

**HEALTHCARE DELIVERY IN MIZORAM: A CASE STUDY OF
NATIONAL URBAN HEALTH MISSION IN AIZAWL DISTRICT**

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**HEALTHCARE DELIVERY IN MIZORAM: A CASE STUDY OF
NATIONAL URBAN HEALTH MISSION IN AIZAWL DISTRICT**

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Submitted

**In partial fulfillment of the requirement of the Degree of Doctor of Philosophy
in Public Administration of Mizoram University, Aizawl**

MIZORAM UNIVERSITY

(A Central university established by an Act of Parliament of India, 2000)

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To the best of my knowledge this work has not been submitted in part or full for any Degree or Diploma to this University or elsewhere.

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I **LALTLEIPUIA**, hereby declare that the subject matter of this thesis is the record of work done by me, that the contents of this thesis did not form the basis the award of any previous degree to me or to the best of my knowledge or anybody else, and that the thesis has not been submitted by me for any research degree in any other University/Institute.

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(LALTLEIPUIA)

Research Scholar

ABBREVIATIONS

ADM :	Additional District Magistrate
AIDS :	Acquired Immunodeficiency Syndrome
AIIMS :	All India Institute of Medical Sciences
ANC :	Antenatal Care
ANM :	Auxiliary Nurse Midwife
ARSH :	Adolescent Reproductive and Sexual Health
ASHA :	Accredited Social Health Activist
AWC :	Anganwadi Centre
AWW :	Anganwadi Worker
BCC :	Behaviour Change Communication
BPL :	Below Poverty Line
BSUP :	Basic Service to the Urban Poor
CDP :	City Development Plan
CMO :	Chief Medical Officer
CPIP :	City Programme Implementation Plan
CPMU :	City Program Management Unit
CSR :	Corporate Social Responsibility
CUG :	Closed User Group\
CVD :	Cardio vascular Disease

DHS	:	District Health Society
DOTS	:	Directly Observed Treatment Short course
DPE	:	Department of Public Enterprise
DWCUA:		Development of Women and Children in Urban Area
FHW	:	Female Health Worker
FP	:	Family Planning
GIS	:	Geographic Information System
GOI	:	Government of India
Hb	:	Haemoglobin
HH	:	House Hold
HIV	:	Human Immunodeficiency Virus
HMIS	:	Health Management Information System
ICDS	:	Integrated Child Development Scheme
ICMR	:	Indian Council of Medical Research
ICT	:	Information and Communication Technology
IDSP	:	Integrated Disease Surveillance Project
IEC	:	Information Education Communication
IFA	:	Iron Folic Acid
IHDSP	:	Integrated Housing and Slum Development Plan
IIHMR	:	Indian Institute of Health Management Research

IIPS	:	Indian Institute of Population Studies
IMR	:	Infant Mortality Rate
IPD	:	In-Patient Department
IPHS	:	Indian Public Health standards
IPP	:	Indian Population Project
IUCD	:	Intra Uterine Contraceptive Device
JNNURM:		Jawaharlal Nehru National Urban Renewal Mission
LHV	:	Lady Health Visitor
LW	:	Link Worker
M&E	:	Monitoring & Evaluation
MAS	:	Mahila Arogya Samiti
MC	:	Municipal Councillors
MCD	:	Municipal Corporation of Delhi
MCH	:	Maternal and Child Health
MIS	:	Management Information System
MLA	:	Member of Legislative Assembly
MMR	:	Maternal Mortality Rate
MO	:	Medical Officer
MOHFW:		Ministry of Health and Family Welfare
MOU	:	Memorandum of Understanding

MP	:	Member of Parliament
MPLADS:		Member of Parliament Local Area Development Scheme
MSDP	:	Multi Sectoral Development Programme
NAC	:	Notified Area Committee
NACO	:	National Aids Control Organisation
NCD	:	Non Communicable Disease
NDCP	:	National Deafness Control Programme
NERUDP:		North Eastern Region Urban Development Programme
NFHS	:	National Family Health Survey
NGO	:	Non Government Organization
NHC	:	Neighbourhood Committee
NHG	:	Neighbourhood Groups
NHM	:	National Health Mission
NLEP	:	National Leprosy Eradication Programme
NMHP	:	National Mental Health Programme
NPMU	:	National Program Management Unit
NRHM	:	National Rural Health Mission
NSS	:	National Sample Survey
NTCP	:	National Tobacco Control Programme
NUHM	:	National Urban Health Mission

NVBDCP:	National Vector Borne Disease Control Programme
OCP :	Oral Contraceptive Pills
OOP :	Out of Pocket
OPD :	Out-Patient Department
ORS :	Oral Rehydration salts
PHC :	Primary Health Centre
PIP :	Programme Implementation Plan
PMU :	Program Management Unit
PNC :	Postnatal Care
PPP :	Public Private Partnership
QAC :	Quality Assurance Committee
QAT :	Quality Assurance Team
RAY :	Rajiv Awas Yojana
RCH :	Reproductive Child Health
RDK :	Rapid Diagnostic test Kit
RKS :	Rogi Kalyan Samiti
RNTCP :	Revised National Tuberculosis Control Programme
RTI :	Reproductive Tract Infection
SHS :	State Health Society
SJSRY :	Swarnajayanti Shahari Rojgar Yojana

SOE	:	Statement of Expenditure
SPIP	:	State Programme Implementation Plan
SPMU	:	State Program Management Unit
SRS	:	Sample Register Survey
STI	:	Sexually Transmitted Infection
TB	:	Tuberculosis
TCG	:	Thrift Credit Group
U5MR	:	Under 5 Mortality Rate
UC	:	Utilisation Certificate
UCHC	:	Urban Community Health Centre
UD	:	Urban Development
UFWC	:	Urban Family Welfare Centre
UHP	:	Urban Health Posts
ULB	:	Urban Local Body
UPHC	:	Urban Primary Health Centre
USEP	:	Urban Self Employment Programme
UT	:	Union Territory
VBD	:	Vector Borne Disease
VHSNC	:	Village Health Sanitation and Nutrition Committee
WHO	:	World Health Organization

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PREFACE

Health is an important indicator of human prosperity and development. Health plays an important role in a person's happiness as well as in his productivity. Health is necessary for economic, social, and cultural development. In order for individuals to receive preventative, curative, and rehabilitative care, health care delivery is vital. A National Rural Health Mission (NRHM) was established by the Indian Government in 2005. There has been a significant improvement in maternal and child health within the Indian population. However, progress is uneven and slow in urban areas. In 2013, the Government of India launched the National Urban Health Mission (NUHM) to address this gap.

This research aims to examine the functioning of NUHM in Aizawl district, with an overview of the development of the healthcare delivery system in India. The study is done primarily on the administration of primary health care delivery service under NUHM in Aizawl district.

The *first* chapter is an introductory chapter; it deals with urban health in India and Mizoram. It explains India's different health care sectors and examines Mizoram's urban health status. This chapter includes a statement of the problem, scope of the study, methodology, review of the literature, objectives of study and research questions. This chapter is supplemented by tables and figure.

The *second* chapter is a conceptual study on health care administration. It examines the historical development of health care services in India, it explores the background of Indian health administration and health care delivery from ancient, Buddhist, mediaeval, and modern periods. It also examines the evolution of health care by discussing the United Nations on health care and the Alma Ata Declaration of 1978, which is a milestone for public health. It also highlighted national health policies that pave the way for the health sectors in the five-year plan. This chapter discusses health committees in India from the pre-independence to the post-independence era. This chapter also explained healthcare administration in India at the union level, state level, district level, and community level.

The *third* chapter discusses the urban health challenges in India and Mizoram. It provides an overview of the National Urban Health Mission in Mizoram by encompassing its goals and objectives, strategy, implementation, financial management, and budgeting in NUHM Mizoram. This chapter also highlights the urban primary health centres in Mizoram, under NUHM. This chapter provides a summary of various achievements under NUHM Mizoram.

The *fourth* chapter discusses the specific roles and functions of healthcare workers, such as auxiliary nurse midwives, urban accredited social health activists, and Mahila Arogya Samiti under the NUHM. It discusses how these professionals are essential in providing maternal and child healthcare, preventive and promotional health services, and creating awareness about various health issues in urban communities. Furthermore, it explores the challenges and opportunities faced by these healthcare workers in urban settings, shedding light on the complexities of delivering healthcare in densely populated and diverse urban areas.

The *fifth* chapter discusses the analysis of the field study using primary data collected through a structured interview questionnaire with the health care workers and a questionnaire collected from the beneficiaries of NUHM. Also, through field observation, which is done in each UPHC under NUHM in the Aizawl district, it is undertaken by following the guidelines of IPHS 2022. It focuses on infrastructure requirements, waste management, human resource requirements, essential services provided, drugs and equipment, laboratories and diagnostic centres, community outreach, and quality assurance monitoring services.

The *sixth* chapter is the concluding chapter; it contains a summary of the study, major findings, observations from the study, suggestions for improvement, and scope for further studies.

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CHAPTER I

INTRODUCTION

1.1 Introduction

Health is a multidimensional concept and a prerequisite to human productivity. The World Development Report (1993) points out that 'Improved health contributes to economic growth'. Cities are an important driving force to implement the Sustainable Development Goals (SDGs). Health is the bridge to connect economic growth with human capital. Therefore, to deliver a good healthcare, we have Public Healthcare system. Health is the most important factor in every person's life. Health is not only important for a person to live a happy life, but it is also required for all productive activities in society. Health is necessary for economic, social, and cultural development. Quality health is the most decisive factor for development in various economies around the world. Countries with poor health care systems cannot produce productive and responsible citizens who can positively co-operate with development.¹ To coordinate and direct international health within the United Nations system and to achieve the highest possible level of health for all people The World Health Organization (WHO) was constituted on 7 April 1948.² WHO is the first organization to observe health problems around the globe. It defines health as a 'state of complete physical, mental, social, and spiritual well-being and not merely the absence of disease or physical (WHO2002). The United Nations specialized agency for health is WHO. WHO is in charge of setting global health policy, guiding the research agenda, and providing technical help to countries. In India, WHO's office is situated in Delhi and serves the entire country.³

¹ Kwasi Ayarkwa, C. (2020, August 27). *The importance of global health, health in LDCs and economic development in developing countries*. GhanaWeb. Retrieved October 3, 2021, from <https://www.ghanaweb.com/GhanaHomePage/features/The-importance-of-global-health-health-in-LDCs-and-economic-development-in-developing-countries-1044550>

² World Health Organization Western Pacific Region. (2021). About WHO in New Zealand/Retrieved from <https://www.who.int/newzealand/about-us> accessed on 16.3.2021

³ World Health Organization India. (2021). About WHO in India/Retrieved from <https://www.who.int/india/about-us#/> accessed on 15.3.2021

In 2000, the United Nations established the Millennium Development Goals (MDGs) as a set of eight international development goals aimed at achieving them by 2015. Two of these goals, MDG4 and MDG5, focused on improving maternal and child health. MDG 4 aims to reduce the global under-five mortality rate (U5MR) by two-thirds between 1990 and 2015. The U5MR is described as the number of under-five deaths per 1000 live births.⁴ MDG 5 has two maternal health targets. The first goal is to reduce maternal mortality (MMR) by three-quarters between 1990 and 2015, assessed by skilled health worker attendance. The second goal is universal reproductive health by 2015, evaluated by contraceptive prevalence, unmet family planning demand, teen birth rate, and prenatal care.⁵

In 2015, United Nations member states adopted global goals, which are also known as Sustainable Development Goals to protect the planet and ensure that all people enjoy peace and prosperity by 2030.⁶ The Sustainable Development Goals (SDG) era has begun, it prominently featured health in the SDGs. The third SDG goal is to ensure healthy lives and promote well-being for all at all ages. To achieve the overall health goal, the SDG declaration emphasizes that we must achieve Universal Health Coverage (UHC) and access to quality health care. ‘Nobody should be left behind.’ This places UHC at the heart of the SDG 3 health goal, and SDG3 as a contributor and beneficiary of sustainable development, with connections to all other SDG targets.⁷

India and other countries signed the 2030 Sustainable Development Agenda Statement at the UN Summit on Sustainable Development in Sept 2015, which consists of 17 Sustainable Development Goals. State government also have a key role to play in implementing these programs. To achieve the SDGs, economic parameters must be set. Keeping this in mind, the National Institute for Transforming India (NITI Aayog)

⁴ Gaffey, M. F., Das, J. K., & Bhutta, Z. A. (2015). Millennium Development Goals 4 and 5: Past and future progress. *Seminars in Fetal and Neonatal Medicine*, 20(5), 285–292. <https://doi.org/10.1016/j.siny.2015.07.001>

⁵ Ibid

⁶ United Nations. (2016). Sustainable Development Goals | UNDP. UNDP. Retrieved from <https://www.undp.org/content/undp/en/home/sustainable-development-goals.html>/accessed on 16.3.2021

⁷ *Monitoring the Health-Related Sustainable Development Goals (SDGs)*. (2017). World Health Organisation. Retrieved April 3, 2022, from https://cdn.who.int/media/docs/default-source/searo/hsd/hwf/01-monitoring-the-health-related-sdgs-background-paper.pdf?sfvrsn=3417607a_4&download=true

was established.⁸ On 12th April 2005, the Indian government launched the National Health Mission (NHM) for strengthening the health system in urban and rural areas. It covers two submission sessions, the National Rural Health Mission and the National Urban Health Mission. NHM functions in each state which are headed by the State Mission Director.

Health is a multidimensional concept and a prerequisite to human productivity. The World Development Report (1993) points out that 'Improved health contributes to economic growth'. Cities are an important driving force to implement the Sustainable development Goals (SDGs). Health is the bridge to connect economic growth with human capital. Therefore, to deliver a good healthcare we have a public healthcare system.

1.2 Public administration and Health Care Policy

Public administration and health care are closely intertwined, as the effective delivery of health care services requires efficient and well-managed public administration (Doorwar et al 2019)⁹ This integration ensures that resources are distributed correctly, rules and regulations are successfully executed, and healthcare programmes are managed in a way that promotes equal access and quality treatment for all members of society. Public administration performs a multitude of interrelated tasks. Indeed, the vast economic impact of the healthcare business is fundamentally dependent on the public sector. Public administration includes everything that people, groups, organisations, and institutions do at all levels.

The term "public administration" refers to the "organisational structures, administrative procedures, and institutionalised values that officials apply" in the pursuance of policy execution and the enactment of government will.¹⁰ In general, public administration is concerned with how to successfully pursue policy objectives

⁸ United Nations. (2016). India and Sustainable Development Goals: The way Forward. Research and Information System for Developing Countries. Date of download 24/03/2021/PDF

⁹ Doorwar, V., Meraj, Q. F., & Hassan, M. (2019). Impact of public administration and its role in higher education. *Social Science Research Network*. <https://doi.org/10.2139/ssrn.3308681> accessed on 16.3.2023

¹⁰ Lynn L. (2007) Public Management A Concise History of the Field. In: Ferlie E, Lynn L, Pollit C, eds. The Oxford Handbook of Public Management. Oxford: Oxford University Press

through layered administrative systems comprised of government and non-government institutions.

Figure 1.1 Public administration and health care relation



Source: Knepper, H. (2018). Healthcare in the United States: Achieving Fiscal Health in the Marketplace or Delivering a Sustainable Public Good? In Positioning Markets and Governments in Public Management (pp. 73-85)

In a broader sense, public administration research and practise have progressed through three paradigms since the 1980s. (However, none of these paradigm shifts have been 'absolute,' implying that a variety of ways are used in practise)

1. Public administration - the emphasis was on enforcing predefined responsibilities and norms.

2. New public management- attention is paid to cross-sectoral management, entrepreneurship within the public sector, market growth and the use of contracts for resource allocation and service delivery.¹¹

3. New Public Governance (emerging paradigm) - focus on institutional relationships within society and government, based on policy networks and collaborative relationships between organisations.¹²

Policies are framed in the most effective way with a true intention of serving the needs of the community. In order to ensure a population's well-being, health policy is essential. Providing timely access to health care is essential for successful health policy, which means that a sufficient number of health professionals must be available. The decisions made by public policymakers and their implementation directly influence the social determinants of health, such as employment, availability of goods and services, and the built environment. (Newman et al., 2014)

1.3 Health care in India

In India, the Constitution mandates that each state provide health care to its citizens. The health system in India is governed by both Union and State governments, due to the federalised system of government. Under the Union ministry of Health & Family Welfare various health programmes are implemented on a national scale such as National AIDS Control programme, Revised National Tuberculosis Program as well as other initiatives in the fields of health and family welfare, the prevention and control of major communicable illnesses, and the encouragement of traditional and indigenous medical systems, as well as the establishment of standards and guidelines that state governments can adopt.¹³

¹¹ Reddel T. (2002) Beyond participation, hierarchies, management and markets: “New” governance and place policies. *Australian Journal of Public Administration*. ;61:50–63 PDF download on 22.03.2022

¹² Stephen P. Osborne. (2016, August). *The New Public Governance?* ResearchGate. Retrieved January 3, 2022, from https://www.researchgate.net/publication/254349580_The_New_Public_Governance

¹³ *Annual report*. (2020). Ministry of Health & Family Welfare Government of India. Retrieved November 3, 2021, from <https://main.mohfw.gov.in/sites/default/files/Annual%20Report%202020-21%20English.pdf>

Public health spending in India has risen from 0.9 percent of GDP in 2015-16 to 1.1 percent of GDP in 2020-21.¹⁴ According to the Economic Survey 2020-21, India ranks 179th out of 189 nations in terms of prioritising healthcare in the government budget. It is worth noting that the 2017 National Health Policy plans to boost public health spending to 2.5 percent of GDP by 2025.¹⁵

The Ministry has budgeted Rs 73,932 crore for 2021-22. (an annualised growth of 7 percent over the actual expenditure in 2019-20).¹⁶ The Department of Health and Family Welfare receives 96 percent of the Ministry's budget of Rs 71,269 crore, while the Department of Health Research receives Rs 2,663 crore (4 percent of the allocation).

According to the Global Health Security (GHS) Index 2021, India ranks 66th out of 195 nations, with an overall index score of 42.8, a -0.8 improvement from 2019. With a score of 75.9, the United States of America (USA) scored first on the index, preceded by Australia and Finland.¹⁷

Since 2016, India's healthcare industry has grown at a compound annual growth rate of roughly 22%. It is predicted to reach USD 372 billion by 2022 at this rate. Healthcare has grown to be one of the most important areas of the Indian economy in terms of both income and jobs. The health sector grew to become India fifth largest employer in 2015, with 4.7 employees. The National Skill Development Corporation (NSDC) anticipates healthcare jobs to grow by 2.7 million in 2017-22 nearly 500,000 more jobs than expected.¹⁸

Hospitals, medical devices and equipment, health insurance, clinical trials, telemedicine, and medical tourism are all part of India's healthcare industry. These

¹⁴ Economic Survey. (2015). Ministry of Finance retrieved from <http://indiabudget.nic.in/budget2016-2017/es2014-15/echapter-vol1.pdf>. accessed on 11.3.2022

¹⁵ Economic Survey. (2020). Ministry of Finance, retrieved from <https://www.indiabudget.gov.in/economicsurvey/>. Accessed on 5.12.2021

¹⁶ Union Budget. (2021). Ministry of Health and Family Welfare, Demand Nos. 44 & 45, retrieved from <https://www.indiabudget.gov.in/doc/eb/allsb.pdf>. accessed on 12.02.2022

¹⁷ *India - GHS Index*. (2021). GHS Index. Retrieved February 3, 2022, from <https://www.ghsindex.org/country/india/>

¹⁸ *Investment opportunities*. (2021). National Portal of India. Retrieved April 5, 2022, from https://www.niti.gov.in/sites/default/files/2021-03/InvestmentOpportunities_HealthcareSector_0

market groups are projected to expand as an ageing society with an expanding middle class favours preventative healthcare. Furthermore, the increased proportion of lifestyle illnesses in metropolitan areas caused by high cholesterol, high blood pressure, obesity, poor nutrition, and liquor use is increasing the need for specialised care services.¹⁹

1.4 Challenges faced by The India Health Care System

India's health care system plays an important role in the country's general growth and well-being. With a population of over 1.3 billion, having access to great health care services is vital for the nation's growth. The importance of India's health care system lies in its ability to handle the varied health needs of its people, support preventive measures, and offer cheap treatment choices. The Indian healthcare system grapples with several challenges that limit its efficiency and usability. Firstly, poor infrastructure and a dearth of healthcare services pose a major hurdle. The rural population, in particular, suffers from a lack of medical centres and trained workers, leading to limited healthcare access.

Secondly, the high cost of medical services stresses people financially, making decent healthcare expensive for many. A strong health care system is important for the well-being and growth of any country, and India is no exception. A good health care system in India can bring countless benefits. Firstly, it improves the general health of people by offering rapid detection and care for different illnesses. Recognising the need for change, India has adopted several key projects and improvements to enhance its health care system. One important step is the launch of Ayushman Bharat, a flagship programme trying to provide national health care for over 500 million vulnerable people. This programme includes two components: Health and Wellness centres, which provide complete basic care services, and Pradhan Mantri Jan Arogya Yojana (PMJAY), which provides financial support against severe health costs.

¹⁹ Ibid

To solve this healthcare issues and challenges the government has established two crucial initiatives to address various issues and challenges in the health sector: the National Rural Health Mission (NRHM) and the National Urban Health Mission (NUHM). These missions aim to improve the overall health and well-being of people living in rural and urban areas, respectively.

1.5 National Urban Health Mission

The states primarily enforced the health care system in India. India's Constitution assigns each state to deliver health care for its people. The National Urban Health Mission (NUHM) was launched on 1st May 2013; it functions in 779 cities and towns with populations of 50,000. Urban health care comprises secondary and tertiary but not primary care. Thus, the mission aims at expanding primary health services to the urban poor. The initiative acknowledges that urban health care is insufficient because of an excessive population. Thus, NUHM has determined three tiers that require enhancement: Community-level (including outreach programs), Urban Health Centre level (including infrastructure and strengthening existing health systems), and Secondary/Tertiary level (Public-Private Partnerships). The initiative intends to have one Urban Public Health Centre for every population of 50,000 and intent to stable the present facilities and build new ones.²⁰

So far, NUHM covers a resident of around 30 crores across 1006 cities. To start monthly health and nutrition days. NUHM aims to upgrade community health, enhance drinking water sanitation. The various service delivery platforms of NUHM are home visits by Accredited Social Health Activist (ASHA) and Auxiliary Nurse Midwife (ANM), outreach programs at the community level by ANMs, medical officer

²⁰National Health Mission. (n.d). National Urban Health Mission. Ministry of Health & Family Welfare, Government of India. Retrieved from <https://nhm.gov.in/index1.php?lang=1&level=1&sublinkid=970&lid=137>/accessed on 15.03.2021

(MO) and specialist, Service at the urban community health center, implicit referral linkages and efficient intersectoral coordination.²¹

1.6 Status of Urban Health Care in Mizoram

Mizoram is situated in India's northeast region. The location is serene and boasts exquisite scenery. It is a tribal region filled with a variety of ethnic groups. They were all governed by distinct rulers. The Mizo's are believed to be a Mongoloid race who have migrated from China. It is believed that they might have originated from the Yulung River in Chhinlung Province, China. The Mizo Communist People's Union (MCPU) formed in 1946 as the first political party in the Mizo Lushai Hills.²² The Lushai Hills Autonomous District Council was established in 1956 during the British regime as an autonomous district council. Subsequently, Mizoram became the twenty-third state of the Indian Union after being officially conquered by the British in the late eighteenth century.

Mizoram has faced certain issues; in 1959, Mizo Hills had been wiped out by a great famine known in Mizo history as the 'Mautam Famine'.²³ The famine was blamed on bamboo blossoming, which resulted in a massive rat population explosion. After eating up bamboo seeds, the rats turned towards crops and filled the huts and houses and became a plague to the villages.

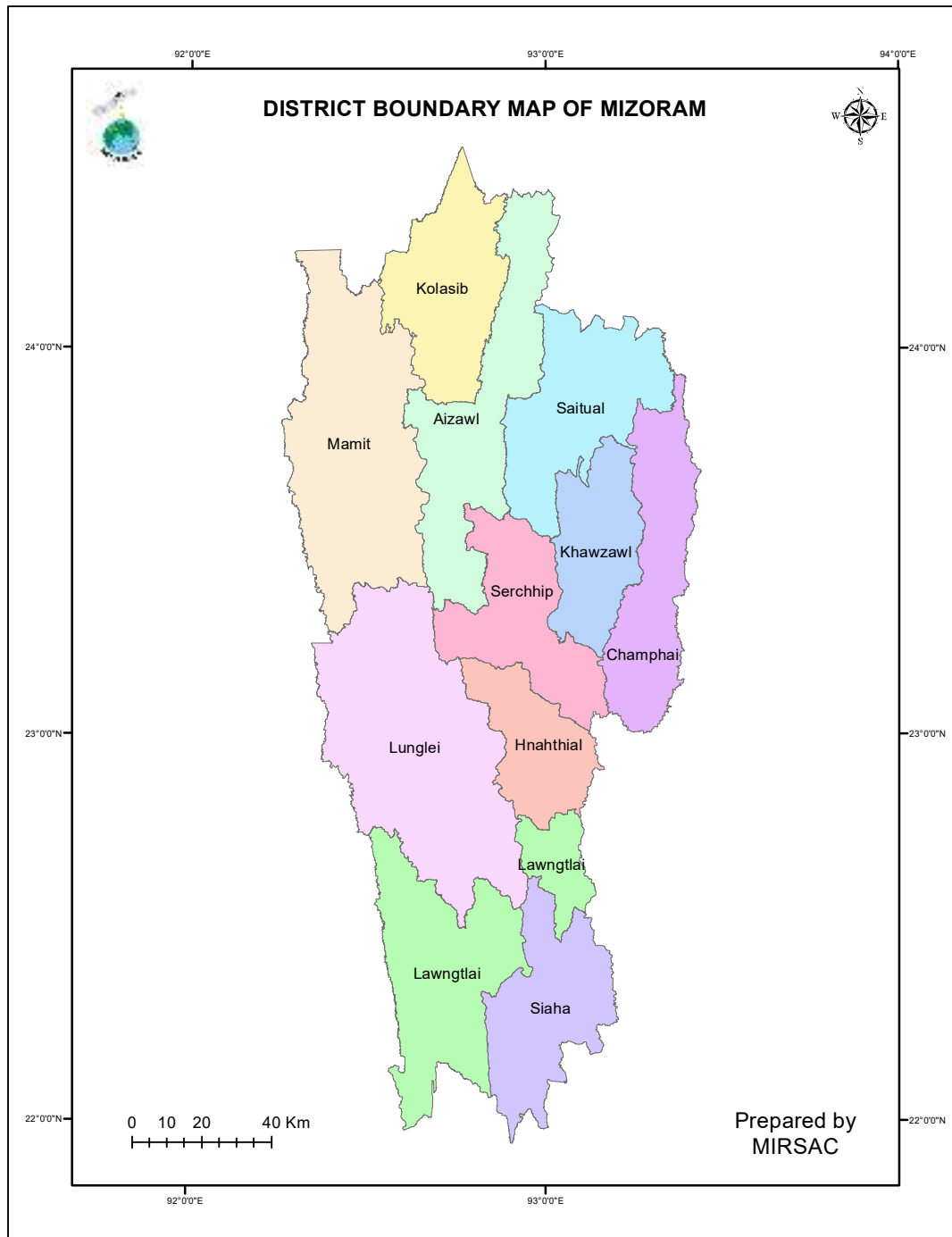
Very little of the grain was harvested due to the massive destruction caused by the rats. For sustenance, many Mizo's had to pick roots and leaves from the jungles. Others left for remote locations in search of edible jungle leaves and roots. Many others left for other locations, and many more died from starvation.

²¹Ministry of Health and Family Welfare Government of India. (2014).National Urban Health Mission orientation module for planners, implementer and partner.P23-25

²² *History of Mizoram*. (n.d.). <http://mizoram.nic.in/about/history.htm> accessed on 22. 09.2024

²³ Ibid

Figure i: District boundary map of Mizoram



Source: Mizoram Remote Sensing Application Centre, Aizawl, Mizoram

Mizoram is a tribal area with hilly terrain and poor communication establishment. Whereas the population is lower than in other big cities, the towns and cities are recognizing quick expansion because of large-scale migration from neighbouring

states like Assam, Manipur, Tripura, and Myanmar. The urban population in Mizoram, as per the census of 2011, stands at 52.11%, which is bigger than in the last decade. (census 2011). According to the Statistical Handbook of Mizoram 2020, there are 9 district hospitals, 9 community health centres, 61 primary health centres, 372 sub-centres, 9 Ayush dispensaries, 1 referral hospital, 1 cancer hospital and 175 clinics established in Mizoram. Even in the remotest village, full-spectrum promotive, preventive, curative, rehabilitative, and palliative health services are being provided to citizens.

In Mizoram, significant progress has been made in the promotion of people's health status during the previous decade. Smallpox, plague, and influenza are no longer epidemic illnesses. Malaria and other non-communicable diseases have been successfully controlled. A large number of hospitals and medical schools have been built. Despite these achievements, there is still much more work to be done in the field of health care.

Table 1.1 DISTRICT-WISE NO OF HOSPITAL & HEALTH CENTRE 2019-2020

SN	District	Hospital		Sub-District Hospital	CHC	PHC	UPHC	Sub Centre	Sub Centre Clinic	Ayush Dispensaries	Mobile Medical Unit
		Govt	others								
1	2	3	4	5	6	7	8	9	10	11	12
1	Mamit	1	0	0	1	10	0	38	8	1	1
2	Kolasib	1	1	0	1	5	0	24	10	1	1
3	Aizawl	2	16	2	3	9	6	91	69	2	2
4	Champhai	1	2	1	2	11	0	60	29	1	1
5	Serchhip	1	1	0	1	5	0	27	6	1	1
6	Lunglei	1	4	2	0	11	2	70	19	1	1
7	Lawngtlai	1	2	0	1	6	0	37	22	1	1
8	Siaha	1	1	0	0	4	0	25	12	1	1
	Total	9	27	5	9	61	8	372	175	9	9

**others include Hospital run by Church/Society/Private*

Source: Statistical Handbook, Mizoram 2020, p109

The above data shows healthcare facilities in different Mizoram districts. It shows the number of hospitals, sub-district hospitals, community health centres, primary health centres, urban primary health centres, sub-centres, sub-centre clinics, Ayush dispensaries, and mobile medical units. It is evident that Aizawl district has the

highest number of hospitals and health centres, with 2 hospitals, 16 sub-district hospitals, and a significant number of other health facilities. However, Mamit district has a significant number of sub-centres, suggesting a focus on primary healthcare and community-level health services. This indicates a better healthcare infrastructure compared to other districts in Mizoram. On the other hand, some districts like Lunglei and Lawngtlai, have a relatively lower number of sub-district hospitals and PHCs.

IMR&MMR REPORT

Table 1.2 District wise Infant Death and IMR report

(IMR per 1000)

SN	District	2016-17		2017-18		2018-19		2019-20	
		Death	IMR	Death	IMR	Death	IMR	Death	IMR
1	2	3	4	5	6	7	8	9	10
1	Mamit	21	19	30	25	16	15	19	15
2	Kolasib	24	20	29	25	31	27	39	32
3	Aizawl	188	22	162	17	109	15	139	15
4	Champhai	29	16	44	24	62	34	40	21
5	Serchhip	12	16	17	23	6	8	6	9
6	Lunglei	44	19	45	18	61	24	43	16
7	Lawngtlai	44	27	48	27	24	12	42	20
8	Siaha	36	28	24	20	31	24	41	30
Total		398	21	389	20	340	18	369	18

Source: Statistical Handbook, Mizoram 2020, p118

Table 1.3 District wise Maternal Death MMR Report

(MMR per 1 lakh)

SN	District	2016-17		2017-18		2018-19		2019-20	
		Death	MMR	Death	MMR	Death	MMR	Death	MMR
1	2	3	4	5	6	7	8	9	10
1	Mamit	2	180	2	168	0	1	1	77
2	Kolasib	2	167	0	0	1	86	2	166
3	Aizawl	6	130	6	67	9	103	1	44
4	Champhai	1	55	5	278	6	331	2	105
5	Serchhip	0	0	0	0	0	0	1	148
6	Lunglei	2	87	2	80	3	120	2	76
7	Lawngtlai	3	182	0	0	6	306	2	97
8	Siaha	4	303	1	81	1	77	2	144
Total		20	104	16	83	26	135	13	63

Source: Statistical Handbook, Mizoram 2020, p118

Mizoram has faced several health issues; the infant mortality rate in Mizoram drops 10 percent in fiscal 2019-20. State's IMR has declined from 15 percent to 5 percent (per 1000 live births) in three years. Mizoram's birth rate in 2018 was 14.8 births per 1000 inhabitants. While the Mizoram birth rate has fluctuated somewhat in recent years, it has continued to decline between 1999 and 2018, finishing at 14.8 births per 1000 inhabitants in 2018.²⁴

The infant mortality rate has declined from 21 per 1,000 live births in 2016 to 18 per 1,000 live births in 2020. However, the differentials of rural (7.96) and urban (16.90) as of 2019 are still high. The mortality rate for the state of Mizoram was 22 per 1,000 live births in 2015-16, whereas in 2019-20 it reduced to 18 per 1,000 live births. The maternal mortality ratio has declined from 104 per 100,000 live births in 2016-17 to 63 per 100,000 live births in 2019-20. However, the north eastern state of Assam in India had the highest maternal mortality ratio at 205 deaths per 100000 women.

Mizoram witnesses an alarming spike in TB death rates, with 108 succumbing to the disease in 2023. A joint study made by various departments of biotechnology Mizoram University, NHM Mizoram, the Department of Health and Family Welfare, Directorate of Health Services Aizawl, Chief Medical Officer, Directorate of Health Services Mamit, the Department of Microbiology and Pathology, Synod Hospital Durtlang a total of 400 TB cases and 840 healthy controls were interviewed from December 2017 - June 2020 the finding suggests that apart from all the well-established risk factors for TB, water supply might play a crucial role in the transmission of TB, since proper hospital waste water treatment is yet to be adopted in Mizoram.²⁵

Mizoram Health and Family Welfare Minister Lalrinpuii informed the legislature on 8th May 2023 that, according to the HIV Estimation 2023, Mizoram has the highest HIV/AIDS prevalence in the country, with 0.23 per 1,000 people infected

²⁴Mizoram-Crude Birth rate. (2018). Knoema. World Data Atlas. Retrieved from <https://knoema.com/atlas/India/Mizoram/Birth-rate/> accessed on 23.03.2021

²⁵ Sailo, C. V., Tonsing, M. V., Sanga, Z., Chhakchhuak, Z., Kharkongor, F., Fela, V., Chhakchhuak, L., Ralte, L., Nemi, L., & Senthil Kumar, N. (2022). Risk factors of tuberculosis in Mizoram: First report of the possible role of water source. *The Indian journal of tuberculosis*, 69(4), 675–681. <https://doi.org/10.1016/j.ijtb.2022.03.003> accessed on 22.09.2024

with the dreadful disease.²⁶ She said that according to the HIV Estimation 2023 report, Mizoram has the highest adult prevalence 2.32%, among those in the 15–49 age range. She also mentioned that cerebrovascular illness is the second leading cause of death among non-communicable diseases, following hypertension, which killed 111 people.²⁷ To address all of these health challenges related to communicable and noncommunicable diseases, the government should take immediate action.

1.7 Review of literature

A thorough review of literature forms an important part of the research. Literature in any field is the bedrock upon which all the imminent work will be built. It shows the originality and applicability of the research matter and defends the proposed methodology. In developed and developing countries, there is a terrific rise in the number of publications, books, and journals. A review of literature is essential to the achievement of academic research. It assures the research capability of the topic. Some books that are important for the proposed studies are reviewed as follows:

R. Agarwal, K. Sangar (2005) ‘Need for Dedicated Focus on Urban Health within National Rural Health Mission’ focused on urbanization and urban poverty. He revealed that the urban poor population constitutes nearly a third of India's urban population and is growing at three times the national population growth rate. He mentioned the various urban schemes implemented by the government to provide health care services to the urban poor. He also states that for NRHM to achieve its goals, the growing urban population needs to be included in its scope. This paper discusses issues on health conditions of the urban poor, the present status of services, challenges and suggests options for NRHM to bridge the large gap.

Arpita Ghosh (2016) ‘Health and Human Rights’ discussed the tribal health situation in West Bengal. The study was based on thirty-one villages of Malda district. He illustrates the population and proportion of major scheduled tribes in West Bengal. He

²⁶ Vanlalruata, H. (2024, March 9). Mizoram has highest HIV/AIDS cases: Health minister Lalrinpuui. *The Times of India*. <https://timesofindia.indiatimes.com/city/guwahati/mizoram-has-highest-hiv/aids-cases-health-minister-lalrinpuui/articleshow/108344201.cms> accessed on 24.09.2024

²⁷ Ibid

mentioned the issues of tribal development and how the central government implemented various schemes for the scheduled tribe. He pointed out that the problem needs special attention in tribal communities' particularly primitive tribal groups, which are highly disease-prone.

M. Chokshi, B. Patil, R. Khanna, S.B Neogi, J. Sharma, V.K Paul and S. Lodpey et. al. (2016) 'Health System in India' discussed the recommendation of three tiered healthcare systems to provide preventive and curative health in rural and urban areas. He further discussed the National Health Policy which main focus is on primary health care. He explained the public health care infrastructure like sub-center, primary health center, community health center, first referral units. He mentioned NRHM for strengthening the rural public health system and highlighting the national program and initiatives for newborn health.

Devaki Nambiar, Rajib Dasgupta, Thiagrajan Sundararaman, Prathibha Ganesan, and Shikha Gupta et. al (2016) 'Reflections on Participation and Knowledge-Making as Part of India's National Urban Health Mission Technical Resource Group Recommendation Exercise' focused on urbanization and poverty. The study pointed out the latest National Family Health Survey, where urban poor experienced worse health outcomes compared to rural poor. It mentioned the NUHM policy framework, which placed a high focus on the urban poor. The study discussed NUHM Technical Resource Group to collect data. It shows that Community Health Workers are few and Urban Local Bodies are retreating from their responsibilities in health care service delivery.

Dr. Mahendra Guar (2008) 'National Rural Health Mission' focused on the improvement in the health system and health status of the people, especially for those people who live in rural areas. He states that the mission seeks to provide universal health care. He mentioned the goals, strategy, and outcome of the mission. He explained the framework for implementing the program. NRHM appears to be a well master plan program with all its achievements during a short period. It would be early to predict in terms of the success of failure.

Dr. R. Kumar (2008) 'Challenges of Healthcare in India Economics and Administration' mentioned the lack of quality in public health. He explained that India has poor health care indicators in a global context compared to other developing countries. India's per capita public health expenditure is Rs 21 which is the lowest in the world. He mentioned the need for investment in health care, which could become the engine of economic growth in many ways. He discussed women's health care and empowerment, discrimination, and inequality in health care and demoralize women. He focused on the futuristic approach of health care, future medical cities might be the ideal steps in building India's healthcare and medical expert, but right now the figure is still inadequate. The book only focused on India's healthcare system, investment, reforms, and improving rural health care, it did not mention any urban health reforms or urban health care system which is much needed for the futuristic approach of health in India.

Dr. R. Kumar (2011) 'Health and Human Development' He focused on the basic pillars of human development, i.e. equity, sustainability, production, and empowerment. He mentioned that human development is interrelated with human rights and human freedom. They are mutually reinforcing, helping to secure the dignity and well-being of all people. He further mentioned the history of the Human Development Index (HDI) and the United Nations Millennium Development Goals (MDG). The index highlighted the disparities between the rich and the poor countries. He explained the National Rural Health Mission (NRHM), which was introduced in 2005. The goals of NRHM are reduction in infant mortality rate, universal access to public health services for women's health, child health, sanitation, access to primary health care, ensuring population, stabilization, and promotion of a healthy lifestyle. He suggested that the issues of NRHM depend on the mission intervention of the state government into action ensuring trained and equipped resident health functioning at every level. Partnership with the non-government provides to strengthen public health. The book focused only on the Human Development Index (HDI) of the world. It mentioned the National Rural Health Mission (NRHM) which only aims for the improvement of health in rural areas. It did not include the study of urban health

problems or the National Urban Health Mission (NUHM) in India, a mission to elevate the urban poor.

John Zohmingthanga et al.'s (2021) 'Public Health in Mizoram' focused on the study of factors influencing infant mortality rate and maternal mortality rate in Mizoram. The research team in this book carried out an investigation into the factors that impact IMR and MMR, encompassing all Mizoram districts, under the direct supervision of a coordinator responsible for data collection. The study was conducted among the relatives of the deceased child who died during the period of 17 months in all the districts. The book mentioned in the findings that the average age of deceased infants was 7 days, while the majority of them died at the age of 1 day. They also mentioned that in the findings, the number of maternal deaths was highest in Siaha district, followed by Lunglei district. The book highlights the vision of the Millennium Development Goals (MDG), which aim to improve maternal health. It also highlights the Sustainable Development Goals (SDG) agenda, which is to reduce the global maternal mortality ratio to less than 70 per 1,000 live births by 2030. The book also highlights the introduction of the National Rural Health Mission in 2003 as a submission of the National Health Mission to reduce infant and maternal mortality rates. Furthermore, the book mentioned the health care workers and health care schemes such as ASHA, Rogi Kalyan Samiti (RKS), Auxiliary Nurse Midwife (ANM), Janani Suraksha Yojana (JSY), and Janani Shisha Suraksha Karyakam (JJSK) that these initiatives are undertaken in Mizoram as given a special focus among the northeast states.

K.C Lalmalsawmzauva (2018) 'Health and Development Interface in Mizoram' focused on the relationship between health and development. It examined health from the perspective of development. The goal and objectives of the book are to make us understand how development variables like health care infrastructure, poverty, influence the attitude of the state of Mizoram. He identified the problem faced by people living in hilly areas seeking health care. He further discussed how occupation income and mass media handle health care seekers in Mizoram. He explained the overview of inter distinct variations of health-seeking behavior, their level of

education, and those who indulge in smoking and drinking district-wise. He highlights the health and health-seeking behaviour between rural and urban Mizoram. He revealed that in rural areas the level of accessibility ranges from 5% to 90%. Out of 10 urban areas, four of them are coded as 100% accessible and the remaining are over 80% accessible. Compared with rural, urban areas show a higher relationship between accessibility and health-seeking behaviour. The book illustrates the socio-demographic health profile of Mizoram. Their performance is quite pleasing compared to the other states, but the study focuses only on the inter-district variations of health and education in rural and urban Mizoram. The study did not cover the entire development factors and variables in health care seekers. It covers only the inter-district variations in rural and urban. In Mizoram, we have three new districts: Saitual, Khawzawl and Hnahthial, which is needed to be studied.

Kapil Yadav, Nikhil SV, Chandrakant S Pandav et. al (2011) 'Urbanization and Health Challenges: Need to Fast Track Launch of the National Urban Health Mission' focused on urbanization and health of the urban poor. It mentioned that poor sanitary conditions in slum homes contribute to the high burden of disease in India. It highlights the public sector urban health delivery system, especially for the poor. The urban population suffers a significantly higher burden of non-communicable disease risk factors. It also states that the goal of the National Urban Health Mission (NUHM) is to improve the quality of health care by upgrading the system of public health. The initiative aims to improve access to and access to health services in the deprived areas of the city.

Muniraju M (2013) 'Healthcare System in India: An Overview' focused on the health sector in India which is characterized by a government sector that is publicly financed and managed from primary to tertiary level throughout the country. He also explained the key health resource in India. He mentioned that the health sector has made significant progress in the year since independence, but still faces significant challenges like lack of infrastructure and lacked qualified health care professionals.

Nilash Nilash (2017) 'Review of Indian Healthcare Sector' mainly focused on the healthcare infrastructure in India. He mentioned the Indian health care delivery system, which is classified into two major factors: public and private, the government i.e.

public. He highlights the Indian healthcare market worth around US dollar 100 billion and it is expected to grow to 280 billion US dollars by 2020. He also mentioned the analysis of the Indian Healthcare market, which is the sixth-largest in the world. He discussed healthcare investment from abroad, hospitals, and diagnostic centers in India. The healthcare industry has attracted Foreign Direct Investment from many countries worth US 3.59 billion. The book mainly focused on the healthcare infrastructure and health care service delivery system in India, it did not mention a particular state infrastructure.

P.K Sasidharan (2005) 'Heal-thy India' mentioned India's health issues like Leptospirosis, Endosulfan, Chikungunya which will gain attention shortly but the massive issues underlying this matter are constantly neglected. Lack of prioritization of health care is the main issue in India. The next priority should be popularizing general practitioners and reducing over-treatment and over the investigation. He further mentioned the biggest health problem in India which is malnutrition. As per WHO India is said to have the topmost figure in malnourished children below the age of five.

R.K Mutatkar (2018) 'Tribal Health and Malnutrition' discussed the issues about the distinctiveness of tribal health. Their leaders of the country express malnutrition as under-nutrition among the tribal people as 'National Shame'. The book portrayed an intervention case study of developing a community model for successfully addressing the issues of under-nutrition in the tribal belts of Maharashtra. The interventions designed, implemented, and monitored as practicing anthropology with a socialist epidemiological approach, formally functioned as an NGO-Government partnership in tribal development. The book mentioned community ownership of the program is manifested through the implementation of 500 tribal men and women village volunteers covering 250 villages in seven tribe-dominant districts of Maharashtra. The book focused only on tribal health and poverty in a specific state of Maharashtra. The book did not mention any other tribal-related states in India, especially the northeast where the tribal population percentage is much denser compared to any other states in the country.

Rais Akhtar (2002) 'Urban Health in The Third World' He mentioned the consequence of urbanization which led to environmental change, increase morbidity and mortality. He highlights the health and culture relation in urban India. He discussed health planning and the resurgence of malaria in urban India. He further discussed the health care facilities and urban health in different states like Calcutta, Colombia, Kuala Lumpur city of Karachi, and Pakistan. He explained that in Calcutta, the fundamental problem is not the unavailability of service but an unbalanced utilization pattern. The book focused on urban health care and health-related problems in third world countries but did not discuss the main urban health issues like AIDS, Cancer, TB, and other communicable diseases which is a big issue around the world.

Rajneesh Goel (2002) 'Community Health Care' highlight on primary health care in developing countries like India. It is a case study of Karnataka with challenges and recommendations applicable to the whole of India. This book focus on health care as an indispensable part of socio-economic development of the people in India. He demonstrates a lack of equipment, infrastructural facilities, medicines, etc. He evaluates the reaction of respondent beneficiaries and community participation in the health system. He highlighted the major issues faced by the health administration in the country and design a way to remove those hindrances and make sure effective health care is provided to the people. This book has brought out the major challenges being faced by the health administration in the country and it is possible to design the system in a way as to remove these obstacles.

K. Ramchandran (1993) 'A Handbook of Management for Primary Health Centre' focused on the development of health services, primary health, and national health program. He highlights the record and statistics inapplicable and meaningful format for health personnel to keep a valid record in the preparation of reports. He discussed the importance of community participation including health education which is necessary for the people for their well-being and welfare.

S. L Goel (2004) 'Primary health Care Management' In this book, the author explores the nature of health and suggests a need for new trust in the 21st century. It examines the nature of primary health care since the Alma Ata Declaration. Moreover, it

examines the characteristics of Primary Health Care, such as community involvement and intersectoral coordination. An overview of primary health care in Punjab is presented in this book, focussing on the development and management of primary health care and their issues.

S.L Goel (2004) "Health Care Organisation and Structure" discussed the levels of health care administration. This book deals with health administration at the Union level, state level and district level. It examines the organization and working of District Hospital, Community Health Centre, Primary Health Centre and sub centre. It also examines the technical and administrative issues faced by the them. The book also explained International Health Care Administration, the role of World Health Organization (WHO) its evolution and objectives. This book provides a clear understanding on Health Care Organisation at different level and it would be useful to the health administrators and policy makers at different levels in India and other developing countries to improve health care system. Despite his great work at times thing have changed. The synoptic view of Health System in India or health system infrastructure and functions has changed.

G. Prasad Rao and Prof. G. Parvathi (2024) "Evolution of Primary Health Care Centres Concept in India - A Study" provides a thorough examination of the evolution of primary healthcare in India, from its inception to the present day. The authors have conducted an exhaustive literature review, scouring indexed and non-indexed journals, websites of important organizations, and national programs related to primary healthcare in India. The article begins by highlighting the significance of primary healthcare as the foundation of health service delivery, and how India was one of the first countries to recognize its merits. The authors then delve into the history of primary healthcare in India, tracing its development from the Bhore Committee report in 1946 to the present day. The authors discuss the key milestones, including the Alma-Ata Declaration, the National Health Policy, and the various committees that have shaped the primary healthcare system in India. The article also highlights the challenges that remain in achieving universal health coverage in India, including issues related to infrastructure, funding, and human resources. The authors provide key findings and

recommendations to address these challenges, making this article a valuable resource for policymakers, healthcare professionals, and researchers.

Salil Basu (1994) 'Tribal Health in India' focused on the major tribal health issues. The book explained the perception of health patterns and health-seeking behavior of the tribal population in Madhya Pradesh and Orissa. The book mentioned the social cultural and environmental factors of tribal health. It also pointed out the paucity of the comprehensive health status of the tribal population in India, which would enable evolving concrete measures of health improvement on tribal groups.

Santosh Kumar Sahu (1991) 'Health Culture in Transition' emphasizes understanding the people and tribal community, how the people take care of their health problems socially and culturally. He discussed the problem faced by the tribal community, he focused on the approach for formulating a program for intervention in the problem, to alleviate the suffering caused by tribal people. He mentioned that a very large portion of needs remains unfulfilled because of the barriers in the path to access these institutions. He suggested that for the improvement of tribal population, oriented health service, a pre-determined health program is the prime necessity rather than promotion.

Siva PM Sandhya Rani et. al. (2013) 'Primary Health Centres in Rural health'. An attempt was made in this book to examine the different facets of health care provided by the Primary Health Centres (PHC). Authors from diverse backgrounds such as Sociology, Social work, Medicine, Policy administration, Economics, Demography bring perspectives from their respective specializations. It highlights the insight concept of PHC infrastructure, performance, and service. The rural health division regarded the primary health centre (1999) as the foundation of the rural health care system. It also mentioned the rural health service infrastructure in India, which is one of the largest in the world. It stressed the quality of service it offers is a cause of concern, poor budgetary allocation for the health sector in general and rural health sub-center in particular. It explained the lack of infrastructure and availability of medical officers and inadequate regular in-service training. It further explained the infrastructure at the primary health centre in India. About 23,673 (91%) primary health

Centres are functioning as against the required 26,022 for the 2002 population. Out of the 15 major states, eleven states have 46-75 percent of the required PHC functioning. It suggested primary health care centres to be more effective. The quality of service rendered both in terms of human approach and medical care must be improved so that there would be better participation in the health program.

