohalla clinic provides primary healthcare services in Delhi, people have stopped going to government hospitals and private clinics. When they used to visit government hospitals, they had to wait long hours because of too many crowds, and

the public had to face overcrowding problems. Overcrowding is another problem that delays treatment and causes long waiting hours in public hospitals.

Another side of Mohalla clinic is infrastructure, set up in portacabin which is made of prefabricated materials and rented a two-room set in which one room is for doctor and staff and a second room for patient sitting space. The limitation of a rented room is the small space according to the patient crowd; in some areas where Mohalla clinic functions on rent, having less space is insufficient for 20 people to sit at one time. During the field survey, two Mohalla clinics were set up in rented houses where we found that with no toilet and bathroom facilities. The toilet facilities are not only necessary for the patient but also for the doctor and staff. Due to less space in the rented clinic, some people were waiting outside the clinic for their turn. Space is important; it should be enough to provide sitting space for patients.

For patients suffering from fever or body pain is not possible to stand or wait outside of the clinic for treatment. During interaction with people, they said in the Mohalla clinic, the pharmacist gives drugs only for 3 to 5 days, varying with the disease. People of older age said they visit 5 to 6 times Mohalla clinic in a month because the doctor prescribes medicine for 5 to 6 days. Generally, older people suffer from diseases such as blood pressure, diabetes, joint pain, etc. It is not easy to visit many times a month for the same medicine. In Mohalla, the clinic doctor is paid based on per-patient examination. It could be said that doctors do not examine patients properly because as much as doctors examine patients, they will get more. Mohalla clinic is not entirely primary healthcare but part of primary healthcare. Mohalla clinic caters to people's immediate healthcare needs, saves time, saves medical expenditure, and reduces overcrowding problems of secondary and tertiary care hospitals. Mohalla clinic also provides a support system that helps reduce the patient burden on secondary and tertiary care. Establishing and strengthening primary healthcare to provide essential basic health services to the large population is necessary. Through awareness and community participation, the number of diseases could be reduced, and this could only be done by primary healthcare because the reach of PHC is extensive.

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### **Appendices**

Table . 1

Distance covered during treatment

Distance covered during treatment					
					Cumulative
	_	Frequency	Percent	Valid Percent	Percent
Valid	.0	28	7.2	7.2	7.2
	2.0	9	2.3	2.3	9.5
	3.0	2	.5	.5	10.0
	4.0	35	9.0	9.0	18.9
	5.0	16	4.1	4.1	23.0
	6.0	75	19.2	19.2	42.2
	7.0	18	4.6	4.6	46.8
	8.0	60	15.3	15.3	62.1
	9.0	19	4.9	4.9	67.0
	10.0	49	12.5	12.5	79.5
	11.0	4	1.0	1.0	80.6
	12.0	19	4.9	4.9	85.4
	13.0	6	1.5	1.5	87.0
	14.0	5	1.3	1.3	88.2
	15.0	10	2.6	2.6	90.8
	16.0	12	3.1	3.1	93.9
	17.0	6	1.5	1.5	95.4
	18.0	4	1.0	1.0	96.4
	20.0	4	1.0	1.0	97.4
	23.0	1	.3	.3	97.7
	24.0	2	.5	.5	98.2
	25.0	1	.3	.3	98.5
	30.0	6	1.5	1.5	100.0
	Total	391	100.0	100.0	

### Waiting hours in a hospital

Table.2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.0	15	3.8	3.8	3.8
	1.0	19	4.9	4.9	8.7
	2.0	23	5.9	5.9	14.6

3.0	37	9.5	9.5	24.0
4.0	42	10.7	10.7	34.8
5.0	81	20.7	20.7	55.5
6.0	105	26.9	26.9	82.4
7.0	68	17.4	17.4	99.7
8.0	1	.3	.3	100.0
Total	391	100.0	100.0	

Table .3

Private health care expenditure

		· ····································	leaith care e		
			_		Cumulative
	_	Frequency	Percent	Valid Percent	Percent
Valid	0	31	7.9	7.9	7.9
	30	1	.3	.3	8.2
	40	2	.5	.5	8.7
	50	17	4.3	4.3	13.0
	60	2	.5	.5	13.6
	70	5	1.3	1.3	14.8
	75	1	.3	.3	15.1
	80	5	1.3	1.3	16.4
	90	1	.3	.3	16.6
	100	55	14.1	14.1	30.7
	120	4	1.0	1.0	31.7
	150	39	10.0	10.0	41.7
	180	2	.5	.5	42.2
	200	79	20.2	20.2	62.4
	250	26	6.6	6.6	69.1
	300	53	13.6	13.6	82.6
	350	7	1.8	1.8	84.4
	400	15	3.8	3.8	88.2
	450	1	.3	.3	88.5
	500	37	9.5	9.5	98.0
	600	6	1.5	1.5	99.5
	1000	2	.5	.5	100.0
	Total	391	100.0	100.0	