Sunil K. Dixit & Murali Sambasivan et. al (2019) 'An Integrated Multitheoretical Perspective of Public Health Care Services Delivery Organizations' demonstrate four main hypotheses in the field of healthcare. The research aims to develop a conceptual view of health care service delivery organizations. It aims to fill the holes mentioned while also contributing to the body of information in a variety of ways. The study discussed organization theories and offers some core elements to a healthcare organization. It is divided into four sections: First, the research methodology was identified. Second, the importance of organization theories (resource-dependence theory, population dynamics theory, transaction-cost economics theory) to healthcare has been highlighted. Thirdly, the major literary themes/elements have been summarized. Fourth, a model of a multi-theoretical.

Utpal Kumar De et. al. (2018) 'Issues on Health and Healthcare in India' deals with health and health-related problems in India with a particular emphasis on the Northeast region. Under a multidisciplinary approach, it highlights key health and health problems and outlines the steps required to achieve the desired outcomes in these areas as set out in the UN Millennium Development Goals. Besides implementing a host of emerging health and health care concerns. He highlights the geographical dynamics that come up while discussing these issues. He mentioned a variety of methods for analyzing mortality and morbidity, and factors affecting out-of-pocket expenditures, including two-level logistic regression, mental health analysis, probabilistic and predictive analysis of dietary deficits, and generalized linear mixed models.

A. Sheeba & A. Seilan (2020) 'Health Care System in India: An Overview' provides an in-depth analysis of the healthcare sector in India, tracing its evolution from ancient times to the present day. The authors, with their expertise in medical surgical nursing and economics, offer a unique blend of historical context, policy analysis, and industry

insights. The book is divided into three main sections: the definition and scope of healthcare, the historical development of the healthcare sector in India, and the current state of the industry. The authors provide a thorough understanding of the healthcare system, including the role of traditional medicine, the entry of the private sector, and the challenges faced by the industry. The authors provide a detailed account of the Indian healthcare system, including the role of the government, the private sector, and traditional medicine. The book is rich in data and statistics, making it a valuable resource for researchers, policymakers, and industry professionals to gain a deeper understanding of the healthcare sector in India.

1.8 Study Framework model: Donabedian quality assurance model

Healthcare delivery is a complex and multifaceted field that has been the subject of extensive research and analysis. With the increasing burdens of illness and the increasing costs of providing healthcare, the healthcare system is facing significant challenges, which highlight the need to develop a more holistic and personalized approach to health care management in order to make it more efficient. There have been numerous methodologies and frameworks proposed by researchers to address these challenges, which include the application of systems thinking, process modelling, and dynamic system modelling as ways of addressing these challenges. (Bonacina et al., 2016)²⁸

In research, choosing a suitable framework is crucial. The three extensively used frameworks for healthcare delivery are the Donabedian quality of care framework, which has three components: structure, process, and outcome. The second is Anderson's behavioural model of healthcare use, which focuses on predisposing, enabling, and need factors.²⁹ The third is the WHO healthcare system framework,

²⁸ Bonacina, S., Pozzi, G., Pincioli, F., Marceglia, S., & Ferrante, S. (2016). A design methodology for medical processes. *Applied Clinical Informatics*, 07(01), 191–210. <https://doi.org/10.4338/aci-2015-08-ra-0111> accessed on 4.02.2022

²⁹ Arnold, M. L., Hyer, K., Small, B. J., Chisolm, T., Saunders, G. H., McEvoy, C. L., Lee, D. J., Dhar, S., & Bainbridge, K. E. (2021). Factors Associated With Self-Perceived Hearing Handicap in Adults From Hispanic/Latino Background: Findings From the Hispanic Community Health Study/Study of Latinos. *Ear And Hearing*, 42(4), 762–771. <https://doi.org/10.1097/aud.0000000000000995> accessed on 23.04.2022

which emphasizes funding, leadership, governance, and service delivery.³⁰ For the current study, the Donabedian quality of care framework is the most suitable.

Avedis Donabedian, a renowned healthcare researcher and theorist, is widely recognized as a pioneering figure in the field of healthcare quality assessment, having introduced a comprehensive framework that has significantly influenced the understanding and evaluation of healthcare delivery (Ayanian & Markel, 2016)³¹. Using the Donabedian model, we can evaluate the quality of healthcare delivery, and provide valuable insights into how well this mission is being implemented. The Donabedian model comprises three key components: structure, process, and outcome.³² Applying this framework to the National Urban Health Mission can help identify areas for improvement and guide the development of effective strategies.

The first component of the Donabedian model is the structure, which refers to the physical and organizational aspects of the healthcare system. This includes the availability of resources such as facilities, equipment, and personnel, as well as the overall infrastructure and management of the healthcare setting.³³ By examining the structure of the National Urban Health Mission, the urban primary healthcare infrastructure, including the establishment of Urban Primary Health Centres (UPHCs) and Urban Community Health Centres (UCHCs) we can learn a lot about the suitability and sufficiency of urban healthcare facilities and resources available in urban areas.

The second component of the Donabedian model is the process, which focuses on the actual delivery of healthcare services. This includes the interactions between healthcare providers and patients, their commitment to clinical guidelines and

³⁰ Murray, C. J., & Frenk, J. (2000). A WHO Framework for Health System Performance Assessment. In *Evidence and Information for Policy*.

³¹ Ayanian, J. Z., & Markel, H. (2016). Donabedian's lasting framework for health care quality. *New England Journal of Medicine/ the New England Journal of Medicine*, 375(3), 205–207. <https://doi.org/10.1056/nejmp1605101> accessed on 23.04.2022

³² Donabedian, A. (2005). Evaluating the Quality of Medical Care. *Milbank Quarterly*, 83(4), 691–729. <https://doi.org/10.1111/j.1468-0009.2005.00397.x> accessed on 23.06.2024

³³ Pecoraro, F., Luzi, D., Cesarelli, M., & Clemente, F. (2015). A methodology of healthcare quality measurement: a case study. *Journal of Physics. Conference Series*, 588, 012027. <https://doi.org/10.1088/1742-6596/588/1/012027> accessed on 23.04.2022

protocols, and the overall coordination and continuity of care.³⁴ By evaluating the process of the National Urban Health Mission, we can assess the efficiency and effectiveness of healthcare delivery in urban areas, identifying any gaps or areas for improvement

The third and final component of the Donabedian model is the outcomes, which refer to the ultimate results and impact of healthcare interventions on the health status of individuals and populations.³⁵ This includes measures such as mortality rates, disease prevalence, patient satisfaction, and functional outcomes. By analyzing the outcomes of the National Urban Health Mission, we can understand exactly how well the healthcare services provided are achieving their goals and improving the health outcomes of the urban population.

Applying Donabedian's model in the National Urban Health Mission can provide an extensive framework for evaluating the quality of care provided in urban areas. The evaluation is important in finding areas for improvement and ensuring that high-quality care is continuously provided to the urban population. By knowing the strengths and weaknesses of the healthcare system, legislators and healthcare workers can make wise decisions to improve the delivery of healthcare services in urban areas. In the end, this will improve the general health and well-being of the urban population by encouraging fair access to quality healthcare services.

1.9 Statement of the problem

The community faces a multitude of health problems. Both urban and rural areas have faced certain health consequences. Unlike rural health, urban health is more complex because of its population, which is highly heterogeneous. In urban areas, especially in a city, health problems like air pollution, water pollution, non-communicable disease,

³⁴ Mitchell, P. H., Ferketich, S., & Jennings, B. M. (1998). Quality Health Outcomes model. *Image: The Journal of Nursing Scholarship*, 30(1), 43–46. <https://doi.org/10.1111/j.1547-5069.1998.tb01234.x> accessed on 23.04.2022

³⁵ Ibid

unhealthy diets, and physical inactivity exist because of current global urbanization. A number of hospitals have been established in certain areas, but the problems remain the same for poor people. In cities and urban areas, the majority of hospitals are private, which is very expensive for the poor and disadvantageous sections of society. The government hospitals are fewer in number and very congested, making it difficult for the urban poor to have proper health care. This led to a decrease in health-seeking behaviour in urban areas.

The Government of India has taken major steps to address the issue by establishing the National Rural Health Mission (NRHM) in April 2005 to provide accessible and quality healthcare to the people. After it was successfully implemented and showed its major achievements and results, the Government of India launched its sub-mission, the National Urban Health Mission (NUHM), which aims to strengthen the healthcare infrastructure in urban areas, addressing the healthcare needs of the urban population in India. Its primary goal is to provide clean water, sanitation, and housing, as well as reduce health inequality. NUHM established the Urban Primary Health Centre (UPHC) and the Urban Community Health Centre (UCHC) to provide primary health care services.

In Mizoram, the introduction of NUHM is very much appreciated to address the health problems of the urban community. Under NUHM, there are various healthcare workers who provide health service delivery to uplift the health of the urban population. Various achievements have been made under NUHM. However, despite these achievements, there are still persistent challenges that need to be addressed. The mission should further prioritise the inclusion of marginalised groups, improve healthcare financing, and strengthen partnerships with urban local bodies and civil society organisations to ensure sustained progress.

In view of the above statement, the study is entitled “Healthcare Delivery in Mizoram: A Case Study of the National Urban Health Mission in Aizawl District.”

1.10 Scope of study

The scope of the proposed study will try to analyse the problem faced by the urban poor. It will include service delivery to the health care seekers in Aizawl. The study will cover the concept of health care and focus mainly on the background and origin of implementation of the National Urban Health Mission (NUHM) in India and Mizoram, particularly the Aizawl district. The origin, setup, and its service delivery strategies, the problems faced by the mission will be studied. The study will focus on health care workers like Urban ASHA, ANM, MAS in providing service delivery to the people. The study will include the infrastructural facilities at Urban Primary Health Centre (UPHC). NUHM is a big step towards improving the well-being of urban residents. The study will be beneficial to bring service delivery to Mizoram. It will cover the Aizawl district from its implementation till the present day.

1.11 Objectives of study

The major objectives of the proposed study are:

1. To study the background and origin of implementation of NUHM in India and Mizoram in particular.
2. To study the infrastructural facilities at UPHCs
3. To study the role of urban ASHA, MAS, and ANM in promoting NUHM.
4. To find out the shortcomings and the problems faced by respondent beneficiaries under NUHM Aizawl.
5. To understand the implications and make suitable suggestions for the effective performance of NUHM.

1.12 Research questions

1. What are the necessary processes for implementing NUHM in Mizoram?
2. What are the basic infrastructural components of NUHM in Aizawl?

3. What are the roles of urban Health Care Workers -ASHA, MAS, and ANM in NUHM in Aizawl?
4. What are the problems faced by respondent beneficiaries under NUHM Aizawl?
5. What are the major implications and suggestions for the effective performance of NUHM?

1.13 Methodology

Research design:

This research followed a mixed method research approach by using both qualitative and quantitative data. To achieve the research objectives as specified above in the delivery of the National Urban Health Mission in Mizoram, with special reference to Aizawl District, all the six UPHC were studied as case study individually.

Sampling Design:

This study employed non-probability sampling techniques, specifically purposive sampling and quota sampling, to select participants. A purposive sampling approach was used to select beneficiaries due to the large size of the beneficiary population. Only those who were literate and had some knowledge about the benefits provided by the Urban Primary Health Centres (UPHCs) were selected. This method ensured that the selected participants had the necessary awareness and understanding to provide meaningful responses relevant to the study objectives. In addition, for selecting healthcare workers, a quota sampling technique was adopted. This method was appropriate because the UPHC workforce consists of diverse groups, including Auxiliary Nurse Midwives (ANM), Accredited Social Health Activists (ASHA), and Mahila Arogya Samiti (MAS) members. Specific quotas were given to each group based on their availability, convenience, and population size within the UPHC workforce, ensuring balanced representation across all worker categories.

For the study, 300 beneficiaries under each UPHC in Aizawl were selected to represent the whole population of NUHM beneficiaries in Aizawl district. To select the

respondents from the beneficiary's, Purposive sampling method was used. Quota Sampling technique was used to select 100 respondents from the healthcare workers.

Data Source:

Both primary and secondary data were collected for the study. The primary data are collected through questionnaires and interviews with concerned NUHM healthcare workers, ANM, ASHA, MAS, and beneficiaries of NUHM in Aizawl District, Mizoram. Data were collected using semi-structured questionnaires, field observations, and personal interviews.

The secondary data were collected from different sources available, such as relevant books, articles, journals, handbooks, guides, magazines, newspapers, pamphlets, websites, and government documents related to the study.

Analytical tools:

A thick descriptive narrative of the filed observations of the six UPHC was done in accordance with the India Public Health Standard (IPHS) 2022. These guidelines serve as a benchmark for the minimum requirements that UPHC must meet, it also brings uniformity in evaluating all the health care services across different regions. Moreover, the guidelines are also aligned with Donabedian model covering the structure, process and outcome (Donabedian, A 2005)³⁶. It also aligns with public health goals including National Health Mission and Sustainable development goals. By observing these standards, the healthcare services can contribute in achieving national and international objectives. Key components of the IPHS 2022 guidelines for UPHCs includes; *Infrastructure requirement; Waste management; Human Resource Requirements; Essential Service Provided (Drugs and Equipment,*

³⁶ Donabedian, A. (2005). Evaluating the Quality of Medical Care. *Milbank Quarterly*, 83(4), 691–729. <https://doi.org/10.1111/j.1468-0009.2005.00397.x>

Laboratory and diagnostics services, Community Outreach services, Quality assurance and monitoring services)

The collected data are analysed both qualitatively and quantitatively using content narrative analysis and tools like the Statistical Package for Social Science (SPSS).

1.14 Chapterization

The thesis is divided into six chapters based on the objectives of the study.

The *first* chapter is an introductory chapter; it deals with urban health in India and Mizoram. It explains India's different health care sectors and examines Mizoram's urban health status. This chapter includes a statement of the problem, scope of the study, methodology, review of the literature, objectives of study and research questions. This chapter is supplemented by tables and figure.

The *second* chapter is a conceptual study on health care administration. It examines the historical development of health care services in India, it explores the background of Indian health administration and health care delivery from ancient, Buddhist, mediaeval, and modern periods. It also examines the evolution of health care by discussing the United Nations on health care and the Alma Ata Declaration of 1978, which is a milestone for public health. It also highlighted national health policies that pave the way for the health sectors in the five-year plan. This chapter discusses health committees in India from the pre-independence to the post-independence era. This chapter also explained healthcare administration in India at the union level, state level, district level, and community level.

The *third* chapter discusses the urban health challenges in India and Mizoram. It provides an overview of the National Urban Health Mission in Mizoram by encompassing its goals and objectives, strategy, implementation, financial management, and budgeting in NUHM Mizoram. This chapter also highlights the urban primary health centres in Mizoram, under NUHM. This chapter provides a summary of various achievements under NUHM Mizoram.

The *fourth* chapter discusses the specific roles and functions of healthcare workers, such as auxiliary nurse midwives, urban accredited social health activists, and Mahila Arogya Samiti under the NUHM. It discusses how these professionals are essential in providing maternal and child healthcare, preventive and promotional health services, and creating awareness about various health issues in urban communities. Furthermore, it explores the challenges and opportunities faced by these healthcare workers in urban settings, shedding light on the complexities of delivering healthcare in densely populated and diverse urban areas.

The *fifth* chapter discusses the analysis of the field study using primary data collected through a structured interview questionnaire with the health care workers and a questionnaire collected from the beneficiaries of NUHM. Also, through field observation, which is done in each UPHC under NUHM in the Aizawl district, it is undertaken by following the guidelines of IPHS 2022. It focuses on infrastructure requirements, waste management, human resource requirements, essential services provided, drugs and equipment, laboratories and diagnostic centres, community outreach, and quality assurance monitoring services.

The *sixth* chapter is the concluding chapter; it contains a summary of the study, major findings, observations from the study, suggestions for improvement, and scope for further studies.

CHAPTER II

HEALTHCARE ADMINISTRATION: A CONCEPTUAL STUDY

2.1 Introduction

This chapter is the conceptual study of healthcare administration. It discussed the historical development of healthcare in India from pre independence to post independence. It also discussed various International Health Agencies, important Committees and Policies in India. This chapter focuses on the structure of healthcare administration by describing healthcare administration at different levels i.e., National level, state level and district level. Furthermore, it highlights the challenges faced by the Indian healthcare system.

Healthcare refers to a range of interventions and services that enhance and maintain the well-being of individuals, societies, and communities. This field deals with identifying, preventing, managing, and treating illnesses, injuries, and other conditions. A wide range of activities are involved in this, including preventive medicine, counselling, and health promotion. Administration is an essential aspect of public service since it involves managing the implementation of government programs, initiatives, and policies in a way that is both efficient and successful for the benefit of people.³⁷

2.2 Historical Development of Health Care in India

In India health care system has evolved tremendously over the course of time, reflecting the country rich cultural heritage. Health care system in India has its roots which can be traced back to Ancient Vedic and Ayurvedic practices which stressed on health and wellness. The traditional practices which mostly involved using plants and herbs as medicine were deeply rooted in the cultural of India. In modern era, the development of health care system is influenced by the British colonial rule, during this era the patients was given a high quality care equally. The Bhore Committee

³⁷ Doorwar, V., Meraj, Q. F., & Hassan, M. (2019). Impact of Public Administration and Its Role in Higher Education. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3308681> accessed on 21.04.2022

founded in 1946 developed the groundwork for the creation of a more comprehensive and accessible health care system in the post-independence.³⁸ Here are the historical development of Health Care based on specific period:

1. Ancient Period (1800-1500 BCE)

An old Indian medicine practise, Ayurveda, refers to "knowledge of life" in Sanskrit. In the Indus Valley, the golden era of ancient Indian medicine started around 800 BCE. The Aryans introduced their gods and knowledge of medicine to the Indus Valley society, but the Indus Valley culture embraced them. In Aryan civilisation and health, the four Vedas (Rig, Yajusa, Sama and Atharva Veda) are the principal sources of knowledge. During ancient Greece, personal cleanliness, diet, physical exercise, and group cleaning were highly stressed. According to Hippocrates, medical practise should be built on observation and the recording of clinical results. As a result of his work, medicine holds a basic, scientific, and ethical spirit that continues to the present day.³⁹

2. Buddhist Period (563–477 BC)

The Buddha himself was passionate about medical science. However, the concept of Ahinsa created a loss for Indian surgery at this time period. Many ill people were cured by Lord Buddha personally. It was believed that caring for the ill was a worthwhile endeavour. Buddha constructed Buddhist Viharas (monasteries) during his travels to promote Buddhism, with an emphasis on providing medical education and healthcare at each Vihara.⁴⁰

The first and foremost doctor in the Buddhist religion was none other than the Buddha himself. In the first sermon Gautam Buddha gave at Sarnath, he emphasised four noble truths: suffering (dukkha), the cause of suffering is clinging and ignorance (dukkha

³⁸ Tabish, S. A. (2000). Historical development of health care in India. *ResearchGate*. https://www.researchgate.net/publication/290447383_Historical_Development_of_Health_Care_in_India accessed on 23.08.2022

³⁹ Tulchinsky, T. H., & Varavikova, E. A. (2014). A history of public health. In *Elsevier eBooks* (pp. 1–42). <https://doi.org/10.1016/b978-0-12-415766-8.00001-x> accessed on 4.09.2022

⁴⁰ Tabish, S. A. (2000, January 1). *Historical Development of Health Care in India*. ResearchGate. https://www.researchgate.net/publication/290447383_Historical_Development_of_Health_Care_in_India accessed on 22.09.2022

samudaya), and one can overcome suffering (dukkha nirodha), which is accomplished by following the Eightfold Noble Path (dukkha nirodha marga).⁴¹

3. Medieval Period (AD 700 – AD 1800)

The late mediaeval period witnessed an increase in compilations dealing exclusively with diagnosis and treatment in addition to medicine or distinct areas such as dietetics. Physicians were seen as humanitarians in the mediaeval era, assisting society with compassion. The inscriptions refer to them as Parahitas and Lokopakras.⁴²

Ashoka constructed several hospitals around the entire country. Middle Eastern doctors trained in the Unani technique made their mark with the onset of Muslim rule in the tenth century. The most effective approach was the therapeutic one. During Akbar's reign, the Unani and Ayurvedic systems were unified (1555-1605). One of the most significant accomplishments was the translation of medical materials from Arabic into Persian and subsequently into Urdu. The influence of Muslim rule was one of the most significant successes. It was evident how Muslim leadership affected everything. After the Portuguese seized Goa in 1510, it started to collapse.⁴³

4. Modern Period (AD 1801-2000)

In the twenty-first century, the patient is the centre of the health-care system. A system like this would ensure that patients have access to the best and highest-quality care possible, regardless of their wealth, where they live, how sick they are, or the colour of their skin. Electronic health records are needed in a twenty-first-century health care system. The huge potential of information technology must be utilised in order to provide users with knowledge, choices, and control.⁴⁴ Over the last 150 years,

⁴¹ Kalra, Priya, Grewal, Aye, & Waraich. (2018, December 22). *Lessons for the Health-care Practitioner from Buddhism*. PMC PubMed Central. Retrieved April 29, 2023, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6330872/>

⁴² Rao, B. & Dr. A. Lakshmipathi Research Centre for Ayurveda. (1992). Some aspects of health care in medieval india. In *Ancient Science of Life: Vol. XI–XI* (Issue No.3 & 4, pp. 137–142). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3336610/pdf/ASL-11-137.pdf>

⁴³ Ibid

⁴⁴ Frist, W. H. (2005). Health care in the 21st century. *New England Journal of Medicine/the New England Journal of Medicine*, 352(3), 267–272. <https://doi.org/10.1056/nejmsa045011> accessed on 22.09.22

two causes have shaped the current public health system: first, the expansion of scientific knowledge about disease sources and methods of control; and second, the expansion of public acceptance of disease control as both a possibility and a public duty.⁴⁵ The current decade has seen a continuation of cost-cutting tactics. Despite the fact that health needs and services have not lessened, today's government and cultural standards stress the financial economy. Medicare payout standards have also been changed in an effort to lower cost growth, especially for medical treatment.⁴⁶

5. United Nations on Health Care

The United Nations, since its beginning, has been heavily involved in supporting and protecting health abroad. Leading that effort within the UN system is the World Health Organisation (WHO), whose constitution came to effect on April 7, 1948, a day that is now recognized as World Health Day annually. Within the United Nations system, WHO is the primary and most organised health organisation. It is accountable for the offering and guidance on global health issues, shaping the health research agenda, making rules and standards, outlining evidence-based policy choices, giving expert support to countries, and tracking and reviewing health trends.⁴⁷

6. Alma-Ata Declaration

One of the most significant public health events in the world was the International Conference on Primary Health Care, which was held in Alma Ata. There, the relationship between poverty and health status was first discussed and measured.⁴⁸ Alma-Ata Declaration called on all the governments to create National Health Policies according to their own situations, to start and support basic health care as a part of national health system. The Alma-Ata Declaration of 1978 appeared as a major

⁴⁵ National Academies Press (US). (1988). *A history of the public health system*. The Future of Public Health - NCBI Bookshelf. <https://www.ncbi.nlm.nih.gov/books/NBK218224/>

⁴⁶ Ibid

⁴⁷ Sundholm, M. (2018, November 19). *WHO: World Health Organisation - Office of the Secretary-General's Envoy on Youth*. Office of the Secretary-General's Envoy on Youth. <https://www.un.org/youthenvoy/2013/09/who-world-health-organisation/accessed on 24.03.22>

⁴⁸ Marinho, M., & Groisman, S. (2020). Alma Ata: Reflections and future prospects in family health strategy. *RGO - Revista Gaúcha De Odontologia*, 68. <https://doi.org/10.1590/1981-863720200003420190051>

milestone during the twentieth century in the subject of public health, and it named basic health care as the key to attain the goal of "Health for All" worldwide.⁴⁹ The Alma-Ata Declaration supports health as a state of full physical, mental, and social well-being, rather than simply the lack of sickness or disability. The Alma-Ata Declaration sees inequality in health-care systems and stresses the need of better health as a way of achieving and increasing socioeconomic development, quality of life, and world peace.⁵⁰

7. National Health Policy

According to the World Health Organisation, health policies are defined as policies, strategies, and actions to achieve certain societal healthcare goals.⁵¹ The health policy of a country is its plan for controlling and improving the social uses of its health knowledge towards desired goals. The Ministry of Health recognised the need for policy coming out of the treatment of day-to-day problems linked to different health programmes and its dedication to meeting the goals of 'Health for All' by 2000 AD.⁵²

The National Health Policy of 1983 and 2002 have served well in leading the way for the health sector in the Five Year Plan. The National Health Policy 2017 aims at getting universal health coverage and providing great health care services to all at a reasonable cost.⁵³

2.3 Health Care Administration: International Health Agencies

The world is deeply concerned about health, and everyone is working hard to enhance people's health. Over the last several years, these International Health Agencies have

⁴⁹ Sharma, D. (2013, January 22). *National Health Policy (1983, 2002, 2017)*. Retrieved April 29, 2022, from <https://mgcub.ac.in/pdf/material/202004121749417d528cb837>

⁵⁰ *Thoughts, Words, Action: The Alma-Ata Declaration to Diabetes Care Transformation*. Available from: https://www.researchgate.net/publication/325059287_Thoughts_Words_Action_The_Alma-Ata_Declaration_to_Diabetes_Care_Transformation [accessed Oct 24 2022].

⁵¹ *World Health Organisation* (n.d) Health Policies. <https://www.who.int/southeastasia/> accessed on 23.05.23

⁵² SHARMA, Dr. M. V. K. (2002). National Health Policy (1983, 2002, 2017) & National Health Programme. In *Unit-3 SWRK4021*. Retrieved February 2, 2022, from <https://mgcub.ac.in/pdf/material/202004121749417d528cb837.pdf>

⁵³ Dahiya, H. (2018). National Health Policy of India. *ResearchGate*. <https://doi.org/10.24327/ijrsr.2018.0907.2343> accessed on 22.2.22

played a critical role in tackling the serious health concerns confronting communities across the world. Here are the international health Agencies:

a) World Health Organisation

WHO organizes and directs health-related activities within the UN. Among its responsibilities are establishing norms and standards, directing health research, preparing evidence-based policies, evaluating health trends, and offering technical assistance to nations.⁵⁴

Taking care of one's, health today requires working together to combat global health crises and ensure that all people have equal access to medical treatment. Equality is the ethical ideal that guides health development. Life-saving or health-promoting interventions should not be withheld for unjust reasons, including economic or social factors. This concept allows WHO to ensure that its healthy development efforts will prioritise improving the health of marginalized communities.

WHO participates in continuous reforms aimed at making it more effective and valuable at both the national and international levels. In order to achieve its mission, WHO aims to create a working environment that is both fulfilling for its employees and inspiring for them. To assess performance at the national, regional, and global levels, WHO uses results-based management to plan its expenditures and activities.

The 129th meeting of the Executive Board and the 64th World Health Assembly both presented three goals.

1. Improved health outcomes, with WHO focusing on initiatives and fields in which the Organisation has a special position or competitive advantage, financing in a manner that supports this emphasis, and achieving the standards of its Member States and partners in addressing agreed global health priorities.

⁵⁴ Sundholm, M. (2018, November 19). *WHO - Office of the Secretary-General's Envoy on Youth*. Office of the Secretary-General's Envoy on Youth. <https://www.un.org/youthenvoy/2013/09/who-world-health-organisation/accessedon25.02.22>

2. More cohesion in the field of global health, with the World Health Organisation (WHO) playing a pivotal role in enabling many stakeholders to effectively and actively contribute to the well-being of all populations.
3. An organisation that aspires to excellence and is accountable, transparent, sensitive, objective, and effective (EBSS/2/2).

The World Health Organisation (WHO) is a specialised body of the United Nations (UN) that is involved with international public health. It is the leading and organising authority for health within the UN system. The organisation is accountable for providing global health guidance, defining recommendations and standards, directing research, developing policies based on evidence assisting governments, and monitoring and analyzing health trends. On April 7, 1948, it was founded, with its headquarters in Geneva, Switzerland.

The World Health Organisation is a member of the United Nations Development Group; its predecessor, the Health Organisation, was the body of League of Nations. The WHO constitution was signed by 61 nations on July 22, 1946, and the first meeting of the assembly (the World Health Assembly (WHA)) finished on July 24, 1948.⁵⁵

Table 2.1 Showing the WHO's Regions and Headquarters

Regions		Headquarters
1.	South-East Asia	New Delhi (India)
2.	Africa	Brazzaville (Congo)
3.	The America	Washington D.C (USA)
4.	Europe	Copenhagen (Denmark)

⁵⁵ Chavan, R. S., & D. Khedkar, C. (2016). World Health Organization (WHO). *ResearchGate*, 5, 585–591. https://www.researchgate.net/publication/303682060_World_Health_Organization_WHO accessed on 2.05.22 8.3.22

5.	Eastern Mediterranean	Alexandria (Egypt)
6.	Western Pacific	Manila (Philippines)

Source: United Nations, World Health Organisation

Each year, prominent health officials from Member States of the World Health Organisation (WHO) go to Geneva to participate in the World Health Assembly (WHA). It is at WHA that WHO's work is assessed, new objectives are created, and new duties are given. Some of the key tasks of the WHA are to set the policies of WHO, designate the Director-General, manage financial policies, and examine and approve the proposed programme budget. Due to the COVID-19 pandemic, the World Health Organisation (WHO) convened the annual World Health Assembly (WHA) electronically for the first time in history on May 18–19, 2020. This two-day virtual meeting focused on an abridged agenda of elements critical for governing business continuity and COVID-19. On November 9–14, 2020, WHA resumed its session as a follow-up to the truncated session that took place in May. At this session, Member States addressed a variety of diverse agenda issues. This section provides a compilation of our efforts at the 73rd WHA (WHA73).⁵⁶

b) United Nations Fund for Population Activities (UNFPA)

The United Nations agency for sexual and reproductive health is known as UNFPA. UNFPA aims to establish a society that embraces all pregnancies, ensures the safety of all births, and unlocks the potential of all young people. Since 1974, UNFPA has been functioning in India partnering with government and many stakeholders.⁵⁷

UNFPA Supports:

⁵⁶ *World Health Organization – Global Health Council*. (n.d.). <https://globalhealth.org/world-health-assembly/> Accessed on 24.05.22

⁵⁷ *About us*. (n.d.). United Nations Population Fund. <https://www.unfpa.org/about-us> Accessed on 22.5.22

1. Access to reproductive health care for women and children in over 150 nations, where over 80 percent of the world's population resides.
2. Pregnant women's health, particularly those of the one million who have potentially fatal issues every month
3. Twenty million women may be helped annually if they had consistent access to modern contraception.
4. Educating thousands of healthcare professionals to guarantee that at least 90% of births are observed by trained attendants
5. Preventing gender-based abuse, which affects one in three women.
6. The determination to stop removing female genitalia, which harms three million girls annually
7. Preventing teenage pregnancies, which are the leading cause of death for females between the ages of 15 and 19.
8. The fight against child marriage, which could affect 70 million girls over the next five years,
9. Delivering safe birth equipment, dignity kits, and other life-saving things to survivors of war and natural disasters
10. Studies, data gathering, and censuses are crucial for development planning.

The organisation was established in 1969, the year the General Assembly of the United Nations declared that "parents have the exclusive right to determine freely and responsibly the number and spacing of their children." UNFPA advocates for universal access to a variety of sexual and reproductive health services, including free family planning, comprehensive sexuality education, and maternal health care, as well

as the realization of reproductive rights for all.⁵⁸ However the organisation also faces several challenges according to (Allen 2007) dealing with the rising pressure and growth of population in the disadvantage areas and maintaining family planning which is necessary for achieving development goals.

c) The United Nations Development Programme (UNDP)

UNDP is the UN's biggest practical player for development problems in the field. The organisation works together with poor countries to use talent development in order to achieve local answers to global and national development problems. UNDP's overall goal is to promote healthy human growth. UNDP has four main areas in its mandate: poverty reduction, democratic government, environment and energy, and disaster preparation and recovery. The HIV/AIDS factor and gender equality are to be integrated into UNDP activities as cross-cutting problems. Another important role that UNDP has in the field is responsibility for the organisation of the operating actions of all UN agencies in a country through the 'resident coordinator' system. UNDP is responsible for tracking the Millennium Development Goals at country level. It also issues a yearly study, the human development study, which takes an in-depth look at a chosen development topic and also includes the Human Development Index, a review of development in the countries of the world.

UNDP's health and development involvement significantly contributes to governments' commitment to achieving the SDGs. Its health system strengthening operations focus on achieving universal health coverage (UHC), a key aim under SDG 3 to ensure equitable health outcomes. UNDP takes a human-rights-based approach, considering gender equity in addressing health inequalities. In 2018, UNDP provided assistance to healthcare systems in over 60 countries, total of US\$1.3 billion in signed agreements. This includes administering Global Fund grants for large-scale HIV, tuberculosis, and malaria initiatives in 18 countries, as well as three regional programs in 29 countries. UNDP also provides direct assistance to national partners in 20

⁵⁸ Ibid

countries for health implementation and system improvement, such as capacity-building and health procurement assistance.⁵⁹

d) Universal health coverage (UHC)

The goal of universal health coverage (UHC) is to ensure that everyone has access to the health care they need without financial barriers. It is critical to achieving the World Bank Group's (WBG) dual aims of eradicating extreme poverty and increasing justice and shared prosperity, and it is the driving force behind all of the WBG's health and nutrition activities.

UHC assists governments in making the most of their most valuable asset: human capital. Supporting health is a fundamental investment in human capital and economic growth without good health, children cannot attend school and individuals cannot work. With 50 million workers, almost all of whom are women, it serves as one of the biggest industries in the world.

e) United Nations Children's Fund (UNICEF)

UNICEF aims to eliminate preventable maternal, newborn, and child deaths as well as stillbirths. It is committed to helping kids and teenagers establish a solid foundation for adulthood. It seeks to improve health systems so they can provide integrated services to children, adolescents, and women of reproductive age, with a focus on health, nutrition, early childhood development, HIV and AIDS, and water, sanitation, and hygiene. It also promotes primary health care, especially at the community level, in order to contribute to universal health coverage. It also promotes overall health and well-being by focussing on social inclusion, child safety, and education. UNICEF works to address health issues in places affected by natural disasters, migration, urbanisation, instability in politics, and war. It does this by supporting the setting up of solid health systems that can withstand crises and by helping with emergency response.⁶⁰

⁵⁹ Capacity development. (n.d.). UNDP. Retrieved January 29, 2022, from <https://www.undp-capacitydevelopment-health.org/en/about-us/>

⁶⁰ *Health*. (n.d.). UNICEF. Retrieved June 7, 2022, from <https://www.unicef.org/health>

f) United States Agency for International Development (USAID)

USAID is changing. It changes families, communities, and nations, allowing them to grow and succeed. Whether it is averting the next global disease, reacting to a tragic earthquake, or assisting a farmer in gaining access to technologies to help her build her company, USAID is the world's leading international development organisation and a catalyst for development outcomes. The work of USAID supports US national security and economic development, showcases American generosity, and encourages beneficiary self-sufficiency and resilience. The goal of foreign aid should be to eliminate the need for it, and we should give development support to partner nations as they embark on their own development path to self-sufficiency, searching for methods to help raise lives, strengthen communities, and achieve self-sufficiency. USAID demonstrates America's goodwill around the world, increases global stability by addressing the root causes of violence, creates new markets and trade opportunities, finds innovative solutions to previously intractable development challenges, saves lives, and advances democracy, governance, and peace.⁶¹

2.4 Health Policies and Committees in India

India has a strong healthcare system with various health committees and programmes. In India policies and committees play a crucial role in guiding the development and implementation of health programmes. Here are some of the various health policies and programmes in India

2.4.1 Pre independence and post-independence

1. Bhore Committee (1943-1960)

In 1943, the Health Survey and Development Committee was founded, and Sir Joseph Bhore acted as its chairman. It emphasized how important it is for all levels of care to integrate curative and preventative care. It presented detailed proposals for

⁶¹ *What we do* | U.S. Agency for International Development. (n.d.). U.S. Agency For International Development. Retrieved March 2, 2022, from <https://www.usaid.gov/what-we-do>

reshaping India's health care system. The 1946 study included many major suggestions, including:

1. Preventive and curative treatments are integrated across all levels of administration
2. Construction of Primary Health Care centres in two stages:
 - a. A single primary health care institution, as suggested for a population of forty thousand. Each PHC would be staffed by two doctors, one nurse, four midwives, four public health nurses, four trained dais, two sanitary inspectors, two health assistants, one chemist, with fifteen more class IV workers. A secondary health facility was also planned to give assistance to PHCs as well as to coordinate and monitor their operations.
 - b. a long-term initiative (also referred to as the three million plan) that will establish secondary health units with 650 beds, regionalised around district hospitals with 2500 beds, and primary health units with 75 beds for every 10,000A–20,000 people.

2. Mudaliar Committee, 1962

The "Health Survey and Planning Committee," led by Dr. A.L. Mudaliar, was formed to review the performance of the health sector following the release of the Bhore Committee report. The group found that the conditions of primary health centres (PHCs) were poor and suggested improving the existing PHCs before creating new ones. It also stressed the need to improve subdivisional and district hospitals. The committee recommended that a PHC should serve a population of not more than forty thousand people and should provide complete services, including therapeutic, preventive, and advertising care. Finally, the Mudaliar Committee suggested creating an all-India health service to replace the previous Indian medical service.

3. Chadha committee 1963

This committee was established under the supervision of Dr. M.S. Chadha, who was the Director General of Health Services. Its purpose was to provide advice on the crucial procedures for the maintenance phase of the National Malaria Eradication Programme. The committee suggested that the vigilance activities of the NMEP be carried out by basic health workers, with one worker for every ten thousand population. These would be multitasking employees who would be in charge of

gathering vital statistics and family planning information, besides their malaria-related tasks. They would be overseen by family planning health assistants.

4. Mukherjee Committee, 1966

The Government of India established the Mukherjee Committee in 1966, officially known as the "Committee on the Reorganisation of the Indian Administrative Service (IAS) and Indian Police Service (IPS)". Dr. K. L. Mukherjee, a distinguished civil servant and academician, chaired the Committee to investigate the factors impeding the effectiveness of the Indian Administrative Service (IAS) and the Indian Police Service. The group worked out the specifics of the Basic Health Service that should be supplied at the Block level as well as the necessary administrative strengthening at higher levels.

5. Jungalwalla Committee, 1967

Under the chairmanship of Dr. N. Jungalwalla, who was the National Institute of Health Administration and Education's (now NIHF) director at the time, the "Committee on Integration of Health Services" was formed in 1964. Its duties included investigating several matters related to the unification of health services, prohibiting of the private practice of doctors in government services, and doctor service conditions. The committee defined "integrated health services" as follows

- a. Service that takes a comprehensive approach to all difficulties rather than a fragmented solution to particular problems.
- b. Medical care and public health activities should be managed by one official at all levels of the hierarchy.

The following measures were recommended for unification at all levels of the country's health organisations:

- Cadre Unification
- Shared Seniority

- Recognition of additional credentials
- Fair compensation for equal labour
- Extra compensation for extra labour
- Government physicians' ability to practise privately is prohibited.

6. Kartar Singh Committee, 1973

This committee named the "Committee on Multipurpose Workers Under Health and Family Planning," was headed by the Additional Secretary of Health and was established to offer a framework for the integration of health and medical services at the peripheral and supervisory levels. Its main suggestions were as follows:

- a. Merge a variety of peripheral employees down to one single cadre of multipurpose workers (male and female). Auxiliary nurse midwives would become MPW (F), while basic health workers, malaria surveillance workers, and others would become MPW (M). One health supervisor (male or female) was responsible for the work of three to four male and female MPWs. The present female health visitors were to be converted into female health supervisors.
- b. A single Primary Health Care Centre should serve a population of 50,000. It needs to be divided into 16 subcenters, with a male and a female health professional per centre (one for every 3000–3500 people).

7. Shrivastava Committee, 1975

The "Group on Medical Education and Support Manpower" was established in 1974 to identify the measures required to (i) transform medical education to meet national priorities and needs, and (ii) create a learning program for health assistants, who would act as a link between medical officers and MPWs.

It advised urgent action for:

- a. Developing relationships among amateur and semi-professional health providers from the community itself². The creation of three health worker cadres at PHC

between community-level employees and doctors, including multifunctional health workers and health assistants.

b. Construction of a Referral Services Complex

c. The Medical and Health Education Commission will be created to make important changes in health and medical education, similar to the University Grants Commission.

d. Acceptance of the Shrivastava Committee's recommendations in 1977 resulted in the establishment of the Rural Health Service.

8. Bajaj Committee, 1986

In 1985, an "Expert Committee for Health Manpower Planning, Production, and Management" was formed under the leadership of Dr. J.S. Bajaj, a professor at AIIMS at the time. The following are major recommendations:

a. Establishment of National Health and Medical Education Policy

b. Implementing a National Health Manpower Strategy

c. Establishing the Health Sciences Education Commission (ECHS) in the manner of the UGC

d. Establishing universities focused on health sciences throughout several states and union territories

g. The creation of health workforce units at both the national and state levels.

f. Vocationalization of education at the 10+2 level in health-related subjects, with suitable incentives, so that enough numbers of high-quality paramedics are available.

g. Conducting a realistic health manpower survey

9. National Health Policy 1983

The Government of India's Ministry of Health and Family Welfare created the National Health Policy in 1983 to attain Health for All by 2001.⁶²

Indicators to Achieve Health for All Indicators by The Achievable Year

1. Lowering the infant mortality rate from 125 to less than 60 in 2000
2. Lowering the maternal mortality rate from 4.5 to less than 2 in 2000
3. Increase mortality rate at birth from 52.6 to 64 in the year 2000.
4. To lower the crude death rate from 14 to 9 in the year 2000.
5. To lower the crude birth rate from 35 to 21 in the year 2000.
6. Aiming for a Net Reproductive Rate of 12,000
7. Providing portable water to the whole rural population by the year 2000

Factors impeding progress towards Health for all

- a. Inadequate political commitment to achieving universal health coverage
- b. Failure to establish parity in access to all aspects of primary health care.
- d. Women's ongoing low status
- d. Slow socioeconomic growth
- a. Difficulty in achieving intersectoral health action Human resource distribution is unbalanced, and there is little support for it.
- f. A widespread lack of adequate health promotion activities
- g. Inadequate health information system and lack of baseline data Pollution, bad food, unsafe conditions, and a lack of water and sanitation

⁶² W.H.O. (2022, March 25). *National health policy*. [www.Searo.Who.Int/India/Topics/Nationalhealthpolicy/En/](https://www.who.int/india/topics/nationalhealthpolicy/en/). Retrieved March 12, 2022, from <https://www.who.int/india>

- h. Rapid changes in demographics and epidemiology
- i. Inappropriate use and allocation of resources, as well as expensive technological costs
- j. Natural and manmade calamities

10. National Health Policy 2002

The National Health Policy 2002 was an important milestone in the healthcare sector of our nation, aimed at addressing the numerous challenges faced by India's healthcare system. This policy, formulated by the Ministry of Health and Family Welfare, sets forth a comprehensive framework to guide health planning and development for the next decade. Recognising the need for accessible and affordable healthcare for all the people, regardless of their socio-economic status, this policy emphasised equity as its cornerstone.

It advocated for strengthening primary healthcare services, improving infrastructure facilities, enhancing human resource capacities, and increasing public-private partnerships to ensure efficient delivery of healthcare services across urban and rural areas. Additionally, this policy aimed to integrate traditional systems of medicine with modern allopathic practises to provide holistic care options. It also prioritised preventive measures through health education campaigns and disease surveillance programmes.

A. Key Objectives and Goals of the National Health Policy 2002

The National Health Policy (NHP) of 2002 aimed to address the healthcare challenges faced by India and improve the overall health status of its citizens. The key objectives and goals of this policy encompass a comprehensive range of areas in healthcare. Firstly, it highlighted the need to provide accessible, inexpensive, and equitable quality healthcare to all persons throughout the country, regardless of socioeconomic

status. It sought to reduce disparities in health outcomes by focusing on underserved regions and marginalised populations. Secondly, NHP 2002 aimed to promote preventive and promotional aspects of healthcare by emphasising disease prevention, health promotion, and early detection. It recognised that investing in preventive measures could significantly reduce the burden on curative services. Additionally, this policy placed a strong emphasis on strengthening public health infrastructure, including primary healthcare facilities at the grassroots level.

It also focused on improving human resource capacity through training programmes for healthcare professionals.

11. National Health Policy 2017

The National Health Policy 2017 marks a historic moment in our country's healthcare system. This strategy, developed to meet the changing health demands of India's population, establishes a comprehensive framework to guide healthcare delivery and administration over the next decade. It tries to provide universal access to affordable healthcare services for all persons, focusing specifically on underprivileged elements of society, by highlighting a preventive and promotional approach. The strategy acknowledges the rising burden of noncommunicable illnesses, mental health difficulties, and new infectious diseases while also addressing issues such as insufficient infrastructure and a scarcity of competent healthcare personnel. This strategy, by aligning with global health objectives, lays the stage for dramatic improvements in our national health system.

A. 2017 National Health Policy Goals and Objectives

The 2017 National Health Policy aspires to create a comprehensive and integrated healthcare system that offers everyone access to high-quality healthcare without financial hardship. Its major purpose is to enhance the population's general health by lowering morbidity and death rates, particularly among vulnerable populations. The strategy aims to promote fair healthcare via effective regulation, smart investment, and strong public-private partnerships. It strives to improve

preventive and promotion health measures while also assuring universal access to inexpensive and high-quality treatment. Furthermore, the strategy emphasises the need to tackle socioeconomic determinants of health, improve digital health infrastructure, encourage innovation in healthcare delivery, and establish governance systems to improve accountability in the health sector.

B. Key Elements and Strategies of the 2017 National Health Policy

The National Health Policy 2017 includes numerous essential components and methods aimed at meeting the nation's diversified healthcare demands. One of its key goals is to ensure fairness and affordability for all individuals by providing universal access to high-quality healthcare services. The strategy prioritises preventative and promotional healthcare, supporting a move away from curative treatment and towards holistic care practises. It strives to enhance the primary healthcare system by emphasising comprehensive healthcare delivery at the community level. In addition, the strategy emphasises the significance of public-private partnerships in increasing healthcare infrastructure and enhancing service delivery. It also encourages digital health projects like electronic health records and telemedicine to improve access and efficiency in healthcare delivery. Overall, these components and initiatives serve as the basis for a comprehensive national health strategy that aims to make all people healthier in the future.⁶³

12. Reproductive and Child Health Programme

The Reproductive and Child Health Programme (RCHP) is a comprehensive project aiming at promoting women's, babies', and children's health and well-being.⁶⁴ It includes a variety of reproductive health treatments such as family planning, prenatal care, safe birth practises, postnatal care, and the prevention and control of sexually transmitted diseases. The RCHP recognises that reproductive health is inextricably linked to individual and community well-being. This program aims to reduce infant

⁶³ *MoHFW/Policy*. (n.d.). Ministry of Health and Family Welfare Govt of India. Retrieved November 29, 2022, from <https://www.mohfw.gov.in/>

⁶⁴ *National Institute of Health & Family Welfare*. (n.d.). Retrieved November 2, 2022, from <http://www.nihfw.org/NationalHealthProgramme/REPRODUCTIVEANDCHILDHEALTH.html>

and maternal mortality rates while encouraging healthier futures for families from varied socioeconomic backgrounds by prioritising access to excellent healthcare services for mothers and children alike.⁶⁵

The Reproductive and Child Health Programme's Goals and Components

The Reproductive and Child Health Programme (RCHP) seeks to promote women's, children's, and adolescents' overall health and well-being. This programme's aims are varied. First and foremost, it aims to reduce both mother and child mortality rates by providing access to high-quality prenatal care, safe birthing services, and postnatal care for both mother and child. Second, the RCHP aims to improve family planning services by offering contraceptive knowledge and access, allowing people to make educated choices about their reproductive health.

Furthermore, through education and awareness efforts, the programme aims to prevent sexually transmitted diseases (STIs). It also targets adolescent health concerns by encouraging young people to engage in healthy behaviours.⁶⁶

It has also helped to reduce infant mortality rates by ensuring that babies get the appropriate vaccines and healthcare services. The programme's focus on teaching pregnant mothers about optimal nutrition has resulted in healthier new-borns and fewer incidences of low birth weight. Furthermore, it has played an important role in promoting knowledge about sexually transmitted diseases among both men and women, thereby lowering their prevalence.⁶⁷

13. Millennium Development Goals 2000

The United Nations Millennium Development Goals (MDGs) are the eight goals set by the 189 UN member states in September 2000 and vowed to being

⁶⁵ *Maternal and Child Health*. (n.d.). Retrieved October 7, 2022, from <https://city.milwaukee.gov/Health/Services-and-Programs/MCH>

⁶⁶ *ibid*

⁶⁷ *Emerging concepts in reproductive health and rights needs clearer definitions, Population and Development Commission told in ICPD Follow-up discussion | Meetings coverage and press releases. (1996, February 26). United Nations. Retrieved November 7, 2022, from <https://press.un.org/en/1996/19960226.pop609.html>*

achieved by 2015. The Millennium Declaration was signed at the United Nations headquarters in New York in September by the 149 leaders of the world in attendance promised to fight sickness, food, poverty, ignorance, discrimination against women, and environmental damage. The MDGs were created from this Declaration, and particular measures and goals were given to them.

The following are the eight MDGs:

1. Eradicating severe poverty and hunger.
2. Achieving universal elementary education.
3. Empowering women and promoting gender equality.
4. To reduce child mortality.
5. To encourage maternal health.
6. In the battle against malaria, HIV/AIDS, and other illnesses.
7. To encourage environmental sustainability.
8. To create a global development alliance.

The implementation of the Millennium Declaration's eight chapters was agreed to begin on January 1, 2001, and the UN promised to conduct similar summits every five years to monitor progress towards attaining the MDGs. The 2005 World Summit served as the first follow-up to the Millennium Summit. Since 2001, the UN has prioritised the execution of these MDGs, and although most of the objectives were not met by 2015, significant good progress has been made throughout the 15 years.⁶⁸

⁶⁸ M. (2017, May 15). *Millennium Development Goals - MDGs*. Millennium Development Goals. Retrieved December 23, 2022, from <https://www.mdgmonitor.org/millennium-development-goals/>

14. National rural health mission 2005

The National Rural Health Mission 2005 (NRHM) is an important programme launched by the Government of India to improve healthcare services in rural regions. NRHM, which was established on April 12, 2005, aims to overcome the substantial gaps in healthcare access and quality between urban and rural areas. The mission emphasises delivering accessible, cheap, and high-quality healthcare services to underprivileged communities in rural areas of the nation.

It strives to improve current health infrastructure, expand human resources for health, encourage community engagement, and raise investment in healthcare institutions. NRHM aims to bridge the healthcare gap between urban and rural India by concentrating on preventive care, maternity and child health services, infectious disease control, and building primary care facilities.⁶⁹

A. National Rural Health Mission Objectives and Goals

In 2005, the National Rural Health Mission was established with the goal of delivering accessible and cheap healthcare services to India's rural population.⁷⁰ Its goals included increasing the general health of rural populations, lowering new-born and maternal death rates, developing public health infrastructure, and guaranteeing equal access to excellent healthcare for everyone. The mission also targeted communicable disease prevention and control, healthy lifestyle promotion, and building health care system at all levels. The National Rural Health Mission attempted to overcome gaps in rural healthcare and develop a sustainable system that suited the special requirements of rural people by concentrating on community engagement, decentralised planning, and efficient implementation mechanisms.⁷¹

⁶⁹ *National Rural Health Mission (NRHM) - Presentation Gov.* (2021, September 6). Presentation Gov. Retrieved April 29, 2022, from <https://presentations.gov.in/logos/national-rural-health-mission-nrhm/>

⁷⁰ Chauhan, G., & Suryavanshi, P. (2021, July 13). *Fifteen Years of NRHM/NHM in the State of Himachal Pradesh, India: A Narrative Review*. Retrieved January 9, 2022, from <https://ijhsir.ahsas-pgichd.org/index.php/ijhsir/article/view/113>

⁷¹ *NATIONAL RURAL HEALTH MISSION.* (n.d.). National Health Mission. Retrieved April 7, 2022, from <https://nhm.gov.in/index1.php?lang=1&level=1&lid=49&sublinkid=969>

15. National Urban Health Mission 2013

The National Urban Health Mission 2013 is a pioneering effort by the Government of India aimed at meeting the healthcare needs of urban communities. With fast development and rising urban poverty, there is an urgent need to increase access to excellent healthcare services in cities and villages throughout the country. NUHM works on improving healthcare systems, boosting facilities, and offering complete basic healthcare services to the urban poor. Launched under the National Health Mission, NUHM aims to reach vulnerable groups living in slums and informal areas. By emphasising preventive care, boosting health knowledge, and ensuring fair access to vital services, this goal aims to reduce health gaps and improve general well-being in urban areas.⁷²

A. Objectives and Goals of The National Urban Health Mission 2013

The National Urban Health Mission 2013 aims to solve the healthcare issues faced by urban areas in India. Its main goal is to improve the general health state of urban communities through fair and quality healthcare services. The project aims to focus on vulnerable groups, such as city dwellers, refugees, and the poor, who often face obstacles in getting healthcare facilities.

It aims to strengthen the healthcare delivery system in urban areas by improving facilities, ensuring the supply of important drugs and tests, and encouraging prevention and promotional healthcare measures. Additionally, it tries to increase community involvement and interaction in healthcare planning and delivery processes. The National Urban Health Mission 2013 aims for widespread access to cheap, complete, and quality healthcare services for urban people across India.⁷³

⁷² *Strengthening National Urban Health Mission*. (n.d.). Ministry of Health & Family Welfare. Retrieved May 3, 2022, from <https://pib.gov.in/Pressreleaseshare.aspx?PRID=1696429>

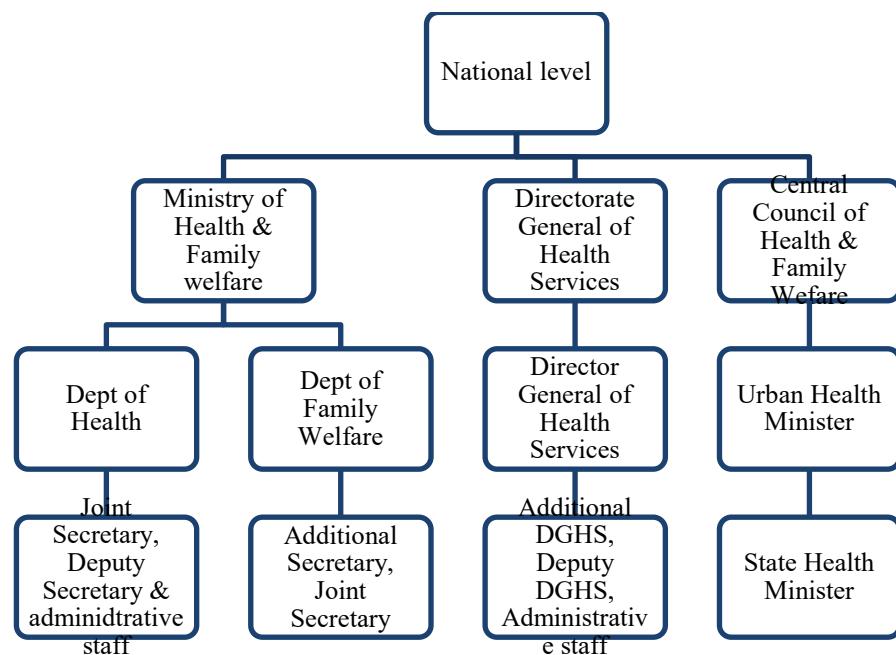
⁷³ *NATIONAL URBAN HEALTH MISSION*. (n.d.). National Health Mission. Retrieved February 2, 2022, from <https://nhm.gov.in/index1.php?lang=1&level=1&sublinkid=970&lid=137>

2.5 HEALTH CARE ADMINISTRATION AT NATIONAL LEVEL

To implement and initiate all the health policies and programmes in India an effective administration is essential. These health policies and programmes are being implemented at various levels such as national, state, and district. First, let us discussed how healthcare administration is set up at national level. India is among the largest countries in the world with a federal setup with a unified spirit. The government's involvement in the expansion of health care is specified by legislation. The Central government duty consists mainly of policy making, planning, leading helping, reviewing and managing of the working of the state health minister. Health system at national level consists of:

- 1) The Ministry of Health and Family Welfare
- 2) The Directorate General of Health Services
- 3) The Central Council of Health and Family Welfare

Figure 2.1 Organization structure of health care administration at national level
National level



Source: Health & Family Welfare Department Government of India

2.5.1 Ministry of Health and Family Welfare

It is an official organ of the Indian health system. It is in charge of developing India's health policy and overseeing all family planning programs. It was founded in 1976, and its headquarters are situated on Raisina Hill in New Delhi. In 2020, the health sector will get an annual budget of Rs 69,000 crore. The Cabinet Health Minister leads the Ministry of Health and Family. It is in charge of three departments.

- 1) Health Department
- 2) Family Welfare Department
- 3) Health Research Department

A. Organization

A cabinet minister, a minister of state, and a deputy health minister lead the Ministry of Health and Family Welfare. The health ministry is led by the Secretary to the Government of India, who is aided by Joint Secretaries, Deputy Secretaries, and Administrative Staff. The Department of Family Welfare is administered by the Secretary to the Government of India, Minister of Health and Family Welfare.

1. Ministry of Health and Family Welfare Functions

It has several functions under union and concurrent list

a. List of unions

- 1) Maintenance and management of international health relations.
- 2) Central Institute Administration.
- 3) Research promotion via research organizations.
- 4) The medical, pharmaceutical, dental, and nursing professions are regulated and developed.
- 5) Establishing and maintaining medication standards.
- 6) Collection of census data and release of other statistical data.
- 7) Collaboration with states.
- 8) Immigrants and emigrants.
- 9) Labor regulation in mining operations.
- 10) Health promotion coordination between states and other ministries.

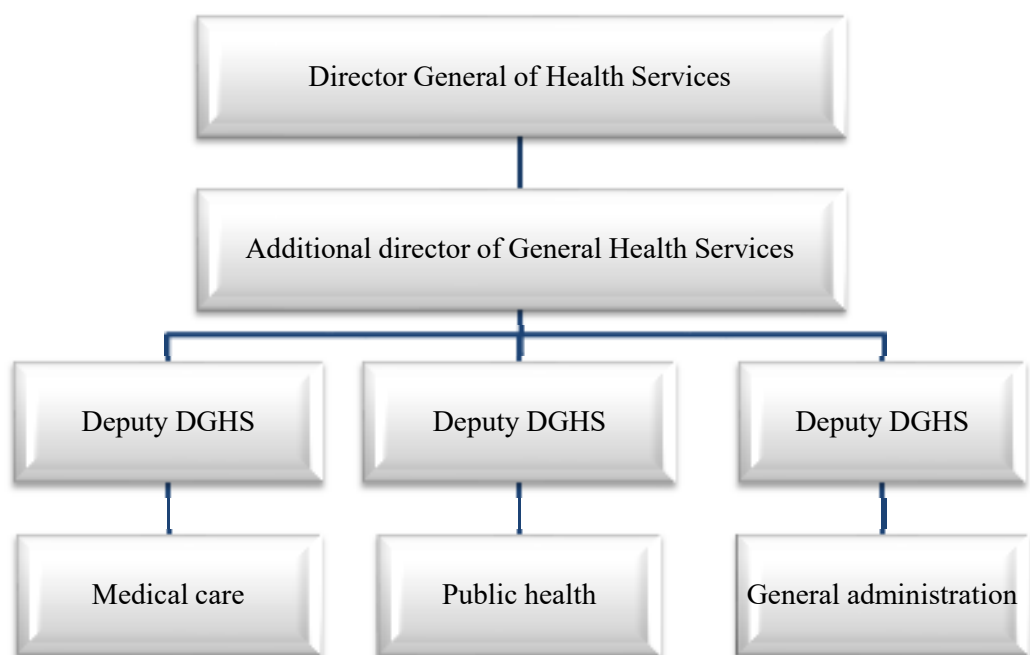
b. List of concurrent items

- 1) Communicable illness prevention.
- 2) Food adulteration prevention.
- 3) Drug and poison control.
- 4) Important data.
- 5) Labour well-being.
- 6) Financial and social planning.
- 7) Population management and family planning.

2.5.2. The Directorate General of Health Services

The DGHS is the union government's primary medical and public health adviser. He is supported by an additional Director General of Health Service, as well as a team of deputies and administrative employees. The directorate is divided into three major departments, including medical care, public health, and general administration.

Figure 2.2 Organizational structure of The Directorate General of Health Services



A. DGHS Functions

As a government agency, the DGHS supervises public health services, healthcare administration, and policy implementation in the country. DGHS performs the following functions:

a. General duties

1) Questionnaires 2) Organisation 3) Collaboration 4) Health-related programming and evaluation.

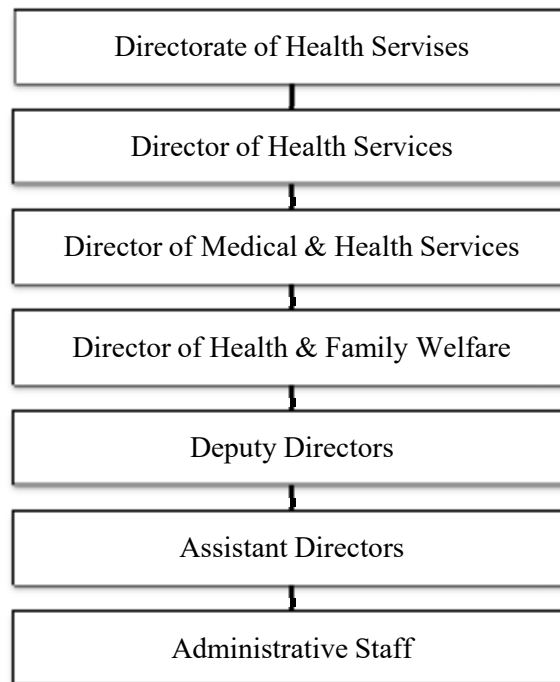
b. Particular functions

- 1) International health and quarantine of all major ports and international airports in the country.
- 2) Drug standardisation.
- 3) Keep medical supply depots in good condition.
- 4) Oversight of postgraduate training programmes.
- 5) Management of various medical schools in India.
- 6) Medical research is carried out via the ICMR.
- 7) Central Government health-care programmes.
- 8) National health programme implementation.
- 9) The Central Health Education Bureau (CHEB) prepares health education materials to raise health awareness.

2.5.3 Central Health and Family Welfare Council

The Central Council of Health was established by a presidential decree on August 9, 1952, in accordance with Article 263 of the Indian Constitution. It was established to facilitate collaboration between the centre and states in the execution of various health programmes. The Central Council for Health and Family Welfare is led by the union health minister and includes health ministers from all states and union territories.

Figure 2.3 Organisational structure of Central Health and Family Welfare Council



Source: Department of Health & Family Welfare, & Joshi, D. C. (n.d.). Annual Report 2014-15 (pp. 463–468).

A. Functions

- 1) To examine and suggest general policy guidelines involving health issues such as environmental cleanliness, nutrition, and health education.
- 2) To propose laws concerning medical and public health issues.
- 3) Make proposals to the central government on the allocation of grants-in-aid for state health purposes.

2.6 HEALTH CARE ADMINISTRATION AT STATE LEVEL

There are now 29 states in India, each with its own health administration. In terms of providing health care to their citizens, states are generally autonomous. Each state built its own health-care delivery system, independent of the federal government. The state's official health administration organs are:

- 1) The Ministry of Health of the State.
- 2) Directorate of State Health.

2.6.1 The Ministry of Health of the State

It is led by the Minister of Health and Family Welfare, who is assisted by the Deputy Minister of Health and Family Welfare. The health minister is responsible for both administrative and political actions related to the Health Secretariat.

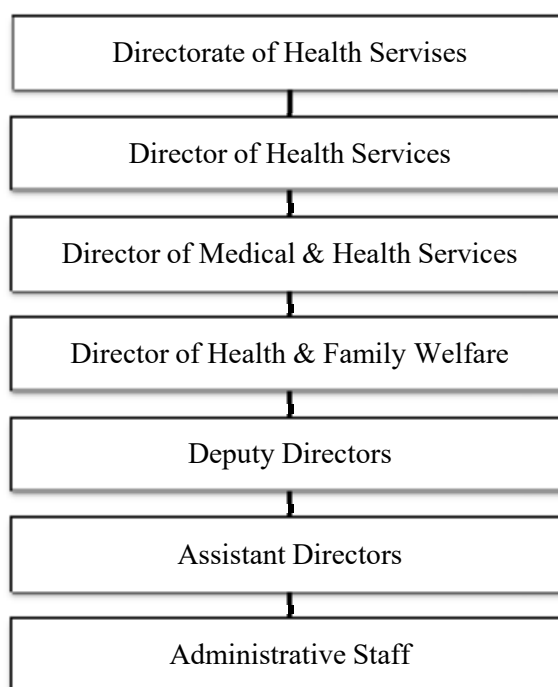
A. Functions

- i) To support and protect the government's policies.
- ii) To observe whether the policies adopted by the legislature are faithfully executed.

2.6.2 Directorate of State Health

The State Health Directorate is in charge of health services, technical services, health policy implementation, and assessment in the state.

Figure 2.4 Organisational structure of Directorate of State Health



Source: Department of Health & Family Welfare, & Joshi, D. C. (n.d.). Annual Report 2014-15 (pp. 463–468).

B. Duties and responsibilities of the State Health Directorate

- 1) Investigating health issues and determining people's health requirements.
- 2) To provide curative and preventative care.

- 3) To take all necessary precautions and actions in the event of a communicable illness epidemic.
- 4) To build and maintain central labs for vaccine preparation.
- 5) Improving and expanding common amenities such as hospitals, pharmacies, blood banks, and emergency services.
- 6) Effective execution of National Health programmes.
- 7) Supervision of the ESI system run by the state health department.
- 8) Providing input to the state health ministry and according to Union Ministry of Health guidelines.

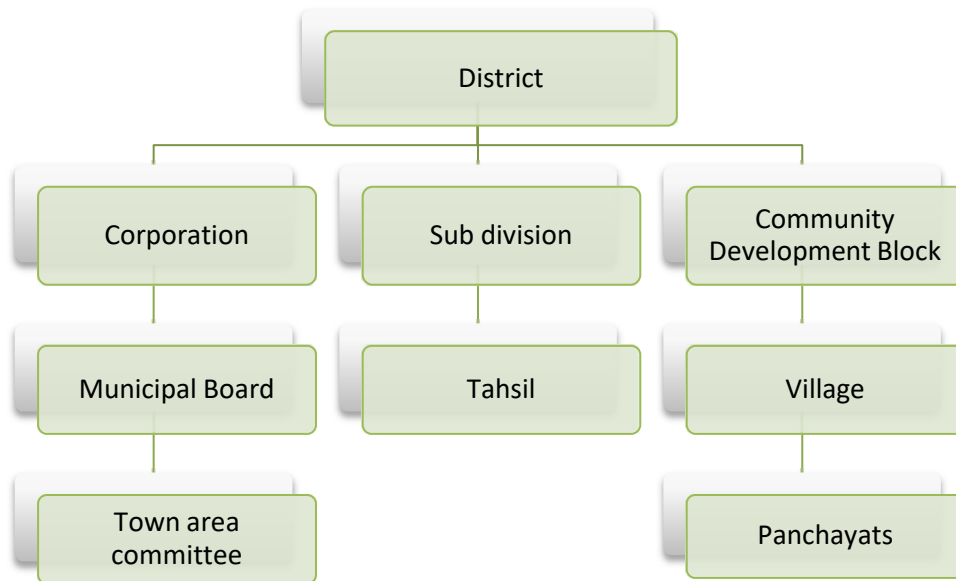
2.7 HEALTH CARE ADMINISTRATION AT DISTRICT LEVEL

At the district level, health organisations are maintained by taluks or blocks, and their primary duty is to organise and execute community development activities. In India, the district is the most important administrative entity. The country is organized into 725 administrative districts, which are further divided into 29 separate states and 9 UTs.

In a district, there are six sorts of administrative areas:

- 1) Sub divisions: Districts are split into two or more sub divisions, each of which overseen by an assistant collector.
- 2) Tehsils (taluks): Each tehsil is in charge of 200-600 villages.
- 3) Community development block: A block with roughly 100 communities and a population of 80,000 to 1,20,000 people. India now has 6,311 community development blocks.
- 4) Municipalities and corporations: Municipalities have populations ranging from 10,000 to 2 lakhs, whereas corporations have populations above 2 lakhs.
- 5) Village and Panchayat: Following the block is the village panchayat.

Figure 2.5 Organizational chart of health care administration at district level



Source: Health & Family Welfare Department Government of India, n.d. <https://mohfw.gov.in>

A. Functions

One of the key functions of health care administration at the district level is to ensure that all health facilities are adequately staffed and equipped to meet the needs of the population. This involves managing personnel, procuring medical supplies, and maintaining infrastructure to ensure the smooth functioning of hospitals, clinics, and other health centres. Its functions include:

- 1) Road construction and maintenance.
- 2) Water drainage and sanitation.
- 3) Lighting on the street.
- 4) Access to clean water.
- 5) Maintenance of hospitals and dispensaries.
- 6) Instruction.
- 7) Birth and death registration.

2.7.1 Municipal administration

The following are the primary units of urban administration:

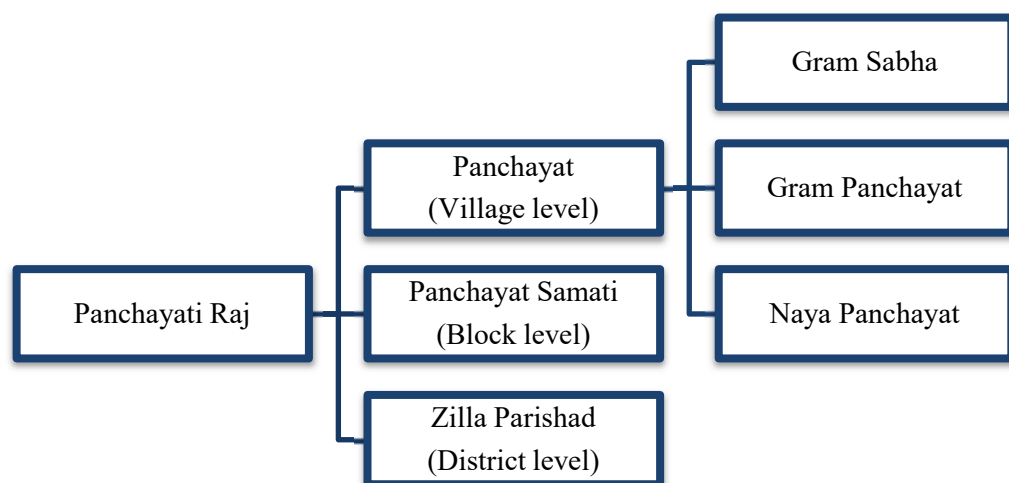
- a) Municipal corporation: It is formed when a city's population exceeds 2 lakhs.
- b) Municipality (municipal boards): They are formed when the population of a city or town ranges from 10,000 to 2 lakhs. It is composed of three parts: the chairman, the board, and the municipal commissioner or executive officer.
- c) Town area committees: These are overseen by the district collector. Town area committees serve a population of 5000–10000 people.

2.7.2. Panchayati Raj/rural administration.

The Panchayati Raj system is a three-tiered rural self-government framework. The three structures are as follows:

- a) Panchayat: This is a village-level government body.
- b) Panchayat Samiti: performs block-level tasks.
- b) Zilla Parishad: performs district-level tasks.

Fig. 2.6 Flow chart of Panchayati Raj



Source: Health & Family Welfare Department Government of India, n.d. <https://mohfw.gov.in>

A. Organization

i) CM and HO (Chief Medical and Health Officer)

The Chief Medical and Health Officer (CM and HO) is the Director of Health and Family Welfare Services in rural areas at the district levels and is in charge of all health and family welfare services in the region. The Dy. CMO, RHC officer, and programme officers help the CM&HO. Block CMOs support the Dy. CMO and RHC officer.

ii) PMO (Principal Medical Officer)

The Principle Medical Officer (PMO) is the Director of Health and Family Welfare Services at the district in urban areas and is responsible for all health and family welfare activities in the city.

2.8 Health Care Administration in Mizoram

In Mizoram healthcare services are provided by the state government. The primary health programmes under the Health and Family Welfare Department (H&FWD) government of Mizoram are the Directorate of Health Services (DHS) and Directorate of Health and Medical Education (DHME). To function as a separate directorate and to meet obligations, H&FWD has been divided into DHS and DHME having its own budget. To look after and administered these two directorates there is Principal Director at the state level. These two directorates are the key governing body in health administration.⁷⁴

At the district level Chief Medical Officer (CMO) and Medical Superintendent took care of DHS and DHME. In Aizawl district there are separate healthcare delivery i.e Aizawl East and Aizawl West, under the supervision of CMO. These two directors received funds from the programme officer. Mizoram has now state hospital, 9 Community Health Centres, 57 Primary Health Centres, 366 sub centres and 78 clinics dispersed throughout the state.⁷⁵

⁷⁴ *Health & Family Welfare Department*. (n.d.). Retrieved November 4, 2022, from <https://health.mizoram.gov.in/page/principal-director>

⁷⁵ Ibid

2.8.1 Directorate of Hospital & Medical Education (DH&ME)

DHME plays an important role in managing medical education and hospital. It has been functioning for almost 17 years now and it is responsible for implementing, teaching, training and research programmes in the field of medical sciences. Health facilities such as Civil Hospital Aizawl, Kulikawn hospital and other district hospital are administered by DHME.

Its Functions:

The Director of Medical and Education has two responsibilities. The first is clinical care in the teaching hospitals under his administration, and the second is education in the medical, dental, and paramedical sciences. Here are some of the other functions:

1. To conduct medical sciences, post graduate courses entrance examination
2. To appoint selection committee under department of Higher & Education.
3. To administer first year application for admission to MBBS/BDS/B.Sc. (Nursing)/BOT/BPT courses.
4. To make sure that more than 100 medical graduates and 30 medical post graduate, diploma and higher specialist graduate are produced annually.

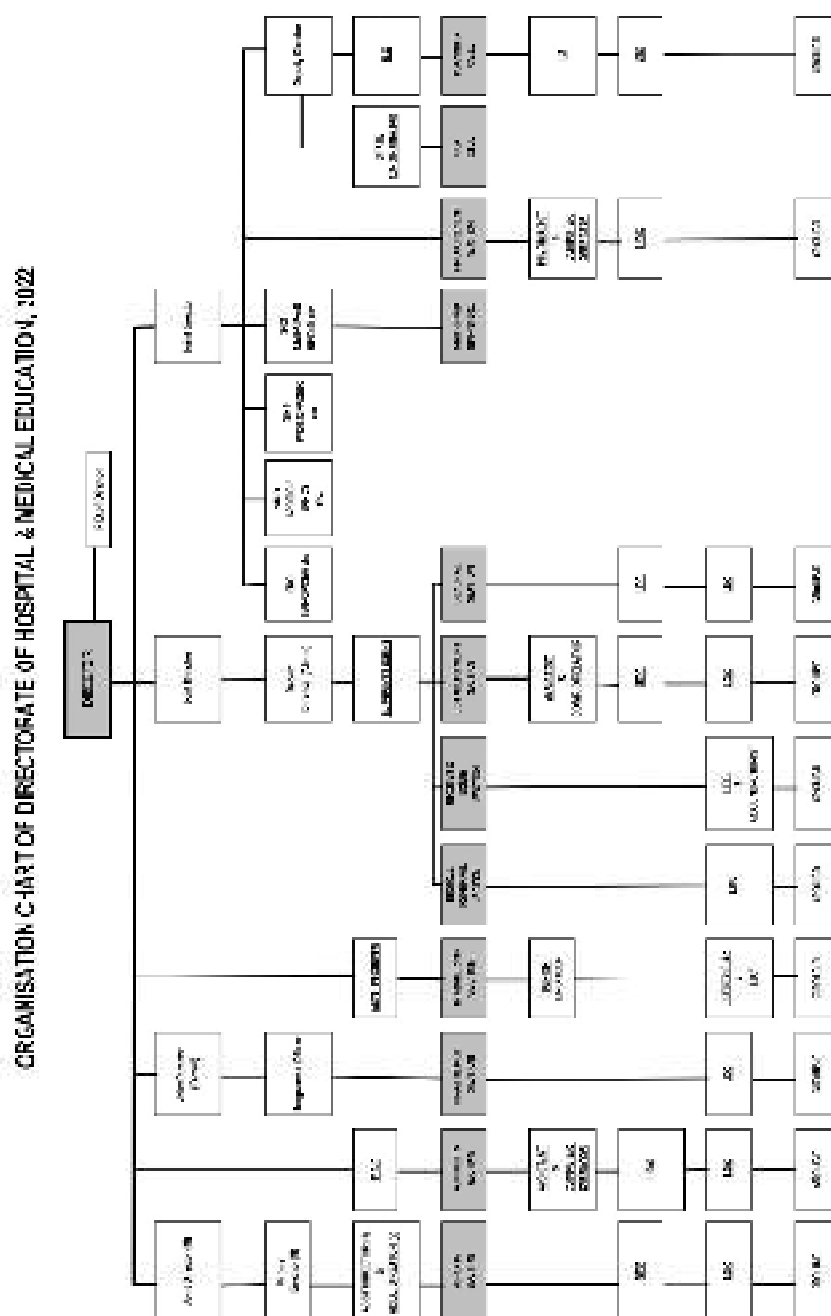
Table 2.2 Various programmes under DHME

1	NATIONAL ORAL HEALTH PROGRAMME (NOHP)	8	PC & PNDT (PROHIBITION OF SEX SELECTION)
2	NATIONAL PROGRAMME FOR PALLIATIVE CARE (NPPC)	9	NATIONAL PROGRAMME FOR THE HEALTHCARE OF THE ELDERLY (NPHCE)
3	NURSING SERVICE UNDER HEALTH & FAMILY WELFARE	10	NATIONAL PROGRAMME FOR PREVENTION AND CONTROL

			OF DEAFNESS (NPPCD), MIZORAM
4	NATIONAL MENTAL HEALTH PROGRAMME	11	THE CLINICAL ESTABLISHMENTS ACT 2014
5	NATIONAL PROGRAMME FOR PREVENTION AND CONTROL OF CANCER, DIABETES, CARDIOVASCULAR DISEASES AND STROKE (NPCDCS)	12	STATE BLOOD CELL
6	NATIONAL VIRAL HEPATITIS CONTROL PROGRAMME (NVHCP)	13	MIZORAM STATE TOBACCO CONTROL PROGRAMME (MSTCP)
7	NATIONAL PROGRAMME FOR PREVENTION AND CONTROL OF NON-COMMUNICABLE DISEASES (NP-NCD)		

Source: Health & Family Welfare Department Government of Mizoram

Fig. 2.7 Organisational chart of Directorate of Health & Medical Education



Source: Health & Family Welfare Department Government of Mizoram, n.d.
(<https://health.mizoram.gov.in>)

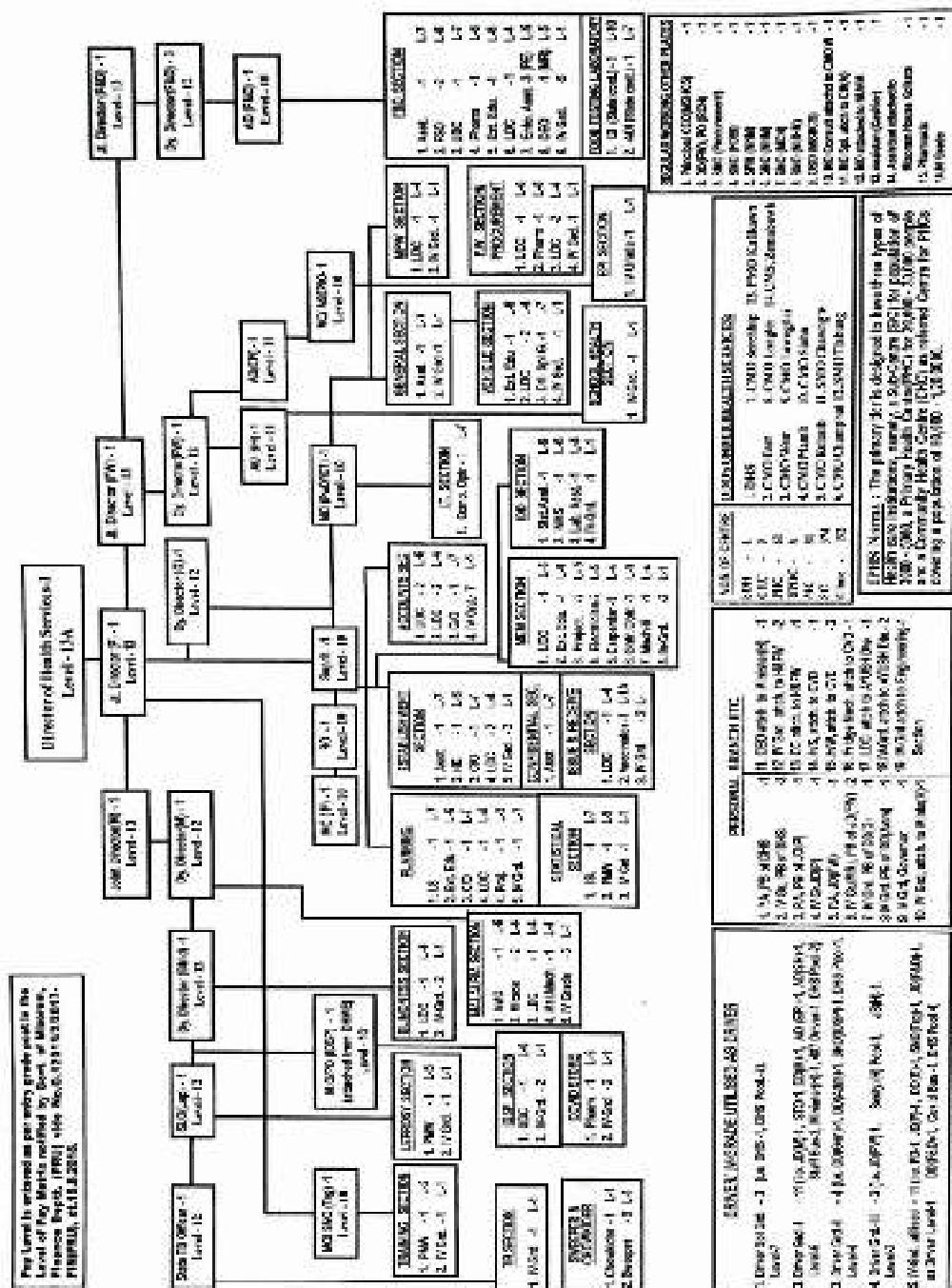
2.8.2. Directorate of Health Services (DHS)

Health Services has been functioning as a separate Directorate for more than 17 years. DHS are responsible and oversee public health within the state, they are in charge of rural health facilities such as Sub Centre (SC), Primary Health Centre (PHCs). DHS also involves in planning, implementation and monitoring of health care programmes and policies formulated by the state government. The Director of Health Services is the Head of the Department and he is assisted at the State headquarters by the following designated Programme Officers etc.

A. Its functions are as follows:

1. To sustain minimal levels of service at all institutions.
2. To continuously improve the abilities of medical professionals and provide preventative, promotional, and curative services to all individuals.
3. To deal with widespread epidemics or outbreaks.
4. To develop and maintain the department's infrastructure.
5. The responsibilities include managing personnel postings, transfers, and deployments at the district level, as well as procuring and maintaining medical supplies and equipment.

Fig 2.8 Organisational chart of Director of Health Services (DHS)

[illegible]

Source: Health & Family Welfare Department Government of Mizoram, n.d.
(<https://health.mizoram.gov.in>)

Table 2.3 Various programmes under DHS

1	AYUSH & SMPB PROGRAMME	11	STATE VECTOR BORNE DISEASES CONTROL PROGRAMME (MALARIA) MIZORAM
2	INTEGRATED DISEASE SURVEILLANCE PROGRAMME	12	NATIONAL RABIES CONTROL PROGRAMME (NRCP)
3	REVISED NATIONAL TUBERCULOSIS CONTROL PROGRAMME	13	MIZORAM HEALTH SYSTEM STRENGTHENING PROJECT (MHSSP)
4	FOOD & DRUGS ADMINISTRATION	14	NATIONAL AMBULANCE SERVICE (NAS)
5	AYUSHMAN BHARAT – HEALTH AND WELLNESS CENTRES	15	QUALITY ASSURANCE & KAYAKALP
6	SCHOOL HEALTH PROGRAMME (SHP) IN MIZORAM	16	URBAN HEALTH MISSION
7	LEPROSY	17	IMMUNIZATION PROGRAMME MIZORAM
8	STATE MASS EDUCATION MEDIA PROGRAMME	18	REPRODUCTIVE & CHILD HEALTH (RCH)
9	CLIMATE CHANGE AND HUMAN HEALTH	19	BLINDNESS
10	COMMUNITY PROCESS (CP), QUALITY ASSURANCE & KAYKALP		

Source: Health & Family Welfare Department Government of Mizoram

2.9 Conclusion

Over the last several decades, India's healthcare administration has seen significant improvements. The organization and delivery of health care by the government sector is quite remarkable. However, with these rapid advancements comes the burden of having the world's second-largest population. India's healthcare

resources are under significant pressure due to the growing world population and the increasing lifespan of its citizens. According to the World Bank database, in 2017, India was the 13th-lowest in terms of the share of total government spending that went to health. The state health care administration needs to decentralise the management process, which includes the transfer of tasks from higher to lower levels. The present setup results in delays. In conclusion, the road ahead for India's health care system is surely difficult, yet filled with huge potential. As the second-most populous country in the world, it is important for India to focus and invest in a strong and accessible health care system. While success has been made in recent years, there is still a long way to go in terms of accessibility, cost, and quality of care.

Chapter III

NATIONAL URBAN HEALTH MISSION IN MIZORAM

3.1 Introduction

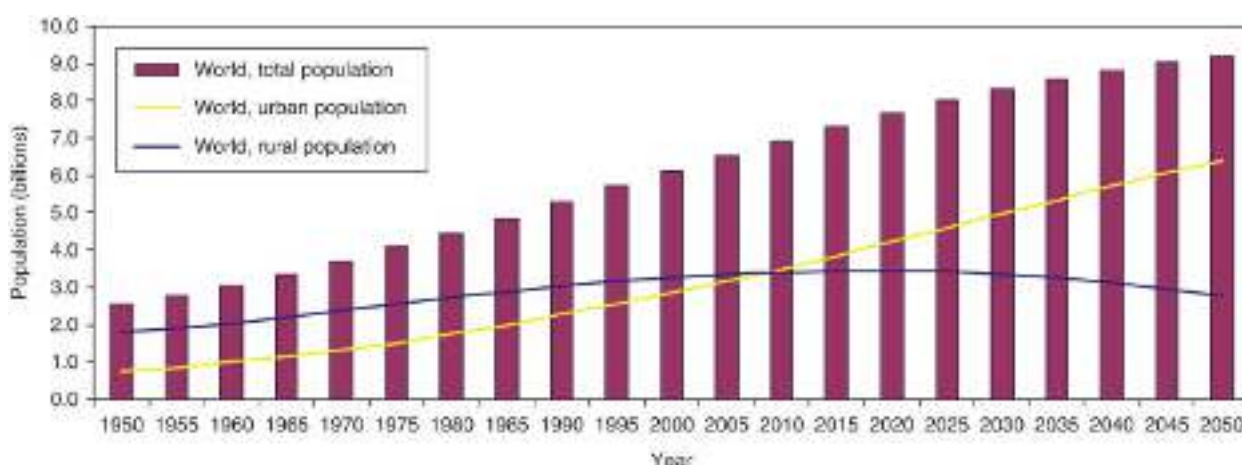
This chapter discusses the history of urban health problems in Mizoram and the origin of the National Urban Health Mission in India and in Mizoram, how it is implemented, their procedure and programmes and its current situation. Urban health is an important part of public health, especially in highly populated countries like India. Understanding the historical foundation of urban health issues gives a crucial perspective for solving present concerns. The National Urban Health Mission in India and its implementation in Mizoram represent the government's commitment to improving the health and well-being of urban residents.

Before discussing the urban health context of Mizoram let us first discussed urbanisation in India compare to the world. The urbanization process leads to an increase in population because migration rates are increasing, leading to a variety of health problems due to inadequate infrastructure and lack of basic facilities. Often, rapid gentrification in developing countries leads to overcrowding and poor living conditions, resulting in the existence of diverse slum distributions. Urbanization is one of the leading global trends of the 21st century that has a significant impact on health. As most future urban growth will take place in developing countries, with the bulk of this expansion concentrated in the poorest countries, the world today has a unique opportunity to guide urbanization and other major urban development trends in a way that protects and promotes health. This is important, not least because the health and well-being of citizens is perhaps a city's most important asset.⁷⁶

In the context of India, the Tenth Plan observed that “Unlike the rural health services, there have been no efforts to provide well-planned and organized primary, secondary and tertiary care services in geographically delineated urban areas. As a result, in many areas, primary health facilities are not available; some of the existing institutions are underutilized, while there is overcrowding in most of the secondary and tertiary centres”.

⁷⁶World Health Organization: WHO. (2019, August 23). *Urban Health*. Retrieved November 1, 2022, from

Fig. 3.1: The urban and rural population of the world, 1950–2050



Source: The urban and rural population of the world, 1950–2050. Based on data from United Nations Population Division, 2008.

This indicates an ever-rising necessity for a mission that is solely directed towards the health and well-being of an urban population in a manner that is accessible to all, and in particular, to slum dwellers and vulnerable sections. Urban health has largely been neglected on a comprehensive and nationwide level as public health in India had substantially been concentrated on rural and isolated India. India's focus on the all-inclusive development of the urban health system is a recent phenomenon, as a critical step was undertaken by the Government of India in acknowledgement of the diverse urban populace, in launching the National Urban Health Mission (NUHM) in 2013 under the extensive operation of the National Health Mission (NHM). NUHM provides a comprehensive framework for setting up urban health systems in different contexts and defines institutional mechanisms at the national, state, and district levels for implementation. Municipalities and town panchayats become the very units of health planning providing states and union territories with appropriate models that address the specific healthcare needs of their consequent masses, especially that of the urban poor, enhancing participation of community in planning and management of the health care service delivery by ensuring a community link volunteer such as ASHA (Accredited Social Health Activist) or Link Worker from other programs like ICDS, etc.⁷⁷ The NUHM also emphasizes the empowerment of the society through the

⁷⁷Urban Health in India: Present and Future(n.d.). Retrieved on September 17, 2024 from <https://innohealthmagazine.com/2022/persona/urban-health-in-india-present-and-future>

generation of awareness so that the public is able to demand services from the Health System. Healthcare workers are also fundamentally more available in urban areas giving an advantage to urban healthcare.

3.2 National Urban Health Mission

In this chapter, before we start investigating NUHM in Mizoram, we must first study the mission's objectives, aims, strategies, and the implementation process based on NUHM framework for implementation. The National Urban Health Mission (NUHM) is a flagship program launched by the Indian government in 2013 to improve the health status of urban populations. The mission aims to provide equitable and quality healthcare services to all urban residents, particularly those living in slums and other underprivileged areas. The NUHM focuses on strengthening the existing healthcare infrastructure in urban areas, including primary health centres, community health centres, and hospitals. It also emphasizes preventive healthcare measures such as immunization, maternal and child health services, and non-communicable disease prevention and management with its focal demographic being the deprived urban population living in listed and unlisted slums, all other vulnerable populations such as homeless, rag-pickers, street children, rickshaw-pullers, construction, brick, lime kiln workers, commercial sex workers and other temporary migrants.⁷⁸

3.2.1 Aims

The National Urban Health Mission would aim to improve the health status of the urban population in general, but particularly of the poor and other disadvantaged sections, by facilitating equitable access to quality health care through a revamped public health system, partnerships, community-based mechanism with the active involvement of the urban local bodies. The urban health care system seeks to meet the unique demands of the urban poor and vulnerable populations. It involves institutional

⁷⁸Karnataka State Health & Family Welfare Society, Bengaluru (Ed.). (2015). *NATIONAL URBAN HEALTH MISSION IMPLEMENTATION GUIDELINES*((Revised)). GOVERNMENT OF KARNATAKA.

processes and managerial methods for addressing health-related issues. Partnerships with community and local organisations are essential for active participation in health initiatives.

3.2.2 Strategies

The situation needs strategies to improve public health services, especially in big towns with reliable private or public sector relationships. These can be created through public-private partnerships, such as with private service providers or NGOs, or public-public partnerships, such as with railways hospitals, ESIC, and public sector companies. The state should decide on the best mix of these strategies for the urban poor, and clear guidelines should be created for agreements. Monitoring by the state is important to ensure the best possible result for the urban poor.

a) Enhancing the efficiency of public health

In order to improve the health system in cities, the government must revise and simplify the current urban health framework and designate referring sites.

Several factors contribute to the poor performance of primary health facilities, including infrastructure, human resources, referrals, diagnostics, caseloads, geographical distribution, and inconvenient working hours. The NUHM submission proposes a "Urban Primary Health Centre" capable of serving an average of 50,000 people, including outreach and referral services. U-PHCs may serve 50,000 people in sparsely populated cities to 75,000 in densely populated cities depending on the geographical location of the slums.

The NUHM aims to improve the current system's performance by offering need-based contracted human resources, tools, and drugs. Rogi Kalyan Samiti is being introduced to support local action. Specialists will provide weekly OPD care in cities, and outreach events will be held in slums to improve healthcare accessibility. Referrals will be identified and disclosed to the community using a GIS map, enabling easy access.

b) Encouraging families to have greater access to healthcare via Arogya Mahila Samitis

The Swarna Jayanti Shahari Rojgar Yojana (SJSRY) is an initiative by the Ministry of Urban Development that aims to provide jobs to the urban poor. The Urban Self Employment Programme (USEP) includes measures for the Development of Women and Children in Urban Areas (DWCUA) groups and Thrift Credit Groups (TCG). Women living in mohallas and slums can form Neighbourhood Groups (NHGs) under SJSRY, which may later federate into a more official Neighbourhood Committee (NHC). Existing structures under SJSRY can also be federated into Mahila Arogya Samiti (MAS), a community-based federated group of around 50-100 families, dependent on the size and concentration of the slum population. The MAS may have a group of 5-20 people, with chosen officials like Chairperson/Secretary and Treasurer. Mobilization of the MAS may be supported by a hired agency/NGO, working with the Accredited Social Health Activist (ASHA) responsible for the area.

c) Promoting and preventing public health

The health problems faced by the urban poor are complex and deeply based on structural issues such as poverty, inadequate access to healthcare, and threats from the environment. To successfully support public health efforts in urban places, it is important to address the social factors of health. By tackling public health promotion from an inclusive and community-centred viewpoint, we can work towards improving the health and well-being of the urban poor, eventually creating a fairer and healthier society for all. By supporting public health programmes that value the social factors of health, we can enable urban people to lead better lives and lower health inequalities. Moreover, these attempts can contribute to the general well-being of society. The goal also gives a framework for partnering with NGOs to build and spread at the community level.

d) ITES and e-governance for improved access and monitoring

ICT-enabled services and e-governance have played a key role in improving access to healthcare in urban areas. These technologies have made healthcare services available to urban dwellers, enabling them to conveniently access information, schedule appointments, and obtain treatment. Furthermore, the adoption of IT-enabled services and e-governance has helped in solving the digital health gap that exists between rural and urban areas. Urban health systems have used this technology to bridge the gap between healthcare practitioners and patients, providing prompt and effective delivery of healthcare services. GIS technology has played a major part in improving the tracking and monitoring of urban health through IT-enabled services and e-governance. HMIS tools have been applied in urban health situations to improve tracking and monitoring. This helps healthcare workers track patient data, disease trends, and resource usage in real-time, allowing them to make informed decisions and react quickly to medical emergencies.

f) Enhancing stakeholder capacity

Developing the skills of all parties, such as community members, healthcare workers, and government bodies, is an important part of carrying out the National Urban Health Mission successfully. By improving their knowledge and abilities, stakeholders can successfully handle the particular healthcare difficulties that urban people experience and assure the delivery of high-quality healthcare services. It is also important for different groups, like Ministries of Health, experts, funders, and civil society organisations, to work together and form partnerships in order to share resources, use each other's knowledge, and meet the many healthcare needs of urban areas.

g) Providing assistance to the poor who are most vulnerable

To achieve the aims of the National Urban Health Mission, it is crucial to prioritise the most vulnerable members of the poor and marginalised communities, including women and slum dwellers. Reduce health inequalities and improve overall

health outcomes in urban settings by addressing the particular health needs and difficulties encountered by these groups via the National Urban Health Mission. Additionally, the National Urban Health Mission should concentrate on improving access to excellent healthcare services in urban settings, especially for those living in slums and informal settlements.

h) Assuring quality health care

NUHM aims to ensure better health care by:

- i) Modification of Indian Public Health Standards where necessary for urban areas.
- ii) Developing capacity of public and private providers for providing quality health care.
- iii) Encouraging the acceptance and enforcement of local public health acts.
- iv) Ensuring citizen charters in facilities.
- v) Encouraging development of standardised treatment plans.

3.3 Implementing NUHM

This section shall elaborate on the essential processes to be carried out in order to effectively implement NUHM. The key features explained in the previous section need to be established through the processes outlined in this section. The processes outlined above have been listed in the order in which they need to be implemented. Of course, some of the processes may be overlapping or carried out simultaneously.

3.3.1 Establishing Institutional Mechanisms

India has three main models of urban health services: cities where state health departments provide all healthcare facilities, cities where a minority of care is provided by ULB, and cities where the majority of healthcare facilities are under the urban local body, which integrates medical and non-medical public health functions. This trend is common in metropolitan centres like Mumbai, Kolkata, Chennai, Bangalore, and Ahmedabad. The Technical Resource Group on NUHM, a body created by the Ministry in 2013, reported these findings.

The NUHM Technical Resource Group provides valuable information and guidance in the implementation of the National Urban Health Mission. Their responsibilities include devising plans, providing technical help, and assessing the implementation of NUHM projects in Indian urban areas (John, 2010)⁷⁹. The NUHM Technical Resource Group is critical to ensuring the National Urban Health Mission's successful implementation. They contribute by providing their expertise and guidance throughout the mission, such as strategy creation, technical help, and progress monitoring (Mickelwait et al., 1983)⁸⁰.

According to the Framework of Implementation, NUHM may be administered by state health departments or urban local bodies. According to the NUHM Framework, "in metropolitan cities and other cities where the state government decides to transfer the management of the urban health system to municipal corporations, city-level health societies will be established."⁸¹ In such circumstances, an MOU with the municipal corporation might be negotiated with clearly stated performance goals."

⁷⁹ John, T. J. (2010, April 1). *India's National Technical Advisory Group on Immunisation*. Vaccine. <https://doi.org/10.1016/j.vaccine.2010.02.041> retrieved on 20.02.2024

⁸⁰ Mickelwait, D. R., Honadle, G., & Barclay, A. (1983, May 1). *Rethinking technical assistance: The case for a management team strategy*. Agricultural Administration. [https://doi.org/10.1016/0309-586x\(83\)90019-5](https://doi.org/10.1016/0309-586x(83)90019-5) retrieved on 20.02.2024

⁸¹ Nuhm framework for implementation 2013

3.3.2 Institutional mechanisms for NUHM rollout

Institutional mechanisms for NUHM rollout involve the creation of specialised teams at both national and state levels, coordination groups, character-building programmes, and regular monitoring and evaluation processes. These methods are important for ensuring the successful implementation and continued growth of the National Urban Health Mission (Ramalingam et al., 2022) across the country⁸². The success of the National Urban Health Mission depends on strong governmental processes that enable efficient rollout, coordination, skill building, and tracking at both national and state levels. Many States may have previously undertaken these stages at the State level. The important steps are as follows:

1. Increasing the size of the State Health Society.
2. Increasing the size District Health Society.
3. Appointing an Additional Mission Director to NUHM.
4. Establishing program management units at the state.
5. District, and city levels (SPMU, DPMU and CPMU).
6. Creating the City Health Society.
7. Collaborating with urban local bodies, and partnering with other urban stakeholders.