Table .4

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	0	31	7.9	7.9	7.9
	30	1	.3	.3	8.2
	40	2	.5	.5	8.7
	50	17	4.3	4.3	13.0
	60	2	.5	.5	13.6
	70	5	1.3	1.3	14.8
	75	1	.3	.3	15.1
	80	5	1.3	1.3	16.4
	90	1	.3	.3	16.6
	100	55	14.1	14.1	30.7
	120	4	1.0	1.0	31.7
	150	39	10.0	10.0	41.7
	180	2	.5	.5	42.2
	200	79	20.2	20.2	62.4
	250	26	6.6	6.6	69.1
	300	53	13.6	13.6	82.6
	350	7	1.8	1.8	84.4
	400	15	3.8	3.8	88.2
	450	1	.3	.3	88.5
	500	37	9.5	9.5	98.0
	600	6	1.5	1.5	99.5
	1000	2	.5	.5	100.0
	Total	391	100.0	100.0	

Table . 5

**Transportation cost** 

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	33	8.4	8.4	8.4
	20	31	7.9	7.9	16.4
	30	53	13.6	13.6	29.9
	40	35	9.0	9.0	38.9
	50	79	20.2	20.2	59.1
	60	13	3.3	3.3	62.4
	70	9	2.3	2.3	64.7

		i l	i i	
80	14	3.6	3.6	68.3
100	64	16.4	16.4	84.7
120	3	.8	.8	85.4
140	3	.8	.8	86.2
150	34	8.7	8.7	94.9
170	1	.3	.3	95.1
200	18	4.6	4.6	99.7
300	1	.3	.3	100.0
Total	391	100.0	100.0	

## QUESTIONNAIRE

-			
	1	Name / 테버	
	2	Age /उम्र	
	3	Sex and education/लिंग और शैक्षिक योग्यता	
	4	Occupation/ व्यवसाय	
=	5	Religion (Caste)/ धर्म( जात )	
	6	Family Monthly income/परिवार की मासिक आय	
	7	Do you have BPL card?/ क्याआपकेपास BPL कार्ड है?	
	8	Numbers of family members in a household/ आपके घर मैं कितने सदसय है ?	
-	9	How many hours you used to wait in a hospital visit?	
		पहले आप को अस्पताल मै कितना समय लगता था पर्ची	
		बनवाने ओर दवाई लेने मै ?	
		·	
-	10	How much expenditure you used to pay for consultation	
		and medication?/ पहले आपको प्राइवेट डॉक्टर को इलाज की	
		fee	
		कितनी दिया करते थे?	
	11	Do you have any insurance policy?/ क्याआपके पास कोई	
		इंस्युरेन्स पॉलिसी है	
ļ	12	How much expenditure they used to do on transport?/ पहले	
		आपको अस्पताल आने जाने मै कितना खर्च करना पड़ता था?	
	13	Distance used to covered during treatment from public	
		hospital/ सरकारी अस्पताल से इलाज के दौरान तय की जाने	

	वाली दूरी	
14	Numbers of visits in Mohalla Clinic on a month by a household/ प्रति परिवार एक माह में मोहल्ला क्लीनिक में आने वालों की संख्या	
	What kind of treatment they are availing from Mohalla	
	Clinic health centre?	
	किस तरह की सुविधा(बीमारी संबधित ) आपको मोहल्ला क्लीनिक से मिल रही है?	
16	Does Anganwadi workers or ASHA workers comes in your home also do you get any knowledge about health from workers? क्या आपके यहाँ आंगनवाड़ी या आशा वर्कर्स आती है और सवास्थ्य संबंधित जानकारी प्राप्त हो रही है?	
17	Do you avail any immunization and vaccination from health centres?/ क्या आपको स्वास्थ्य केंद्र से immunization या vaccination की कोई सुविधा मिल रही है	

# Significance of Mohalla clinic as primary healthcare in terms of accessibility and out of pocket expenditure

by Kavitabh Kumar

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