3.3.3 City Mapping and Vulnerability Assessment

The second stage in adopting NUHM is to identify the health requirements of the vulnerable population. City mapping is important for planning and building cities because it shows how they are laid out, what infrastructure they have, and what their

⁸² Ramalingam, A., Raju, M., Ganeshkumar, P., Yadav, R., Tanwar, S., Sakthivel, M., Mukhtar, Q., & Kaur, P. (2022, December 8). *Building Noncommunicable Disease Workforce Capacity Through Field Epidemiology Training Programs: Experience From India, 2018–2021*. Preventing Chronic Disease. <https://doi.org/10.5888/pcd19.220208>

unique features are. Streets, houses, sites, and other aspects of cities are shown in great depth on city maps.

The goal of NUHM is to improve the health status of the urban population, but equal distribution of health care is needed in each section of the society. By facilitating quality care through partnership, community-based mechanism and support from the urban local bodies. The first step for the mission is to understand the urban problems and its solution.

Vulnerability assessment and mapping help us to locate and access basic amenities of urban poor. Urban areas are huge especially in metropolitan cities each city, zones and wards have different issues in their own respected areas. These issues and problems are needed to be identified and understand their specific health needs. To effectively take actions of the health of urban population we need to understand the present situation and gaps in service delivery. Mapping and vulnerability assessment are the first step in planning for urban outreach health service. City mapping and vulnerability assessment are the two components under NUHM but they have different objectives.

a) City mapping

This is a geographic mapping of the city. The objectives of mapping is to identify and get accurate information relevant to NUHM. Through city mapping we can locate all the details of all health facilities, catchment areas, slums, hospitals, sub centre, educational institutions, Anganwadi centre, municipal & ward boundaries, roads, landmarks, rivers which is all shown in the map. City map will definitely help us in understanding the location of slums and locate the vulnerable areas where the urban poor population are located. This will help in building UPHC and Health kiosks and ensuring that vulnerable section of the people receive health services.

In India and in many parts of the state, city mapping is conducted through GIS or a manual process. It may also be done by the government departments specializing in remote sensing and spatial mapping and sometimes they hired private agencies.

Most of the states conduct mapping manually for the current map of the city. Municipal has a team and their duty is to update the city map through physical verification.

b) Methodology of City mapping

There are various types of mapping performed by the state. For conducting city mapping, the state must follow any of these methodologies

1. GIS Mapping
2. UPHC Catchment area mapping
3. Vulnerability assessment

1. GIS Mapping: Geographical Information System (GIS) is a computer system for capturing storing, checking and displaying data on earth surface. It shows different kinds of data on the map like buildings, streets, river, landmarks. Through GIS we can know the exact location of slums and vulnerable areas.

GIS Mapping has three steps

- i. Desk review: Desk review is a method of reviewing and studying current geographic information systems data and tools for a particular project or goal.
- ii. Field Operation: includes collecting analysis, and administration of geographical data in the field.
- iii. Post Field Validation: GIS post field validation refers to the process of confirming and proving geographic information gathered during field activities.

c) Results of GIS Mapping catchment areas.

The following shall be emerged from a well conducted mapping

- i. From GIS mapping we can know all public health facilities in urban areas UPHC catchment areas.

ii. We can know all the list of private health facilities and Anganwadi centres in the slum areas.

iii. GIS mapping reveals all list of slums with population numbers and educational institution of government and private.

iv. Through mapping we can locate all the municipal and ward boundaries, roads, landmarks, agricultural land and water bodies.

v. UPHC Catchment Area Mapping

The Public Health Manager, in consultation with the MO and ANMs, is preparing a map of the UPHC target area. The plan should include ANM areas, poor sites, and major features. This will improve understanding of the population covered and ensure all regions are included. The map preparation method may be community-led, with MAS members also involved. This will create knowledge about the UPHC, its position, and services among the community.

3. Vulnerability Assessment

The NUHM vulnerability assessment tries to identify a slum's or household's vulnerability to illness, taking into account characteristics such as low economic and nutritional status, occupation, gender, handicap, marital status, age, and stigmatised diseases. This qualitative evaluation focuses on understanding the vulnerability status of the city's wards, slums, and homes, resulting in a greater knowledge of the slum and all the families inside it. Vulnerability is often related to insufficient housing and public services, although other issues are also addressed.

There are two types of assessment namely, Slum level Vulnerability Assessment and Household Vulnerability Assessment:

1. Slum or ward level vulnerability Assessment: Teams (comprising ASHA, ANM, PHM, RKS members, ULB members) for each city zone (ward or

UPHC catchment area, or cluster) need to be selected to perform slum level group talks as per a prescribed technique.

2. Household level vulnerability Assessment: According to the UPHC's mandate, the Staff from the UPHC must visit each home to do a survey, register the household, and give them a health card. In this type of vulnerability assessment Urban ASHAs may also be offered extra incentives to undertake the survey.

3.3.4 Implementing UCHCs and UPHCs into operation

After all the city mapping and various type of vulnerability assessment is completed, the actual implementation of UPHC begins. UPHC is important for providing fair access to quality healthcare services for all people, regardless of their socio-economic class or physical location. According to the result of mapping numbers of location of facilities and service offered will emerged. This section elaborates on various aspects in functioning of UPHC at NUHM.

i. Location of the UPHC

UPHC will aim to provide services to a slum population in various location. So preferably UPHC should be set up close to slum or inside slum area. Primary health Centre should be established as the first point of contact between communities and the health system. In that case there will be maximum beneficiaries. This would benefit the slums and this will create universal accessible of healthcare to the people.

Through mapping and vulnerability assessment, we can identify the region for UPHC, but locating an empty site is not simple. Slums are overcrowded and congested. In the procurement of land, urban local bodies (ULB) play a significant role. Some of the UPHC uses rented buildings and facilities. The government must establish its own building for UPHC in the long term since, in terms of IPA, every UPHC should have its own building, and LSC is essential.

ii) Constitution of Rogi Kalyan Samitis

All facilities should have a Registered Patient Welfare Committee or Rogi Kalyan Samiti (or any other state specific name). Guidelines for RKS defining the constitution, functioning, roles and responsibilities have been formulated and released by the Ministry of Health. The Samiti is responsible for expenditure of the untied funds received by the facilities. According to the guidelines, the Registered Patient Welfare Committee is responsible for ensuring that the facility's expenditures and untied money are properly used. Supervising and examining the healthcare services delivered to patients.

iii) Minimum services must be offered

UPHC operates as the core of Primary Health Care. Under NUHM, UPHC staff or health care team operates in certain areas like outreach, special camps, house visit. MAS and ASHA oversee the community, they give advice and care for pregnant women and refer them to the facility. Under NUHM UPHC there are various services like OPD, consultation, lab diagnosis, dressing, consultation, contraceptives and medicine for free of cost. In every UPHC now there are NCD which plays an important role in health service. Their main services offered are screening patients for communicable and non-communicable diseases. In UPHC there are several staff who performs different service according to their job responsibilities. To strengthen UPHC the government introduced State Health Strengthening Project which is now implemented in all the states for strengthening all health institutions. In UPHC OPD specialist visit are provided periodically.

iv) Areas of catchment identification

The Public Health Manager, in consultation with the medical officer and ANM, prepares the catchment area of UPHC, which is all shown through mapping and vulnerability assessment. This mapping depicts all the locations of communities and vulnerable locations of the urban poor that ANM should cover. The UPHC personnel

should have a firm comprehension of their catchment population, which is 50,000 or between 30,000 and 70,000. The area of population must be divided equally among all ANMs. Based on the mapping, all the communities must be covered by the ASHAs under the supervision of the ANM.

v) Registration of Households

Registration of households is an important instrument for the UPHC area survey. UPHC staff like ASHA and ANM should visit every household to register the population covered under UPHC. This household registration survey usually starts from the slum areas and then extends to all urban populations. The area that is not covered by ASHA must be covered by ASHA and must be visited by the ANM. This may be done annually or every three months. The information collected is basic demographic data: name, age, sex, relationship, occupation, immunisation record, children under 5 years, and pregnant women. All this data is based on the vulnerability assessment guidelines. This can be done using paper format or electronic format. The registration of households in the UPHC is a critical procedure that assures appropriate maintenance of records and acts as the basis for successful healthcare services. By following the established format, the UPHC can quickly enrol and deregister families, ensuring the supply of quality healthcare to the community.

3.3.5 Integrating Disease Control Programmes with NUHM

According to the Framework, NUHM aims to establish a mechanism for bringing together all communicable and noncommunicable disease programmes, which include HIV/AIDS. Programmes which are given below:

- a. National Vector Borne Disease Control Programme (NVBDCP)
- b. Revised National Tuberculosis Control Programme (RNTCP)
- c. Integrated Disease Surveillance Project (IDSP)

- d. National Leprosy Elimination Programme (NLEP)
- e. National Mental Health Programme (NMHP)
- f. National Deafness Control Programme (NDCP)
- g. National Tobacco Control Programme (NTCP)
- h. Communicable and Non-communicable diseases such as NPCDCS

The Mission aims to provide an effective urban health platform for the urban poor, focused on non-communicable diseases (NCDs) that make up a major part of the urban burden of disease. It aims to improve system efficiency through a shared platform, service access, and recommendation methods. The Mission will also focus on integrated planning, sharing of funds and human resources, and shared tracking and review at city, state, and district levels for all communicable and non-communicable disease programs.

3.3.6 NUHM's budgeting & financial management

i. Structures

NHM is the biggest scheme under the Ministry of Health and Family Welfare, covering 43 percent of the Ministry's funding. Compared to the previous year's REs, Government of India increased their allocation for NHM by 7% to 36,960 crores in FY 2022–2023.⁸³ As NUHM is the sub mission of NHM. In most of the States, human resources for financial management have been approved at the state, city and district levels for the NUHM. At the district and city levels, the NUHM finance managers will work with the District and State Accounts Managers to ensure integration, cross learning, timely release of funds and monitoring of expenditure under the NUHM. At

⁸³Kapur, A., Shukla, R., Pandey, S., Tanya Rana, &Suparna Pal. (2022). National Health Mission (NHM) Budget Briefs Vol 14/Issue 6. In *Accountability Initiative, Centre for Policy Research* [Report]. Accountability Initiative, Centre for Policy Research. https://cprindia.org/wp-content/uploads/2022/06/National-Health-Mission_2022-23.pdf accessed on 20.02.23

the City level, particularly for the big metro cities, finance managers have been approved. These finance managers should work in coordination with the NUHM finance managers at the State level so as to ensure integration, regular reconciliation and monitoring of expenditure under NUHM.

ii. Funding for the NUHM

Funding is an essential component of every healthcare system, including urban health. Without enough money, it is difficult to serve urban populations' healthcare demands properly. For most states, the central government provides 60:40 funding, but for Sikkim, J&K, Himachal Pradesh, and Uttarakhand, which fall under a special group in the northeast, it provides 90:10. Every Union Territory gets 100% government funding, regardless of whether they have a legislature.⁸⁴ All of those current rules that were made under NRHM also apply to NUHM, unless it mentions otherwise. For funds under NHM to be released, the Department of Expenditure in the Ministry of Finance has set some conditions.

iii. Funds Flow Mechanisms

As a first stage, NUHM funds are dispersed to the states and union territories under the NUHM Flexible Pool. The SHS releases funds to the districts or municipal corporations as a second stage. In the third stage, funds will be released to UPHCs or UCHCs by the DHS, ULB, or CHS - depending on the situation. Bank accounts and funds transfer through PFMS are mandatory for all urban health facilities.

iv. Bank Accounts

All the urban health facilities where the funds under NUHM have been transferred should keep a separate bank account for NUHM funds operated under joint signatures, with at least one signatory must be from regular government service. All

⁸⁴2021-2022 *Annual report*. (2022). Ministry of Health & Family Welfare Government of India. Retrieved April 6, 2023, from <https://main.mohfw.gov.in/sites/default/files/FinalforNetEnglishMoHFW040222.pdf>

the corporations (including seven metro cities) must have clear Delegation of Financial Powers for NUHM funds.

v. Monitoring and Reporting

A Statement of Fund Position (SFP) and Financial Management Report (FMR) are required to be sent to the Ministry of Finance at the end of each month by the state government. The SFP and FMR give an update on the state government's financial status. They are used to analyse the state's financial performance and make expenditure decisions for the future. The Ministry of Finance will use these reports when allocating funding to the state government.

3.3.7 Job responsibilities of NUHM healthcare workers

Here are the job responsibilities of the healthcare workers under NUHM:

1) State Consultant

To become a State Consultant, he or she must be a Public Health Personnel. As a State Consultant, here are some of the job responsibilities perform under NUHM

- i. Systematic collection, documentation & presentation of information regarding urban health system, health needs and input to decision makers
- ii. To analyse data of UPHC and its use
- iii. Capacity building of NUHM staff
- iv. Budgeting and financial planning
- v. Monitoring and evaluation of UPHC functions
- vi. Undertake assignment from time to time assign by Mission director or SNO

2) Public Health Manager

He/she must be a nodal person responsible for non-clinical activities public health personnel. There must be one each for Aizawl East, Aizawl West and Lunglei. Here are some of the duties perform under NUHM

1. To supervise and monitor day to day activities of UPHCs and report to SNO.
2. To organize and facilitate monthly meeting.

3. To ensure report preparation and submission.
4. To ensure timely reporting and quality of HMIS data.
5. To plan and organize training of capacity building programs.
6. To maintain liaison with stakeholders for convergence.
7. To assist SNO in procurement and for routine immunization.
8. To maintain equipment and ensure timely delivery of supplies to UPHC.
9. To maintain referral linkages, gap analysis and SOP.
10. To ensure RKS meeting/guidelines.
11. To ensure timely indents of drugs, vaccines, ORS, instruments, contraceptives etc
12. To conduct selection of MAS.
13. To ensure ASHA activities on outreach and incentives.
14. To participate in UHND outreach/meetings/seminars/training/workshops.

3) Medical officer

MO are MBBS from institute recognised by National Medical Council and must completed compulsory internship. Their roles and responsibilities include:

1. In each UPHC there must be one full time plus one part time.
2. Their working hours should be 8 hours 6 days from 9am to 3pm every week. But this timing may change according to their location and area of posting.
3. To provide affordable health care services to the catchment area.
4. To attend National Health Programmes.
5. To conduct and support UHND & outreach programmes and immunization.
6. To access training/ capacity training needs to HR.
7. To conduct monthly RKS meeting.
8. To ensure display of citizen charter and to look after grievance redressal.
9. To ensure timely submission of monthly or daily report and clarify laboratory test report.
10. To display IEC materials and signage instruction.
11. To guide instruct and coordinate paramedical staff whenever necessary.
12. To prepare monthly/ weekly UPHC action plan and monitor all performance.

13. To ensure local procurement and indenting of medicine and other medical equipment.
14. To attend seminar, meeting, conference, workshop organised by NUHM.
15. To participate in National Health Programmes.
16. To perform other functions and other duties as instructed by higher authorities.

4) Staff Nurse in OPD

Staff nurse under NUHM must have B.Sc. nursing/GNM course passed from any nursing school/institution recognised by Indian Nursing Council. They must be registered nurse and have valid registration. Their roles and responsibilities are:

1. To support Medical Officer in daily OPD services.
2. Maintaining of OPD registers and patient record.
3. To assist Medical Officer in follow up of patients.
4. To perform patients dressing, emergency and tray maintenance.
5. To give advice on nutritional needs of patients.
6. To assist Medical Officer in referral process like referral slips, referral register.
7. To provide Ante natal and Post natal check-up (ANC & PNC).
8. To give health education and counselling to patients & beneficiaries.
9. To guide and assist staff in preparation of daily and monthly reports.
10. To guide and instruct staff in terms of maintenance of sustainable cleanliness in different section.
11. To maintain medical equipment, ILR/deep freezer, vaccines.
12. To participate in National Health Programmes.
13. To perform any work assigned by Medical Officer.

5) Staff Nurse in Community

- i. To participate in Outreach/UHND and immunization.
- ii. To maintain all records, registers, procedures of meetings related to community process.
- iii. To supervise and scrutinize performance of frontline workers, calculate incentive.

- iv. To perform any other work assigned by Medical Officer.

6) Pharmacist

Pharmacist shall have Diploma in pharmacy, B.B Pharmacy registered with Pharmacy Council. A Pharmacist can provide services to public health, care and preventive measures. Here are some of the roles and responsibilities:

- i. To maintain records of all drugs, equipment's and other consumables.
- ii. To dispense drugs to patients and assist Medical Officer in OPD services.
- iii. To participate in UHNDs/outreach programmes.
- iv. To ensure the availability of drugs/consumables at all levels of UPHC.
- v. To make indent of drugs/consumables with appropriate procedures.
- vi. To participate in National Health Programmes.
- vii. To perform any other work assigned by Medical Officer.

7) Laboratory technician

He or she should have completed a Bachelor Degree in Medical Laboratory Technology or Diploma in Medical Laboratory Technology (DMLT). All the necessary lab test are done by Lab technicians. Here are some of the roles and responsibilities:

1. Testing of blood like Hb, Platelets count, total RBC, WBC, bleeding/Clotting time
2. Routine urine test like sugar, Albumin, microscopy
3. Diagnosis of RTI/STI with wet mounting, Grams stain
4. Sputum test for Mycobacterium
5. Blood smear/RDK exam for Malaria
6. Rapid test for pregnancy
7. RPR for Syphilis
8. Rapid test for faecal contamination of water
9. Ortho Uline test for chlorine
10. Blood lipids, urea, creatinine, LFT
11. Cross checking of samples for quality control
12. Disposal of waste materials as per norms

13. To participate in Outreach/ National health programs
14. To perform any work assigned by MO

8) Health Worker

A healthcare worker is one who delivers care and services to the sick and ailing either directly as doctors and nurses or indirectly as aides, helpers, laboratory technicians, or even medical waste handlers.⁸⁵ Their roles and responsibilities include:

1. To work as a team member with doctors, nursing and other staff.
2. To reach out people in their home for outreach services and UHND.
3. To give appropriate counselling to the patients.
4. To advice patients in terms of benefits from the government.
5. To assist the doctor whenever necessary.
6. Preparation and submission of daily or monthly reports.
7. Patient treatment for minor ailment and distribution of drugs, treatment given at the doorstep.
8. To give counselling to people whenever necessary.
9. To perform vulnerable assessment in coordination with MAS.
10. To supervise and monitor the field workers like ASHA and MAS.
11. To ensure child nutrition & immunization.
12. To perform any other necessary work assigned by Medical Officer.

9) Accounts Clerk

He or she must have a Diploma in Accounting (Bachelor's Degree in Accounting preferred), or associate degree may need a bachelor's degree, relevant experience, or professional certification in some cases. Their main duties and responsibilities include:

1. To assist Medical Officer, Staff Nurse for organizing and coordinating UPHC meetings.

⁸⁵Joseph, B., & Joseph, M. (2016, August 20). *The health of the healthcare workers*. PMC Pub Med. Retrieved April 23, 2023, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5299814/>

2. To maintain all necessary files & records.
3. To receive and put up all mails which is required for checklist.
4. To assist MO in organizing camps and outreach programs.
5. To maintain and upload data (offline/online).
6. To prepare and compile different types of reports.
7. To maintain UPHC accounts.
8. To perform any task assigned by MO.

3.4 National Urban Health Mission in Aizawl, Mizoram

As we have discussed in the previous chapter, a brief summary of the status of Mizoram; now we will discuss its capital, Aizawl. Aizawl is Mizoram's largest city and the state capital. The city is located in northern Mizoram. It had a population of 325,676 in 2001 and 400,309 in the 2011 Census, indicating a 22.92% increase over the previous decade. The urban population in Aizawl District is 77.4% (2011 census). The population density in Census 2011 was 234 people per square kilometre. The city of Aizawl covers an area of 457 square kilometres.⁸⁶ NUHM focuses on urban slums and disadvantaged, vulnerable populations. To improve the urban slums, we must first identify the slum population in Aizawl. The state government recognised 73 slum pockets under the Rajiv Awas Yojana (RAY) scheme.⁸⁷ The 2011 Census has designated 26.8% of Aizawl city's population as living in recognised slums; however, this demarcation had been heavily contested as the state government didn't consult local political leaders, as it was rightfully predicted that the delineation of such areas as slums would be a subject of dissent among the locals. This does not indicate an absence of urban slums in Aizawl, but that there are no concentrations of poor groups

⁸⁶ *Mizoram Population 2022 | Sex Ratio & Literacy rate 2024*. Retrieved on February 7, 2024 from <https://www.census2011.co.in/census/state/mizoram.html#:~:text=As%20per%20details%20from%20Census,are%20555%2C339%20and%20541%2C867%20respectively>

⁸⁷ Saitluanga, B. L. (2018, August 17). *Towards a sustainable smart city: The case of Aizawl*. Observer Research Foundation; ORF. Retrieved September 19, 2024, from <https://www.orfonline.org/research/43403-towards-a-sustainable-smart-city-the-case-of-aizawl>

in slums.⁸⁸ These slum pockets came to be as a result of the necessity to conform to the JNNURM guidelines in order to acquire funding for BSUP housing to cater to the urban poor and their increasing accommodation requirements.

In Aizawl, urban health is a critical issue that needs immediate attention. Concerns such as pollution, poor sanitation, and inadequate health facilities have been created as a result of rapid urbanization in a confined environment. Residents of Aizawl suffer from respiratory diseases, water-borne illnesses, and malnutrition as a result. To address these issues, the government must take necessary steps to improve the city's health infrastructure. Improved sanitation systems, clean drinking water, and increased access to healthcare are among these measures.

Aizawl district has the highest age-adjusted cancer incidence rate among males in the country for the past five years. The total number of cancer cases reported in Mizoram from 2012 to 2016 was 8,059, with 3,736 females and 4,080 cancer cases recorded in the Aizawl district alone during the same time. Aizawl district has the highest occurrence rate of lung cancer in females and the highest incident rate of stomach cancer in males in Asia.⁸⁹ Aizawl is also known as India's "cancer city," Dr. Eric Zomawia Mission Director National Health Mission Mizoram and the State Nodal Officer for non-communicable diseases, citing a Population-Based Cancer Registries (PBCR) report published in 2016 'At least 4,656 new cases of cancer were registered between 2012 and 2014 in Mizoram.'⁹⁰

In order to meet the healthcare needs of the urban population, particularly the urban poor, the National Urban Health Mission has been developed within the National Health Mission.⁹¹ This initiative will be implemented throughout the 12th Five-Year

⁸⁸Kamath, L., & Waingankar, S. (2013). *Hybrid Municipalization in Aizawl: A Case Study of Urban Reforms from the Northeast*. Centre for Urban Policy and Governance, School of Habitat Studies, Tata Institute of Social Sciences, Mumbai.

⁸⁹'Business Insider India. (2020). Mizoram's Aizawl district recorded highest cancer cases in India'. BI India. Retrieved from https://www.businessinsider.in/india/news/mizorams-aizawl-district-recorded-highest-cancer-cases-in-india/amp_articleshow/77648427.cms/accessed on 23.03.2021

⁹⁰'Khojol, H. L. (2019). Why Mizoram continues to be the "cancer capital" of India. East Mojo. Retrieved from <https://www.eastmojo.com/news/2019/02/05/why-mizoram-continues-to-be-the-cancer-capital-of-india/> accessed on 23.03.2021

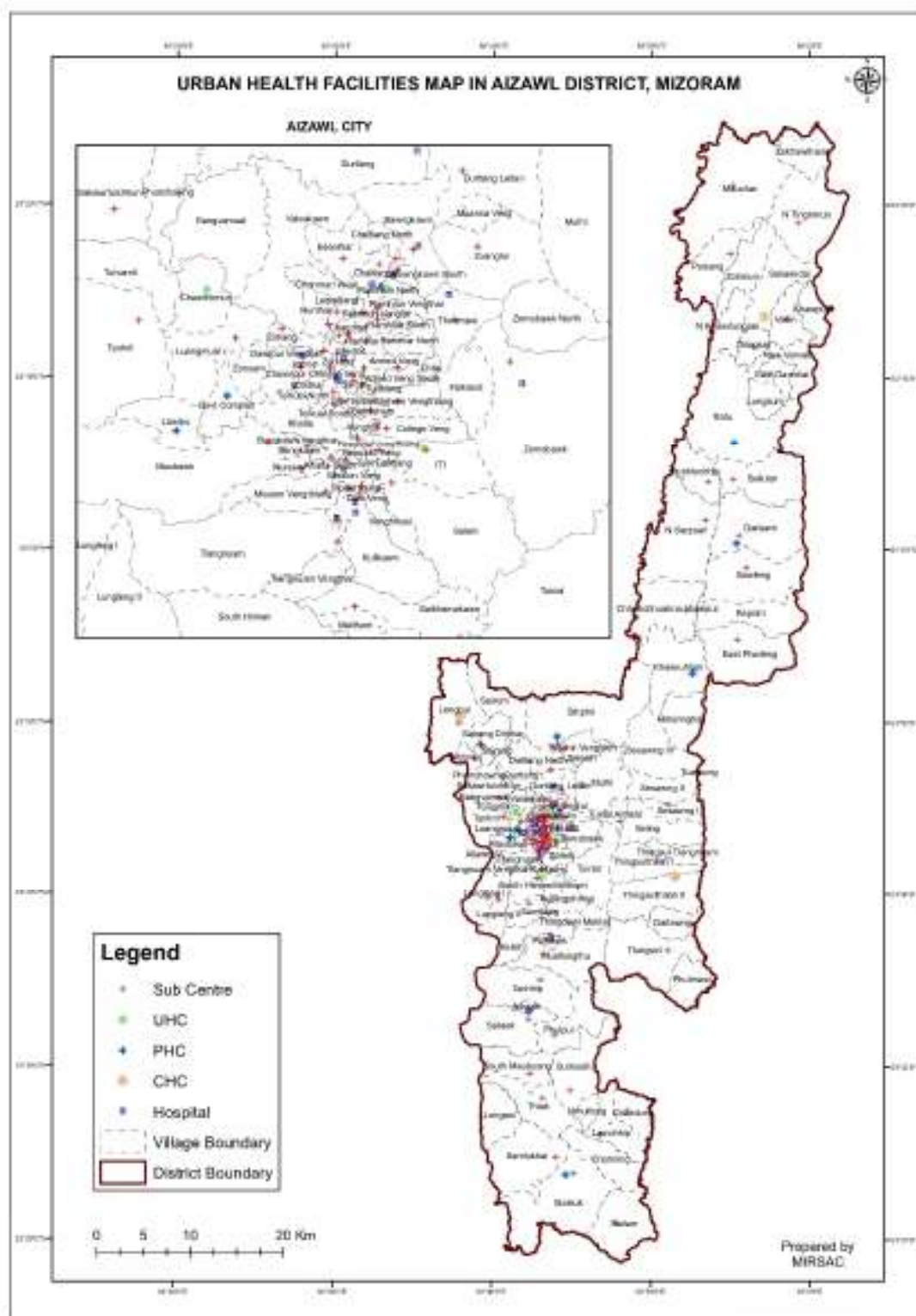
⁹¹*NHM Mizoram*. (n.d.). Retrieved February 20, 2024, from <https://www.nhmmizoram.org/>

Plan. The Union Cabinet granted permission for the initiation of a National Urban Health Mission on May 1st, 2013. In Mizoram by adopting the implementation framework of NUHM it has been established in 14th February 2014 as a sub-mission within the broader National Health Mission.

The introduction of the National Urban Health Mission is much appreciated in Mizoram and it is expected when addressing the health problems of the urban community. It would propose a systematic strategy to providing integrated and sustainable health care service delivery for the primary, secondary, and tertiary sectors in the state's metropolitan regions, with an emphasis on impoverished slums and other vulnerable populations. According to Mizoram NUHM PIP2013-14 the scheme has approved the following proposals:

1. There should be one urban primary health centre (U-PHC) for every population of fifty to sixty thousand.
2. Establishment of a single urban community health centre (U-CHC) to serve a cluster of five to six urban primary health centres (U-PHCs) located in large cities.
3. There should be one auxiliary nursing midwife (ANM) for every 10,000 individuals in the population.
4. An Accredited Social Health Activist (ASHA), also known as a community link worker, is responsible for serving a population of 200 to 500 families.

Figure ii: Urban Health Facilities Map in Aizawl district, Mizoram



Source: Mizoram Remote Sensing Application Centre, Aizawl, Mizoram

The Government of India Health & Family Welfare National Health Mission approved the Mizoram NUHM Programme Implementation Plan (PIP) for the year 2013-14. Aizawl and Lunglei are the two cities that will be covered under NUHM. A number of activities are included in the State NUHM budget, such as planning and mapping, program management, training and capacity building, strengthening of health services, regulation and quality assurance, community processes, innovative action and PPPs, monitoring and evaluation, and urban RCHs.⁹² According to PIP, the Urban RCH initiative would be included in NUHM. Urban components of initiatives such as JSY, JSSK, and JBSK would continue to be allocated under current budget heads rather than NUHM. For RCH, a separate amount of Rs 23.96 lakhs has been approved for the year 2014-15.⁹³ Therefore, the total budget proposed is 763.09 lakhs, while 97.34 lakhs have been approved.

In Mizoram there has been a lack of initiatives to provide healthcare services for the urban underprivileged group, particularly those residing on the outskirts of cities and towns. Since 2003–2004, the Urban Health Scheme has been implemented as part of the Reproductive and Child Health (RCH) Programmes, focusing on two main Townships. However, it has been noted that the current scheme is unable to fulfil the growing need for healthcare services. It is essential to prioritise the healthcare needs of those in urban areas due to population expansion.

The primary objective of the National Urban Health Mission (NUHM) is to enhance the health condition of the urban population, with a specific focus on the impoverished and other marginalised groups. By improving the public health system, it will be possible to ensure equitable and unrestricted access to high-quality healthcare services. Moreover, the mission will be based on collaboration, community-based initiatives, and the active participation of urban local authorities.

⁹²Ministry of Health and Family Welfare, Government of India (2014). *APPROVAL OF STATE PROGRAMME IMPLEMENTATION PLAN 2013 – 14 FOR NATIONAL URBAN HEALTH MISSION MIZORAM*

⁹³Ibid

3.4.1 Community Health Care Workers under NUHM Mizoram

In Mizoram under the National Health Mission (NUHM), community health care workers play a crucial role in accomplishing the mission's objectives and enhancing healthcare delivery in India. The roles and responsibilities of health care workers like ASHA, MAS, ANM will be studied in the next chapter. Here are some main reasons why healthcare workers are vital under NUHM:

a. Primary healthcare delivery: NUHM emphasises strengthening primary healthcare services, and healthcare professionals are at the vanguard of delivering these services. They provide essential healthcare services at the grassroots level, including preventive care, health promotion, and fundamental curative services. By ensuring access to quality primary healthcare, healthcare workers contribute to reducing morbidity and mortality rates.

b. Maternal and child health: NUHM places significant emphasis on enhancing maternal and child health outcomes. Healthcare workers, such as auxiliary nurse midwives (ANMs) and accredited social health activists (ASHAs), play a vital role in providing antenatal care, secure deliveries, postnatal care, and immunizations. Their efforts help reduce maternal and neonatal mortality rates and enhance the overall health of women and children.

c. Disease prevention and control: NUHM focuses on preventing and controlling communicable and non-communicable diseases. Healthcare personnel like ANM and ASHA are responsible for implementing disease surveillance, conducting examinations, and providing treatment and counselling for various health conditions. They play a crucial role in preventing the transmission of diseases and promoting healthy behaviours within communities.

d. Community engagement and mobilisation: NUHM recognises the significance of community participation in healthcare. Healthcare professionals function as a bridge between the healthcare system and the community, engaging and mobilising community members for health-related activities. They raise awareness, educate individuals about health issues, and encourage community participation in health programmes and initiatives.

e. Capacity building and training: NUHM emphasises the capacity building of healthcare personnel to enhance their skills and knowledge. Training programmes are

conducted to upgrade their clinical skills, improve their understanding of public health principles, and enhance their ability to provide quality healthcare services. This continuous capacity building ensures that healthcare professionals are equipped to satisfy the evolving healthcare requirements of the population.

f. Health system strengthening: NUHM seeks to strengthen the comprehensive healthcare system in India. Healthcare personnel contribute to this objective by providing feedback, identifying voids in service delivery, and suggesting enhancements. They actively participate in health system planning, implementation, and monitoring, ensuring that healthcare services are accessible, equitable, and of high quality.

In Mizoram, healthcare workers under NUHM are essential for delivering primary healthcare services, enhancing maternal and child health, preventing and controlling diseases, engaging communities, developing capacity, and strengthening the healthcare system. Their dedication and endeavours contribute to accomplishing the objectives of NUHM and enhancing the overall health and well-being of the population.

3.4.2 Urban Primary Health Centres in Mizoram

The primary objective of the Universal Health Coverage plan is to make healthcare services accessible to more people at the local level by establishing urban primary health centres. As part of the Universal Primary Health Care Expansion program, sub-centres and health clinics will be established. People who are seeking health care go to these places first.

In Mizoram, UPHC has been set up by adopting the guidelines for the implementation of NUHM. According to the guidelines, it will function for approximately 50,000 people in the population, the U-PHC would be located within or 500 meters of the slum. The working hours of the U-PHC would be from 12.00 noon to 8.00 pm. The services provided by U-PHC would include OPD (consultation), basic lab diagnosis, drug/contraceptive dispensing, and delivery of Reproductive & Child Health (RCH) services, as well as preventive and promotive aspects of all

communicable and non-communicable diseases. However, this guideline has not been followed strictly in the case of working hours.

Two significant cities/towns, Aizawl (the capital city) and Lunglei township (the second largest town), have been carrying out Urban Health as a program under RCH/NRHM since 2004. In 2014-15, Aizawl and Lunglei each established six UPHCs and two UPHCs, respectively, which are currently offering 24/7 services. Construction of three UPHC structures began in 2014-2015, with two buildings located in Aizawl City and one in Lunglei Town, as approved by the GOI.⁹⁴

Major services offered by UPHCs are summarised below:

1. Providing OPD and IPD services to general patients.
2. First aid services and the management of minor injuries.
3. Full immunisation counselling for mothers.
4. Make referrals to higher facilities as needed.
5. Home visits and outreach services by ANM & ASHA for early pregnancy detection.
6. Performing Delivery Operations.
7. Provision of services relating to vector-borne infections.
8. FP Services-Providing oral medication and condoms.

3.4.3 UPHC offices in Mizoram

There are nine UPHC in Mizoram, six of the UPHC ITI, Zemabawk, Chawlhmun, Lawipu, Sihphir and Hlimen are from Aizawl district which we are about to study. Two of the UPHC Hrangchawk and Sazaikawn are from Lunglei district. Champhai is the latest UPHC in Mizoram. UPHC performance has been monitored annually, OPD, IPD, services delivery and number of emergencies are the main parameter.

⁹⁴GOVERNMENT OF MIZORAM. (2013). *NATIONAL URBAN HEALTH MISSION PROGRAMME IMPLEMENTATION PLAN 2013-2014*.PDF download on 2.6.2023

The following are the UPHCs offices in Mizoram:

- a) ITI UPHC: the facility is located in ITI locality. According to data provided by NUHM office, during the year 2022-2023 the number of populations covered is 65344 with 6 localities namely Venghlui, Bethlehem, College Veng, Bethlehem Vengthlang, ITI, Salem Veng. Under ITI UPHC there are 6 sub center, 10 clinics and 48 Anganwadi center.
- b) Chawlhmun UPHC: It is located at Chawlhmun locality, it covers 31396 populations with 12 localities namely Zotlang, Luangmual, Ainawn, Chawlhmun, Tuivamit, Tanhril, Central jail veng, Sakawrtuichhun, Lungverh, Rangavamual and Phunchawng. Under Chawlhmun UPHC there are 4 sub center, 4 clinic and 29 Anganwadi center.
- c) Hlimen UPHC: the facility covered a population of 9407 with 6 localities namely Tlangnuam, Melthum, Saikhamakawn, Hlimen and Samtlang. It has 1689 households, 6 sub centers and 35 Anganwadi centers.
- d) Lawipu UPHC: It is located at Lawipu locality, covering a population of 19162 with 3234 households. It covers 6 localities namely Khatla South, Bungkawn, Bungkawn Vengthar, Nursery, Maubawk and Lawipu. It covers 3 sub centers and 3 health clinics.
- e) Sihphir UPHC: It covers a population of 12425 and 1884 households. It has 1 sub centre, 5 clinics. It covers a locality of Selesih, Sihphir, Durtlang Vengthar, Durtlang and Neihbawih.
- f) Zemabawk UPHC: Located at Zemabawk locality, it covers a locality of Zemabawk, Zuangtui, Thuampui, Tuirial Airfield. It covers 14 sub centers and 41 Anganwadi center. It covered a population of 33150 with 4388 households.
- g) Hrangchawkawn UPHC: Located at Hrangchawkawn Lunglei district, it covers a locality of Luangmual, Sethlun, Theiriat, Hrangchawkawn, Lungpuizawl,

Zobawk and Sairep. It has 5 sub center and 33 Anganwadi Center. It covers a population of 10631 with 2196 households.

- h) Sazaikawn UPHC: The facility is located at Sazaikawn locality Lunglei district. It covers 7 localities namely Hauruang, Sazaikawn, Vanhne, Venghlun, Venglai, Rahsi Veng. It covers a population of 13447 with 2039 households. It covers 4 sub centers, 1 clinic and 33 Anganwadi center,

Table 3.1: Staff Position in UPHC 2023-2024

Sl. no	Name of UPHC	MO	Pharmacist	Staff Nurse	Lab. Tech	Account Clerk	Hw/AN M	IVGrade/Helper	Asha	MAS
1.	Hlimen	1	1	3	2	1	2	3	6	6
2.	Chawlhmun	1	1	3	1	1	1	3	12	8
3.	Lawipu	1	1	3	1	1	2	3	6	6
4.	Zemabawk	1	1	3	1	1	3	3	17	12
5.	Sihphir	1	1	3	1	1	2	3	7	7
6.	ITI	1	1	3	2	1	2	2	16	8
7.	Hrangchalkawn	1	1	3	1	1	2	2	9	7
8.	Sazaikawn		1	3	1	1	2	3	6	5
9.	Champhai	1	1	3	1	1	2	3	8	-
	Total	8	9	27	11	9	18	25	87	65

Source: NHM Mizoram official website

The Urban Primary Health Centre (UPHC) Mizoram employs a total number of 8 MO, 9 Pharmacist, 27 Staff Nurse, 11 Lab technicians, 9 Accounts clerk, 18 ANMs, 25 Helper, 87 Ashas and 65 MAS each playing a vital role in providing comprehensive primary healthcare services to the local population. This diverse team of healthcare professionals includes professionals from a variety of fields.

Table 3.2: UPHC performance report 2017-2021

Sl.No	Name of UPHC	OPD		IPD		No. of emergency		No of delivery	
	YEAR	17-18	20-21	17-18	20-21	17-18	20-21	17-18	20-21
1	Sazaikawn	2331	2 160	NIL	23	298	289	0	NIL

2	Hrangchalkawn	2861	1298	8	13	145	218	3	12
3	Lawipu	4147	3037	36	43	111	115	4	1
4	ITI	5330	2758	41	27	451	579	17	4
5	Hlimen	4618	3277	63	5	576	726	17	NIL
6	Chawlhmun	9787	4385	176	24	481	476	19	6
7	Zemabawk	9746	3735	NIL	9	245	165	NIL	NIL
8	Sihphir	5810	3404	69	42	520	554	16	17
	TOTAL	44631	24090	393	186	2827	3122	76	40

Source: *ACHIEVEMENTS UNDER NUHM 2020-2021. National Health Mission Mizoram. Retrieved November 22, 2023, from <https://nhmmizoram.org/upload/NUHM%202020-21.pdf>*

As we can see from the above table, the performance difference between 2017-18 and 2020-21 has shown that by the number of years passed, there has been a huge change. When we compare 2017 and 2021, OPD has been reduced to 20541, IPD has declined to 207, and the number of deliveries has declined to 36. This may happen due to a certain reason, like Covid-19 or an increase in the number of private hospitals nearby. There are a certain number of issues faced by UPHC. The UPHC is unable to perform its activities fully due to the pandemic. Staff are performing their duties at 3C and DCHC as well, so activities are hampered. As a result of the pandemic, public gatherings were prohibited for other activities such as UHND (as Anganwadi Centres were closed) and outreach. Since the GOI's funding has not been received in time, most of the activities have not been completed. In some UPHCs, the number of deliveries is NIL, which is not great news for the NUHM performance record. In most of the UPHCs, staff are increasing, but based on the performance report, there is a need for improvement in each UPHC.

3.5 Achievements under NUHM Mizoram

The National Urban Health Mission (NUHM) was launched to provide accessible, affordable, accountable and effective primary healthcare facilities, especially to the poor and vulnerable sections of the population. There have been numerous

achievements during the previous year's i.e. 2014-2017 but the achievement during the year 2018-2021 will be highlighted.

The achievements of the National Urban Health Mission (NUHM) are given below.

Table 3.3: Achievements under NUHM 2018-2021

Sl.No	CIVIL WORKS	MAS	ASHA	OUTREACH	CONVERGENCE
1.	Construction of Hlimen UPHC	Orientation and reorientation training	Orientation and reorientation training	60 camps conducted	H & FW, UD & PA and AMC
2.	Construction of Lawipu UPHC	Training of MAS for Aizawl UPHC		UHND held 332 times	RIPANS and Apollo school of Nursing, Laithangpuii College
3.	Construction of water tank and renovation of Sihphir UPHC	Training of MAS for Lunglei UPHC		Specialist visit for once a month	State NCD cell
4.	Construction of Hrangchawkaw n UPHC	50 MAS member approved	79 Urban ASHA approved	70 outreach is approved	All UPHCs are upgraded in Health & Wellness Centre
5.	Retaining wall of Hlimen UPHC	MAS fund 5000 released	Training of 79 ASHAs	13 outreach is conducted. Health Checkup to AMC Sanitation Worker and Rag picker	UPHC designated as Microscopic Centre and number of sputum collected
6.	Construction of Champhai UPHC			332 UHND is approved per month and 1303 is conducted	

Source: NUHM directorate of Health & Family Welfare

3.6 Conclusion

The National Urban Health Mission is an effort by the Government of India aimed at improving access to healthcare services in urban areas. This goal sees the unique challenges faced by urban communities in terms of healthcare service and tries to address these problems successfully. The execution of the National Urban Health Mission is vital to ensuring the well-being of urban people and building a healthy healthcare system. One of the key aspects of achieving the National Urban Health Mission is the merging of different healthcare services. This includes putting together basic healthcare, non-communicable diseases, mental health, senior health, hospice care, therapeutic services, and other important components of healthcare. By combining these services, the National Urban Health Mission tries to provide complete healthcare to the urban population, focusing on not just their current healthcare needs but also promoting preventive and overall health methods. Likewise, the application of the National Urban Health Mission should also focus on solving the gaps in healthcare availability among different parts of the urban population. That includes ensuring that healthcare services are available and affordable for all, regardless of socio-economic position or geographic location. To accomplish this, multiple approaches can be taken. First, there is a need to improve the current healthcare facilities in essential places.

CHAPTER IV

ROLES AND FUNCTIONS OF HEALTHCARE WORKERS UNDER NUHM

4.1 Introduction

In the last chapter, we examined the National Urban Health Mission in India and Mizoram, emphasising the importance of urban healthcare workers. This chapter will examine the importance of healthcare workers' roles and responsibilities under the National Urban Health Mission, as outlined in the NUHM framework for the implementation and guidelines of ASHA, ANM, and MAS provided by NHM. The National Urban Health Mission was launched to tackle and address the primary health needs of the poor and vulnerable urban population. Health care workers assist the urban poor by understanding their needs and problems, their daily challenges, and how the environment affects their mental well-being. They are responsible for providing care and services. Health care workers like ANM, ASHA, and MAS have a very important role in helping the urban poor, those who live in slums, by providing their basic needs and giving them not only health needs but also a healthy environment for their mental wellbeing. Providing health care to vulnerable and disadvantaged urban groups is the main focus of NUHM. The roles and activities of these healthcare workers are tailored to meet the unique needs of the communities they serve. According to the World Health Organisation (WHO), "health workers are people whose job it is to protect and improve the health of their communities."⁹⁵

Health care workers address issues at the community level. Health workers are key partners in health care delivery and play a critical role in promoting equitable expansion of coverage for a range of preventive, promotional, and curative services related to reproductive, maternal, new-born, and child health, infectious diseases, and noncommunicable diseases. Health workers play an important role during the

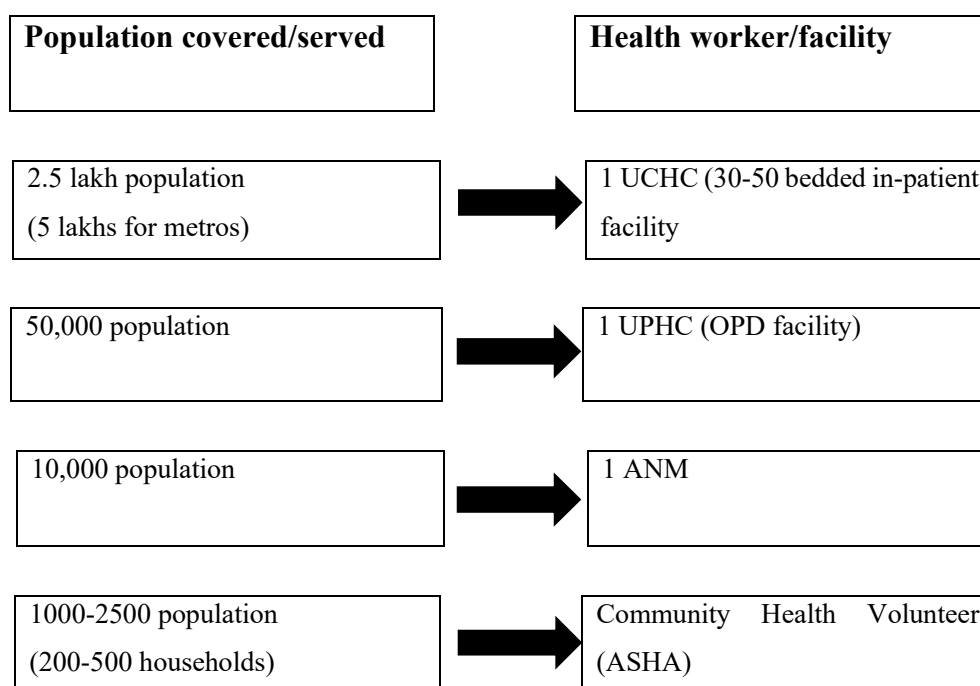
⁹⁵*Health workers*. (n.d.). Retrieved November 25, 2023, from <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/health-workers/>

pandemic; they are the frontline workers, so the government also takes certain measures for their safety.

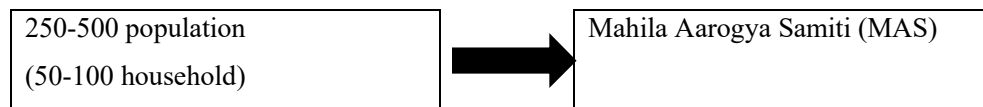
Dr. Tedros Adhanom Ghebreyesus, WHO Director-General, said, "No country, hospital, or clinic can keep its patients safe unless it keeps its health workers safe. WHO's Health Worker Safety Charter is a step towards ensuring that health workers have the safe working conditions, training, pay, and respect they deserve."⁹⁶

Under the National Urban Health Mission, healthcare workers are important in ensuring that people in cities get good healthcare. These healthcare workers, including doctors, nurses, pharmacists, and community health workers, are essential for providing basic health care, preventative care, and health education to people living in cities. They also assist in dealing with several health problems in urban areas, including communicable and noncommunicable diseases, as well as issues related to mothers and children's health.

Figure 4.1 NUHM population covered



⁹⁶ *Keep health workers safe to keep patients safe: WHO.* (2020, September 7). World Health Organisation. Retrieved December 29, 2023, from <https://www.who.int/news/item/17-09-2020-keep-health-workers-safe-to-keep-patients-safe-who>



Source: National Urban Health Mission & Ministry of Health and Family Welfare (2018).
Guidelines for organising Urban Primary Health Centre services.

The following are the roles and responsibilities of healthcare workers under the National Urban Health Mission, as specified in the NUHM implementation framework:

4.2 ROLE AND FUNCTIONS OF AUXILIARY NURSE MIDWIFE (ANM)

The ANM cadre in India was established in the 1950s with the aim of focusing on maternal health, including midwifery, and child health during the first two years of life.⁹⁷ The Auxiliary Nurse Midwife (ANM) has played a key role in the better functioning of the National Urban Health Mission, especially with pregnant women, breastfeeding women, and infants and children who are malnourished due to poverty or other family issues. They act as a link between the government's health department and lactating women and children. The ANM examines nutrition and medical needs, as well as the importance of caring for pregnant women and infants by raising awareness and educating families and communities.

In 1973, the Kartar Singh Committee advised changing the classification of ANM to “multipurpose worker,” who would offer a variety of services, including family planning and maternal and child health (MCH) at the field level.⁹⁸ The importance of ANM has been seen in many rural areas, especially in places where there is a lack of nutrition supplements and medical care, mainly due to poverty, a lack of transportation, or a lack of medical care in such areas. ANM are often equipped with

⁹⁷ Malik G. (2009) 'Role of auxiliary nurse midwives in National Rural Health Mission', *Nursing Journal of India*, 100(4), pp. 88–90. pmid:20527493

⁹⁸ Mavalankar, D., & Vora, K. S. (2008, March). *The changing role of Auxiliary Nurse midwife (ANM) in India: Implications for Maternal and Child Health (MCH)*. INDIAN INSTITUTE OF MANAGEMENT AHMEDABAD INDIA. Retrieved December 3, 2023, from [http://scholar.googleusercontent.com/scholar?q=cache:3Ppu3uO2IGJ:scholar.google.com/&hl=en&as_sdt=0,5&scioq=The+Changing+Role+of+Auxiliary+Nurse+Midwife+\(ANM\)+in+India:+Implications+for+Maternal+and+Child+Health+\(MCH\)+Mavalankar+2010](http://scholar.googleusercontent.com/scholar?q=cache:3Ppu3uO2IGJ:scholar.google.com/&hl=en&as_sdt=0,5&scioq=The+Changing+Role+of+Auxiliary+Nurse+Midwife+(ANM)+in+India:+Implications+for+Maternal+and+Child+Health+(MCH)+Mavalankar+2010)

basic needs such as medicine for pregnant women and sick children, as well as basic supplements for the mother and infant. She has been given a task such as:

1. Finding the needy people in a marginalized community
2. Acting as a first responder in a place where there is a disease outbreak
3. Functioning as a link between vulnerable society and the schemes of the state government or the central government concerning their needs
4. Assisting ASHA in their work and guiding her in areas of concern
5. According to her requirements, ANM must also act as a support system for an MAS and cooperate with her function as needed.
6. She should also be able to provide continual care to the people within her concern in the future.

4.2.1 Role of ANM in UPHC

ANM also has several responsibilities at the UPHC, especially those concerning her duties and work. Her roles may include the following:

1. It is her duty to assist the medical officer who is on duty and take measures as per her instructions.
2. It is also the responsibility of an ANM to conduct CNC-based check-ups, and there may be some patients who require a referral. It is ANM's duty to refer such patients.
3. It is the responsibility of an ANM to conduct immunizations in the facility and regulate their progress.
4. Family planning is not a common topic among vulnerable and marginalised groups. It is the duty of an ANM to educate the public regarding the importance of family planning. Contraceptive pills, condoms, etc. should be easily accessible from the ANM.
5. The medical officer in the concerned area may participate in special outreach sessions; it is the ANM's duty to assist the MO in every way possible.

4.2.2 ANM's role in mapping and vulnerability assessment

The mapping of areas with vulnerable and marginalised sections is done by ANM and includes the following:

1. Finding out the vulnerable assessment area and regulating the needs of the people in such an area. The objectives can vary according to the area, the population of the marginalised section, and the group of people dwelling in such an area. Thus, the needs and measures needed to be taken must be assessed beforehand.
2. ANM may also see the geographical areas of the same area. She must be able to identify some specific areas, which can be helpful for her work. ANM must be able to convey her research to the concerned UPHC, where they will discuss any problems that can arise due to transportation.
3. When studying the geographical areas of the slums, ANM must be able to locate certain specific locations, such as Anganwadi centres, schools, health care centres, community health care centres (if any), and market places. If there are any government buildings in such an area, she must see if they can be used as meeting venues.
4. A map study is important beforehand because it will help the ANM identify any slum-covered areas, marginalized sections, and other important places. This will help her ensure that no section or group of people is left behind in the coverage of UPHC.

4.2.3 ANM Outreach Activities under NUHM

One of the important roles of an ANM is conducting an outreach programme, which acts as one of the most important keys to spreading their aid to people who are having transportation problems and those living in unreachable areas for vehicles. Such activities are not only important for the people alone but also a great experience for the ANM herself. Through such activities, ANM can see to the diverse needs of the people according to their areas, villages, or any other difference, including geographical differences.

Organising such outreach activities may include the following methods:

1. ANM, ASHA, and MAS may function together in order to work out the problems faced by the people, but they must also be able to record the census of the people without neglecting children and infants.
2. The needs of the people may be recorded systematically, and the NHUM will see to it and provide aid accordingly.
3. It will be the role of the local UPHC to make a calendar that includes important dates for immunization, dates of national health importance, special outreach days, and the seasons when malaria or any other disease are common. Such activities are important for educating people in the affected areas.
4. It is the role of an ASHA to conduct tests on malaria or other diseases that can easily spread; she must see to it that such tests are conducted properly, that the results are conveyed to the patient, and that follow-up medical treatment is organised properly.

4.2.4 Auxiliary Nurse Midwife and the Urban Local Bodies

Urban Local Bodies (ULBs) play an important role in the functioning of ANM; they act as the functioning bodies in urban areas, which function almost the same as the local governance bodies of rural areas such as Panchayats and other Zila Parishads.

a. The ULB classifications are as follows:

1. Mahanagar Nigam performs this function as the Municipal Corporation and tends to work in areas such as monitoring the administration of urban areas.
2. Nagar Palika functions as a municipality; the objectives, such as housing, sanitation, transportation, a market place, etc., fall into their hands.
3. The Nagar Panchayat serves as a notification body for the urban population.

b. Urban local bodies may serve the following functions:

1. They may see if there is any disease outbreak in their concerned areas and take measures and precautions if there is one.
2. They must survey the common diseases in their areas and take preventive measures accordingly.

3. They must make sure that procedures for proper waste disposal are maintained in their area and that people are abiding by their regulations.
4. In urban areas, there are proper procedures for managing solid waste.
5. They must ensure the viability safe drinking water and maintain sanitation and cleanliness in their communities.
6. ULB may also deal with illegal trading and false licenses in their areas; they may work together with the local police as required.
7. ULB must also ensure food safety in their local areas and check the price of the goods periodically.
8. ULB must also maintain the safety of road transportation.
9. The register of births and deaths must be maintained by ULB.
10. In the local area, ULB may also manage cremations and burial sites.
11. The ULB is in charge of controlling stray animals in their areas.

c. Following are the relationships between ANM and ULB:

1. ANM must be able to identify the Ministry of Health and ULB's demarcation lines in their functions and roles in their local areas.
2. ANM must pay attention to the ULB's members and departments. ANM must be able to report on the ULB's efficiency in their local areas.
3. ANM may serve as a bridge between the ULB and the needs of the locals, whether in terms of sanitation, health, transportation, or other benefits.
4. ANM may function as a linkage between ASHA, MAS, and ULB and their local communities.

4.2.5 ANM's Role in Health Kiosks

NUHM is not equipped with sub-centres; as a result, health kiosks act as an alternative approach. Health kiosks, also known as nursing stations, will help provide the support needed. However, the functionality of health kiosks will depend on the funds allocated and the availability of workers. The following points describe how health kiosks function for the benefit of society:

1. ANM's work will be accompanied and supported by health kiosks. Health kiosks may interfere with conducting outreach sessions and aiding ANM

whenever required. Health kiosks can be set up in areas where there is a lack of other health care facilities and where UPHC is not set up. They are most commonly found in slum areas.

2. The functioning of health kiosks is seen very much in slum dwelling areas, where the dwellers might face adverse health issues, mainly due to a lack of proper sanitation. Such adverse health issues are common with sex workers, homeless people, ragpickers, etc.
3. These health kiosks will act as a link between the needy people in neglected areas and health facilities. As a result, the importance of health kiosks is undeniable; it is essential to set them up in every area where there is no UPHC.
4. Health kiosks would provide services such as immunization and health counselling, and they must also provide medical aid to those in need. They will also offer their services in educating the people about the necessity of family planning and aiding them with antenatal and postnatal care.

4.2.6 Role of ANM in Special Outreach Sessions

Under NHUM, ANM has a key function in order to carry out their work effectively without neglecting any marginalized or vulnerable section of society. Her role may include the following steps:

1. Conducting special outreach sessions for people in need may target areas with transportation problems.
2. ANM must be able to provide at-home services, with a particular focus on lactating women and children. She may be able to see if those people are experiencing harassment or neglect in their family or society.
3. It is the responsibility of an ASHA, ANM, or MAS who are functioning under UPHC to see that such problems are solved accordingly, and aid may be given as per requirement.
4. It is also the role of an ANM to see to the functioning of ASHA and MAS and to function together wherever required.

5. An ANM's function is to act as the first responder for communicable and non-communicable diseases, managing them, spreading awareness according to people's needs, handling medicinal care, and even following up on treatment.

It is the role of an ANM to perform special outreach sessions according to the people's needs. The ANM is responsible for safeguarding vulnerable and disadvantaged members of society, raising awareness, regulating the population, providing help such as medical supplies and first aid kits, and promoting public cleanliness and sanitation. They collaborate with medical officers, local authorities, ASHA, and MAS to support medical teams and guarantee that no section is left behind.

4.2.7 ANM organising an Urban Health and Nutrition Day (UHND)

Every ANM must be able to conduct UNHD or special outreach sessions at least once a month; this will keep her role active and will also improve her relationship with the people in her concerned areas. It is better to conduct home visits with the people as many times as possible, especially targeting pregnant women and ill children, as such vulnerable groups may find it hard to visit health centres regularly. This home visit session is very useful for ANM because she can see the needs of people in a specific field, which may help her work function more efficiently. In times of need, ANM functioning alone is not recommended; as a result, MAS, ASHA, and UPHC staff may stay within reach of the ANM. They may be helpful for ANM whenever their service is needed.

The roles of an ANM may vary accordingly; they may vary from raising public awareness, handling medicines according to people's needs, giving supplements to lactating women and children, conducting home visits, or even conducting special outreach sessions. Her roles can vary on a wider scale or may be related to personal care; the following may act as the key functions of an ANM:

1. Providing special care for pregnant women who cannot afford hospital treatments due to poverty.

2. Giving immunisations to the locals concerning the diseases that are common in the specific areas.
3. Paracetamol, digene, vitamins, iron, and other essential medicinal care should be available to the ANM, as these medicines function as first aid kits in times of need.
4. It is also the role of an ANM to educate the locals concerning the medical care, pregnancy, and health situation of the infant in the families, as well as spread awareness on the importance of cleanliness and how it is linked to the health condition of the areas.
5. ANM must be able to provide first aid in an emergency situation; this may include situations or accidents such as burns, fever, diarrhoea, and so on.

4.2.8 Significance in Organising a UNHD

Urban Health and Nutrition Day (UNHD) is an important programme that focuses on the vulnerable and marginalised sections of the community. It aids in providing necessities to the needy for the wellbeing of society. The following are important points for organising UNHD:

1. UNHD is organised in areas where there is a lack of health care facilities. The focus group is made up of marginalised and neglected members of the community. UNHD's working hours should be flexible, and they should be able to adjust their time to align with the community's working hours, as the people in those areas are mostly daily workers and labourers.
2. The organisation of UNHD is supported and assisted by various local bodies, NGOs, and the health facility centres available in the nearby areas. They do work in accordance with ANM, ASHA, and MAS in their respective regions.
3. As much as possible, the local medical officer may assist UNHD's work. He may manage UNHD's reports and registers, as well as provide advice to UNHD workers. The medical officer must be able to organise the annual calendar for UNHD.

4. The ASHA and MAS may assist UNHD in dealing with vulnerable communities by providing healthcare treatments and educating them on sanitation and the importance of personal hygiene.
5. ANM and MAS must work together to aid the UNHD in achieving its goals. UNHD must cover every section of society and ensure that no one is left behind in the process.
6. UNHD must focus on pregnant and lactating women, new-born babies, sick children, adolescents, poverty, and personal hygiene issues. UNHD may also tend to minor injuries and accidents, and refer patients as required.
7. If more than one UNHD is available in the relevant areas of ANM, they may seek to merge both of them according to the community's convenience.
8. If merging both of them is not possible, then a rotational plan must be proposed, covering one area at a time. If that is the case, two days a week must be proposed for each UNHD.
9. UNHD must help identify chronic illnesses, both communicable and non-communicable. After the process is done, ANM may conduct screening procedures.
10. Those who are at risk must be confirmed as early as possible and begin treatment. UNHD may assist in distributing medical aid and conducting follow-up programmes.

4.2.9 Roles and functions of the ANM in organising a UNHD

The ANM develops micro-plans for the UNHD to address the needs of vulnerable areas and educates urban local governments such as MAS, ASHA, and UNHD on their significance. They assure community accessibility, maintain records of patients and disadvantaged sections of society, and encourage them to attend UNHD. Effective transport management is critical to UNHD's viability. UNHD must maintain a systematic record of all interactions with ANM. In response to UNHD, ANM may make patient referrals and guarantee follow-up treatment. Overall, the ANM plays an important role in tackling health challenges in disadvantaged

communities. An ASHA is responsible for seeing emergency patients, and she may refer them to the ANM accordingly.

ANM may seek any measures needed to be taken for the referred patient, which may include the following actions:

1. She may interfere with non-communicable diseases, especially high blood pressure, blood sugar, fever, etc. She may ensure that proper medicinal care is given and inform them of the diseases regarding the intake of food and personal care.
2. She must inform those patients suffering from chronic illness about the importance of regular visits to health care centres such as UPHC, government hospitals, etc. If necessary, it is also recommended to educate the patient's entire family.
3. The central government is also implementing several schemes concerning the health of the people in the country. It is the duty of every ANM to inform the people in her concerned areas about the schemes and benefits they could receive.
4. The ANM must regulate blood tests in cases of malaria, blood sugar, and other diseases. She may discuss the results and take any immediate measures needed.
5. The ANM must ensure the safety of any leprosy or tuberculosis patients in her area. She may regulate their checkups and ensure their mental well-being, whether in their family or in society as a whole. DOTS and other medicinal care treatments should be readily available.
6. Any other disease or impairment, such as blindness, stiffness, or mental illness, should be regulated by the ANM as much as she can. It is her duty to educate the public on the relevant issues and ensure the mental wellbeing of such patients.
7. It is the duty of the ASHA and the ANM to ensure proper and safe home delivery for pregnant women. She may ensure that any follow-up treatments are available.
8. ANM may also serve as a midwife in cases where home delivery is needed; this is especially important in areas where there is no proper health care centre.

9. Postpartum diseases are very common among new mothers in rural areas. It is the duty of ANM to educate mothers and their families in such matters. The postpartum problem is very neglected in rural areas.
10. ANM must ensure the health conditions of new-born babies; it is upon her shoulders to weigh and see the health conditions of such babies. She may refer, if needed.
11. She may motivate the new-born families regarding the importance of proper care and immunization. She may regulate the vaccination of new-born babies as needed.

4.2.10 ANM and ASHA

The ANM and ASHA may function together on several occasions in order to make their work more efficient and beneficial for the people. The ANM and ASHA should ensure that every family in their areas is covered by their work. They can collaborate with ASHA on special outreach sessions or home visits and may guide or assist UPHC in its functioning. The ANM can regulate these visits to ensure progress and the better functioning of activities. They must replenish medical aid, which ASHA can distribute according to the people's needs. They can also provide home visits to expectant mothers and ill patients, ensuring their nourishment and tracking newborns. In some cases, the ANM may provide special care or treatment for patients in need. Regular meetings with ASHA and MAS can help identify and address problems. The ANM can also help ASHA improve their skills and experience. They should also be able to identify suspected cases of TB and leprosy and provide follow-up care after diagnosis and initial management.

ANM plays a crucial role in dealing with communicable and highly transmittable diseases. They collaborate with ASHA to determine the cause of disease spread, identify infected individuals, and stop it. Field visits are critical for managing disease spread, regulating contracted areas, and seeking immediate rehabilitation. ANM raises awareness about treatment, prevention, and dealing with high-risk individuals. They ensure proper treatment is available and contact authorities for follow-ups. Serious patients needing referrals should be referred to hospitals with

adequate facilities. The ANM reports disease outbreaks to authorities and collaborates with them as needed. They must promote cleanliness and hygiene, ensure proper water storage, and dispose of waste. ANM educates the public about the first signs of disease and how they can be transmitted, enabling them to prevent it themselves. In summary, ANM plays a vital role in managing communicable diseases, ensuring proper treatment, and educating the public about disease symptoms and transmission.

The ANM will supervise ASHA's work on the following matters:

1. Regulate the population of the target areas and make sure there is complete coverage of every section of society.
2. ANM will guide ASHA in conducting special outreach sessions, home visits, health melas, and other medical checkups.
3. ANM will keep ASHA's records up to date and check her maintenance on a regular basis.
4. ANM will assist ASHA in stocking up on medical necessities.
5. ANM will help ASHA monitor newborns, conduct home visits, and ensure that lactating women and sick children get proper treatment.
6. ANM will accompany ASHA in conducting home visits for those who need special care and attention.
7. ANM will assist ASHA and MAS in conducting initial meetings and helping with their maintenance.
8. ANM will ensure that ASHA and MAS skills are sharpened.
9. ANM may conduct an orientation session for an ASHA to regulate beneficiaries for the NCD screening session.
10. ANM may conduct a household vulnerability assessment for an ASHA, which will help her function efficiently.
11. ANM may assist an ASHA in arranging home visits in vulnerable areas to see if any progress is needed.
12. An ANM may educate an ASHA on the importance of safe drinking water, sanitation, fresh and healthy meals, and the need for proper toilets.

13. ANM may hold weekly meetings for an ASHA in which they could work together to resolve issues relating to their home visits and other outreach sessions.
14. ANM may address problems faced by the ASHA in her community regarding her security, the availability of first aid kits, and her work maintenance.
15. ANM may ensure that ASHA receives incentives on time.

4.2.11 Communicable and non-communicable diseases

ANM plays a key role in helping identify non-communicable diseases in her concerned areas. In such a situation, she must act as the first responder and assist in managing and regulating NCD. In her role, the following actions may be included:

1. The ANM must raise awareness in her areas of concern, particularly about cleanliness and the importance of proper waste disposal. Unhygienic living conditions can become a major cause of disease.
2. ANM may work together with non-government organisations or other urban local bodies in the concerned areas to deal with non-communicable diseases. These groups can be highly influential among the locals; as a result, their interference can have a significant impact on the functioning of the ANM.
3. ANM may educate people about disease prevention and inform them of the first symptoms, such as cancer, high blood pressure, tumours, and so on. The ANM should provide the first aid kit for non-communicable diseases, and the test for such diseases is also highly important, especially in rural areas.
4. In cases of testing for various cancers, hypertension, blood sugar, etc., it is advisable for the ANM to be present in the screening test areas and see that there is proper regulation and measures in such areas.
5. The locals should be aware of the importance of sanitation, not only in their habitat but also in schools, public places, working places, markets, public eating places, hospitals, and public parks.
6. Non-communicable disease data should be properly regulated. It is the duty of an ANM to see that such a task is performed.

7. In seeking proper hygiene and sanitation, the mental wellbeing of the people should not be neglected. People must not only have a healthy lifestyle but also a healthy environment and mindset. An ANM must perform every possible task for her concerned people's mental wellbeing.

4.2.12 Roles in the Administrative Task

ANM also has certain roles in the administrative section. It is the role of an ANM to have records and listings and to submit such files without delay to the concerned authorities. Maintaining such reports needs a specific approach, which may include the following:

1. ANM must list out those patients who are receiving nurturing care and support from government schemes and see their progression after that. Such a listing is critical for identifying the ANM's covered areas and any necessary measures.
2. ANM must also record the medicinal care she received, as well as her distribution list.
3. ANM must also register the PNC in areas of concern.
4. Immunisation plays a very important role in the functioning of an ANM. She must keep proper records, including immunization records for newborns.
5. Special outreach programmes play a key role in the working of an ANM; any programmes held must be properly registered to see the progress made.
6. The ANM must register marriages in her area of concern. She must make people aware of the importance of family planning and register if such measures are followed.
7. ANM must identify disease outbreaks in her areas and conduct surveys as required. Such action must be properly registered.
8. The testing of non-communicable diseases is properly carried out by the ANM; such tests must be within her register.
9. Births and deaths in her concerned areas have to be registered by an ANM; this may also help in the census.

10. An ANM plays a key role in guiding an ASHA in performing her duties; thus, an ANM must maintain and register the workings of an ASHA as much as possible, as well as their collaboration.

4.2.13 Role of ANM in pre and post delivery

ANM plays a key role in safe delivery, especially in areas where there are no other health care facilities or hospitals to consult. In such a situation, an ANM must be properly trained and well-read. ANM plays a crucial role in early pregnancy, identifying danger signs, promoting hospital delivery, educating the public on the importance of breastfeeding, and providing nutritional supplements. They should also have a first aid kit with essential items like oregano, paracetamol, clean drinking water, and soft cotton. In cases of pneumonia or lung diseases, immediate care is essential. An ANM should also prevent epidemic diseases, promote sexually transmitted diseases like HIV and AIDS, and educate the public about the benefits of clean drinking water. They should also promote family planning, providing condoms and contraceptive pills in case of emergencies.

ANM also promotes cleanliness, promoting a healthy lifestyle through regular bathing, sanitation of homes and surroundings, and public places. They should also raise awareness about the legal age of marriage for both men and women and focus on sexual issues among teenagers and young adults. Lastly, an ANM plays a vital role in dealing with disasters and other unforeseen events, providing solace to affected areas. By educating the public on these important aspects, an ANM can help ensure a safe and healthy pregnancy and delivery.

During pregnancy, ANM should check for signs such as fatigue, restlessness, excessive vomiting, high fever, dizziness, convulsions, swelling of the feet, burning while urinating, excessive urinating frequency, foul discharge, high blood pressure, sudden blood sugar changes, leaking for more than a day without labour pain, bleeding from private parts, and loss of foetal movement. These signs can indicate potential dangers and should be promptly addressed by a doctor. Additionally, if a pregnant woman feels dizzy or experiences excessive swelling, it may be necessary to consult a medical practitioner. It is also important to note that excessive urination frequency can

be a dangerous sign, and if the discharge has a foul smell or changes in colour, it should be taken to a doctor.

Newborns may exhibit danger signs such as refusing to breastfeed, fatigue, crying, difficulty breathing, cold skin, yellow palms and soles, and blood-forming discharge. These signs can indicate a serious health issue and should be monitored closely to ensure the safety and well-being of the newborn.

4.2.14 Role of ANM in disaster management

Disaster management is an important topic in marginalised communities, as they are more vulnerable due to a lack of proper medical care and the use of armed force to react. As a result, ANM plays an important role in dealing with disasters in her concerned regions. Her responsibilities may include:

1. ANM must make the people aware of several natural disasters, such as earthquakes, landslides, droughts, tsunamis, cyclones, etc. The people must not be overwhelmed in such situations; instead, keeping calm and acting accordingly would pave the way for their survival.
2. ANM must instruct the people on how to react, to look for a safe place, and to stock up on their needs such as food, clean drinking water, medicinal care, clothes, etc.
3. ANM must work together with ASHA and MAS, as well as local authorities, in order to react against such a disaster. The medical officer in the affected area should also instruct the ANM on first aid response.
4. ANM must stock up on some medical treatment available for disasters, which she could distribute upon the occurrence of disasters.
5. ANM must be able to function actively in hazardous situations, and she must be prepared for them beforehand.
6. She should be able to assist anyone in need after the disaster.
7. She must regulate the distribution of food supplies and medicinal care to the people.

4.2.15 Role of ANM as administrative leader

ANM, as a first responder, plays a crucial role in the administration of the locals. To function effectively, as her work requires, she must have good leadership skills. Her skills as an ANM must include educating the people and providing them with essential resources for the betterment of society and the lives of the dwellers as well. An ANM must be a good administrative leader in the society she lives in. She must possess the qualities of an effective leader.

To become a good leader, the ANM must be able to:

1. Set proper goals to reach and establish certain rules or actions to be followed. She must be able to influence people and inspire them to reach their goals. Her actions must be trusted by the general public, which must have trust in her and her actions.
2. She must be able to educate the public on the importance of sanitation, health care, regular check-ups, hygienic living, and education.
3. An ANM must be responsible in her actions and in whatever steps she is taking; she must be able to convey to the people the possibility of the outcome and how it would be beneficial for society and individuals.
4. An ANM must be able to make decisions as required. She must also be able to listen to and understand other people's decisions, as well as discuss them with them.
5. An ANM must be able to motivate others; if she proves herself to be a responsible and faithful worker, it will help her achieve her goals.

An ANM is responsible for linking local healthcare services to the community and ensuring good coordination with various organizations. These include health centres, educational institutions, local bodies, departments for women and children's development, and non-government organizations. The ANM can work with these organisations to achieve their goals, such as maintaining sanitation, housing, healthcare services, educational institutions, parks, restaurants, and hotels. It is essential to discuss and find solutions to issues in the affected areas. Coordination is

crucial for the functioning of the ANM, and it can also involve discussions with authorities to achieve their objectives.

4.3. Role And Function of Accredited Social Health Activist (ASHA)

The National Rural Health Mission established a village-level female community health worker, an accredited social health activist (ASHA), who serves as an intermediary between the local population and the public health care system. ASHAs are female community health workers that comprise one of the world's biggest community health workforces.⁹⁹ Each ASHA serves a thousand individuals and acts as a link between government health care services and the community, reducing cultural and social barriers and increasing community participation.¹⁰⁰ The role of an ASHA includes several tasks, such as providing health care to the locals, maintaining cleanliness in her concerned areas, preventing disease outbreaks in the community, etc.

The role and functioning of an ASHA include the following:

1. Creating an awareness generation: An ASHA may create awareness concerning health care issues; she may focus more on marginalised and vulnerable sections of society. ASHA may be able to identify their problem and find a suitable solution for them.
2. Counselling: It is always essential for an ASHA to talk to her concerned areas regarding reproductive health. This topic may include issues related to HIV/AIDS and other sexually transmitted diseases.
3. Curative care and other supplies: ASHA must be provided with medicinal care, including DOTS and other first aid care. The first aid kit may include ointments, paracetamol, vitamins, etc.
4. She acts as a volunteer health activist; her functions include not only distributing medicinal care to the public but also educating the people on the

⁹⁹ Liu, A., Sullivan, S., Khan, M., Sachs, S., & Singh, P. (2011). Community health workers in global health: scale and scalability. *Mount Sinai Journal of Medicine*, 78(3), 419–435.

¹⁰⁰ I bid.

necessity of health care and sanitation. She works for society's betterment. Her role as an activist is often cherished, especially in rural areas where there is a lack of hospitals and trained medical staff.

5. Paying home visits: It is the role of an ASHA to pay regular visits to her concerned areas; she may focus more on the house where there are pregnant women and sick children. She may focus on feeding lactating women and children. In her visits, she can regulate the reports on disease patients, be they communicable or non-communicable. Her frequent visits to the field would help her function better, and she would gain more experience from them.
6. Attending Village Health and Nutrition Day (VHND), which is organised in the community: ASHA should give importance to health days and other nutritional days. Such functions may contribute to widening her knowledge.
7. Regular visits to the health facility: It is essential for an ASHA to pay regular visits to certain health care centres and assist medical workers as much as she can. This can assist her in her work and allow her to contribute more efficiently to her local area.
8. Holding village-level meetings in the concerned areas: It is essential for an ASHA to hold a village-level meeting not only to generate awareness but also to discuss matters of public importance. Through such meetings, an ASHA can form a better bond with the communities and share problems more openly.

4.3.1 Selection process for an ASHA

The following is a list of ASHA selection criteria:

1. Among the residents themselves, an ASHA would be preferable for a woman. Preference may be given to women in the age group between 25 and 45. She may be married, unmarried, widowed, etc.; her marital status does not contribute much to the selection procedure.
2. A good leadership and communication skill would be a plus, as her job would require it.
3. An ASHA has to be able to read and write, at least in her local language. She must be in the 8th grade, according to the requirements.

4. An ASHA with a certain disability would function in the same community as a larger disabled population because it is believed that such people would have a better understanding of each other.
5. It will always be better for an ASHA to have a support system, such as family or friends, who can help her with her work and functioning.

4.3.2 Removal of ASHA

If any of the below are happening, it can be concluded that an ASHA is either resigning or dormant:

1. She submitted a letter of resignation to the concerned authorities.
2. If an ASHA does not attend three consecutive initial meetings without any prior information, she will be considered dormant.
3. If an ASHA did not attend three consecutive meetings at the local health centre without giving prior notice,
4. If an ASHA is inactive in her role concerning home visits and other special outreach sessions, she is considered dormant.

However, an ASHA may remain in her position in the following cases:

- a. If she has a genuine reason for not attending to her role and gets support from some of the concerned authorities,
- b. If her reason is seen as reasonable, the authorities may look into her past records, register her, and decide accordingly.
- c. The DAC would take a final view on whether the ASHA would stay or not. The DAC may contact the ASHA personally and discuss the issue with her.
- d. It is always recommended that proper measures be taken upon discharge from an ASHA. All records must be documented.
- e. If the ASHA got discharged from her position, the same selection process would apply to filling her position.

The Gramme Panchayat would participate in ASHA's work. Gramme Sabha would take part in the selection process for ASHA by supporting ASHA in her functioning, especially in works relating to sanitation and public health. All ASHA members will serve on various committees formed by the committee concerned with people's

physical and mental wellbeing. In collaboration with ASHA, the Gramme Panchayat will create a health and sanitation program. Some of the incentives offered by ASHA would be handed out by the Gramme Panchayat.

4.3.3 Role and Integration of an ASHA with Anganwadi Workers

It is critical for ASHA and AWW to regularly organize health and nutritional days. Health Day may include caring for pregnant women, who are often malnourished and neglected. It may also include infants and children, as well as their well-being in the family and society. The health day may cover reproductive health, adolescence, and puberty. It may also include the importance of sanitation, cleanliness, and personal hygiene awareness.

Anganwadi Worker (AWW) will guide ASHA in various functions and activities; she may act as her support whenever necessary. The functions may include the following:

- a) Organising Health Day once or twice a month. On Health Day, the women, adolescent girls, and children from the village will be gathered for instruction on health-related problems such as the importance of healthy food, personal hygiene, care during pregnancy, the value of prenatal check-ups and hospital birth, home remedies for small illnesses, and the importance of vaccination, etc. AWWs will tell ANM to join and help plan the health days at the Aanganwadi Centre (AWC).
- b) AWWs and ANMs will serve as resource persons for ASHA training.
- c) IEC activity through a show of posters, folk dancing, etc. on these days can be undertaken to educate the recipients on health-related problems.
- d) AWWs will be depot holders for drug kits and will be giving them to ASHA. The replacement of the eaten drugs can also be done through AWW.

e) With the help of ASHA, AWW will update the village's list of qualified couples and children under one year of age. ASHA will assist the AWW in organising nutritional supplements for pregnant and nursing women and babies. She would also make an effort to take the recipients from the village on specific days of vaccination, health checkups, etc. to AWCs.

4.3.4 Role and integration with ANM

Asha workers play a crucial role in bridging the gap between the community and the healthcare system. They are responsible for providing basic healthcare services, providing health education, and creating awareness about various health issues in their respective communities. Asha workers also play a vital role in supporting auxiliary nurse midwives in their work. They assist in identifying pregnant women, promoting institutional deliveries, and ensuring that mothers and children receive essential healthcare services.

The Auxiliary Nurse Midwife (ANM) will guide ASHA in undertaking the following activities:

1. She will have a weekly or fortnightly meeting with ASHA to discuss the actions completed during the week or fortnight. She would guide her in case ASHA encountered any difficulties during the execution of the execution of her task.
2. AWWs and ANMs will serve as resource persons for ASHA training.
3. ANMs will notify ASHA of the date and time of the outreach session, as well as assist her in bringing the recipient to the session.
4. ANM will join and advise on how to arrange the health days at AWC.
5. She would request ASHA's assistance in updating eligible couple registrations in the village.
6. She would use ASHA to encourage the pregnant ladies to go to the subcentre for initial examinations. She would also support ANMs in bringing married couples to sub-centres for family planning.
7. ANM will assist ASHA by encouraging pregnant women to take complete courses on IFA tablets, TT injections, and so on.

8. ANMs will advise ASHA on oral medication dosing and adverse effects.
9. ANMs will educate ASHA on the risk signs of pregnancy and labour so that she can promptly detect and support the recipient in seeking further care.
10. ANMs shall notify ASHA of the date, time, and venue for the initial and monthly training programs. She would also ensure that, throughout the training, ASHA receives remuneration for performance as well as TA/DA for attending the session.

4.3.5 HIV and AIDS

ASHA has dealt a lot with HIV/AIDS-related concerns. She raises awareness about virus prevention and treatment. HIV is a communicable disease that is highly infectious and harmful. HIV can be transmitted through the following:

- a) Unprotected sexual reproduction
- b) Sharing products, such as syringes, with HIV-infected people.
- c) Using or sharing unsterilized needles or lancets from the infected person.
- d) HIV can be transmitted from a mother to her child.

On the other hand, an ASHA should also give information and raise awareness about topics such as where the disease cannot be transmitted, such as kissing and touching, holding hands, dining together, mosquito bites, sharing clothes, bathing together, or through saliva, nose fluids, tears, urine, etc.

Since HIV is a highly infectious disease, it can easily be transmitted from one person to another. People who are at higher risk than others, mostly due to their lifestyle or occupation, are as follows:

1. Sex workers and people who often inject themselves with drugs
2. Men who engage in sexual activities with other men, migrant labourers who frequently visit commercial sexual workers, people with multiple sexual partners, HIV-infected mothers' infants, and people with other STIs
3. People who contract HIV are frequently at a higher risk of contracting tuberculosis, which can be highly lethal even after treatment.
4. HIV is considered to be preventable by using a condom and a clean syringe; however, there is no proof that HIV is 100 percent preventable. As a result, one

must be extremely cautious in his or her daily activities with friends and partners.

HIV testing and management facilities are available in the district hospital in every district capital; they are free of charge. HIV treatment is also free and accessible in government hospitals.

4.3.6 ASHA and her role in dealing with infectious diseases

Malaria is an infection caused by a parasite called *Plasmodium vivax*. This is transmitted by female mosquitoes (*Anopheles*). There are two types of malaria identified so far, which are *Vivax* and *Falciparum*. *Vivax* is considered to be less lethal, whereas *falciparum* malaria can cause damage to the brain, liver, and lungs and eventually lead to a fatal death.

The following are the malaria signs and symptoms:

- i) High fever, shivering, and sweating may occur on alternate days. However, in *Falciparum*, it may occur every day at a certain time with a *Falciparum*-type infection.
- ii) The infected patient may have continuous fever, nausea, and headaches.
- iii) Malaria becomes more lethal and has a more severe effect on children under five, pregnant women, or patients who have already received ASHA's immunisation.

ASHA plays a crucial role in immunisation and follow-up requirements. She should list pregnant women, new-born babies, and children up to two years old who are eligible for the required vaccines, as well as identify gaps between vaccines. On a regular basis, ASHA should visit families to assess their health needs and report any pregnant women or sick children in the area. She should make families aware of immunisation's importance, emphasising new-born babies and sick children. On a regular basis, ASHA should also discuss the importance of immunization with parents or other family members. If necessary, ASHA may accompany pregnant women or

children to a healthcare centre, ensuring proper care and attention for both mother and child. BCG and oral polio must be given to every newborn.

4.3.7 Encouraging children to come to Urban Health and Nutrition Day

ASHA's role consists of the following:

1. She must contact the relevant ANM and AWW. It is also important to have a group discussion about their functioning and look for any possible refuge.
2. It is the role of an ASHA to look into a marginalised section of society and ensure that no individuals or social groups are left out in the process.
3. Some children with disabilities may often feel left out from their peers; it is the duty of an ASHA to see their backs and support the mental well-being of such children.
4. Some areas have neither an ANM nor an Anganwadi centre or worker to take care of their health needs. As an immediate action to tackle the issue, a woman from the hamlet or slum can be included in the 'village health and sanitation committee' as a representative from the neglected sections. So that ASHA can play the role of the voice for the neglected community.
5. ASHA may also contribute to identifying children with special needs who are underserved.

4.3.8 Working Arrangements of ASHA

An ASHA's working hours may vary accordingly. However, she may be flexible in her working hours. She somehow acts like a nurse who would be ready to be called twenty-four-seven, but sometimes they can be quite free.

1. At the Community Health Centre: ASHA may visit the health centres regularly not only to seek help if any is needed but also to sharpen her abilities in her functioning and work. It may also broaden her field of knowledge.
2. Availability at Home: She may act as a depot holder at home, distributing essential medical treatment as per requirement.

3. At AWC: She will be attending the AWC on the day when immunology and ANC sessions are being organized. At least once or twice a week, she would organize health days for health IEC, rudimentary health checkups, and advice, including medicine and contraceptive dispensation.

4.3.9: The Role of ASHA in the Prevention and Management of Malaria

Through events such as home visits and other outreach programmes, ASHA must make people aware of malaria and how to prevent it. She must report the first symptoms and the required first aid kit. The locals must find ways to improve their living environment and indulge more in cleanliness. ASHA must work together with other local bodies and women's groups to create awareness about public sanitation. All water storage areas must be properly covered, and no ponds or fish tanks must remain open, especially at night. Spraying insecticides may also help. If any person has been suffering from a fever for less than a week, she may consult with the concerned ASHA. The ASHA may decide if a request for Rapid Diagnostic Test (RDT) and blood slide tests is essential for fever patients who live in malaria-prone areas. ASHA must make sure that such a test is conducted and oversee any follow-up medicinal treatment. If RDT is not positive, then the patient may undergo ASHA treatment. Beforehand, all patients with fever and headaches must take paracetamol.

However, if the RDT test is positive, taking either chloroquine or ACT drugs (depending on the instructions given by ASHA), followed by primaquine for further treatment, is essential. ASHA should register any medicines given out. She must also document every malaria case in her area and refer to records. If there is a pregnant woman suffering from malaria, it should be made known to the ASHA as soon as possible. ASHA could begin the treatment by administering chloroquine tablets or acting immediately, depending on the situation. Primaquine is not advisable to be given to a pregnant woman or an infant under one year old. The transportation of slides and obtaining the result of the test should be done effectively. The slides, which are collected by an ASHA, should be delivered to the subcentre as soon as possible. These slides will again be transported to the PHC lab in a more facilitated health clinic, which will normally last two weeks.

4.3.10 Role of ASHA in TB

Tuberculosis (TB) is a highly communicable bacterial disease caused by *Mycobacterium tuberculosis*, affecting around two million people in India. When an infected person coughs, sneezes, or drops saliva from a runny nose, the disease spreads. It can be easily spread in areas with poor house construction, unhealthy environments, and unhygienic living conditions. Malnourished individuals are at higher risk of contracting the disease, so proper food intake, a healthy lifestyle, and a clean environment can help protect against it. Suspecting TB is crucial, as it can turn fatal and require immediate treatment. Symptoms of pulmonary TB include coughs with blood spats, chest pain, even fevers, severe sweating at night, sudden weight loss, and sudden appetite loss even after medication. To treat and manage TB, TB may be examined through X-rays, particularly a sputum examination. Anti-TB drugs are essential for every patient, lasting 6 to 9 months, and may vary according to the patient.

In several countries, Directly Observed Treatment, Short Course (DOTS) is an ongoing treatment for TB. Patients should not stop treatment until it is fully completed. TB prevention requires BCG vaccination at birth, and ASHA must contribute to finding cases and arranging medical treatment. Proper health care and sanitation are essential for fighting TB. ASHA should have discussions with locals during home visits and outreach sessions; encourage older people, smokers, and those vulnerable to cough and other lung diseases to visit a doctor; and serve as a DOTS provider in her village.

Role of ASHA in the Treatment Phase

ASHA is a vital link between locals and healthcare departments in managing TB. Rural and marginalised communities receive the main treatment, Dose-Of-Treatment (DOTS). Treatment can last 6 to 9 months, and ASHA ensures patients continue their daily treatment. They must understand the adverse side effects of TB medicine and educate patients about them.

Proper nutrition and health supplements are essential for patients undergoing treatment. The family plays a significant role in the treatment process, and they should be advised to take precautions at home, especially for children, elders, or sick people

who are not immune to the disease. Proper hygienic care is also crucial for patients. For at least two months after therapy, patients should stay away from spouses, children, newborns, and the elderly. ASHA must regulate other family members and monitor for signs of TB. To prevent TB in small children, BCG vaccination is required at birth. The identity of a TB patient must be maintained by ASHA, and medical care must be performed without public knowledge. Precautions for anti-TB treatment among pregnant women include avoiding pregnancy during and 6 months after treatment, not taking contraceptive pills with DOTS, and not giving streptomycin in the first trimester of pregnancy.

4.3.11 ASHA Modular Training

ASHA's capacity development is critical to improving her job and processes. It is critical to provide the training with the information and skills necessary to achieve the scheme's goals and success. ASHA capacity development has been seen as a continuous process, and ASHA training may involve the following steps:

a) Induction training:

After selecting an ASHA, she may continue her training. An ASHA's training can be very effective because it functions as field-level training, which helps them enhance their capabilities and functions. The training may be completed in 23 days and may be extended up to a period of another 12 months, according to the performance of the ASHA. The process of this training is called induction training.

b) Training materials:

An ASHA's roles and functions may vary accordingly. As a result, her training materials may also vary from one person to another. The following items, such as a facilitator's manual, training aids, and ASHA reference materials, may be included in the training material: She would make every effort to maximise the potential of the resources at hand.

c) Recurrent retraining:

Following the initial training, this will last for approximately two days. Compared to the intro, this training will be more useful. It will include cooperative group work techniques, group discussions, and field visits. They will attempt to utilise the training resources at their disposal as efficiently as possible. The regular training may continue until the on-the-job training begins.

d) On-the-job training:

On-the-job training may include field visits such as paying home visits, conducting special outreach programmes, and seeing the needs of the locals in their areas. On-the-job training is considered to be the most effective method of training.

e) Continuing education and skill enhancement:

This function entails enhancing an ASHA's skills and workings. She may work with ANM and AWW in her area of interest. She may seek advice from the local non-government organisation and other local bodies on the effective functioning of government schemes.

f) National level:

In order to develop effective measures that should be taken in relation to other local organisations and non-governmental organisations in the affected areas, an ASHA would collaborate with the National Rural Health Mission and its technical support teams, as well as the Ministry's Training Division, at the national level.

g) State level:

In collaboration with the State Training Cell of the Directorate of Family Welfare, the State Institute of Health and Family Welfare (SIHFW) will review the training process, monitor progress, and work with ASHA to implement field-level improvement measures.

4.3.12 Performance-based incentives

ASHA, an honorary volunteer, would not receive any salary or honorarium but could be compensated with performance-based incentives for her time in various situations. These include training duration in terms of TA and DA, participating in monthly or bimonthly training, and prioritizing tasks under national programmes for health or social sector programmes with measurable outputs. Payment will be made at the venue of the training when ASHA attends regular sessions and meetings.

ASHAs should also be given monetary compensation for achieving key health-related activities and service outcomes within a village. The Untied Fund of Rs. 10,000 at the SC, jointly operated by the ANM and the Sarpanch, could be used as monetary compensation for achieving these processes. The exact package of processes would be determined at the state level, depending on supply-side constraints and what is feasible within the specified time period.

In addition to monetary compensation and group recognition and awards, non-monetary incentives like exposure visits and annual conventions can also be considered. A drug kit containing basic drugs should be given to ASHAs.

4.4 MAHILA AROGYA SAMITI (MAS)

The Mahila Arogya Samiti is composed of dedicated women who work towards the promotion of women's health and well-being. These women come from diverse backgrounds and have a range of skills and expertise, including healthcare professionals, social workers, community leaders, and volunteers. MAS acts as a key factor in improving the health, sanitation, and nutrition of vulnerable sections of society. MAS is a mission under the National Health Mission that envisions the role of upliftment in society, particularly for women and children belonging to marginalised groups. MAS may collaborate with ANM and ASHA to address the lack of medical assistance and nutrition, and it also tends to do so in conjunction with certain government schemes.

4.4.1 Vulnerability and its impact on health

A. Role of MAS in Convergence

MAS plays an important role in creating convergence in society. MAS may work with other local bodies, government schemes, and non-government organisations in society to reduce some barriers to public health. This may include the importance of a hygienic lifestyle, personal hygiene, and cleanliness in public places. There should be proper public toilets, and safe drinking water must be available in public areas for easy access for people. MAS may raise awareness about the essentiality of first aid kits such as ORS, paracetamol, safe drinking water, etc. MAS may collaborate with the community to bring about better changes in the area. Support from the community is always the key to the work's vitality and positive outcome.

MAS members may undertake the following steps to perform effectively:

1. She may regulate the problems related to safe drinking water, cleanliness of the areas, proper nutrition, safe lodging, and education, especially concerning children.
2. MAS may conduct public meetings and educate the locals on the importance of health and sanitation. She may collaborate with ANM and ASHA, as well as the public, to achieve a more effective outcome.
3. MAS may seek to make efficient use of community buildings like community centres or halls to raise awareness among the public.
4. MAS may advocate with the authorities of the concerned communities on the importance and need for community toilets, public drinking water, public-based dustbins, transportation, and proper health care.

B. Adverse effects of vulnerability on health

People living in urban areas often face hazards and health problems due to overpopulation and the crowding of buildings. The adverse effects on health issues are as follows:

1. There is often a lack of safe drinking water, improper disposal of waste, unhygienic toilets, and cleanliness in public places, all of which contribute to the deterioration of health in urban areas, especially in slum-dwelling areas.
2. In urban areas, there are often poor housing conditions; people often live in inappropriate buildings due to the need for housing. The bad condition of the building offers little protection against extreme heat, cold, pollution, traffic, accidents, theft, and sexual abuse. This can have a severe impact on the well-being of women and children, as they are more susceptible to all these negative outcomes.
3. Children and young women in such areas are more vulnerable to gender-based violence and other forms of sexual harassment because of the building's improper protection. When they sleep in open areas or insecure buildings, this can have negative effects.\
4. Due to their densely populated condition, it is difficult to maintain proper hygiene in urban areas. As a result, people living in those areas are more vulnerable to diseases such as typhoid, tuberculosis, diarrhoea, the common cold, etc.
5. In addition to various health hazards, people living in such miserable conditions are more susceptible to floods, earthquakes, droughts, cyclones, and other environmental hazards. It is the role of an MAS to look into the deteriorating living conditions as such and take measures and precautions in dealing with such vulnerable areas.

C. Role of MAS in Vulnerability Assessment and Mapping in Dense Areas

Having a focused target area and regulating up to 10–12 households for each MAS member in order to track the assessment and the living conditions of such areas. MAS may work together with an ASHA to check the health conditions of the locals, regulate any measures needed to be taken, and accompany follow-up programmes.

MAS may deal with the categorization of housing. The evaluation may be based on location, occupation, and the occupants' members. MAS may identify their specific health issues and take action if any treatments are required. MAS, in collaboration with ASHA, may address the issues of how effective measures can be taken and see a positive outcome. MAS may monitor the progress made in every evaluation. MAS may work together with local bodies in the concerned areas, like the departments of Women and Child Development (WCD), Public Health Engineering Department (PHED), Urban Development, etc., to create a more liveable environment, focusing on the health, sanitation, education, and security of the dwellers.

4.4.2 Formation of MAS: Objectives, Composition, and Process

A. Objectives of MAS

The major MAS objectives are:

1. To provide a platform for all sections of society, focusing more on the marginalised sections and tending to health-related issues, as well as the development of women in the community.
2. MAS may have a voice in society concerning the health issues of women and children, bringing out their lack of medical assistance and proper nutrition and working to overcome them.
3. MAS may raise awareness among the general public; they may discuss the importance of education, sanitation in the area, immunization, and proper nutrition care for lactating women and children.
4. MAS may work in order to make the most efficient use of untied funds and see to it that they are used according to the needs of the people.
5. MAS may collaborate with ASHA to improve community health; she may assist ASHA whenever possible.
6. MAS may form a community mechanism in the society in response to the needs of the society dealing with health-related issues and immunisation.
7. MAS may organize community-level services; she may act as a link between society and healthcare.

B. Composition of MAS

MASs should be established with 10–12 members, including 50–100 families, depending on the size of the slum or cluster. The group should have at least five members and a maximum of twenty. The MAS committee will consist of one member from each cluster of 10 to 20 houses. Each ASHA would be associated with two to five of these groups. A MAS may form a group to work toward creating a better environment for the dwellers. The members of the group would be guided by the ASHA and the ANM as well. The selection process is natural. However, there are certain characteristics that the members may possess. Such characteristics may include:

- a) A woman who has good leadership qualities may be a person who is concerned with the mental wellbeing of the community and is thoughtful and dutiful. She may be responsible in her roles and understand the importance of teamwork.
- b) In the formation of the group, it may be ensured that all sections of society are included so that no one feels left behind in the process.
- c) If the slum has a presence or those who used to be involved in the working of local bodies such as self-help groups, the Development of Women and Children in Urban Areas (DWCUA) group, the Neighbourhood Group under SJSRY, thrift, and credit groups. Such women would get involved in working with an MAS, including pregnant women and the weaker sections of society, due to their vast experience in the field.
- d) ASHA shall serve as MAS's member secretary.

MAS also has to interact with women from the slum areas, listening to their problems and finding any possible solutions. Such initial meetings may consist of:

- i) The team consisting of MAS, ASHA, and other local bodies may encourage slum women to visit Anganwadi's, participate in various vocational training programmes that are organised under government schemes, and participate in health melas and

other free health checkups. They should also utilise the benefits received under the government scheme.

ii) The MAS should also motivate the slum dwellers to focus on personal hygiene as much as possible. They can get vitamins and iron that are distributed by ASHA. The slum dwellers must be aware of the importance of cleanliness in their surroundings and how it is related to their personal health.

iii) MAS must pave the way by instilling in the minds of the people the importance of having a clean and safe community, which in turn contributes greatly to the mental well-being of their children as well as themselves.

iv) It is seen that those initial meetings are mainly attended by the slums because of their expectation of receiving some material benefits. MAS may occasionally provide ORS, paracetamol, and some health education pamphlets.

C. Procedure for MAS creation

ASHA and the ASHA facilitator play an important role in the procedure of MAS creation. There are 4 steps, which are given below.

Step 1: Forming a team at the slum level

To mobilise the community, first, a team has to be formed at the slum level. For selecting the MAS members, the ASHA facilitators, with the support of NGO AWW and ANM, must form or establish a team. MAS is supervised by ASHA.

Step 2: First meetings with women from slums

To understand the health conditions of the community and to improve the health of men and women in the slums, the team conducts a number of meetings with the slum group and those who attend Anganwadi and training programmes.

Step 3: Finding engaged and dedicated women in the community

This is an important step in the formation of MAS. In a community of slums, finding a dedicated woman is very difficult. To find dedicated women, ASHA conducted a meeting several times to discuss issues related to the community. Those who attend the meeting regularly are identified as interested, and they are selected as MAS members.

Step 4: Establishing MAS and choosing its office holder

After selecting the women for MAS, the newly minted members are recorded in the registration sheet as official members of MAS. ASHA facilitates the selection of the chairperson, and ASHA is the member secretary in the MAS group.

D. Roles and Responsibilities of Chairman of MAS

Following are the roles and responsibilities of chairman at MAS.

1. The chairman must be able to hold the initial MAS meetings on a regular basis, at least once a month.
2. The chairman must ensure that effective discussion can be held in such meetings among the members.
3. The chairman must be able to raise community-based awareness about the importance of health and sanitation.
4. He must ensure proper management of MAS registrations and records on occasion, such as during special outreach programs and home visits.
5. The chairman must find ways to work together with the local bodies, NGOs in the local areas, and the concerned government departments.
6. The chairman must ensure the mental health of MAS members.

In every meeting of MAS, the meetings must regulate the records of their past actions, review positive and negative effects, and see if any progress is made. Such reviews are critical for MAS's future functionality. An action plan for generating awareness about the importance of health and sanitation must be prepared. MAS must

see any positive change in the well-being of the community and examine if any progress is needed in certain fields.

The discussion of MAS must include issues such as focusing on the basic needs of slum dwellers and the problems related to health care facilities and sanitation. MAS must try to point out the main causes of disease or disease outbreaks in certain areas, especially concerning public hygiene. Appropriate measures must be undertaken in order to overcome such diseases and other health hazards in the environment. Discussions must be conducted at the village level by NGOs or local bodies. This could lead to more favourable results. MAS may seek out anyone who can assist them in achieving their goals. A time limitation must be set in order to regulate the function of MAS and their time.

4.4.3 An overview of MAS's major activities

A. Ensuring and encouraging access to crucial public services

MAS plays a critical role in enabling community access to essential public services including health, water, sanitation, nutrition, and education. It is necessary to identify disadvantaged and vulnerable populations and avoid their exclusion from accessing services. Regular monitoring of health care and other public services is important to detect gaps or difficulties in service delivery, which will be addressed via Community Health planning.

1. Monitoring the Anganwadi services

Anganwadi centres are vital community-level outposts for health, nutrition, early learning, and other women and child-related services. They may significantly decrease and manage malnutrition in children. The MAS shall monitor Anganwadi operations, including analysing the regular supply of services, especially supplemental nutrition, and any gaps in the past months.

2. Education

Improvements in education lead to better health outcomes and the right for all children, especially girls, to access schools. In slums, many children, especially girls, are forced to drop out due to various compulsions. MAS members must ensure the protection of children's education rights. Monitoring the regularity of teachers and mid-day meal in schools is crucial for ensuring nutrition, social equality, and student attendance. MAS should monitor school dropouts, teacher absenteeism, and the implementation of mid-day meal menus.

3. Drinking water, sanitation

Clean drinking water, proper sanitation facilities, and trash removal are crucial for community health. Hand pumps, public stand posts, and piped water are typical sources in slums, however many are non-functional owing to inadequate drainage, leading to waterborne infections. MAS should check the state of clean drinking water, sanitation, and hygiene to avoid infections like diarrhoea and malaria.

4. Status of Women

MAS plays a crucial role in identifying and responding to occurrences of gender-based violence in the slums and surrounding areas. Women may be healthy only when they are capable of living their lives without abuse and harassment, both at home and in the community.

5. Health services and diseases

MAS participates a lot in achieving a clean and healthy society. She may help in identifying disease outbreaks in her concerned areas and monitoring measures taken in order to tackle such issues. The work of MAS may include the following:

a) Urban Health and Nutrition Day

Such days are mostly organised once a month. On such occasions, MAS may work together with an ASHA to identify the disease of the people by conducting tests and

giving out treatments that are available. MAS may educate the public on the importance of prevention, such as securing clean surroundings, personal hygiene, regular health checkups, immunisation, and the importance of using mosquito nets.

b) Special Outreach Sessions

MAS may also conduct special outreach sessions in rural areas where health centres are not easily available and transportation is a problem. MAS may equip herself with the available health care kits and pamphlets about education on health and cleanliness. Special outreach sessions are usually fruitful, not only for the locals but also for the MAS.

c) Availability of drugs with the ASHAs

An ASHA may be equipped with certain medical treatments and a first aid kit. This is essential not only for the outreach sessions but also for emergency use in cases of burns, accidents, diarrhoea, fever, etc.

d) Deliveries and referral transport

MAS may instruct the people on the importance of institutional deliveries. However, there are certain areas where medical facilities are not easily available; on such occasions, MAS may work together with ANM to achieve a successful home delivery. MAS may be responsible for referring patients and conducting follow-up sessions.

e) Diseases

MAS may regulate any disease outbreak and regulate the measures for prevention. She may ensure the safety measures taken.

f) Use of mosquito nets

It is the duty of an MAS to ensure that every family sleeps under a mosquito net; this is necessary for the prevention of not only malaria but also other vector-borne diseases.

B. Organizing Local Collective Action for Health Promotion

MAS plays an important role in bringing the community together for the development of health and sanitation; it creates awareness and helps educate the general public. The following is an example of MAS's public health work:

- i) The MAS takes important measures to achieve its goal of creating a healthy and safe living environment through cleanliness drives. Various non-government organisations and volunteers may participate in such drives.
- ii) MAS may take measures to control vector-borne diseases, especially malaria. MAS may raise awareness about malaria prevention, such as using mosquito nets at night, covering water storage, maintaining cleanliness in surrounding areas, and so on. MAS also participates in controlling communicable diseases such as TB, AIDS, etc.
- iii) "Sanitation Mapping" has been organised by an MAS in order to maintain cleanliness in the concerned areas. They should regulate any actions taken and track their progress.
- iv) The importance of safe drinking water should be made known to the public. In cases of fever or other disease, it is always recommended to drink boiled water. Safe drinking water in public areas should be available.
- v) By undertaking a survey of those who can assess safe drinking water in areas where the access rate is low, MAS may take necessary measures.
- vi) MAS should deal with proper waste disposal, management, and treatment.
- vii) MAS should address issues such as improving environmental health, safe drinking water availability, sanitation, and proper housing.
- viii) In order to function more effectively in her areas of concern, MAS may collaborate with the community.

C. Monitoring of healthcare facilities by the community

The MAS plays an important role in monitoring the processes of public health facilities. The processes consist of the following:

- i) Filling out score cards for public health facilities: MAS members would visit the nearby U-PHCs or other health facilities and interact with service users to fully understand the issues related to service delivery and other treatments they could offer. This information is important when filling out the available score cards for enriching health facilities.
- ii) MAS may organise important functions and use those platforms to highlight certain barriers to issues relating to health facilities in the local area.
- iii) Monitoring important schemes such as the Rashtriya Swasthya Bima Yojana (RSBY) and relations with the public sector, as well as highlighting problems that may arise.

D. Maintenance of records

The maintenance of records is an essential aspect of the MAS. It is critical to maintain comprehensive records that include details about the health programs conducted, the number of births and deaths, meetings, and the type of service provided. The maintenance of records also involves keeping track of the training and capacity-building initiatives conducted for the members of the MAS. This could include the activity record and financial records.

a. Activity records

- 1. Meeting record: meeting record of every meeting held by MAS, which includes attendance records and records of minutes of meetings. Every detail of the meeting record, agenda, and financial decisions of MAS should be recorded in this register.
- 2. Public service monitoring tool and register: Mas uses the Public Service Monitoring Tool and register to determine the status of the availability of vital

public services throughout the preceding month. MAS members use this tool to fill out the Public Monitoring Register and develop their action plans during monthly meetings.

3. Death register: the maintenance of a death register of all the deaths within the community provides valuable data for understanding the health trends and challenges faced by women. By meticulously recording and analyzing this data, the MAS can effectively strategize interventions and allocate resources.
4. Birth register: Maintenance of the birth register enables the MAS to identify high-risk pregnancies, track immunisation coverage, and monitor the prevalence of maternal and child health issues. The MAS's maintenance of birth registers also promotes accountability, transparency, and data-driven decision-making in health care service delivery.

b. Financial records

1. Cash book: The MAS records every detail of the expenditures made during the month. It not only records all cash transactions in a systematic manner, but it also helps in monitoring the organization's financial health. Proper maintenance of the cash book ensures transparency and accuracy in financial reporting.
2. Bank pass book: MAS is responsible for the maintenance of a bank passbook to ensure proper financial management and transparency in these operations. It allows the members of the Samiti to track the flow of funds, monitor expenditures, and ensure the financial resources are utilised effectively.
3. Utilization certificate: MAS plays a crucial role in ensuring the community's wellbeing and health. It is essential to maintain detailed and accurate utilisation certificates to track the effective allocation of resources and funds. A well-documented utilisation certificate can also facilitate future funding opportunities and partnerships.
4. MAS statement of expenditure: This record would assist the MAS in providing an account of its operations and expenditures upon request; it will also be utilised by the ASHA facilitator to send the yearly SOE and UCs created by MAS via UPHC/district PMU.

E. Addition to the planning process

The following points are included in the planning process of an MAS:

1. Registering causes of death, such as whether it is a communicable or non-communicable disease, is important for an MAS to see in which field to stress more and what action is needed to be taken according to the spread of the disease.
2. Understanding the disease's cause and nature would assist the MAS in regulating the specific disease in her area of concern. For example, if malaria causes more deaths, an MAS can target the malaria case study and take preventive measures beforehand.
3. An experienced MAS can function more effectively in her work because of her familiarity with the fields, and she will also be able to act more accordingly compared to a newly appointed one.
4. Group discussions with the community, local bodies, NGOs, ANM, and ASHA in the relevant areas are very productive for an MAS to function.
5. Having a health resource map is very helpful for an MAS in carrying out the necessary measures.

4.4.4 Principles of Utilisation and Untied Fund

A. MAS and NUHM untied funds

Following are the relationships between MAS and NUHM:

1. NHUM provides MAS Rs. 5,000 as an annual untied fund. This fund may be used for the development of vulnerable areas and for monitoring health issues in such areas.

2. The untied fund is deposited in the bank account of MAS. The funding can be used for arranging and holding initial meetings that will focus on sanitation, health, and the needs of localities.
3. The MAS may use the untied funds to register pregnant women and newborn babies and manage diseases in certain areas. In managing such issues, MAS must ensure that she covers all the areas in her sections and that no one is left behind.
4. The untied fund may also be used for home visits and organising special outreach sessions.
5. The MAS may be very careful in the management of the funds, but she must ensure that it all goes directly where it should.
6. The MAS is free to use the funds for the emergency needs of the locals, especially concerning their health. However, MAS may not divert the fund to managing other facilities.
7. MAS may focus on the fields of nutrition, proper education, the need for sanitation, environmental protection, and public health matters in arranging the funds.

B. Utilisation of the allotted funds

The utilisation of the allotted funds must be done in such a way that they reach every section of society. Although it must be distributed equally, more focus should be given to the vulnerable and marginalised sections of society. The fund should be used to provide relief to needy people such as poor and destitute women, sick and elderly people, people with special needs, and slum dwellers. The fund should focus only where it is needed. MAS may tend to regulate whether the money is used in the correct manner or not. The fund should not be diverted to other government activities.

UPHC or concerned authorities may advise the MAS on fund distribution. As they are more familiar with the respective areas, they are considered to be able to make suggestions. Third parties should not be involved in the allocation of untied funds. The use and management of untied funds must be fair and transparent. The MAS can examine the estimated budget and outcome. The untied funds may also act as emergency money, which can be utilised when there is a shortage of money in the workings of MAS.

4.4.5 Essential for the accomplishment of MAS's goals

The following are necessary for the accomplishment of MAS's goals:

1. Sanitation drives in the community, as well as not neglecting the slum areas, would aid in achieving a hygienic society. Proper management of household waste disposal is crucial. To do this, it is important to train one member from each family belonging to different groups. Every family member must be trained in the importance of nurturing a pregnant woman and new-born babies. A lactating mother must not be neglected. Diarrhoea is always a common symptom in rural areas; it is mainly caused by unhygienic living conditions. As a result, sanitation measures are required in rural areas. The importance of safe drinking water and the necessity for sanitation must be spearheaded among the public.
2. Educating the public on the importance of nourishment for pregnant women and breastfeeding. Immunisation must be done in consultation with health care workers. Every parent must understand the importance of immunization. Thus, proper immunisation must be taken for new-born babies and children. MAS must educate the public on the importance of TT injections and IFA tablets for expectant mothers. MAS may educate young women about the importance of nutritional supplements during pregnancy and postpartum care, but they must also be made aware of the importance of immunisation and other care available in health centres for their newborn. Giving training to mothers for the care of

their newborn babies, assigning them measures they must follow, and ensuring the mental well-being of such women and their children is essential for MAS.

3. MAS will inform the ASHA, ANM, and AWW at regular intervals and see if any measures can be taken. MAS may track down pregnant women and sick children to ensure that they receive early treatment. MAS may work together with Anganwadi workers to identify lactating mothers and malnourished children. They may ensure that proper treatments are given and may conduct follow-up sessions as required. MAS may function effectively in slum areas, dealing mainly with malnourished women and children who are not able to afford medical care by giving them the necessary support in collaboration with ANM and ASHA. Health and educational camps, free checkups, health melas, etc. are to be attended by lactating mothers. This may be conducted not only in the concerned areas but also in the slum areas. Rural people often hesitate to consult doctors with their early symptoms; thus, the disease they are contracting would often lead to a worsening condition. Thus, it is necessary to motivate those people to visit health care centres for regular checkups.
4. In collaboration with ASHA and ANM, MAS would conduct a variety of outreach sessions, home visits, health melas, and free check-ups. Such activities are critical to the functioning of the MAS. MAS may conduct as many meetings as possible and record their activities. MAS may keep records on the occurrence of diseases, births, and deaths.

4.5 Conclusion

Healthcare workers play a vital role in the implementation and success of the National Urban Health Mission. They are the main heroes who provide essential healthcare services to the urban population, often in difficult and overlooked settings. The importance of healthcare workers under NUHM cannot be overstated. They are responsible for providing a wide range of healthcare services, including preventive, promotional, healing, and rehabilitative services. These dedicated professionals work hard to ensure that urban areas have access to great healthcare, despite all the obstacles

they may face. In addition to providing direct patient care, healthcare workers at NUHM also play a vital role in community outreach and instruction. They work to raise awareness about health problems, encourage healthy habits, and ensure that people and families have the information they need to make informed decisions about their health. Moreover, healthcare workers under NUHM play an important role in closing the gap between urban areas and healthcare centres. They serve as advocates for the neglected, trying to ensure that everyone has fair access to healthcare services, regardless of their financial position or background. Overall, healthcare workers under NUHM are critical to providing complete and fair healthcare in urban areas. Their commitment, kindness, and skill are essential in improving the health and well-being of urban populations.

CHAPTER V

RESULTS AND DISCUSSION

5.1 Introduction:

The preceding chapter provides a close evaluation of the prescribed roles and functions of healthcare workers, including Auxiliary Nurse Midwives (ANM), Accredited Social Health Activists (ASHA), and Mahila Aarogya Samitis (MAS) according to NUHM guidelines. It lays emphasis on their pivotal role within the community within the community and their critical contributions to the implementation and success of the National Urban Health Mission (NUHM).

This chapter presents and delineates the findings derived from the field study and observation reports, which provide a comprehensive analysis of questionnaires administered to NUHM beneficiaries, as well as structured interview questionnaires for healthcare workers in Aizawl district. Central to the study objectives are the investigation of origins and implementation of NUHM in Aizawl District, assessment of the infrastructural facilities at Urban Primary Health Centres, evaluation the roles of healthcare workers such as ANMs, ASHAs, and MAS under the NUHM framework, identification the shortcomings and challenges faced by the respondent beneficiaries, and presentation of befitting suggestions to enhance the effectiveness of the National Urban Health Mission. The questionnaires have been specifically designed to achieve these objectives.

The data were analysed using the Statistical Package for the Social Sciences (SPSS), generating descriptive statistics, percentages, and statistical charts. The study used a purposive sampling approach to select 300 beneficiaries from the large population of Urban Primary Health Centres (UPHCs) in Aizawl district. The selected participants were knowledgeable and literate regarding the advantages of UPHCs, which guaranteed that they provided insightful responses. The UPHC workforce is composed of a variety of groups, including Auxiliary Nurse Midwives, Accredited Social Health Activists, and Mahila Arogya Samiti members. Consequently, a quota sampling technique was used to select 100 healthcare workers.

5.2 Field study report of NUHM UPHCs in Aizawl, Mizoram

As discussed above, the assessment of NUHM implementation in Mizoram entails field visits in all UPHCs under Aizawl District located at Chawlhmun, Zemabawk, Hlimen, Lawipu, and Sihphir for the purpose of a comprehensive study. During these visits, meticulous observations were made across the facilities. Such field observations are crucial, as they offer valuable insights into the operational dynamics of the healthcare setting and allow for a thorough understanding of the physical infrastructure of the buildings. The field study was carefully observed in accordance with the India Public Health Standard (IPHS) which was formulated in 2022. These guidelines serve as a benchmark for the minimum requirements that UPHC must meet, it also brings uniformity in evaluating all the health care services across different regions. Moreover, the guidelines are also aligned with Donabedian model covering the structure, process and outcome (Donabedian, A 2005)¹⁰¹. It also aligns with public health goals including National Health Mission and Sustainable development goals. By observing these standards, the healthcare services can contribute in achieving national and international objectives.

Key components of the IPHS 2022 guidelines for UPHCs:

1. Infrastructure requirements:

- a) Location: It should be located within urban slum areas with easily accessible and visible area with good road connectivity. It should have high boundary wall and space for future expansion.
- b) Building: It should have a space to accommodate 50-60 patients per day. It should have waiting area provided with fan, drinking water and separate toilets. There should be separate room for immunization, consultation room (minimum 12sqm), counselling room, clinical/laboratory, medical imaging, dressing/ injection/emergency room, minor OT, pharmacy/drug dispensing counter (minimum 15sqm), IPD ward/bed 6 beds, health and wellness room (18-20) persons, labor room (15x15 225) sqm, Asha room and store room oxygen support.

¹⁰¹ Donabedian, A. (2005). Evaluating the Quality of Medical Care. *Milbank Quarterly*, 83(4), 691–729. <https://doi.org/10.1111/j.1468-0009.2005.00397.x>

- c) **Signage:** Display of layout facilities, safety precautions, hazard sign, fire exit plan, parking signs, disaster and emergency preparedness, fire safety, environment friendly features, non-skid & non slippery areas.

2. *Waste management:*

It should follow bio waste management rules (BMW), safe disposal of needles, syringes and other hazardous waste, construction of deep burial pit, sharp pit, placenta pit. For general waste disposal, solid waste management rules is followed. For liquid waste, a separate drainage system for effluent treatment plan (ETP) must be implemented.

3. *Human Resource Requirements:*

- a) **Staff:** the required staff are 1 Medical officer (MBBS), 1 pharmacist, 1 Lab technician, 2 Staff Nurses, 2 ANMs for outreach activities, 1 urban Asha per 1000-2500 population and 1 multi-tasking worker for cleaning and maintenance.
- b) **Training & meetings:** Regular training for staff such as refresher training on urban health challenges, skill-based training for Asha and paramedics, training for lab is a primary requirement.
- c) **Technicians and other paramedics.** A monthly review meeting at the facility and family planning, chaired by MO and ULB meeting once in a month must be held.

4. *Essential Service Provided:*

- a) **Maternal and Child Health services:** this includes antenatal care, post-natal care, newborn care and immunization.
- b) **Family planning services:** this includes counselling on education, contraceptive
- c) **Non-Communicable disease:** NCD screening and early detection of diabetes, hypertension, cardiovascular diseases and cancer (Oral, breast, cervical)
- d) **Communicable disease Prevention:** diagnosis and treatment of diseases like Malaria, TB, HIV, Dengue and other vector borne diseases.

- 5. *Drugs and Equipment:*** the guidelines provide a list of the required drugs and equipment for UPHC.

6. **Laboratory and diagnostics services:** the facility should have basic lab diagnostic test for blood glucose, malaria, HIV, urine test and other basic screenings.
7. **Community Outreach services:** Urban Asha, ANM should focus on health promotion in the community and organizing health programmers in schools and UHND.
8. **Quality assurance and monitoring services:** the facility should have monthly review meetings and audits to access service quality Moreover, patient feedback system must be integrated to enhance the location and identification of the gaps and ensure patients satisfaction. It should also have Grievance redressal mechanism to address patients complaints and feedback.

In tandem with the above IPHS Standard requirements that was designated for all UPHC, the following UPHCs in Aizawl district are examined appropriately to evaluate their quality and help in the better implementation of NUHM. The field based observations and assessment on -infrastructure, waste management, human resource management, essential services, drugs and equipment's, laboratory & diagnostic center, community outreach and quality assurance are given below:

A. ITI UPHC:

The Urban Health Centre in ITI locality was established under the Reproductive and Child Health Programme in 2004. It is located in the eastern part of Aizawl City. The state government procured the loan from NABARD to construct the UHC building and staff quarters (25 no.). The state spent Rs. 127.50 lakhs and Rs. 339.06 lakhs on the two projects, respectively. In total, 28,535 people and 5,829 households are covered by the UHC.¹⁰² According to the 2011 census, the UHC covers six wards. There were five Ward numbers: 33, 34, 35, 36, 37 and 41. In 2014-2015, the UPHC building underwent renovations and upgrades, as permitted by the Government of India.

¹⁰²NATIONAL URBAN HEALTH MISSION (NUHM). Health & Family Welfare Department. Retrieved April 4, 13 C.E., from <https://health.mizoram.gov.in/page/urban-health-mission>

Figure 5.1: ITI UPHC



Picture credit: Laltleipuia, field survey 2023 December

Table 5.1: Number of population ITI UPHC

Sl.no	Locality	Ward no.	No. of House	Total Population	Total Male	Total Female
1	Bethlehem	33	977	4,846	2,354	2,492
2	Bethlehem Vengthlang	34	1,460	7,467	3,648	3,819
3	College Veng	35	611	2,904	1,398	1,506
4	ITI Veng	36	899	4,440	2,197	2,243
5	Venghlui	37	1,034	4,744	2,359	2,385
6	Salem Veng	41	845	4,134	2,016	2,118
TOTAL			5826	28,535	13,972	14,563

Source: Field Survey, 2023 December

The provided table 5.1 presents the population statistics for six localities within the ITI UPHC (Urban Primary Health Centre) area in Mizoram, India. The data includes the locality name, ward number, number of houses, total population, total male population, and total female population. According to the information given, the total population across these six localities is 28,535, with 13,972 males and 14,563 females. The largest locality is Bethlehem Vengthlang, which has a population of 7,467, comprising 3,648 males and 3,819 females, and 1,460 houses. Venghlui is the second largest locality, with a population of 4,744, 2,359 males, 2,385 females, and 1,034 houses. College Veng is the smallest locality, with a population of 2,904, 1,398 males, 1,506 females, and 611 houses. These population figures provide valuable insights into the demographic composition of the ITI UPHC area.

1. Infrastructure

a) Location

The facility is strategically situated in the ITI locality, offering convenient access for adjacent neighbourhoods and excellent road connectivity, including a designated parking area. Its elevated position not only affords a scenic vista but also effectively diminishes noise pollution. Additionally, the premises are safeguarded by a boundary wall and wire fencing encircling the building. Furthermore, the architectural design of the facility is embellished in the colours associated with the Ayushman Bharat theme which is recommended by IPHS guidelines 2022 as shown in figure 5.1.

Figure 5.2: Parking areas, compound and boundary wall



Picture credit: Laltleipuia, field survey 2023 December

b) Building

The facility accommodates a total of six beds, with three designated for male patients and three for female patients as shown in figure 5.3. Due to the increased demand for delivery services from the local community, there is a pressing need to expand capacity. In terms of referral services, the facility lacks its own transportation and often compelled to hire commercial vehicles for patient transfer. Although there is a waiting area, it is insufficient to accommodate more than 40 patients.

Figure 5.3: IPD Beds male and female



Picture credit: Laltleipuia, field survey 2023 December

c) Signage

The facility prominently displays a range of signage both inside and outside, including information on fire safety, disaster management emergency exit, Kayakalp, health awareness, and guidelines for acceptable and unacceptable practices which is illustrated in figure 5.4. The facility is provisioned four public toilets, along with two drinking water coolers and two wash basins designated for hand washing purposes.

Figure 5.4: Signage, toilets, water cooler and hand washing basin



Picture credit: Laltleipuia, field survey 2023 December

1. Waste management

Regarding waste management, the facility complies with established solid waste management regulations, providing separate BMW dustbins as recommended by the Internal Performance Assessment (IPA) as shown in figure 5.5. Moreover, it features a dedicated drainage system for liquid waste and a deep burial pit located in proximity to the facility for effective disposal.

Figure 5.5: Dustbins



Picture credit: Lattleipua, field survey 2023 December

2. Human resource management

- a) **Staff structure:** The facility has 2 medical officers one from NHM and another attached from Zoram Medical College (ZMC), 3 staff nurse, 2 ANM, 2 Group D, 1 accounts clerk, 2 lab technicians and 1 Pharmacist. 8 MAS group and 16 ASHA workers are under ITI UPHC

3. Essential service provided

The standardized outpatient department (OPD) hours are from 9 AM to 4 PM. However, the Medical Officer insinuated the flexibility of this schedule. Specialist physicians pay weekly visit once which normally fall in the weekdays. The availability of doctors unfailingly instigates an unprecedented surge in number of OPD patients from 50 to 100. Among all UPHCs, the facility reports the highest number of OPD visits, totalling 6,875, during the year 2023-24. Non-communicable disease (NCD) screenings are conducted for

all patients aged 30 and above, encompassing assessments such as blood pressure monitoring, tuberculosis testing, blood sugar evaluations, haemoglobin testing, and other blood analyses.

Figure 5.6: Labor room, yoga room, dressing room, isolation ward, general ward



Picture credit: Laltleipuia, field survey 2023 December

4. Drugs and equipment

The Department of Health & family Welfare is responsible for supplying drugs to UPHC. The supply is procured through open tenders. Central Medical Store (CMS), Zemabawk also manages the distribution of drugs to UPHC. Despite the involvement of such dominant agencies, statements reporting the lack of emergency medical equipment is preponderant, thus purchase are frequently made from another medical store. Moreover, the drug supplies are most often not balanced, some are many and some are less.

5. Laboratory and diagnostic centre

The facility has a laboratory room which provides services for basic lab test including urine re (albumin), blood sugar, blood group, haemoglobin, scrub typhus, typhoid, H. Pylori (ulcer), dengue, hepatitis B&C, HIV, VDRL/syphilis, malaria and Tb. These lab tests are standard according to IPHS guidelines.

- 6. Community outreach:** ASHA's outreach program entails beneficial communal services, such as visitation of pregnant women and counselling on birth preparedness. It primarily endeavours to motivate women to give birth in hospitals and bring children to clinic for immunization. One priority of ASHA is its cooperation with village health and sanitation committee (VHSC) for village health plan. This enables ASHA and ANM to work with the Anganwadi centres efficiently. The centres then conducted UNHD where women and children are educated about infectious illnesses, health issues and contraception.

7. Quality assurance and monitoring services

The government offers various training programs for Accredited Social Health Activists (ASHA) workers, as well as for staff nurses and Auxiliary Nurse Midwives (ANMs), who are in charge of executing clinical operations. Urban Local Body meetings are held either at the facility or at the local council house, while review meetings are convened at the facility under the leadership of the Medical Officer. The meeting entails a deliberation of patients' feedback which is considered the min determinants for workers' performances and services of workers. The facility is equipped with solar inverters, which prove to be highly beneficial in ensuring uninterrupted power supply for operational duties. However, there is a want of dedicated spaces for ASHA workers and counselling, and the breastfeeding room is in dire need of significant improvements.

B. CHAWLHHMUN UPHC

Chawlhhmun UHC was established in 2014 under the RCH Programme as a social addressal of low-income areas, and located in the western part of Aizawl City. During the formulation of the NUHM Plan, an initiation of convergence with urban local bodies took place, beside the frequent joint committee meetings with Health Department delegates. In 2014-2015, construction of UPHC was already underway. The actual period for completion was substantially lesser than estimated.

Figure 5.7: Chawlhhmun UPHC



Picture credit: Laltleipuia, field survey 2023 December

Table 5.2: Number of Population Chawlhhmun UPHC

Sl.no	Locality	Ward no.	No. of House	Total Population	Total Male	Total Female
1	Zonuam	66	556	2,647	1,330	1,317
2	Tanhiril	70	566	2,930	1,417	1,513
3	Sakawrtuichhun	71	284	1,425	755	670
4	Rangvamual	76	331	1,342	645	697

5	Chawlhmun	77	634	3,092	1,597	1,495
TOTAL			2371	11,436	5,744	5,692

Source: Field survey, 2023 December

According to the table 5.2 given above, the total population across these five localities is 11,436, with 5,744 males and 5,692 females. The largest locality is Chawlhmun, which has a population of 3,092 comprising 1597 males and 1495 females, and 634 houses. Tanhril is the second largest locality, with a population of 2930 where 1417 males, 1513 females, and 70 houses. Zonuam is the smallest locality, with a population of 2647 where 1330 males, 1317 females, and 66 houses. These population figures provide valuable insights into the demographic composition of the Chawlhmun UPHC area.

1. Infrastructure

a) Location:

The facility is located in the Chawlhmun area. Although the site is commendable for its easy accessibility, the routes are exceedingly narrow with neither parking space nor a designated turning point. Additionally, the perimeter has a dearth of high boundary wall which defies the stipulations outlined in the IPHS guidelines. The structure is adorned with colours representative of the Ayushman Bharat theme as shown in figure 5.6. It is a two-story structure, with the first floor comprising the OPD Medical Officer's room, a pharmacy, an emergency casualty room, and a waiting area.

Figure 5.8: Building structure of UPHC Chawlhmun



Picture credit: Laltleipua, field survey 2023 December

b) Building:

The facility is equipped with a dressing room, an infection control room, an emergency room, a pharmacy with an integrated drug dispensing counter, a male ward and store room as shown in figure 5.9. The Medical Officer's (MO) room simultaneously operates as a counselling and consultation space. However, the number of rooms is relatively lower in number compared to other UPHCs. At the time of the visit, the third floor was still under construction. Upon its completion, it is projected that the facility will fulfill the requisite room capacity in alignment with the IPHS guidelines of 2022. Currently, the facility accommodates a total of five inpatient (IPD) beds.

Figure 5.9: IPD beds, MO room, drug dispensing counter, accounts clerk room



Picture credit: Laltleipuia, field survey, 2023 December

c) Signage:

The facility has a signage display of fire exit, citizen charter, health hazards, danger, dos and don'ts and cleanliness instructions as shown in figure 5.10. The signages are chiefly positioned outside the room, providing guidance for individuals in the vicinity. However, it is imperative that they also be strategically placed inside the room to effectively aid patients in the ward. More signage such as fire safety and emergency exit, disaster management protocol should be displayed inside and outside the building.

Figure 5.10: Danger, fire exit, citizens charter



Picture credit: Laltleipuia, field survey 2023 December

2. Waste management

The facility segregates liquid and solid waste in accordance with the IPHS guidelines. Bio-Medical Waste (BMW) bins are provided in each room. In addition, a deep burial pit, placenta pit, and sharp waste pit have been constructed outside the building, following the specifications outlined in the IPHS guidelines 2022, as depicted in Figure 5.11. Other attachments to the facility include two public toilets, a water cooler and two hand washing basins which are located outside the waiting area and within the casualty unit.

Figure 5.11: Deep burial pit, wash basins, toilets, water cooler & bmw dustbin



Picture credit: Laltleipua, field survey 2023 December

3. Staff

The facility has one MO, three staff nurses, one ANM/health worker, one pharmacist, one lab technician, one account clerk and three group D. Under Chawlhmun UPHC there are twelve ASHA and eight MAS groups.

4. Essential service provided

Services such as child vaccination and immunization are administered by the facility and other various health camps. Screening for non-communicable diseases (NCDs) is systematically conducted, particularly for individuals aged 30 and above. Counselling on family planning and the dissemination of

contraceptive education are facilitated by the Medical Officer (MO) within the facility, while the Auxiliary Nurse Midwife (ANM) undertakes these activities during outreach initiatives. The prevention of communicable diseases, including HIV, tuberculosis, and sexually transmitted infections (STIs), is actively addressed through outreach programs led by ASHA workers and ANMs.

5. Drugs and equipment

As previously enunciated, the Central Medical Store in Zemabawk serves as the principal agency responsible for the procurement and distribution of medications and medical equipment. According to the healthcare provider's statement, the supply of medications is deemed sufficient and is managed with due diligence.

6. Laboratory and diagnostic centre

The facility has an efficient laboratory with a wide range of services and tests afforded to the general public, such as scrub typhus, typhoid, dengue, haemoglobin, hepatitis B&C, HIV, TB, VDRL/syphilis, uric acid, urine r/e & s/p, RBS, malaria (ICT), malaria (b/s), SGOT, SGPT, creatinine, H.Pylori, pregnancy test, AFB, typhi IgM.IgG, uric acid, widal, CRP, blood sugar and blood group test. These are the essential requirement indicated by IPHS guidelines.

7. Community outreach

UHND has been frequently conducted in all Anganwadi centre under Chawlhmun UPHC by ANM and ASHA workers as shown in figure 5.12. Awareness on health subjects and advice on family planning, nutrition and contraception is being done in every Anganwadi centre by ANM and ASHA workers. Other services including registration of pregnancies, prenatal care for pregnant women, regular vaccination for children, identification of malnourished children, IFA (iron and folic acid) supplementation and deworming for teenagers. NUHM offers just Rs 200 support for UHND Anganwadi visit, this amount of money cannot be employed for health reason. Healthcare professionals utilised their aid to purchase sweets for the children.

Figure 5.12 UHND Chawlhmun Anganwadi centre



Picture credit: Laltleipua, field survey December 2023

8. Quality assurance

The facility used to have an Urban Local Body (ULB) meeting, which is expected to take place once a month as shown in figure 5.13, Although patient satisfaction scores are assessed on a monthly basis, the review meetings are administered bi-monthly, wherein the scores are analysed to identify areas of weakness and potential shortcomings.

Figure 5.13 Chawlhmun UPHC ULB meeting



Picture credit: Laltleipua, field survey 2023 December

C. HLIMEN UPHC:

Since its inception in 2004 as UHC, Hlimen UPHC has been operating in a rented house. It was established to provide primary healthcare for the poor population living in the southern part of the city, and is currently serving a variety of nearby hamlets and villages in addition to its designated ward. Construction of the UPHC building is underway in accordance with the ROP 2014-2015. This UPHC covers ward number 47,48,49,50 with a population of 9314 and 1961 households. During 2013-14, funds were allocated for upgrading facilities - furniture, equipment, etc. The UPHC is currently serving a variety of nearby hamlets and villages in addition to its designated ward.

Figure 5.14 Hlimen UPHC



Picture credit: Laltleipuia field survey, 2023 December

Table 5.3: Number of populations in Hlimen UPHC

Sl.no	Locality	Ward no	No. of House	Total Population	Total Male	Total Female
1	Tlangnuam	47	839	4,008	2,018	1,990
2	Melthum	48	241	1,110	584	526
3	Saikhamakawn	49	317	1,463	727	736

4	Hlimen	50	564	2,733	1,404	1,329
5	Samtlang	NA	NA	NA	NA	NA
TOTAL			1961	9,314	4,733	4,581

Source: Field Survey, 2023

According to table 5.3 the largest locality is ward no 47 Tlangnuam, which has a population of 4,008, comprising 2,018 males and 1,990 females, and 839 houses. Hlimen is the second largest locality, constituting a total population of 2,733 with 1,404 males, 1,329 females, and 564 houses. Melthum ward no 48 is the smallest locality, with a population of 1,110 with 584 males, 526 females, and 241 houses. These population figures provide valuable insights into the demographic composition of the Hlimen UPHC area.

1. Infrastructure

a) Location

The facility is situated in the Hlimen locality, a region characterized by its aesthetically pleasing environment and well-developed road infrastructure. The building is well-designed two-story structure, prominently featuring the Ayushman Bharat theme. Notably, it lacks a boundary wall or fencing surrounding the premises. The facility contains several signage placed along the hallways as illustrated in figure 5.15, to provide essential informational guidance to visitors. Additionally, there is a wash basin located near the entrance for hand washing purposes. Public restrooms are available on the first floor.

Figure 5.15: Signage, hand washing basin & public toilet



Picture credit: Lalteipuia, field survey 2023 December

b) Building:

The facility includes distinct rooms for the outpatient department (OPD), pharmacy, laboratory, sterilization area, labor room, staff room, and kitchen which is shown in figure 5.16. However, it lacks separate spaces for ASHA services, health and wellness activities, counselling, immunization, and consultations, requiring these functions to be conducted in available rooms. The facility is outfitted with a solar-powered inverter, which provides significant advantages in terms of energy efficiency. Furthermore, Urban Local Body (ULB) meetings and review sessions are held in the facility's conference hall. The facility includes a total of five beds, with two allocated for male patients and three for female patients. Each ward is attached with two 2 bathrooms. The waiting area has a capacity to accommodate approximately 45 individuals, which is considered satisfactory.

Image 5.16: Store room, immunization room, laboratory & accounts clerk



Picture credit: Laltleipuia, field survey 2023 December

2. Waste management

The facility adheres to solid waste management regulations for general waste disposal. It is equipped with separate dustbins, as mandated by Kayakalp. Furthermore, the facility features a dedicated drainage system for liquid waste and two deep burial pits, sharp pit, placenta pit beneath the building for biochemical waste treatment purposes which is illustrated in figure 5.17.

Figure 5.17 Dustbins & deep burial pit



Picture credit: Laltleipuia, field survey 2023 December

3. Human resource management

a) Staff:

The facility has 1 medical officer, 1 lab technician, 1 account clerk, 3 group D, 2 ANM, 3 staff nurses. There are 6 ASHA and MAS groups under Hlimen UPHC. The healthcare staff reported the necessity of the appointment of a permanent Medical Officer who is committed to long-term residency. The previous Medical Officers generally lasted for maximum 1 year and resigned to pursue further studies. This poses grave challenges not only for the healthcare staff but, more crucially, for the community as well.

4. Essential service provided:

The outpatient department (OPD) operates on weekdays from 9 AM to 4 PM, with specialist doctors visiting once a week. In comparison to other Urban Primary Health Centres (UPHCs), Hlimen sees a lower number of OPD patients which is 3386 during the year 2023-24. Non-communicable disease (NCD) screenings are conducted for all patients. For referral services, the facility refers patients to Civil Hospital Aizawl or Zoram Medical College for further assessment.

Figure 5.18: OPD, NCD screening, registration counter



Picture credit: Laltleipuia, field survey 2023 December

5. Drugs & medical equipment

Central Medical Store, Zemabawk is the principal supplier of medications and equipment. According to the responses from health care workers, supply pharmaceuticals are inadequate with certain medications approaching expiration. Medical equipment necessary for an emergency is not received within the required period; this creates a delay of service and the need to purchase from another medical shop. A consistent supply of essential medications is crucial for healthcare workers to ensure timely and efficient service delivery.

6. Laboratory and diagnostic centre

Laboratory has several types of tests including urine, Hb, TLC, ESR, blood grouping, blood MP, ICT, dengue, blood sugar, albumin, SGOT, SGPT, creatinine, uric acid, VDRL, HCV, HBV, H. Pylori, widal, scrub typhus, HIV and CRP.

7. Community outreach

The facility has routinely implemented outreach services through ANMs and ASHAs at each Anganwadi center, facilitating UHND sessions. These sessions provide guidance on family planning, contraception, and various health-related topics. Additionally, family profiles are collected, and health information is meticulously maintained. ASHAs are responsible for managing data related to children and mothers within the community. Moreover, they conduct blood tests, urine tests, and malaria screenings during home visits.

8. Quality assurance

The facility organises urban local body meeting once in a month for a thorough deliberation of the health risks and issues that has arisen within the community. A review meeting is also conducted among the staff chaired by MO once in a week or twice in a month. Patients' satisfaction

score is also done every month to analyse their performance and improve feedback recommendations.

D. SIHPHIR UPHC:

In 2014-2015, the Sihphir UPHC was established in a State Government-built structure. The expected population covered is 13,185, with 2,690 houses in Wards 1–4. This building is already functional and is situated on the outskirts of the city adorned with exquisite mountainous scene which effectively appealed to travellers.

Figure 5.19: Sihphir UPHC



Picture credit: Laltleipuia, field survey 2023 December

Table 5.4: Number of populations covered in Sihphir

Sl no	Locality	No of Ward	No. of House	Total Population	Total Male	Total Female
1	Sihphir	1	1,349	6,528	3,268	3,260
2	Selesih	2	188	882	425	457
3	Durtlang Vengthar	3	341	1,756	949	807

4	Durtlang	4	812	4,019	1,965	2,054
5	Neihbawih	NA	NA	NA	NA	NA
TOTAL			2,690	13,185	6,607	6,578

Source: Field Survey, 2023 December

According to the field study report, the total population across these five localities is 13,185 with 6,607 males and 6,578 females. The largest locality is Sihphir, which has a population of 6,528 comprising 3268 males and 3260 females, and 1349 houses. Durtlang is the second largest locality, with a population of 4019 where 1965 males, 2054 females, and 812 houses. Selesih is the smallest locality, with a population of 882 where 425 males, 457 females, and 188 houses.

1. Infrastructure

a) Location:

The facility is situated in the Sihphir locality, positioned at the hilltop, which facilitates easy access for visitors. It offers substantial parking capacity and is strategically located with optimal road connectivity, and spacious compound is a befitting for large public gatherings and events. Enclosed by a robust boundary wall, it ensures heightened security. The building is decorated in the distinctive Ayushman Bharat theme colors in accordance with IPHC guideline, as illustrated in Figure 5.20.

Figure 5.20: Boundary wall, parking areas, compound & paintings



Picture credit: Laltleipuia, field study 2023 December

b) Building:

The facility offers a total of five inpatient (IPD) beds, allocated for both male and female patients, with one bed specifically designated for prenatal care. At the time of visit, the facility is provisioned with specialized rooms, such as a laboratory, labor room, store room, changing room, dressing room, dental room, pharmacy, power backup room, sterilization room, and vaccine storage room as shown in figure 5.21. The labor room is also utilized as a breastfeeding area, while the changing room serves as a space for ASHA and ANM workers. The dressing room is additionally utilized as an injection room, while the OPD doctor's office is similarly adapted for both counselling and consultation purposes. The isolation room has recently been converted into a power backup room, now housing the inverter battery. Several public restrooms are attached, located both near the entrance and within the building, with separate provisions for males and females. The restrooms are well-maintained and are supplied with a reliable water source. Additionally, hand washing basins are provided outside, near the entrance, while a water filter is available inside the facility for public use.

Figure 5.21: IPD beds, NCD screening, pharmacy room, vaccination room & MO room



Picture credit: Laltleipuia, field study 2023 December

c) Signage

The facility has multiple signages fire exit, safety precautions, emergency exit, fire exit, health topics, dos and don'ts as shown in figure 5.22.

Figure 5.22: Signage of danger, citizens charter, emergency exit



Picture credit: Laltleipuia, field study 2023 December

2. Waste management

The facility operates in tandem with Solid Waste Management Rules and Biomedical Waste Management Rule (BMW), ensuring the proper segregation of waste through designated bins. Green bins are used for non-infectious waste such as paper cups, office stationery, and tissue paper. Yellow bins are designated for infectious waste, including bandages, gauze, cotton, items contaminated with body fluids, and placental material. Blue bins are allocated for glass bottles, discarded medications, and similar items. White bins are reserved for sharps, such as needles, knives, blades, and other sharp objects. Red bins are used exclusively for the disposal of blood bags, infectious intravenous sets, and latex gloves. Additionally, a placenta pit, deep burial pit, and sharp pit have been constructed near the facility for the safe disposal of specialized waste as shown in figure 5.23. The facility also maintains a separate drainage system to manage liquid waste.

Figure 5.23: Deep burial pit, placenta pit, and sharp pit & bmw dustbin



Picture credit: Laltleipuia, field study 2023 December

3. Human resource management

a) Staff

The facility has one MO, one lab technician, one pharmacist, one account clerk, three staff nurses, three Group D staff and two ANM workers. Under Sihphir UPHC there are seven Asha's and seven MAS groups.

b) Training

Various training programs are organized by the government health department throughout the year. In 2023-24, specific training sessions were held for staff nurses on Health and Wellness Centres (HWC) and Biomedical Waste Management (BMW), for pharmacists on DVDMS, and for laboratory technicians on malaria-related procedures.

4. Essential service

The OPD operates from 9:00 AM to 4:00 PM, with specialised physicians visiting the hospital once a week. Non-communicable disease (NCD) screenings are undertaken for people over the age of 30. ANM and Staff nurse perform dressing of patients, supervising helper, registration of patients. They maintain vaccine indent, manage stock register and regular check-up for antenatal care.

5. Drugs and equipment

CMS are the primary supplier of the majority of the pharmaceuticals and medical apparatus, while NHM occasionally provides medical equipment. The facility cannot maintain a substantial stock of medicine for an extended period as a result of the distribution of free drugs and medications to all patients.

6. Laboratory and diagnostic centre

The facility performs a wide range of laboratory test which include urine re, blood sugar, blood group, Hb, scrub typhus, typhoid, H. Pylori, dengue, hepatitis b&c, HIV, VDRL, malaria and Tb.

7. Community outreach

The facility's ANM and ASHA conduct UHND sessions at each Anganwadi centre to provide health awareness and counselling. ASHA also carries out home visits, gathering information and registering pregnant women and childbirth cases. Additionally, ANM and ASHA are responsible for

vaccination outreach, as well as delivering nutrition and health talks at the UPHC.

8. Quality assurance

Review meetings and ULB meetings are regularly conducted at the facility, with the ULB meeting being scheduled on a monthly basis. The facility has grievance redressal mechanism and complains box available near the entrance to write a complains and suggestions.

E. LAWIPU UPHC:

Owing to its secluded locale, Lawipu is one of the most targeted areas under NUHMand catered to the city's most disadvantaged community. The State Government also makes attempts to improve the living conditions of these groups through the JNNURM Slum Housing Scheme. In this area, the state government has built a housing complex that will accommodate an estimate of 400 people. Furthermore, there are large expanses of stone quarries in the region, with a resident population of foreign labourers and immigrants who are deprived of good health care. According to GIS mapping, it includes Wards 54, 55, 56, 57, and 58. According to the census, the population is 14,915 people, with 3,075 homes.

Figure 5.24: Lawipu UPHC



Picture credit: Laltleipuia, field survey 2023 December

Table 5.5: UPHC Lawipu Population covered

SL no	Locality	Ward no	No of house	No of family	No of Male	No of Female	Total Population
1.	Nursery	54	358	628	1463	1580	3043
2.	Maubawk	57	634	975	2285	2598	4883
3.	Khatla South	53	342	484	1194	1274	2468
4.	Bungkawn Vengthar	56	362	550	1112	1315	2427
5.	Bungkawn	55	1043	825	2130	2134	4264
6.	Lawipu	58	495	556	1035	1042	2077
	Total		3234	4018	9219	9943	19162

Source: Field Survey, 2023 December

According to a field study conducted in December 2023, Maubawk is the largest locality, with a population of 4,883, consisting of 2,285 males and 2,598 females, and 634 households. Bungkawn ranks as the second largest locality, with a population of 4,264, comprising 2,130 males, 2,134 females, and 1,043 households. Lawipu is the smallest locality, with a population of 2,077, including 1,035 males, 1,042 females, and 495 households.

1. Infrastructure:

a) Location:

Situated in the Lawipu locality, the facility is nestled in an aesthetically pleasing environment that is free from noise pollution. It offers ample parking space within a spacious compound. The premises are enclosed by a tall boundary wall and fencing, all adorned in a uniform colour that reflects the Ayushman Bharat theme as illustrated in figure 5.25. The facility is outfitted with numerous signage displayed

throughout the corridors, providing essential information to visitors. Additionally, there is a wash basin located outside the building near the entrance for hand washing. Public restrooms are conveniently situated on the first floor and outside the building, enhancing accessibility for users.

Figure 5.25: Public toilet, hand washing basin, signage & IEC corner



Picture credit: Laltleipuia, field study 2023 December

b) Building:

The facility accommodates a total of five beds, with two designated for male patients and three Separate rooms are dedicated for the outpatient department (OPD), pharmacy, laboratory, sterilization area, labor room, staff room, store room, immunization services, dental care, inpatient wards for both males and females, and a kitchen as shown in figure 5.26.

Figure 5.26: Dressing room, waiting area, IPD beds for male & female



Picture credit: Laltleipuia, field survey 2023 December

However, there is no distinct compartment for ASHAs. Its designated task of health and wellness counselling are generally carried out in any convenient space. The facility is equipped with a solar-powered inverter, which proves to be highly beneficial.

Figure 5.27: OPD, dressing room, store room, dental room & drug dispensing counter



Picture credit: Laltleipuia, field survey December 2023

c) Signage:

The facility has signage display of danger, toilets, health topics, citizens charter, way indicator, room number. This signage display is aware by the people and beneficial for the workers as it enhanced efficiency in completing their task, reduce errors and accidents easy for the workers. Date of Specialist visit and OPD closed are used to displayed in a white board.

Figure 5.28: Signage of toilet, danger, citizen charter & 6 step handwashing guide



Picture credit: Lalteipuia, field survey, 2023 December

2. Waste management

The facility complies with solid waste management regulations for general waste disposal, featuring separate dustbins as mandated by the Biomedical Waste Management Rule. It includes a dedicated drainage system for liquid waste and two deep burial pits situated beneath the building: one designated for placental waste and another for sharps as illustrated in figure 5.29. Furthermore, the facility provides specific dustbins for both biomedical and general waste.

Figure 5.29: Dustbins & deep burial pits



Picture credit: Laltleipuia, field survey 2023 December

The waiting area has a capacity to accommodate approximately 45 individuals, which is considered adequate. Non-communicable disease (NCD) screenings are conducted for all patients over the age of 30. The facility refers patients to Civil Hospital Aizawl or Zoram Medical College for further evaluation.

3. Human resource management

a) Staff

The field surveys at Lawipu conducted on December 2023 revealed the statistics of human resources as such - 1 MO, 1 pharmacist, 1 account clerk, 2 ANMs, 3 staff nurses, 1 lab technician and 3 Group D clerks, 6 ASHA and 6 MAS.

4. Essential service

The outpatient department (OPD) operates on weekdays from 9 AM to 4 PM, and specialist doctors visit once a week. In comparison to other Urban Primary

Health Centres (UPHCs), Lawipu experiences a lower volume of OPD patients which is 3322 during the year 2023-24. This can be attributed to the presence of private hospitals in nearby wards such as Khatla and Bungkawn, which are more accessible to many residents. NCD screening is done for every person above the age of 30 years, the screening includes hypertension, diabetes, cancer of oral cavity, cervix and breast.

5. Drugs & equipment

CMS, Zemabawk and the Department of Health & Family Welfare Department, Govt of India administered the procurement of the required drug and equipment. All the list of supplied drugs are managed by the pharmacist who is tasked with the documentation of required drugs for emergency. According to the statement given by the respondent healthcare worker medical supplies especially for emergency are not supplied regularly moreover the drugs supplied are not balanced some are more and some are less.

6. Laboratory and diagnostic centre

The Laboratory at the facility performs basic lab test which includes urine r/e, blood grouping, malaria parasite, RBS, haemoglobin, typhi dot, scrub typhus, pregnancy test, HCV, HBsAg, HIV, H. Pylori, VDRL, SGPT, SGOT, creatinine, ESR, TLC, DLC, sputum (AFB), stool r/e, CRP, T.B. Mantoux, Covid, Dengue. In term of referral service, the facility refers patients to Civil hospital Aizawl and Zoram Medical College for further evaluation.

7. Community outreach

ASHA routinely conducts home visits to pregnant women, registering the number of newborns and expectant mothers within the community. UHND is observed at every Anganwadi centre by ASHA and ANM, where they educate women and children on health issues and raise awareness about infectious diseases. The outreach also entails counselling and contraceptive education.

8. Quality assurance

The Urban Local Body (ULB) meetings and the staff review sessions are convened in the facility's hall, with ULB meetings taking place monthly and staff reviews occurring twice a month. Patient satisfaction ratings are evaluated on a monthly basis, categorized into grades, and subsequently reviewed during staff meetings. A grievance redressal mechanism, including a complaint box, is also in place for the public; however, no complaints have been lodged for the year 2023.

F. ZEMABAWK UPHC:

Figure 5.30: Zemabawk UPHC



Picture credit: Laltleipuia, field study, 2023 December

The relocation of the UPHC, which previously operated from a rented facility in Ramhlun, to Zemabawk where it occupies its own building is anticipated to significantly enhance healthcare accessibility to a broader segment of vulnerable populations. Early indications suggest a successful expansion of reach to a broader population. Zemabawk UPHC is housed in a robust building

set within an aesthetically pleasing environment. Situated on the northeastern outskirts of Aizawl, Zemabawk is an area that, aside from a cancer hospital and a few sub-centres, lacks other healthcare facilities. The neighbourhood is primarily composed of migrants and low-income residents. The nearest health service delivery site is located 2 kilometres away. GIS mapping indicates that the facility serves Wards 8, 9, 10, 11, 12, and 13. Furthermore, the local government has pledged a substantial area of land for the construction of the UPHC and associated staff quarters.

Table 5.6: Number of populations covered in Zemabawk Sub centre & health clinics

Sl No	Sub Centre covered	Population covered	Clinic covered	Population covered	SEDP Clinic	Population covered
1.	Zuangtui Sc	4751	Zemabawk N Clinic	4189	Zemabawk East clinic	2273
2.	Zemabawk Sc	7634	TNT Clinic	2597	Zemabawk Lungbial Clinic	1480
3.	Tuirial Airfield Sc	894	Falkland Clinic	2461	Tuirial Clinic	924
4.	Thuampui Sc	5567	Muthi Clinic	1035		
	Total	18846	Total	10282	Total	4677

Source: Field Survey, 2023

According to the above table 5.6, the largest locality has a population of 4,008, comprising 2,018 males and 1,990 females, and 839 houses. Hlimen is the second largest locality, with a population of 2,733 with 1,404 males, 1,329 females, and 564 houses. Melthum ward no 48 is the smallest locality, with a population of 1,110 with 584 males, 526 females, and 241 houses.

1. Infrastructure

a) Location:

The facility is located in the Zemabawk area, offering ample parking and convenient road access. Its relatively secluded position ensures a quiet environment, free from external noise. However, the facility lacks a boundary wall or fencing along its perimeter. The building is decorated with colors reflecting the Ayushman Bharat theme, as depicted in Figure 5.31. It features an expansive grounds area, suitable for public gatherings, along with a waiting shelter for the convenience of the public.

Figure 5.31: Waiting shed, parking area & wall paintings



Picture credit: Laltleipuia, field survey 2023 December

b) Building:

The facility features a spacious waiting area that can accommodate at least 60 individuals. It has multiple rooms such as casualty room which is also used for dressing room, pharmacy room cum drug dispensing counter, laboratory room, store room, dental room, MO room which is also used for counseling and consultation room, changing room also used for nursing station which is illustrated in figure 5.32. General ward has total of 5 beds both for male and female, sterilization room, induction cum post-natal ward and common room.

Figure 5.32: General ward, vaccine room, casualty & drug dispensing counter



Picture credit: Laltleipuia, field survey 2023 December

2. Waste management

The facility adheres to Biomedical Waste Management Rule as recommended by the IPHS Guidelines 2022. It is equipped with dustbins in each room, in compliance with Biomedical Waste (BMW) regulations. Additionally, a deep burial pit, placenta pit, and sharp pit have been constructed in close proximity to the building as shown in figure 5.33. Public restrooms are available within the facility, along with drinking water and hand washing basins.

Figure 5.33: Deep burial pit, soak pit, sharp pit, and placenta pit & bmw bins



Picture credit: Laltleipuia, field survey December

3. Human resource management

a) Staff

During the time of field visit, the facility has 1 MO, 1 account clerk, 2 lab technician, 1 pharmacist, 3 ANMs, 3 staff nurses, 3 Group D staff. 17 ASHAs and 12 MAS groups are under UPHC Zemabawk. Among all the UPHC in Aizawl district Zemabawk has the highest number of staff strength.

4. Essential service provided

The OPD operates from 9:00 AM to 4:00 PM, with multiple specialist doctors visiting the facility once or twice a week, depending on their availability. The schedule for specialist visits is published on whiteboard, as illustrated in Figure 5.34. Zemabawk UPHC ranks third in terms of OPD patient volume, with a total of 5,289 patients recorded for the year 2023-24. For referral services, patients are directed to Civil Hospital or ZMC for further diagnostic evaluation. NCD screening is done for every adult patient above 30 years of age.

Figure 5.34: OPD, waiting area, specialist duty routine



Picture credit: Laltleipuia, field survey 2023 December

5. Drugs & equipment

Drugs and other essential medical equipment are supplied by Central Medical Store. Grievances about the irregularity of the supply has been uncommon, because of which some of the test kits has to be purchased from the local medical store. The NHM also supplies medical equipment, though not on a regular basis. According to the healthcare workers, the provision of medications and medical equipment is erratic, leading to recurring issues, as a consistent and dependable supply of pharmaceuticals from the government is crucial for the uninterrupted delivery of care.

6. Laboratory and diagnostic center

Laboratory test done in the facility are Haemoglobin, RBS, malaria, HIV, scrub typhus, hepatitis b&c, VDRL, AFB, SGOT, SGPT, creatinine, blood grouping, H. pylori, Typhi IgM.IgG, urine, uric acid, widal, pregnancy test, CRP and dengue.

7. Community outreach

ASHA 's outreach entails home visit where the workers would conduct blood test for urine, malaria, pregnancy test and maintained a record of children, mother and pregnant women. They also visit post-delivery mother and child every 3 months till 15 months to check their health status. UHND visits are also conducted by ASHA and ANM, who organize health check-ups at each Anganwadi center, deliver lectures on health awareness, and provide counseling on family planning.

8. Quality assurance

ULB meeting is scheduled at the facility once a month and review meeting twice a month, as depicted in figure 5.34. The meeting is attended by each representative from local council, YMA, MHIP, and MUP from the area and all the staff member of the facility. The discussion essentially gravitates around the communal health concerns and public awareness strategies.

Figure 5.35: ULB and staff review meeting at Zemabawk UPHC



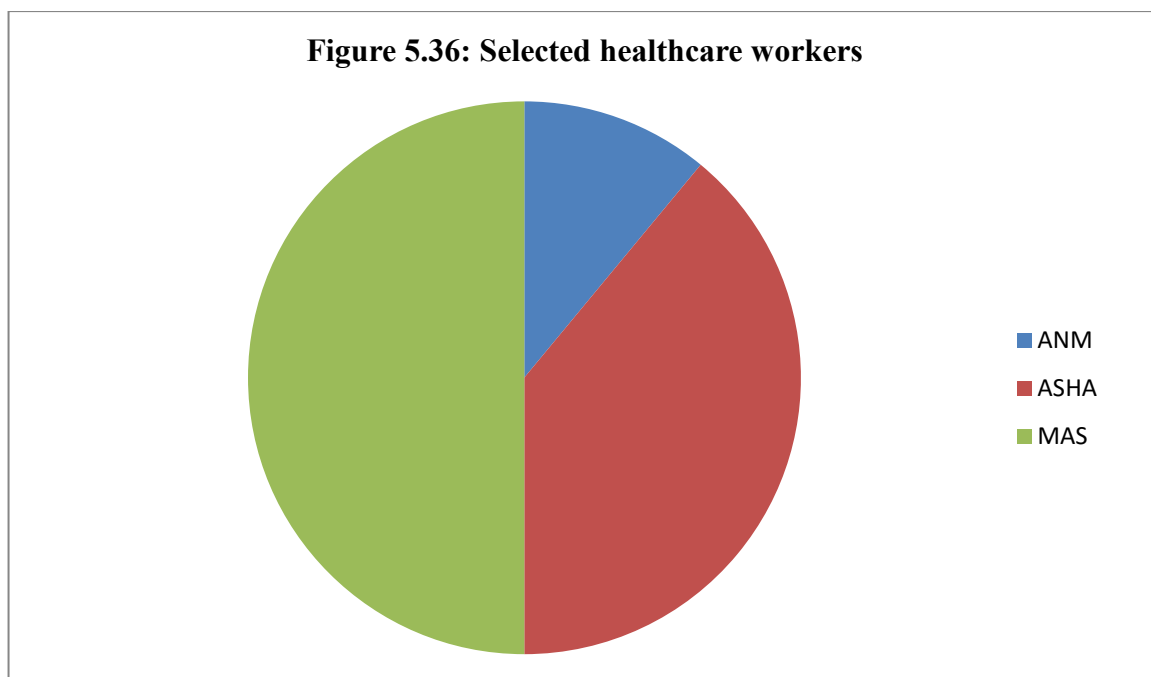
Picture credit: Laltleipuia, field survey 2023 December

5.3 Field study of the selected healthcare workers under NUHM

For the purpose of studying the implementation of NUHM in Aizawl district along with its roles and function, the subjective views and perception of the healthcare workers under the mission is evaluated. The process of data collection involves a selection of multiple health workers from each category - ANM, Urban ASHA, and MAS under UPHC Aizawl district. The interview was conducted on structured interview method. The number of persons interviewed were 100 members and all female, with 11 members from ANM, 39 members from ASHA and 50 MAS members from 47 MAS groups. The response of healthcare workers is analyzed below.

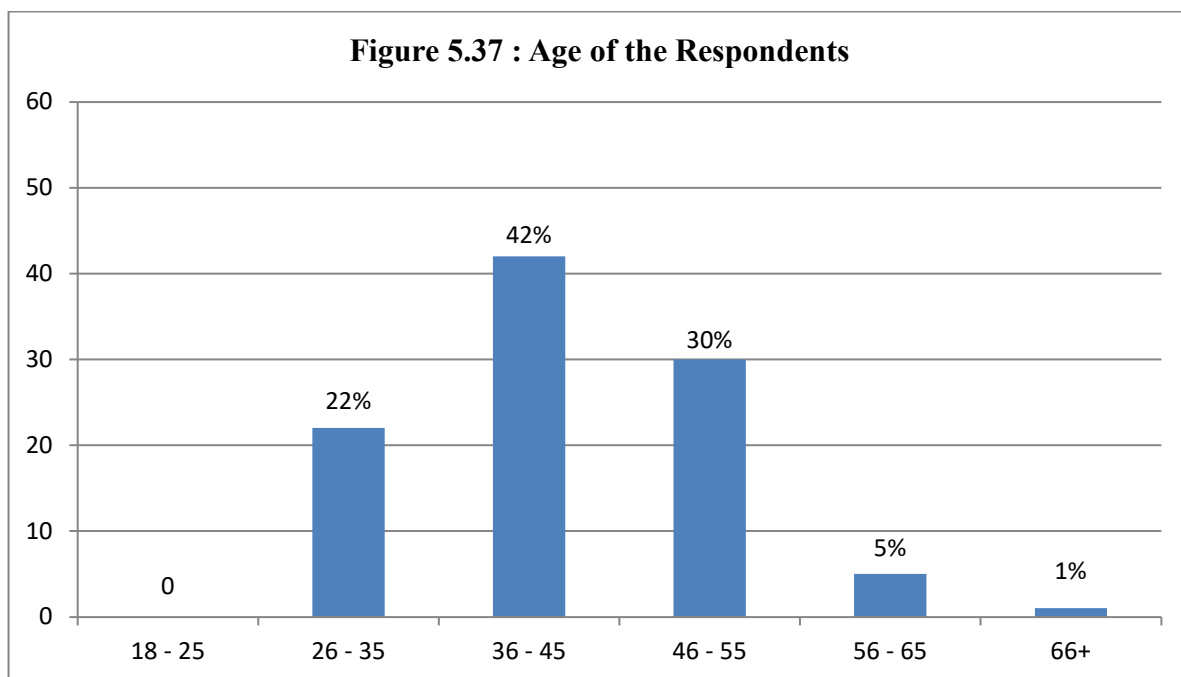
Healthcare workers and their service delivery are foundational for a successful implementation of National Urban Health Mission. There are various types of healthcare providers and healthcare workers like ANM, ASHA and MAS who work for the community under NUHM. These healthcare workers diligently performed their duties under their respective UPHC. Every Urban Primary Health Center has certain areas of population or community to cover in which they are responsible to provide health service delivery.

A. Health Care Workers under National Urban Mission



Source: Field survey, 2023 December

The selected healthcare workers under NUHM Aizawl are given in Figure 5.36. According to the Figure 5.36, 49% of health care workers were MAS, making them the largest group of health care workers in the study. Additionally, the survey conducted under the National Urban Mission highlighted that ASHA workers accounted for 40% of the health care worker respondents, while ANM workers accounted for 11% of the respondents. This result is based on Aizawl district UPHC which are Chawlhmun UPHC, Lawipu UPHC, Hlimen UPHC, ITI UPHC, Zemabawk UPHC and Sihphir UPHC.



Source: Field survey, 2023 December

The age of a respondent is a crucial variable in the questionnaire, as it provides valuable insights into the characteristics, behaviours, and preferences of different age groups. Figure 5.37 shows the age distribution of the respondents revealing that there were no respondents between the ages of 18-25. Based on the statistics it is obvious that most respondents were between the ages of 26-35, accounting for 22% and 42% of respondents respectively. The age group of 46-55 also represented a significant portion accounting for 30% of the respondent. The data indicates that the respondent pool is mostly made up of middle aged and elderly people. The lack of representation of young people especially those age 18-25 is notable and might require further study in future research. Understanding the age distribution of respondent provide useful information for explaining the outcome of study.

Table 5.7: Education Qualification of healthcare workers

Qualification	Respondent	Percentage %
Primary education (up to IV th)	4	4.0

Secondary education (up to VIII th)	47	47.0
X th pass	38	38.0
XII th pass or above	11	11.0
Total	100	100.0

Source: Field survey, 2023 December

Understanding the education qualification of healthcare workers in a research study strengthens data integrity, improves study quality. This is crucial for interpreting findings, leading to more meaningful and impactful results. Table 5.7 indicates that the education qualification of the respondents varied with 4% having primary education, 47% having secondary education, 38% being 10th pass and 11% being XII pass or above. The majority of the respondent have at least a secondary education with 47%. According to the data, a considerable number of the respondents completed at least a secondary level which offers a positive implication that most of these healthcare workers are relatively educated.

Table 5.8 Length of service of the healthcare workers under NUHM

s/n	Year of service	Number of respondents	Percentage %
1	Less than a year	4	4.0
2	1 – 3	12	12.0
3	3 – 5	29	29.0
4	More than 5 years	55	55.0
	Total	100	100.0

Source: Field survey, 2023 December

The length of service determines the level of experience of the health workers, which fosters their ability to effectively navigate complex situations. Employees with more extensive experience and longer tenure tend to offer a perspective that differs from those with less experience. Table 5.8 shows the distribution of respondents based

on their length of services. The data shows that the majority of respondents which is 55% have worked for more than 5 years. This indicates that the majority of the respondents have worked experienced in their perspective fields. On the other hand, there are 4 respondents who have worked for less than a year. There are 29% of the respondent who have worked for 3-5 years. This table clearly indicates that there are variety of workers who has enough experience in the field with other may have a lot to learn and gained from the experienced workers.

Table 5.9 Major problems faced in task by healthcare workers under NUHM

s/n	Problem description	Number of respondents	Percentage %
1	Daily home visits/outreach consume a lot of time leaving no time for other activities	29	29.0
2	Excessive record maintenance without getting any extra payment.	13	13.0
3	Population size covered is too large	16	16.0
4	The equipment provided are not sufficient	17	17.0
5	Don't have permission to administer medication	8	8.0
6	I don't have a problem	17	17.0
	Total	100	100.0

Source: Field survey, 2023 December

Table 5.9 depicts that, out of the total respondents, 29% claimed home visit is exceedingly time-consuming which leaves them no additional time for other activities. As previously elucidated in the chapters, the responsibility of the health workers entails attending the outreach programmes like UHND and home visit. 13% of the respondents felt that their main problems are excessive record and register maintenance without getting any additional payment. According to the response from the respondents, they have to maintain number of registers apart from having to update them on a daily basis. The introduction of Internal Performance Assessment (IPA) requires additional separate record maintenance for quality assessment purpose. Inspections are conducted regularly, and healthcare workers are expected to be

adequately prepared. This creates a significant challenge in fulfilling their other responsibilities effectively. Regarding the scope of the population served, 16% of respondents reported that their assigned coverage area is disproportionately large compared to the time allocated for completion. According to the NUHM framework under UPHC, healthcare workers are designated specific areas to carry out their responsibilities, particularly outreach activities and home visits. A substantial portion of respondents from the Zemabawk area expressed difficulties due to the high population density within their designated UPHC coverage areas. The data further indicates that 17% of respondents perceived the medical equipment provided at the healthcare facilities as inadequate. They respond that medical equipment which are essential for daily requirement are not sufficient and some medicines are not supplied regularly from Central Medical Store, so they need to purchase from local store. In Mizoram, Central Medical Store (CMS) acted as the main hub for sourcing, storing and distributing pharmaceutical and medical equipment to various health facilities. Meanwhile, 8% of the respondents felt that they don't have permission to administer medication. This creates a major issue for them while performing their duties during home visit, outreach program and emergency service. Healthcare workers are informed to carry only health supplements and health nutrients which should be distributed to the people. 17% of the respondents responded that they didn't have a problem or any issues in their work.

Table 5.10 Trainings undergone by healthcare workers under NUHM

Number and types of training		Respondents	Percentage
1	Induction training	59	59.0
2	Refresher training	19	19.0
3	Other training	0	0
4	No training	22	22.0
5	Grand total	100	100.0

Source: Field survey, 2023 December

The critical role of training, whether in personal or professional settings, cannot be overemphasized. By analysing the training experiences of healthcare workers, we can design targeted initiatives that refine workforce competencies, elevate patient care, and enhance operational effectiveness. The importance of training is explicitly outlined in the IPHS guidelines of 2022. As detailed in Table 5.10, the majority of respondents (59%) reported having undergone induction training, while 19% had participated in refresher courses. Notably, none of the respondents indicated engagement in any other form of training. Additionally, 22% of respondents had not received any training whatsoever. According to data from the NUHM, several training programs have been implemented for healthcare workers in recent years as part of Mizoram's achievements. However, the findings reveal a substantial need for both induction and refresher training.

Table 5.11 Knowledge about latest practices of healthcare workers in healthcare service

s/n	Healthcare workers keep themselves updated from	Number of respondents	Percentage %
1	Workshops and trainings	44	44
2	Reading relevant research materials	31	31
3	Online courses	25	25
4	Other	0	0
	Total	100	100

Source: Field Survey, 2023 December

The respondents were queried about the current practices and methodologies they employed to stay informed and updated about the latest advancement in healthcare. 44% of the respondents mentioned workshops and trainings as their chief source. 31 % of the respondents updated themselves through reading relevant research materials as implicated in table 5.11. Meanwhile, 25% of the respondents stay informed through online courses. Surprisingly, none of the respondents used other sources. This is a positive connotation of the healthcare workers' awareness of their

roles and responsibilities. However, those who did not undergo training and workshops were still able to update their knowledge from other sources through reading research materials and online courses.

Table 5.12 Monthly report submission by healthcare workers

s/n	Report submitted to	Number of respondents	Percentage %
1	Mobilizer (CMO)	1	1.0
2	Urban Primary Health Centre	6	6.0
3	Circle Officer ICDS	1	1.0
4	Mobilizer & UPHC	39	39.0
5	Did not submit	53	53.0
	Total	100	100.0

Source: Field survey, 2023 December

In UPHC, the systematic submission of reports is critical for ensuring effective healthcare delivery, as it facilitates the accountability of healthcare workers. Reports enable the tracking of disease outbreaks and assist in monitoring disease trends. Additionally, they enhance the transparency of the UPHC by providing timely and accurate data. Table 5.12 indicates that, based on monthly report submissions, the majority of respondents (53%) did not submit their reports to any health center. 39% of respondents reported submitting their reports to the mobilizer (UPHC), while 6% indicated that their reports were submitted directly to the UPHC. Meanwhile, 1% of respondents stated that they submit their reports to the Circle Officer of ICDS and the Mobilizer (CMO). These findings highlight concerns regarding the efficacy and efficiency of the data collection and reporting system within the health sector. Notably, ANM and ASHA workers are primarily responsible for submitting and maintaining reports from outreach activities. However, a significant portion of the respondents are newly recruited MAS workers, who lack the requisite experience and familiarity with the report submission procedure.

Table 5.13 Suggestions given by healthcare workers for meeting the goals of NUHM

s/n	Responses	Number of respondents	Percentage %
1	Coordination between health care workers and community leaders	25	25.0
2	Additional training opportunities	30	30.0
3	Improved staffing levels and incentives	14	14.0
4	Ensure better medical equipment and supplies	23	23.0
5	No idea	8	8.0
	Total	100	100.0

Source: Field survey, 2023

Table 5.13 reveals that 30% of respondents underscore the need for augmented training opportunities for healthcare workers to enhance service delivery and fulfill the objectives of the NUHM. 25% of respondents opined that an improved coordination between healthcare workers and community leaders—such as those from YMA, VC, MHIP, MUP, and Church Leaders—who play a vital role in advancing the NUHM goals, is imperative. 23% of respondents advocate for the provision of better medical equipment and a consistent supply of pharmaceuticals as essential prerequisites for achieving the NUHM’s objectives. Moreover, 14% of respondents suggest that optimizing staffing levels and ensuring the timely distribution of incentives would be the most effective means of achieving these goals. 8% of respondents offer no recommendations. Collectively, the findings implicate that enhancing training opportunities and strengthening staffing levels are pivotal strategies for the successful attainment of the NUHM’s objectives.

Table 5.14 Felt needs for health care workers

s/n	Changes required from healthcare workers	Number of respondents	Percentage %
1	Salary/incentive revision	24	24.0

2	Strengthen man power	19	19.0
3	Efficient supply of medical equipment especially first aid	25	25.0
4	Training for newly recruit	25	25.0
5	No idea	7	7.0
	Total	100	100.0

Source: Field survey, 2023

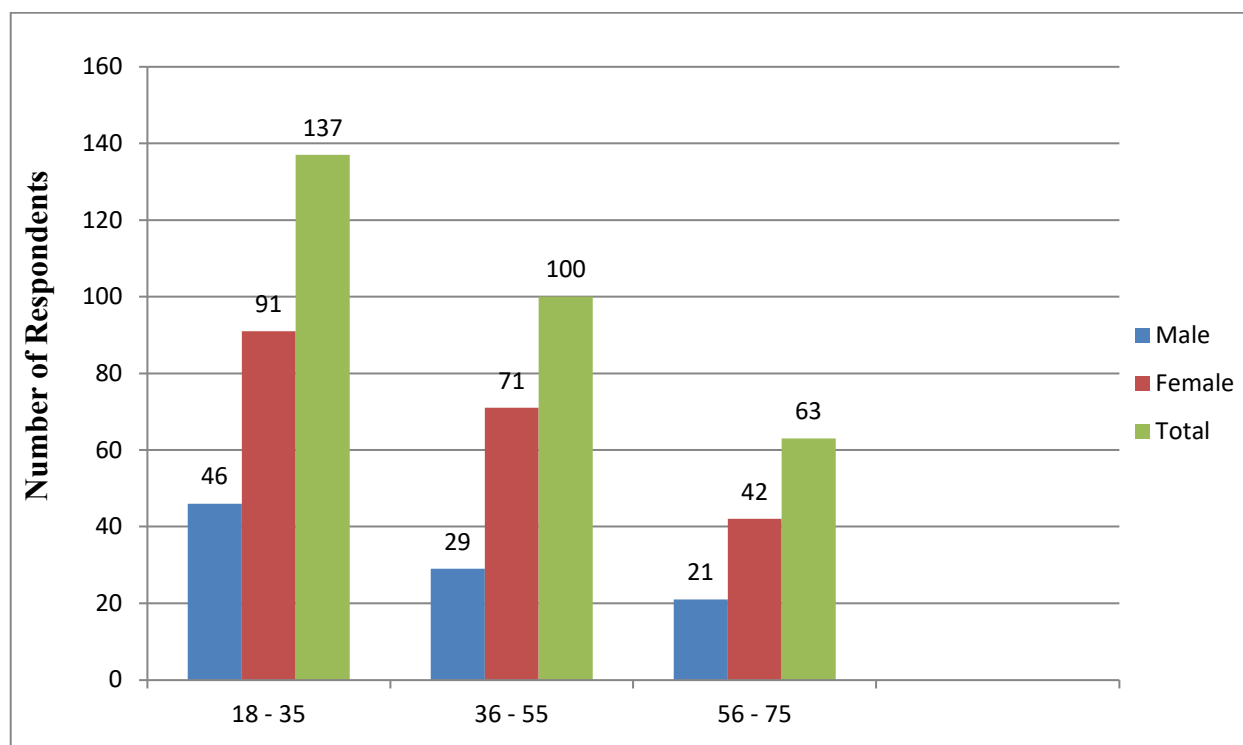
Table 5.14 indicates that both 25% of the respondents felt the needs for healthcare workers are efficient supply of medical equipment especially first aid kit and training for newly recruit healthcare workers. 24% of the respondent felt that the needs for incentive revision, since the current incentives for healthcare workers especially ANM and ASHA are very low on the other hand they did not receive on time. Meanwhile, 19% of the respondent felt the needs to strengthen man power for effective performance in healthcare delivery. Surprisingly, 7% of the respondent's response to no idea. However, table 5.14 clearly indicates that efficient supply of medical equipment and training for freshers are the main felt needs in the present situation for the healthcare workers.

5.4 Field study of the selected beneficiaries under NUHM

With the study objective focused on NUHM in Aizawl district, questionnaire was prepared for beneficiaries. 300 beneficiary representatives were selected from Aizawl district. Beneficiaries hold a pivotal role in research studies, as they are direct participants and key contributors to the research process. Their insights and perspectives significantly influence the formulation of research questions. Research findings are more likely to be successfully applied when informed by constructive feedback from beneficiaries. In this particular field study, 50 beneficiaries were selected from each UPHC in the Aizawl district. The results of questionnaire are discussed below.

A. Beneficiaries under National Urban Mission

Figure 5.38: Age and Sex of the respondents of beneficiaries



Source: Field survey, 2023 December

The age distribution of the respondents given in the above figure 5.38 shows that out of the total 300 respondents 204 are female respondents which is 68% and 96 are male respondents which is 32%. Among the age group of 18-35 are the highest contributors which is 137 respondents. The second highest contributors are the age group of 36-55 comprising 100 respondents. Meanwhile the lowest contributors are the age group of 56-75 in which there are 63 respondents.

Table 5.15: Health care Scheme used by beneficiaries

s/n	Types of Health Care Scheme	Number of respondents	Percentage %
1	AB-PMJAY	148	49.33
2	Mizoram State Health Care Scheme	87	29

3	None	65	21.67
	Total	300	100

Source: Field survey, 2023 December

The financial status and socio-economic background of an individual can be readily inferred by examining the healthcare schemes they engage with. Table 5.15 explicates that the majority of the respondents which is 49.33% used AB-PMJAY healthcare scheme. 87 of the respondents which is 29% used Mizoram State Health Care Scheme (MSHCS). Meanwhile, there are 21.67 % of the respondents who are not using any health care scheme. However, the analysis of the questionnaire indicates that the majority of the beneficiaries used AB-PMJAY health care scheme provided by Government of India. This scheme is for low income families identified under the Socio-Economic Caste Census (SECC) 2011. Under the AB-PMJAY scheme, qualifying families are entitled to health coverage of up to ₹5 lakhs per year for medical expenses incurred at both private and public hospitals that are empanelled under the program. Table 5.15 clearly indicates that the majority of NUHM beneficiaries come from urban impoverished households.

Table 5.16: Healthcare services centre used by beneficiaries

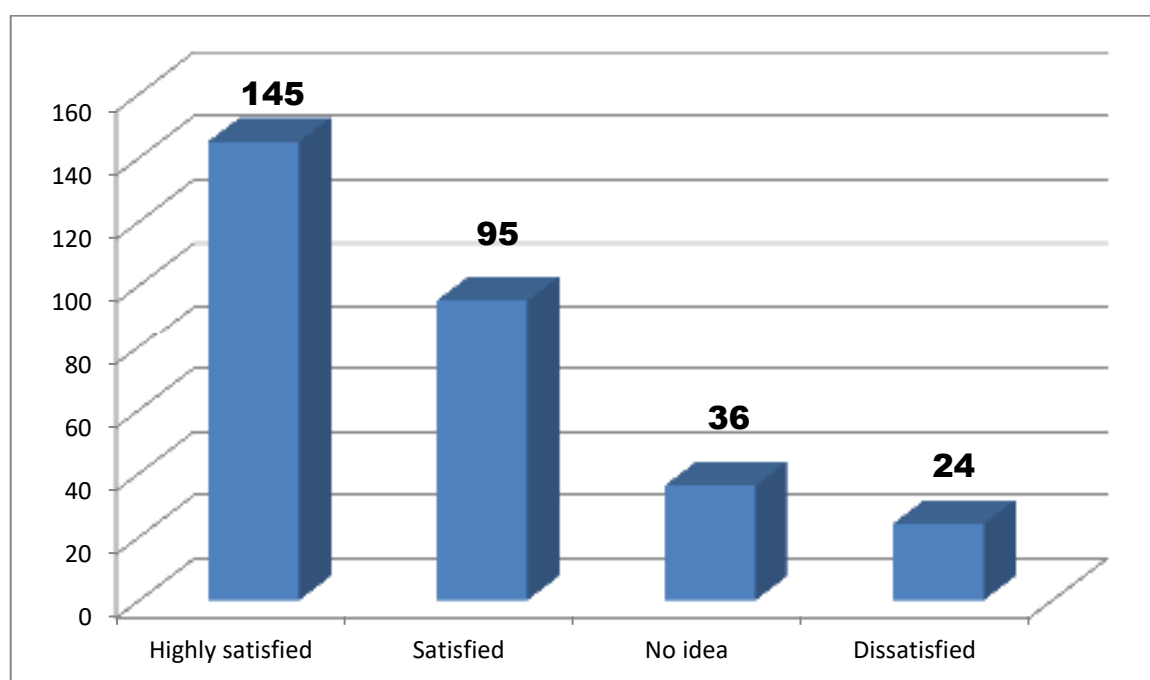
s/n	Health Care Service Centres	Number of respondents	Percentage %
1	Urban Primary Health Centre	192	64
2	Urban health and Wellness Centre/Sub Centre	42	14
3	Health clinic	35	11.7
4	None	31	10.3
	Total	300	100

Source: Field survey, 2023, December

The data shows that the majority of the respondents 64% utilised UPHC for healthcare services. Following that 14% of the respondents used Urban health and

Wellness Centre/ Sub Centre. It is interesting to note that 10.3% of the respondents felt that these healthcare service centres were not applicable to them. The majority of the population chooses UPHCs because they offer a wider range of healthcare services and have doctors, whereas subcentres or health clinics may only offer limited or specialized services and only employ ANMs, or health workers. The service provided by the two health centres varied in that, the former gives a free service to individuals, whereas the latter may charge fees.

Figure 5.39: Evaluation of beneficiaries' satisfaction score regarding the activities of the NUHM



Source: Field survey, 2023 December

A satisfaction score is an essential metric for evaluating how well a service, or experience fulfil respondents' expectations. From the above Figure 5.39 it is evident that a majority of the respondents comprising 145 out of 300 are being highly satisfied with the NUHM activities and services. Moreover 95 expressed satisfactions with the activities and services of NUHM. Additionally, 36 of them reported they were unaware of the service available, while 24 of the respondents voiced their grievances. This data provides a comprehensive evaluation of the overall satisfaction level with NUHM

activities and services. It is indicative of a positive outlook towards the activities provided with only a small percentage expressing dissatisfaction.

Table 5.17: Rating of the UPHC buildings under NUHM by beneficiaries

s/n	Respondent	Number	Percentage %
1	Excellent	164	54.7
2	Good	117	39.0
3	Satisfactory	17	5.7
4	Poor	2	.7
	Total	300	100.0

Source: Field survey, 2023 December

The above table 5.17 rating distribution shows that 54.7% of the respondent rated the building as ‘Excellent’ while 39.0% rated it as ‘Good’. These results signify that a substantial portion of the respondents have a positive view on UPHC building. However, a small percentage of respondents 5.7% found the UPHC building ‘Satisfactory’ and 0.7% of the respondents rated it as ‘Poor’. Despite its low rating percentage, these ratings highlight potential site for improvement. More than half of the beneficiary respondents have given excellent ratings to the Urban Primary Health Centre buildings under the National Urban Health Mission. This indicates that the facilities are not only well-maintained but also meet the expectations of the beneficiaries in terms of infrastructure, cleanliness, and functionality, reflecting a high standard of quality in service delivery environments.

Table 5.18: Major problems or challenges faced by beneficiaries in UPHC

s/n	Respondent	Number	Percentage%
1	Long waiting hours	189	63.0

2	Lack of availability of medicines and medical supplies	22	7.3
3	Insufficient trained healthcare providers	1	.3
4	Limited accessibility to healthcare facilities	69	23.0
5	No problem faced	19	6.3
	Total	300	100.0

Source: Field survey, 2023 December

Table 5.18 highlights the significant challenges faced by the community in accessing health care services. The primary issue faced by majority of respondents, i.e. 63% is long waiting hours which is pertinent to the quality of care. 73% of the respondents raise concerns about the lack of availability of medicines and medical supplies in healthcare facilities. This can create problems in effectiveness of treatment. Furthermore 23% of the respondents complains about the limited accessibility to health care facilities. Due to the location of the healthcare centre, it is difficult for individual to reach in time. Moreover, 0.3% of the respondents raise concerns about insufficient trained healthcare providers. Meanwhile, 6.3% of the respondents do not face any major issues. However, the above results indicate that all of the respondents faced certain problems in receiving healthcare services under NUHM. It is important to solve these issues and ensure equitable access to quality health care.

Table 5.19: Most pressing improvements needed under NUHM by beneficiaries

s/n	Respondents	Number	Percentage %
1	Well-maintained healthcare facilities with good infrastructure	131	43.7
2	Well trained health care workers	35	11.7
3	Adequate information about the services that are available	26	8.7
4	Reduce out-of-pocket expenses	32	10.7
5	Adequate referral system to higher healthcare facilities	76	25.3

	Total	300	100.0

Source: Field survey, 2023 December

As illustrated in Table 5.19, the most urgent improvement under the National Urban Health Mission (NUHM) discernible by majority of respondents (4.37%) is the need for well-maintained healthcare facilities with good infrastructure. Additionally, 25.3% of respondents emphasized the importance of establishing a proper referral system to higher-level healthcare facilities as a site for development. Furthermore, 11.7% of respondents highlighted the need for well-trained healthcare workers capacitated with consistency and diligence in their performance. Another 10.7% foregrounds the needs to reduce patient expenditure. Meanwhile, 8.7% of respondents asserted that patients are entitled to receive accurate information regarding the services provided at healthcare centres, as this knowledge facilitates timely access to appropriate care, potentially at alternative facilities. In summary, Table 5.19 underscores that, within the framework of the NUHM, healthcare centers are in dire need of considerable enhancements in infrastructure to ameliorate healthcare services and the patient care outcomes.

The field survey observes each UPHC in the Aizawl district in accordance with the IPHS guidelines. Most UPHC generally adhere to the guidelines. In-depth observation studies are not conducted on specific indicators provided by IPHS during field observation, such as the list of medicines and drugs, cleaning protocols, service-wise protocols, and a checklist for daily rounds.

5.5 Patient satisfaction scores of UPHCs Aizawl district

Patient satisfaction scores are critical indicators of the quality of care provided in healthcare settings. They are not just numerical values; they are vital tools for measuring, improving, and maintaining the quality of healthcare services. Consistently evaluating and responding to these scores cultivates trust, loyalty, and improved patient outcomes, ultimately enhancing both patient well-being and the overall

healthcare system. The satisfaction score of patients is collected monthly from patient feedback at each UPHC, where a unique patient satisfaction feedback form is used which includes questions to assess the patients' satisfaction with the healthcare they received. The staff's responsiveness, technical skills, environment, the quality of clinical service, the cleanliness of the hospital, the availability of medicines, the behaviour of the healthcare providers, and the range of questions may be between 10 and 15. In order to determine the overall satisfaction score, the scores of each patient are calculated and divided by the total number of months. By dividing the overall satisfaction score by the total number of months, the average satisfaction score is delineated. The highest rating for patient satisfaction is 5, with an average of 2.5. The minimum requirement scores for UPHC registers at 3.5.

Table 5.20 Patients' satisfaction score 2023 Aizawl district UPHC

Sl/no	Month	UPHC SATISFACTION SCORE 2023					
		ITI	Chawlhhmun	Hlimen	Zemabawk	Sihphir	Lawipu
1.	January	3.8	3.9	3.8	4.0	4	2.3
2.	February	3.6	3.8	4.5	2.8	4	2.1
3.	March	3.5	3.9	3.6	3.6	3.7	2.2
4.	April	3.4	3.3	3.8	3.6	4	2.3
5.	May	3.6	3.7	3.8	3.1	3.8	4.2
6.	June	4.0	3.5	4.0	4.0	4.2	3.4
7.	July	4.0	3.7	3.8	2.9	3.5	4.2
8.	August	3.6	3.8	4.0	3.8	4	3.4
9.	September	3.5	3.9	4.0	3.5	4	3.5
10.	October	4.2	4.0	3.8	3.2	3.8	3
11.	November	4.2	4.0	3.3	3.0	3.8	3.6
12.	December	4.2	4.1	4.1	3.2	4	3.5
Overall satisfaction score		45.6/60	45.6/60	46.5/60	40.7/60	46.8/60	30.1/60
Average satisfaction score		3.8/5	3.8/5	3.87/5	3.3/5	3.9/5	2.5/5

Source: Field study December 2023

The above data provides monthly satisfaction scores for six Urban Primary Health Centres (UPHCs) for the year 2023. An in-depth analysis is given below:

a. Overall Satisfaction Scores: The scores are calculated as the sum of monthly scores for each UPHC, measured out of 60. Sihphir has the highest overall score which is 46.8/60, Hlimen came second with only slight gap at 46.5/60. ITI & Chawlhmun both score 45.6/60. Zemabawk scores 40.7/60. Lawipu has the lowest overall score which is 30.1/60.

b. Average Satisfaction Scores: The average scores are derived by dividing the overall score by 12 (the number of months) and then scaled to 5. Sihphir has the highest average score which is 3.9/5. Lawipu has the lowest average score among the UPHCs (2.5/5). The rest UPHCs ranged between 3.3/5 and 3.87/5

Performance Highlights of the UPHCs based on patients' satisfaction score

- i. Best Performing UPHC:** Sihphir shows consistent high scores across all months, achieving the highest average (3.9/5).
- ii. Most Volatile UPHC:** Lawipu displays significant variability, with the lowest scores (2.1 in February) and some peaks (4.2 in May and July).
- iii. Steady Performers:** ITI and Chawlhmun show relatively stable trends, consistently scoring around 3.8/5.
- iv. Improvement Needed:** Zemabawk and Lawipu require attention to address periods of low satisfaction, particularly in July and February.

CHAPTER VI

CONCLUSION

6.1 Introduction

This chapter will cover the summary and major findings of the study from the discussion in the previous chapters. It would cover general answer to the research questions and analysis of the research objectives. It will also include limitations of the study and suggestions for further studies in research.

In today fast paced modern society where expectations are always rising, the most important thing we can keep and protect is our health. There are numerous health problems faced by the community, urban cities as well as rural areas have faced certain health implications. Number of hospitals are established in certain areas but the problems remain the same for poor people. In cities and in urban areas the number of hospitals available are private hospitals which are very expensive for the poor and disadvantage sections of the society. The Government hospitals are less in number and very congested, it is difficult for the urban poor to have a proper health care. The Government of India has taken major initiatives to deal with the issues by establishing National Rural Health Mission (NRHM) in April 2005 to provide accessible and quality healthcare to the people. After it was successfully implemented and shows its major achievement and results, the Government of India launched its sub mission National Urban Health Mission (NUHM) it aims to strengthen the healthcare infrastructure in urban areas addressing the healthcare needs of the urban population in India. Its main focus is to provide clean water, sanitation, housing and reduce health inequality. NUHM established Urban Primary Health Centre (UPHC) and Urban Community Health Centre (UCHC) to provide primary health care services.

In Mizoram the introduction of NUHM is very much appreciated to address the health problems of the urban community. In Aizawl district we have six Urban Primary Health Centers, under NUHM there are various healthcare workers functioning to uplift the health of urban population by providing health service delivery. Various achievements have been made under NUHM. However, despite these achievements, there are still persistent challenges that need to be addressed. The mission should further prioritize the inclusion of marginalized groups, improve healthcare financing,

and strengthen partnerships with urban local bodies and civil society organizations to ensure sustained progress.

6.2 Summary:

The thesis is divided into six chapters based on the objectives of the study

The *first* chapter is an introductory chapter; it deals with urban health in India and Mizoram. It explains India's different health care sectors and examines Mizoram's urban health status. This chapter includes a statement of the problem, scope of the study, methodology, review of the literature, objectives of study and research questions. This chapter is supplemented by tables and figure.

The *second* chapter is a conceptual study on health care administration. It examines the historical development of health care services in India, it explores the background of Indian health administration and health care delivery from ancient, Buddhist, mediaeval, and modern periods. It also examines the evolution of health care by discussing the United Nations on health care and the Alma Ata Declaration of 1978, which is a milestone for public health. It also highlighted national health policies that pave the way for the health sectors in the five-year plan. This chapter discusses health committees in India from the pre-independence to the post-independence era. This chapter also explained healthcare administration in India at the union level, state level, district level, and community level.

The *third* chapter discusses the urban health challenges in India and Mizoram. It provides an overview of the National Urban Health Mission in Mizoram by encompassing its goals and objectives, strategy, implementation, financial management, and budgeting in NUHM Mizoram. This chapter also highlights the urban primary health centres in Mizoram, under NUHM. This chapter provides a summary of various achievements under NUHM Mizoram.

The *fourth* chapter discusses the specific roles and functions of healthcare workers, such as auxiliary nurse midwives, urban accredited social health activists, and Mahila Arogya Samiti under the NUHM. It discusses how these professionals are essential in providing maternal and child healthcare, preventive and promotional health services, and creating awareness about various health issues in urban communities. Furthermore, it explores the challenges and opportunities faced by these healthcare workers in urban settings, shedding light on the complexities of delivering healthcare in densely populated and diverse urban areas.

The *fifth* chapter discusses the analysis of the field study using primary data collected through a structured interview questionnaire with the health care workers and a questionnaire collected from the beneficiaries of NUHM. Also, through field observation, which is done in each UPHC under NUHM in the Aizawl district, it is undertaken by following the guidelines of IPHS 2022. It focuses on infrastructure requirements, waste management, human resource requirements, essential services provided, drugs and equipment, laboratories and diagnostic centres, community outreach, and quality assurance monitoring services.

The *sixth* chapter is the concluding chapter; it contains a summary of the study, major findings, observations from the study, suggestions for improvement, and scope for further studies.

6.3 Major findings

Research questions are framed to achieve the objectives of the study. The findings of the study are discussed below in response to research objectives:

1. *To study the background and origin of implementation of NUHM in India and Mizoram.*

The implementation of National Urban Health Mission in the state requires a comprehensive approach with various essential processes. According to the NUHM framework for implementation the process of implementing NUHM are:

a) *Establish institutional mechanism:*

The main objectives like appointing additional Mission Director of NUHM, expansion of State Health Society, establishing City Health Society, Urban Health Cell within State Program Management, convergence with Urban Local Bodies (ULB) and stakeholders.

b) *Urban health planning:*

The second steps in implementation include health planning like prevention of ill health, strengthening of primary health facilities, ensuring primary health through outreach and to identify specific health issues in the city. Moreover, urban health planning in NUHM also involves collaboration and partnerships with local stakeholders, including community-based organizations, healthcare providers, and municipal authorities. Engaging with these stakeholders can help in identifying community health priorities, mobilizing resources, and developing sustainable healthcare delivery models that are responsive to the unique urban context.

c) *Urban Mapping:*

The third steps in implementation are GIS mapping. It helps to understand the availability and distribution of resources available, location of slums, health facilities, road and landmarks. Three type of mapping is used by the states in NUHM implementation i) City mapping using GIS technology, ii) UPHC catchment area mapping, iii) Vulnerable assessment

d) *Operationalised UPHC:*

After the previous step is completed the actual implementation of the mission begins by functioning UPHC and UCHC. UPHC must be located near or inside the slums or slum like areas. It shall be the epicentre and the core of primary healthcare. UPHC and UCHC must provide preventive, curative, promotive and palliative care for the community.

e) *Linking diseases control programmes of NUHM:*

Disease control programmes include all communicable and non-communicable diseases including HIV. Organising outreach services like UHND and special outreach camps. Organising referral services and reporting mechanism through Health Management Information System (HMIS) a web base monitoring provided by Ministry of Health and Family Welfare (MoHFW)

2. *To study the infrastructural facilities at UPHCs.*

To obtain these research questions a study of National Urban Health Mission in India and Mizoram was made in chapter 3. The findings are given below

Firstly, PHC was established by the Bhole Committee in 1946. It was set up to provide preventive health care system close to public. Likewise, NUHM was established in 2013 as a sub mission of NHM. NUHM intends to build UPHC as a centre of preventive, promotive and curative. UPHC has provided services like OPD & IPD services, patients referral services to other health centres, counselling of mother for immunization and FP services like distribution of condoms and oral pills.

Secondly, there are six UPHC in Aizawl district they are divided into two CMO, Aizawl east and Aizawl west. In Aizawl east there are three UPHC ITI UPHC, Zemabawk UPHC and Sihphir UPHC. In Aizawl west there are also three UPHC namely Chawlhmun UPHC, Lawipu UPHC and Hlimen UPHC. In Aizawl district there are total number of six UPHC. In Aizawl district UPHC the total number of healthcare workers are 11ANM, 64ASHA, 47MAS group. UPHC staff like 6 MO, 18 Staff Nurse, 6 Pharmacist, 6 Accounts clerk, 9 Laboratory technician and 17 Group D. At State level we have 2 State Consultant, 2 Public Health Manager, 1 Group D. At the District we have 1 Public Health Manager (PHM) at Lunglei district. At Lunglei District there are Sazaikawn UPHC and Hanchalkawn UPHC, at Champhai district we have Champhai UPHC. Currently there is no UCHC present in Aizawl district

Thirdly, for enhancing the infrastructural facilities at UPHC a field study and field observation is done in each UPHC Aizawl district under NUHM. Here are some of the results from the study:

a) *Efficient supply of medical equipment:*

In UPHC a regular supply of medicine and medical equipment especially first aid kit is essential. Due to large number of OPD patients on a daily basis medicine are out of stock this create major issues for both the patients and the health care providers. Patients come with minor injury and some need emergency treatment due to accident, some need dressing of wounds. To solve these issues the health care providers must maintain a record of stock register for medicine and other health equipment. By submitting their essential requirements and list of needs in advance on quarterly basis this will certainly help in shortage of medical supplies. In UPHC with the help of IPA (Internal Performance Assessment) they receive some amount of money which help them for local purchase of medicine and medical equipment in case of emergency.

b) *Training for newly recruit health care workers:*

Without a proper training no workers can perform their duty effectively. Under the supervision of NUHM different types of training induction, refresher should be conducted for all healthcare workers. This will bare an effective result in their performance.

c) *Incentive revision and regular payment:*

Among the healthcare workers some of them had been continuously working for many years and perform their duties efficiently. But their incentives are very low compare to the time and effort they put into it. Based on the findings most of the healthcare workers did not receive their incentives on time. To solve these issues the NUHM has to look into this matter and must find a quick solution.

d) *To strengthen manpower:*

From the analysis of structured interview questionnaire to healthcare workers in chapter V, it was found that 19% of the respondent's response that for effective performance and adequate care in UPHC strengthening of manpower is highly required.

3. *To study the role of urban ASHA, MAS and ANM in promoting NUHM.*

To ensure the research questions the role of urban healthcare workers in NUHM was presented in chapter 4. The findings are given below

a) *Role of Auxiliary Nurse Midwife:*

ANM play a crucial role in National Urban Health Mission, they provide basic healthcare services to the urban population and promote maternal and child health. One of the primary responsibilities if ANM is to conduct outreach sessions and camps like UHND. Special outreach camps are conducted to raise awareness about health issues such as antenatal care, post-natal care, immunization, counselling for family planning, maintaining health records and monitoring overall health to the community. Furthermore, ANM supervise and monitor Urban ASHA in the field level. ANM collaborate with Urban Local Bodies (ULB) to participate and to take steps to meet specific health needs of the community. Community health issues such as waste disposal, sanitation, water, vector control, stray animals which can impact the health of the people. According to NUHM framework each ANM is expected to provide service for population of 10,000.

b) *Role of Accredited Social Health Activist:*

Urban ASHA plays an important role in delivering healthcare services to the urban population. They act as a vital link between the community and the healthcare system by creating awareness about the health concerns and promote healthy behavior

for the people. Furthermore, ASHA roles and responsibilities include home visit, attending UHND and outreach activities, promoting and coordinate Mahila Arogya Samiti formation, accompanied pregnant women, sick child to health facilities, counselling of women on maternal and child health and timely maintenance of reports and records. Overall, the role of ASHA in NUHM is indispensable as they serve the backbone of the community health in urban areas. According to NUHM framework ASHA covers a population of 1000-2500 which is 250-500 households.

c) Role of Mahila Arogya Samiti:

MAS plays a crucial role in attaining the goals of NUHM by empowering women and promoting health and wellness in urban communities. They are local collective or groups of 10-15 community women. According to NUHM framework each MAS covers 250-500 populations which is 50-100 households and they formed in slums or slum like areas. MAS group conduct a monthly meeting to discussed issues faced by the community. They address the local issues related to health like water, sanitation, hygiene, communicable and non-communicable diseases control. They are coordinated by Urban ASHA who also acts as a member secretary. Furthermore, MAS create awareness about the importance of health issues, facilitating health camps, promote preventive care, maternal and child health. Overall, they seek to improve the health outcomes of urban population. They have untied funds of Rs 5000 per year.

4. To find out the shortcomings and the problems faced by respondent's beneficiaries under NUHM Aizawl.

It was found from the analysis of questionnaire to beneficiaries that the major problems faced by the respondent beneficiaries under NUHM are given below:

a) Long waiting hours in UPHC:

Long waiting hours in health care centers can have a high impact on the patients both mentally and physically. Table 5.18 indicates that 63% of the respondent beneficiaries face these issues. Depending on the patient's health conditions this can increase anxiety and stress level. Patients with chronic conditions or acute illness may

expressed discomfort. These problems are common in UPHC especially in Zemabawk and Chawlhmun UPHC due to large number of OPD patients and large area of population covered.

b) *Lack of availability of medicine and medical supplies:*

It was found from the analysis of questionnaire to beneficiaries that 7.3% of the respondents felt that the major problems of health facilities under NUHM is the lack of availability of medical supplies and poor supply from Central Medical Store (CMS). Some of the medical kit specially first aid kit is not available during emergency service and need to purchase from the local store. This creates problems for the patients in terms of emergency and effectiveness of treatment.

b) *Limited accessibility of healthcare facilities:* It was found from the analysis of questionnaire to beneficiaries that 69 members which is 23% of the respondents faced issues regarding limited accessibility to healthcare facilities. This can lead to a range of problems for the individual to receive medical attention on time, leading to untreated illness and worsen the conditions. For some reasons it maybe a little bit far for the people to reached health center on time especially people residing in Zemabawk and Sihphir. Due to location of UPHC which is isolated form the city it may create problem even for the health care staff to reached on time.

5. *To understand the implications and make suitable suggestions for the effective performance of NUHM*

The National Urban Health Mission has significant implications for the overall health and wellbeing of urban population in India. Based on the analysis of questionnaire both from beneficiaries and healthcare workers one of the major implications and suggestions are:

a. The need to maintain healthcare facilities with good infrastructure:

Health care facilities play a crucial role in providing essential medical services to communities. The quality of infrastructure in health care facility directly impacts patients care, staff productivity and overall performance. A well maintained health care facility with modern technology and latest technology can significantly improve patient's outcomes by providing a safe and comfortable environment for receiving treatment. 43% of the respondent's response that for effective delivery of healthcare services we need to have a healthcare facility with good infrastructure. With rapid increase in population and urbanization there is an increased demand for healthcare facilities. There is a need for efficient healthcare service delivery. There are several implications face by UPHCs in Aizawl district. ITI UPHC have implications like for counselling of patients there is no counselling room, immunization toilet and pipe is damaged, there are 11 bed available but no separate female ward, a ramp for PWD patient is highly needed, Laboratory room needed extension the current Lab room is small and congested, a separate room for breast feeding corner, proper side drain near the building, water tank for water storage, plastic chair for patients and waiting room for patients with chronic patients. Sihphir UPHC have implications like there are only 5 bed available due to small building and there are no separate room for male and female, isolation ward is needed. Hlimen UPHC have implications like a need for new Laboratory room the current lab room is small and the location is difficult for patients to enter, there is no separate Dentist room, there are only 6 bed available with no separate male and female, nursing station and casualty room needed extension, public toilet need to place in front of the building, sterilization room with bathroom attached is needed, separate entrance for disabled persons PWD and pregnant women, the current entrance are steps which is difficult for wheelchair to enter the health center. Chawlhmun UPHC has only 4 bed available, they need bigger room for more bed in ward. Overall, most of the UPHC has common issues regarding number of bed available, toilet and room extension. This matter should be look into it and NUHM should take measures to solve these issues.

b. Training for healthcare workers:

Healthcare worker plays a crucial role in providing essential medical care to patients. Training programs for healthcare workers provide a wide range of topics which include medical ethics, communication, infection control, emergency response and latest advance in technology. It was found that 30% respondents from the healthcare workers and 11% respondents from the beneficiaries felt the needs to have a well-trained healthcare worker who can perform their duties efficiently. A training can be induction or refresher depending on the needs. Different types of training were conducted by NUHM Mizoram, according to NUHM achievements in Mizoram during the year 2013-2014 ULB Orientation training and orientation of MAS training is conducted. During the year 2015-2016 Orientation campaign for stakeholder/MAS/ULBs and Mahila Arogya Samiti (MAS) training is conducted. Awareness campaign/orientation training of stakeholders under NUHM (Aizawl East, West and Lunglei) was conducted on 18th May 2016, 19th May 2016 and 24th May 2016. During 2017 Financial Management Training of UPHC Accounts Clerk from Aizawl East District and Aizawl West District was conducted. ASHA Orientations and Refreshers training was held on 18th and 19th July, 2017. Training of Urban ASHA's and ANM's on Universal Screening of NCD'S. Orientation of urban Local Bodies of UPHC under NUHM in Aizawl&Lunglei was conducted on 14th – 16th of February 2017 at Civil Hospital Conference Hall. During the year 2018-2019 NUHM workshop of city level staffs was conducted on 2nd February, 2018. Biomedical waste Management Training of Staff Helpers from Aizawl East and Aizawl west district was conducted. ASHA Orientation and Refreshers training was held on March, 2019 1st responder training was conducted.

NUHM has conducted training for different healthcare workers and staff form UPHC every year to ensure the delivery of high quality, efficient and safe health care services to the people.

c. Ensuring better supply of medical equipment:

The availability of adequate supply of medical equipment in primary healthcare settings is crucial for delivering quality healthcare. 25% of the respondent from the healthcare workers felt the need to have adequate medical equipment in UPHC. Many healthcare centers are faced with challenges such as outdated equipment, inadequate supplies, lack of essential tools such as emergency kit to treat patients effectively. ITI UPHC has implications like equipment for autoclave for sterilization and first aid kit. Hlimen and Lawipu UPHC need ultrasound. Meanwhile, Chawlhmun UPHC have only one oxygen cylinder. Sihphir UPHC need dressing instrument for the patients. These problems not only affect the patients but also the healthcare workers who are striving to deliver a quality and effective care. Due to limited resource available it is difficult to produce quality care. However, to solve these issues we need efficient procurement which includes regular inspection. Furthermore, by developing partnership with reliable suppliers we can help to meet the required standards not only depends on one supplier like Central Medical Store.

6.4 Limitations of the study

The study is a case study of NUHM in Aizawl district of Mizoram. It focusses only on the working and functioning of healthcare workers in Aizawl district. The role and functions of UPHC in another district like Lunglei, Sazaikawn and Champhai are not included. The study included only 6 UPHC. Health facilities and health care centers like sub center/ health and wellness center are not included in the study.

The present study explained the functions of Urban Primary health Centers while another health facilities like health clinic and the importance of Anganwadi center are not included in the study. Furthermore, the most important functions of NCD screening under UPHC which is mandatory according to NUHM framework need in depth study. In the study community participation is one of the key aspects for successful implementation of NUHM meanwhile the importance of VHSS is not mentioned.

The present study is a case study and has identified the problems and challenges faced by the healthcare workers like ANM, ASHA, MAS in improving the care services to urban population, health providers like MO, Lab technician, Pharmacist, Staff Nurse and other staff under UPHC their problems and challenges should also be noted. All these limitations cannot be included in the study due to the study which is conducted only in one district. Because of these limitations, the study may not cover the entire functions of NUHM in Mizoram.

6.5 Suggestions for further studies

Here are some of the suggestions that further studies can be conducted by researchers.

1. Role and functions of Village Health Sanitation and Nutrition Committee (VHSNC) at the community.
2. Community participation in implementation of NUHM
3. A comparative study of healthcare workers in rural and urban areas under NHM Mizoram.

APPENDICES

APPENDIX NO 1

Ref: Healthcare workers

Topic: Health Care Delivery in Mizoram: A Case Study of National Urban Health Mission in Aizawl District.

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QUESTIONNAIRE FOR AUXILIARY NURSE MIDWIFE

Instructions:

Please answer the following questions to the best of your knowledge and experience. Choose the best appropriate answer or leave any additional comments as necessary. Confidentiality of respondents will be respected, and the data obtained will only be utilised for research purposes.

1. Name :
2. Age :
3. Education : Primary education (up to IV th) ☐
Secondary education (up to VIII th) ☐
X th pass ☐
XII th pass ☐
Graduate/PG ☐
4. How many years of work experience do you have as an ANM?
 - a. Less than 1 year
 - b. 1-3 years
 - c. 3-5 years
 - d. More than 5 years

5. In which setting have you worked as an ANM?

- a. Zemabawk UPHC b. Sihphir UPHC c. Hlimen UPHC
d. ITI UPHC e. Chawlhmun UPHC f. Lawipu UPHC

6. Have you provided antenatal and postnatal care to pregnant women?

- a. Yes
b. No

7. Have you assisted in deliveries?

- a. Yes
b. No

8. Have you given children immunisations as part of your ANM duties?

- a. Yes
b. No

9. Have you conducted family planning counselling sessions?

- a. Yes
b. No

10. What improvements do you believe could benefit ANMs in providing better healthcare services?

- a. Higher remuneration
b. Additional training opportunities
c. Improved staffing levels
d. Better medical equipment and supplies
e. Other (please specify):

11. Do you receive incentive/salary on time?

- a. Yes
b. No

12. Do you participate in UHND outreach programs?

- a. Yes
- b. No

13. Does the availability of the equipment you need affect your work?

- a. Yes
- b. No

14. If yes, what effect your work?

- a. We don't have permission to administer medication
- b. Equipment are not available on time
- c. The equipment provided are not sufficient
- d. Above all

15. Do you maintain medical register/record?

- a. Yes
- b. No

16. If so, what medical register/record you maintain?

(More than one can be selected)

a. ANC	b. Birth & Death	c. OPD
d. TB	e. Malaria	f. Family planning

17. Have you received any training? If so, what training did you receive?

- a. No
- b. Induction training
- c. Refresher training
- d. Other training

18. Do you have any suggestions as to how ANMs and NUHMs can work together more effectively?

APPENDIX NO 2

Ref: Healthcare workers

QUESTIONNAIRE FOR URBAN ASHA

Instructions:

Please answer the following questions to the best of your knowledge and experience. Choose the most appropriate answer or provide any additional comments as necessary. Confidentiality of respondents will be maintained, and the data collected will only be used for research purposes.

Sd/- Laltleipuia,

1. Name :

2. Age :

3. Education : Primary education (up to IV th) ☐
 Secondary education (up to VIII th) ☐
 X th pass ☐
 XII th pass or above ☐

4. How long have you been working as an ASHA worker?

- a. Less than a year
- b. 1-3 years
- c. 3-5 years
- d. Over 5 years

5. In which setting have you worked as an ANM?

- a. Zemabawk UPHC b. Sihphir UPHC c. Hlimen UPHC
- d. ITI UPHC e. Chawlhmun UPHC f. Lawipu UPHC

6. In your duty which creates a major problem to enhance health care in the community?

- a. Daily home visits consume a lot of time leaving no time for other activities.
- b. Excessive record maintenance without getting any payment for it.
- c. Population size covered is too large
- d. I don't have a problem

7. Do you think the government's rewards for ASHA workers are good enough?

- a. Yes
- b. No

8. Are you aware of the health programs and policies implemented by the government for the community you serve?

- a. Yes
- b. No

9. How do you keep yourself updated with the latest practices in healthcare?

- a. Workshops and trainings
- b. Reading relevant research materials
- c. Online courses
- d. Other (please specify)

10. Do you receive incentive/salary on time?

- a. Yes
- b. No

11. Have you recorded the number of mothers, children and pregnant women in your area?

- a. Yes
- b. No

12. Where do you submit your monthly report?

(You can tick more than one)

- a. Mobilizer
- b. UPHC
- c. Circle officer ICDS
- d. If other specify _____

13. Do you participate in UHND outreach programs?

- a. Yes
- b. No

14. Have you received any training? If so, what training did you receive?

- a. No training
- b. Induction training
- c. Refresher training
- d. Other training

15. Do you have any suggestions as to how Urban Asha's and NUHMs can work together more effectively to meet its goal? _____

APPENDIX NO 3

Ref: Healthcare workers

QUESTIONNAIRE FOR MAHILA AROGYA SAMITI (MAS)

Instructions:

Please answer the following questions to the best of your knowledge and experience. Choose the most appropriate answer or provide any additional comments as necessary. Confidentiality of respondents will be maintained, and the data collected will only be used for research purposes.

Sd/- Laltleipuia,

1. Name:

2. Age:

3. Designation in MAS:

4. How many years of work experience do you have?

- a. Less than 1 year
- b. 1-3 years
- c. 3-5 years
- d. More than 5 years

5. In which setting have you worked as an MAS?

a. Zemabawk UPHC	b. Sihphir UPHC	c. Hlimen UPHC
d. ITI UPHC	e. Chawlhmun UPHC	f. Lawipu UPHC

6. How frequently do MAS meetings occur?

- a. Weekly

- b. Monthly
 - c. Bi-monthly
 - d. Quarterly
 - e. Other (please specify)
7. Have you received sufficient training and orientation for your role in MAS?
- a. Yes
 - b. No
 - c. Partially
8. In your opinion, how effective is the coordination between MAS and NUHM?
- a. Excellent
 - b. Good
 - c. Satisfactory
 - d. No coordination exists
9. Are you satisfied with the support and resources provided by NUHM to implement MAS programs?
- a. Very satisfied
 - b. Satisfied
 - c. Neutral
 - d. Dissatisfied
 - e. Very dissatisfied
10. How engaged are the community members in the MAS activities?
- a. Highly engaged
 - b. Moderately engaged
 - c. Minimally engaged
 - d. Not engaged at all
11. Are you aware of the health programs and policies implemented by the government for the community you serve?

- a. Yes
- b. No

12. Do you receive incentive/salary on time?

- a. Yes
- b. No

13. With the mother and Child Protection Card (MCP) do you keep track of mothers, children, and pregnant women?

- a. Yes
- b. No

14. Where do you submit your monthly report?

(You can tick more than one)

- a. Mobilizer
- b. UPHC
- c. Circle officer ICDS
- d. If other specify _____

15. Do you have any suggestions as to how MAS and NUHMs can work together more effectively to meet its goals?

:

APPENDIX NO 4

Ref: Beneficiaries/patients

QUESTIONNAIRE FOR NUHM BENEFICIARIES

Instruction

This questionnaire aims to collect insights into the problems encountered by the beneficiaries of NUHM to emphasize areas that need attention. By gathering this information, we can make informed recommendations and provide policy suggestions for enhancing the healthcare services provided by NUHM.

Sd/- Laltleipuia,

1. Name: _____

2.. Male ☐ Female ☐ Others ☐

3. Age: _____

4. Locality: _____ (Urban Area)

5. What Healthcare Scheme do you use?

- a. AB-PMJAY
- b. Mizoram State Healthcare Scheme
- c. None

6. Have you or anybody in your family used the healthcare services under the NUHM (UPHC/Health & Wellness Centre)?

- a. Yes
- b. No

7. If yes, what kind of healthcare services have you or your family members used?
(Multiple answers allowed)

- a. Urban Primary health Centre
- b. Health & Wellness Centre
- c. Health clinic
- b. Other (please specify) _____

8. How satisfied are you with the quality of healthcare services provided under the NUHM?

- a. Very satisfied
- b. Satisfied
- c. Neutral
- d. Dissatisfied
- f. Very dissatisfied

9. Describe the condition of the UPHC building under NUHM

- a. Excellent
- b. Good
- c. Fair
- d. Poor

10. Did you find the healthcare facilities under NUHM to be clean and well-maintained?

- a. Yes
- b. No

11. How would you rate the behaviour and attitude of the healthcare staff?

- a. Excellent
- b. Good
- c. Satisfactory
- d. Poor
- e. Not applicable (haven't interacted)

12. Did the healthcare providers explain your condition and treatment plan clearly?

- a. Yes

- b. No
- c. Partially

13. Are you satisfied with the way health care workers perform in maternity care services?

- a. Yes
- b. No

14. Is the primary health centre located in a convenient and accessible location?

- a. Yes
- b. No

15. Are proper sanitation and hygiene facilities in place, including toilets for patients and staff?

- a. Yes
- b. No

16. What are the major problems or challenges you have faced while availing of healthcare services under the NUHM? (Please tick all that apply)

- a. Long waiting hours
- b. Lack of availability of medicines and medical supplies
- c. Insufficient trained healthcare providers
- d. Limited accessibility to healthcare facilities
- e. Any other (please specify) _____

17. What are the most pressing infrastructure improvements needed at this UPHC?

- a. Well-maintained healthcare facilities with good infrastructure
- b. Well trained health care workers
- c. Provide proper information about the services that are available
- d. Reduce out-of-pocket expenses
- e. Inadequate referral system to higher healthcare facilities
- f. Any other (please specify) _____

APPENDIX NO 6

Gazette notification of NUHM Mizoram

विबन्दी नं० डी० एन०-13(14/99)

REGD. NO. D. 1 - 33004/99

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स्वास्थ्य एवं परिवार कल्याण मंत्रालय

(स्वास्थ्य और परिवार कल्याण विभाग)

संकेत

नई दिल्ली, 15 मई, 2013

सं. एम. 19017/1/2008-एच एच (अणु-01).—सरकार ने राष्ट्रीय आबादी, विशेष रूप से सड़की मरीजों और समाज के अन्य उपेक्षित वर्गों को उन्नत प्राथमिक स्वास्थ्य परिचरों सेवाएं पहुँचा करने के लिए स्वास्थ्य राष्ट्रीय स्वास्थ्य मिशन (एन एच एम) के तहत एक उप-मिशन के रूप में राष्ट्रीय सड़की स्वास्थ्य मिशन की शुरुआत की है। यह मिशन 50,000 से अधिक आबादी वाले सभी नगरीय सड़कों, सभी शिक्षा मुख्यालयों तथा राष्ट्रीय की राजधानियों में शुरू किया जाएगा है। 50,000 से कम आबादी वाले सड़कों को राष्ट्रीय स्वास्थ्य मिशन के दूसरे उप-मिशन, राष्ट्रीय ग्रामीण स्वास्थ्य मिशन के तहत शामिल किया जाएगा।

2. राष्ट्रीय सड़की स्वास्थ्य मिशन का उद्देश्य सड़की आबादी, विशेषकर झुग्गीझुगुनी तथा अन्य उपेक्षित वर्गों को सड़की स्थानीय निकायों (एच एम बी) की सक्रिय भागीदारी से उन्नत स्वास्थ्य परिचरों तक समाज सुविधाएं प्रदान करने उनकी स्वास्थ्य स्थिति में सुधार लाना है। इन उद्देश्यों को प्राप्त करने के लिए परलोक है कि जहाँ आवश्यकता सुविधाएं उपलब्ध नहीं हैं, उन सड़की/नगरी में समुचित जन स्वास्थ्य प्रदाय प्रणाली विकसित की जाएगी जिसमें नई आवश्यकता के निर्माण का प्रावधान होगा, मौजूदा जन-स्वास्थ्य प्राथमिक प्रणालियों को मजबूत बनाया जाएगा, गुणवत्ता बढाने वाले तथा और गुणवत्ता वाले प्रिक्ली होब के साथ भागीदारी स्थापित की जाएगी तथा महिला आयोग समिति (एम ए एच) एवं प्रभावित सामाजिक स्वास्थ्य कार्यकर्ता (आशा) नाम से उन संकेत कार्यकर्ताओं जैसी समुदाय स्तरीय संस्थाओं के जरिए समुदाय का क्षमता-निर्माण किया जाएगा तथा सड़की स्थानीय निकायों जैसे प्रमुख स्ट्रेक्चरल के क्षमता निर्माण और मरीजों में सबसे उपेक्षित वर्गों को शामिल करने के लिए विशेष प्रावधान किए जाएंगे।

2816 06/2013

संघाजन समूह द्वारा क्या अनुमोदित प्रशासनिक और वित्तीय अधिकार दिए गए हैं। इसके अलावा, मिशन को मिशन संघाजन समूह द्वारा क्या अनुमोदित अपने स्वयं के निचम और प्रक्रियाएँ बनाने का भी अधिकार है।

केसर देवियानु, सचिव
अनुसूचित

मिशन संघाजन समूह (एम. एस. जी) को सभी योजनाओं और घटकों, जो एन. आर. एच. एम. और एन. यू. एच. एम. के साथ हैं, के संबंध में वित्तीय मामलों का अनुमोदन करने का पूर्ण अधिकार है। मिशन संघाजन समूह द्वारा प्रदत्त दस्तावेजों के प्रयोग पर यह सार है कि एन. आर. एच. एम. और एन. यू. एच. एम. के संबंध में एक रिपोर्ट सही वित्तीय मामलों में रटोबदन, चम रही योजनाओं में संशोधन तथा नई योजनाओं के स्वीकृतिकरण पर संशोधन के समस्त सूचनाएँ रखे जाएं। एन. एस. जी. स्थापक के बीच के निधन नीतियों और कार्यक्रम निर्धारित करता है और मिशन की अधिकार-वापत कार्यक्रम समिति को नीतियों और प्रशासन में समझ देता है।

अधिकार-वापत कार्यक्रम समिति (ई. पी. सी) को मिशन संघाजन समूह (एम. एस. जी) द्वारा अनुमोदित वित्तीय मामलों में 25 प्रतिशत की सीमा तक परिवर्तन करने की संज्ञा देती है। इससे अधिक रटोबदन एम. एस. जी. के अनुमोदन से होगा। अधिकार-वापत कार्यक्रम समिति द्वारा प्रदत्त दस्तावेजों के प्रयोग पर यह सार है कि एन. आर. एच. एम. और एन. यू. एच. एम. के संबंध में एक प्रति रिपोर्ट के साथ वित्तीय मामलों में रटोबदन, चम रही योजनाओं में संशोधन तथा नई योजनाओं के स्वीकृतिकरण पर संशोधन के समस्त सूचनाएँ रखे जाएं।

MINISTRY OF HEALTH AND FAMILY WELFARE

(Department of Health and Family Welfare)

RESOLUTION

New Delhi, the 15th May, 2013

No. L. 19017/1/2008-UB(Vol.III).—The Government has launched the National Urban Health Mission (NUHM) as a sub-mission under an overarching National Health Mission (NHM) for providing quality primary healthcare services to the urban population, especially the urban poor and other vulnerable sections of society. The Mission is to be launched in all cities/towns with a population of more than 50,000, all district headquarters and state capitals. Towns with a population below 50,000 will be covered under the National Rural Health Mission (NRHM), the other sub-mission of the National Health Mission.

2. National Urban Health Mission (NUHM) aims to improve the health status of the urban population, particularly the slum dwellers and other vulnerable sections by facilitating equitable access to quality health care with the active involvement of the Urban Local Bodies (ULBs). It proposes to achieve its objectives by developing appropriate public health delivery system across cities/towns with provisions for creating new infrastructure where none exists, strengthening the existing primary public health systems, entering into partnerships with for-profit and not-for-profit private sector, improving access and building community capacity through community level institutions like Mahila Arogya Samiti (MAS) and link workers called Accredited Social Health Activists (ASHA), capacity building of key stakeholders like ULBs, and by making special provision for inclusion of the most vulnerable amongst the poor.

3. The National Urban Health Mission would use the institutional structures already created under NRHM at the national, state and district levels for operationalisation of the NHM and sub-mission of the NUHM. However, in order to provide dedicated focus to issues relating to urban health, the institutional mechanism under the NRHM at various levels would be strengthened for NUHM implementation. The existing governance structures and financial mechanisms existing under the NRHM would also serve NUHM as well.

- i. At the central level, the Mission Steering Group (MSG) under the Union Health Minister, the Empowered Programme Committee (EPC) under the Secretary (H&FW) and the National Programme Coordination Committee (NPCC) under the Mission Director will be responsible for providing overall guidance and taking important decisions. The Ministers of HUPA and Urban Development will be included in the already existing MSG. The existing EPC will be expanded by co-opting Secretary, HUPA and Secretary, Urban Development as members.
- ii. At the central level, a National Programme Management Unit (NPMU) would be created to facilitate and monitor implementation of NUHM.

- iii. To enhance the program management capacity at state level, the State PMU of the NRHM would be strengthened.
- iv. In addition to the above, at the City level the States may either decide to constitute a separate City Urban Health Mission/City Urban Health Society or use the existing structure of the District Health Society/Mission under NRHM with additional stakeholder members. In light of state/city/town specific need, suitable contextualization and flexibility would be allowed to State Governments.
- v. The management of NUHM activities may be coordinated by a city level Urban Health Committee headed by the Municipal Commissioner/District Magistrate/ Deputy Commissioner/District Collector/Sub-Divisional Magistrate/Assistant Commissioner based on whether the city is a district headquarters or a sub-divisional headquarter. This would help ensure better coordination with other related departments like Women & Child Development, Water Supply and Sanitation especially in times of response to disease outbreaks/epidemics in the city.
- vi. For the seven mega cities, namely Delhi, Mumbai, Kolkata, Chennai, Bengaluru, Hyderabad and Ahmadabad, the sub-mission NUHM will be implemented through the respective ULBs.

4. As NRHM & NUHM would be two components of the National Health Mission (NHM), Additional Secretary & Mission Director, Ministry of Health & Family Welfare would be Additional Secretary & Mission Director (NHM), comprising both the sub-missions of NRHM and NUHM.

5. Similarly at the State level, State Mission Director, NRHM would also look after the sub-mission of NUHM in addition to the existing NRHM. State Mission Director would be Mission Director, National Health Mission encompassing both the sub-missions of NRHM and NUHM.

6. The Mission Steering Group and the Empowered Programme Committee have been empowered to make modifications of norms of approved schemes/ items of expenditure under NUHM, similar to that already approved for NRHM, as detailed out in the Annexure.

7. The Mission Directorate has been vested with adequate administrative and financial powers to enable it to achieve the agreed outcomes under the overall guidance of EPC and MSG. Additional Secretary and Mission Director, NHM is vested with administrative and financial powers as approved by the Mission Steering Group. Additionally, the Mission will also have the power to frame its own rules and procedures as approved by the Mission Steering Group.

KESHAU DESHAJ, Secy.

Annexure

The Mission Steering Group is fully empowered to approve financial norms in respect of all schemes and components which are part of NRHM & NUHM. The exercise of delegated powers by the MSG is subject to the condition that a progress report regarding NRHM & NUHM, along with deviation in financial norms, modifications in on-going schemes and details of new schemes are placed before Cabinet for information on an annual basis. The Mission Steering Group lays down the policies and programs for the Health Sector and advises the Empowered Programme Committee of the Mission in policies and operation.

The EPC has been given the flexibility to change financial norms approved by the MSG within a range of 25%, with larger variations being approved by the MSG. The exercise of delegated powers by the EPC is subject to the condition that a progress report regarding NRHM & NUHM, along with deviation in financial norms, modifications in on-going schemes and details of new schemes are placed before Cabinet for information on an annual basis.

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ABSTRACT

HEALTHCARE DELIVERY IN MIZORAM: A CASE STUDY OF NATIONAL URBAN HEALTH MISSION IN AIZAWL DISTRICT

**AN ABSTRACT SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF
PHILOSOPHY**

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DEPARTMENT OF PUBLIC ADMINISTRATION

SCHOOL OF SOCIAL SCIENCES

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**HEALTHCARE DELIVERY IN MIZORAM: A CASE STUDY OF
NATIONAL URBAN HEALTH MISSION IN AIZAWL DISTRICT**

By

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Submitted

**In partial fulfillment of the requirement of the Degree of Doctor of Philosophy
in Public Administration of Mizoram University, Aizawl**

Healthcare Delivery in Mizoram: A Case Study of National Urban Health Mission in Aizawl District

Introduction

Health is a multidimensional concept and a very crucial factor in human productivity and economic growth, as highlighted in the World Development Report (1993) as well as in measuring Human Development Index. The World Health Organization (WHO) was established in 1948 to coordinate and direct international health within the United Nations system. The Millennium Development Goals (MDGs) were established in 2000, with two of them focusing on improving maternal and child health. In 2015, the United Nations adopted the Sustainable Development Goals, which prominently featured health in the SDGs. The third SDG goal is to ensure healthy lives and promote well-being for all at all ages. India signed the 2030 Sustainable Development Agenda Statement in 2015, which consists of 17 SDGs. The State Government plays a key role in implementing these programs, and the National Institute for Transforming India (NITI Aayog) was established to strengthen the health system in urban and rural areas. As health connects economic growth with human capital, and a good healthcare system is thus essential for achieving these goals.

India's healthcare system is crucial for its growth and well-being, with a population of over 1.3 billion. It handles diverse health needs, supports preventive measures, and offers affordable treatment options. However, challenges include poor infrastructure, lack of healthcare services, especially for rural populations, and high medical costs. A strong healthcare system can improve general health by providing rapid detection and care for various illnesses. India has adopted several projects/policies like- Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY), Universal Immunization Programme (UIP), National Health Mission (NHM), Pradhan Mantri Swasthya Suraksha Yojana (PMSSY, National Urban Health Mission (NUHM), etc to improve the healthcare delivery system.

The National Urban Health Mission (NUHM) was launched in 2013 to expand primary health services to the urban poor in 779 cities and towns within a population of 50,000. The mission aims to address insufficient urban health care due to an excessive population by identifying three tiers for service delivery: community-level outreach programs, urban health centre-level infrastructure, and secondary/tertiary-level public-private partnerships. This thesis made an attempt to study the implementation of NUHM in the northeastern state of Mizoram to improve its healthcare delivery system for the urban poor.

National Urban Health Mission in Mizoram

Mizoram is one of the most urbanised hilly State in India. Aizawl is the state capital with an urban population of 77.4% of the total state population of 400,309 (2011 Census). The population density in Census 2011 was 234 people per square kilometre. The state government recognised 73 slum pockets under the Rajiv Awas Yojana (RAY) scheme¹. The 2011 Census has designated 26.8% of Aizawl city's population as living in recognised slums. According to NITI Aayog health index, Mizoram is one of the performing states, however it still faces many health challenges in areas ranging from Cancer, Tobacco, Malaria, Malnutrition related illness.

Tuberculosis death rates is alarming with 108 cases in 2023. The HIV Estimation 2023 report reveals Mizoram has the highest HIV/AIDS prevalence in the country, with 0.23 per 1,000 people infected. Cerebrovascular illness is the second leading cause of death among non-communicable diseases, following hypertension. The government has taken many immediate actions to address these health challenges and increase the quality of life in align with the vision and principles of “Universal Health coverage and Care”. The Mizoram State Vision 2030 has adopted the national and global framework including health sector to achieve the National Health Mission.

¹Saitluanga, B. L. (2018, August 17). *Towards a sustainable smart city: The case of Aizawl*. Observer Research Foundation; ORF. Retrieved September 19, 2024, from <https://www.orfonline.org/research/43403-towards-a-sustainable-smart-city-the-case-of-aizawl>

Correspondingly, National Urban Health Mission in Mizoram was launched in 2014 to address the health problems of the urban community. It proposes a systematic strategy to provide integrated and sustainable health care service delivery for the primary, secondary, and tertiary sectors in the state's metropolitan regions, with an emphasis on impoverished slums and other vulnerable populations. According to Mizoram NUHM PIP2013-14 the scheme has approved the following proposals:

1. There should be one urban primary health centre (U-PHC) for every population of fifty to sixty thousand.
2. Establishment of a single urban community health centre (U-CHC) to serve a cluster of five to six urban primary health centres (U-PHCs) located in large cities.
3. There should be one auxiliary nursing midwife (ANM) for every 10,000 individuals in the population.
4. An Accredited Social Health Activist (ASHA), also known as a community link worker, is responsible for serving a population of 200 to 500 families.

Aizawl and Lunglei are the two cities that will be covered under NUHM. A number of activities are included in the State NUHM budget, such as planning and mapping, program management, training and capacity building, strengthening of health services, regulation and quality assurance, community processes, innovative action and PPPs, monitoring and evaluation, and urban RCHs. This thesis has done the study to examine the implementation of NUHM in the urban healthcare centre of Aizawl city.

Study Framework model: Donabedian quality assurance model

Healthcare delivery is a complex and multifaceted field that faces significant challenges due to increasing illness burdens and costs. Researchers have proposed various methodologies and frameworks to address these challenges, including systems thinking, process modelling, and dynamic system model. The Donabedian quality of care framework, Anderson's behavioural model of healthcare use, and the

WHO healthcare system framework are three widely used frameworks for healthcare delivery.

Avedis Donabedian, a renowned healthcare researcher and theorist, introduced a comprehensive framework that significantly influenced the understanding and evaluation of healthcare delivery. The Donabedian model comprises three key components: structure, process, and outcome. Applying this framework to the National Urban Health Mission can help identify areas for improvement and guide the development of effective strategies.

The structure of the healthcare system refers to its physical and organizational aspects, such as the availability of resources, infrastructure, and management. By examining the structure of the National Urban Health Mission, we can learn about the suitability and sufficiency of urban healthcare facilities and resources. The process of healthcare delivery focuses on the interactions between healthcare providers and patients, their commitment to clinical guidelines, and overall coordination and continuity of care.

The effects of healthcare interventions on the health status of individuals and populations include mortality rates, disease prevalence, patient satisfaction, and functional outcomes. Analysing the outcomes of the National Urban Health Mission helps us understand how well healthcare services are achieving their goals and improving the health outcomes of the urban population.

Applying Donabedian's model to the National Urban Health Mission provides an extensive framework for evaluating the quality of care provided in urban areas, helping legislators and healthcare workers make wise decisions to improve the delivery of healthcare services. This ultimately improves the general health and well-being of the urban population by encouraging fair access to quality healthcare services.

Review of literature

A study on urban health care delivery is very relevant for government administration scholars and authors. However, thorough research of NUHM in Mizoram with specific reference to the Aizawl area has not yet been identified. Few of the research focus on health care aspects, particularly on rural health; a specific

study on urban health care is lacking. The researcher has chosen relevant literatures, comprising 19 books, 14 articles and journals, and five theses which covers studies in the area of – health policy, healthcare delivery, urban health, tribal healthcare, community healthcare and workers, primary healthcare, etc covering internationally, nationally and locally published documents.

Scope of study

The scope of the proposed study will try to analyse the problem faced by the urban poor. It will include service delivery to the health care seekers in Aizawl. The study will cover the concept of health care and focus mainly on the background and origin of implementation of the National Urban Health Mission (NUHM) in India and Mizoram, particularly the Aizawl district. The origin, setup, and its service delivery strategies, the problems faced by the mission will be studied. The study will focus on health care workers like Urban ASHA, ANM, MAS in providing service delivery to the people. The study will include the infrastructural facilities at Urban Primary Health Centre (UPHC). NUHM is a big step towards improving the well-being of urban residents. The study will be beneficial to bring service delivery to Mizoram. It will cover the Aizawl district from its implementation till the present day.

Objectives of study

The major objectives of the proposed study are:

1. To study the background and origin of implementation of NUHM in India and Mizoram in particular.
2. To study the infrastructural facilities at UPHCs
3. To study the role of urban ASHA, MAS, and ANM in promoting NUHM.
4. To find out the shortcomings and the problems faced by respondent beneficiaries under NUHM Aizawl.

5. To understand the implications and make suitable suggestions for the effective performance of NUHM.

Research questions

1. What are the necessary processes for implementing NUHM in Mizoram?
2. What are the basic infrastructural components of NUHM in Aizawl?
3. What are the roles of urban Health Care Workers -ASHA, MAS, and ANM in NUHM in Aizawl?
4. What are the problems faced by respondent beneficiaries under NUHM Aizawl?
5. What are the major implications and suggestions for the effective performance of NUHM?

Methodology

Research design:

This research followed a mixed method research approach by using both qualitative and quantitative data. To achieve the research objectives as specified above in the delivery of the National Urban Health Mission in Mizoram, with special reference to Aizawl District, all the six UPHC were studied as case study individually.

Sampling Design:

This study employed non-probability sampling techniques, specifically purposive sampling and quota sampling, to select participants. A purposive sampling approach was used to select beneficiaries due to the large size of the beneficiary population. Only those who were literate and had some knowledge about the benefits

provided by the Urban Primary Health Centres (UPHCs) were selected. This method ensured that the selected participants had the necessary awareness and understanding to provide meaningful responses relevant to the study objectives. In addition, for selecting healthcare workers, a quota sampling technique was adopted. This method was appropriate because the UPHC workforce consists of diverse groups, including Auxiliary Nurse Midwives (ANM), Accredited Social Health Activists (ASHA), and Mahila Arogya Samiti (MAS) members. Specific quotas were given to each group based on their availability, convenience, and population size within the UPHC workforce, ensuring balanced representation across all worker categories.

For the study, 300 beneficiaries under each UPHC in Aizawl were selected to represent the whole population of NUHM beneficiaries in Aizawl district. To select the respondents from the beneficiary's, Purposive sampling method was used. Quota Sampling technique was used to select 100 respondents from the healthcare workers.

Data Source:

Both primary and secondary data were collected for the study. The primary data are collected through questionnaires and interviews with concerned NUHM healthcare workers, ANM, ASHA, MAS, and beneficiaries of NUHM in Aizawl District, Mizoram. Data were collected using semi-structured questionnaires, field observations, and personal interviews.

The secondary data were collected from different sources available, such as relevant books, articles, journals, handbooks, guides, magazines, newspapers, pamphlets, websites, and government documents related to the study.

Analytical tools:

A thick descriptive narrative of the filed observations of the six UPHC was done in accordance with the India Public Health Standard (IPHS) 2022. These guidelines serve as a benchmark for the minimum requirements that UPHC must

meet, it also brings uniformity in evaluating all the health care services across different regions. Moreover, the guidelines are also aligned with Donabedian model covering the structure, process and outcome (Donabedian, A 2005)². It also aligns with public health goals including National Health Mission and Sustainable development goals. By observing these standards, the healthcare services can contribute in achieving national and international objectives. Key components of the IPHS 2022 guidelines for UPHCs includes; ***Infrastructure requirement; Waste management; Human Resource Requirements; Essential Service Provided (Drugs and Equipment, Laboratory and diagnostics services, Community Outreach services, Quality assurance and monitoring services)***

The collected data are analysed both qualitatively and quantitatively using content narrative analysis and tools like the Statistical Package for Social Science (SPSS).

Chapterization

The thesis is divided into six chapters based on the objectives of the study.

The *first* chapter is an introductory chapter; it deals with urban health in India and Mizoram. It explains India's different health care sectors and examines Mizoram's urban health status. This chapter includes a statement of the problem, scope of the study, methodology, review of the literature, objectives of study and research questions. This chapter is supplemented by tables and figure.

The *second* chapter is a conceptual study on health care administration. It examines the historical development of health care services in India, it explores the background of Indian health administration and health care delivery from ancient, Buddhist, mediaeval, and modern periods. It also examines the evolution of health care by discussing the United Nations on health care and the Alma Ata Declaration of 1978, which is a milestone for public health. It also highlighted national health

² Donabedian, A. (2005). Evaluating the Quality of Medical Care. *Milbank Quarterly*, 83(4), 691–729. <https://doi.org/10.1111/j.1468-0009.2005.00397.x>

policies that pave the way for the health sectors in the five-year plan. This chapter discusses health committees in India from the pre-independence to the post-independence era. This chapter also explained healthcare administration in India at the union level, state level, district level, and community level.

The *third* chapter discusses the urban health challenges in India and Mizoram. It provides an overview of the National Urban Health Mission in Mizoram by encompassing its goals and objectives, strategy, implementation, financial management, and budgeting in NUHM Mizoram. This chapter also highlights the urban primary health centres in Mizoram, under NUHM. This chapter provides a summary of various achievements under NUHM Mizoram.

The *fourth* chapter discusses the specific roles and functions of healthcare workers, such as auxiliary nurse midwives, urban accredited social health activists, and Mahila Arogya Samiti under the NUHM. It discusses how these professionals are essential in providing maternal and child healthcare, preventive and promotional health services, and creating awareness about various health issues in urban communities. Furthermore, it explores the challenges and opportunities faced by these healthcare workers in urban settings, shedding light on the complexities of delivering healthcare in densely populated and diverse urban areas.

The *fifth* chapter discusses the analysis of the field study using primary data collected through a structured interview questionnaire with the health care workers and a questionnaire collected from the beneficiaries of NUHM. Also, through field observation, which is done in each UPHC under NUHM in the Aizawl district, it is undertaken by following the guidelines of IPHS 2022. It focuses on infrastructure requirements, waste management, human resource requirements, essential services provided, drugs and equipment, laboratories and diagnostic centres, community outreach, and quality assurance monitoring services.

The *sixth* chapter is the concluding chapter; it contains a summary of the study, major findings, observations from the study, suggestions for improvement, and scope for further studies.

Major findings and suggestions:

Research questions are framed to achieve the objectives of the study. The findings of the study are discussed below in response to research objectives:

1. To study the background and origin of implementation of NUHM in India and Mizoram.

The implementation of National Urban Health Mission in the state requires a comprehensive approach with various essential processes. According to the NUHM framework for implementation the process of implementing NUHM are:

a) Establish institutional mechanism:

The main objectives like appointing additional Mission Director of NUHM, expansion of State Health Society, establishing City Health Society, Urban Health Cell within State Program Management, convergence with Urban Local Bodies (ULB) and stakeholders.

b) Urban health planning:

The second steps in implementation include health planning like prevention of ill health, strengthening of primary health facilities, ensuring primary health through outreach and to identify specific health issues in the city. Moreover, urban health planning in NUHM also involves collaboration and partnerships with local stakeholders, including community-based organizations, healthcare providers, and municipal authorities. Engaging with these stakeholders can help in identifying community health priorities, mobilizing resources, and developing sustainable healthcare delivery models that are responsive to the unique urban context.

c) *Urban Mapping:*

The third step in implementation is GIS mapping. It helps to understand the availability and distribution of resources available, location of slums, health facilities, road and landmarks. Three type of mapping is used by the states in NUHM implementation i) City mapping using GIS technology, ii) UPHC catchment area mapping, iii) Vulnerable assessment

d) *Operationalised UPHC:*

After the previous step is completed the actual implementation of the mission begins by functioning UPHC and UCHC. UPHC must be located near or inside the slums or slum like areas. It shall be the epicentre and the core of primary healthcare. UPHC and UCHC must provide preventive, curative, promotive and palliative care for the community.

e) *Linking diseases control programmes of NUHM:*

Disease control programmes include all communicable and non-communicable diseases including HIV. Organising outreach services like UHND and special outreach camps. Organising referral services and reporting mechanism through Health Management Information System (HMIS) a web base monitoring provided by Ministry of Health and Family Welfare (MoHFW)

2. *To study the infrastructural facilities at UPHCs.*

To obtain these research questions a study of National Urban Health Mission in India and Mizoram was made in chapter 3. The findings are given below

Firstly, PHC was established by the Bhore Committee in 1946. It was set up to provide preventive health care system close to public. Likewise, NUHM was established in 2013 as a sub mission of NHM. NUHM intends to build UPHC as a centre of preventive, promotive and curative. UPHC has provided services like OPD

& IPD services, patients referral services to other health centres, counselling of mother for immunization and FP services like distribution of condoms and oral pills.

Secondly, there are six UPHC in Aizawl district they are divided into two CMO, Aizawl east and Aizawl west. In Aizawl east there are three UPHC ITI UPHC, Zemabawk UPHC and Sihphir UPHC. In Aizawl west there are also three UPHC namely Chawlhmun UPHC, Lawipu UPHC and Hlimen UPHC. In Aizawl district there are total number of six UPHC. In Aizawl district UPHC the total number of healthcare workers are 11ANM, 64ASHA, 47MAS group. UPHC staff like 6 MO, 18 Staff Nurse, 6 Pharmacist, 6 Accounts clerk, 9 Laboratory technician and 17 Group D. At State level we have 2 State Consultant, 2 Public Health Manager, 1 Group D. At the District we have 1 Public Health Manager (PHM) at Lunglei district. At Lunglei District there are Sazaikawn UPHC and Hbranchalkawn UPHC, at Champhai district we have Champhai UPHC. Currently there is no UCHC present in Aizawl district

Thirdly, for enhancing the infrastructural facilities at UPHC a field study and field observation is done in each UPHC Aizawl district under NUHM. Here are some of the results from the study:

a) *Efficient supply of medical equipment:*

In UPHC a regular supply of medicine and medical equipment especially first aid kit is essential. Due to large number of OPD patients on a daily basis medicine are out of stock this create major issues for both the patients and the health care providers. Patients comes with minor injury and some need emergency treatment due to accident, some need dressing of wounds. To solve these issues the health care providers must maintain a record of stock register for medicine and other health equipment. By submitting their essential requirements and list of needs in advance on quarterly basis this will certainly help in shortage of medical supplies. In UPHC with the help of IPA (Internal Performance Assessment) they receive some amount of money which help them for local purchase of medicine and medical equipment in case of emergency.

b) Training for newly recruit health care workers:

Without a proper training no workers can perform their duty effectively. Under the supervision of NUHM different types of training induction, refresher should be conducted for all healthcare workers. This will bare an effective result in their performance.

c) Incentive revision and regular payment:

Among the healthcare workers some of them had been continuously working for many years and perform their duties efficiently. But their incentives are very low compare to the time and effort they put into it. Based on the findings most of the healthcare workers did not receive their incentives on time. To solve these issues the NUHM has to look into this matter and must find a quick solution.

d) To strengthen manpower:

From the analysis of structured interview questionnaire to healthcare workers in chapter V, it was found that 19% of the respondent's response that for effective performance and adequate care in UPHC strengthening of manpower is highly required.

3. To study the role of urban ASHA, MAS and ANM in promoting NUHM.

To ensure the research questions the role of urban healthcare workers in NUHM was presented in chapter 4. The findings are given below

a) Role of Auxiliary Nurse Midwife:

ANM play a crucial role in National Urban Health Mission, they provide basic healthcare services to the urban population and promote maternal and child

health. One of the primary responsibilities of ANM is to conduct outreach sessions and camps like UHND. Special outreach camps are conducted to raise awareness about health issues such as antenatal care, post-natal care, immunization, counselling for family planning, maintaining health records and monitoring overall health to the community. Furthermore, ANM supervise and monitor Urban ASHA in the field level. ANM collaborate with Urban Local Bodies (ULB) to participate and to take steps to meet specific health needs of the community. Community health issues such as waste disposal, sanitation, water, vector control, stray animals which can impact the health of the people. According to NUHM framework each ANM is expected to provide service for population of 10,000.

b) Role of Accredited Social Health Activist:

Urban ASHA plays an important role in delivering healthcare services to the urban population. They act as a vital link between the community and the healthcare system by creating awareness about the health concerns and promote healthy behavior for the people. Furthermore, ASHA roles and responsibilities include home visit, attending UHND and outreach activities, promoting and coordinate Mahila Arogya Samiti formation, accompanied pregnant women, sick child to health facilities, counselling of women on maternal and child health and timely maintenance of reports and records. Overall, the role of ASHA in NUHM is indispensable as they serve the backbone of the community health in urban areas. According to NUHM framework ASHA covers a population of 1000-2500 which is 250-500 households.

c) Role of Mahila Arogya Samiti:

MAS plays a crucial role in attaining the goals of NUHM by empowering women and promoting health and wellness in urban communities. They are local collective or groups of 10-15 community women. According to NUHM framework each MAS covers 250-500 populations which is 50-100 households and they formed

in slums or slum like areas. MAS group conduct a monthly meeting to discussed issues faced by the community. They address the local issues related to health like water, sanitation, hygiene, communicable and non-communicable diseases control. They are coordinated by Urban ASHA who also acts as a member secretary. Furthermore, MAS create awareness about the importance of health issues, facilitating health camps, promote preventive care, maternal and child health. Overall, they seek to improve the health outcomes of urban population. They have untied funds of Rs 5000 per year.

4. To find out the shortcomings and the problems faced by respondent's beneficiaries under NUHM Aizawl.

It was found from the analysis of questionnaire to beneficiaries that the major problems faced by the respondent beneficiaries under NUHM are given below:

a) Long waiting hours in UPHC:

Long waiting hours in health care centers can have a high impact on the patients both mentally and physically. Table 16 indicates that 63% of the respondent beneficiaries face these issues. Depending on the patient's health conditions this can increase anxiety and stress level. Patients with chronic conditions or acute illness may expressed discomfort. These problems are common in UPHC especially in Zemabawk and Chawlhmun UPHC due to large number of OPD patients and large area of population covered.

b) Lack of availability of medicine and medical supplies:

It was found from the analysis of questionnaire to beneficiaries that 7.3 of the respondents felt that the major problems of health facilities under NUHM is the lack of availability of medical supplies and poor supply from Central Medical Store

(CMS). Some of the medical kit specially first aid kit is not available during emergency service and need to purchase from the local store. This creates problems for the patients in terms of emergency and effectiveness of treatment.

c) *Limited accessibility of healthcare facilities:*

It was found from the analysis of questionnaire to beneficiaries that 69 members which is 23% of the respondents faced issues regarding limited accessibility to healthcare facilities. This can lead to a range of problems for the individual to receive medical attention on time, leading to untreated illness and worsen the conditions. For some reasons it maybe a little bit far for the people to reached health center on time especially people residing in Zemabawk and Sihphir. Due to location of UPHC which is isolated form the city it may create problem even for the health care staff to reached on time.

5. To understand the implications and make suitable suggestions for the effective performance of NUHM

The National Urban Health Mission has significant implications for the overall health and wellbeing of urban population in India. Based on the analysis of questionnaire both from beneficiaries and healthcare workers one of the major implications and suggestions are:

a. *The need to maintain healthcare facilities with good infrastructure:*

Health care facilities play a crucial role in providing essential medical services to communities. The quality of infrastructure in health care facility directly impacts patients care, staff productivity and overall performance. A well-maintained health care facility with modern technology and latest technology can significantly improve patient's outcomes by providing a safe and comfortable environment for

receiving treatment. 43% of the respondent's response that for effective delivery of healthcare services we need to have a healthcare facility with good infrastructure. With rapid increase in population and urbanization there is an increased demand for healthcare facilities. There is a need for efficient healthcare service delivery. There are several implications face by UPHCs in Aizawl district. ITI UPHC have implications like for counselling of patients there is no separate counselling room, immunization toilet and pipe is damaged, there are 11 bed available but no separate female ward, a ramp for PWD patient is highly needed, Laboratory room needed extension the current Lab room is small and congested, a separate room for breast feeding corner, proper side drain near the building, water tank for water storage, plastic chair for patients and waiting room for patients with chronic patients. Sihphir UPHC have implications like there are only 5 bed available due to small building and there are no separate room for male and female, isolation ward is needed. Hlimen UPHC have implications like a need for new Laboratory room the current lab room is small and the location is difficult for patients to enter, there is no separate Dentist room, there are only 6 bed available with no separate male and female, nursing station and casualty room needed extension, public toilet need to place in front of the building, sterilization room with bathroom attached is needed, separate entrance for disabled persons PWD and pregnant women, the current entrance are steps which is difficult for wheelchair to enter the health center. Chawlhmun UPHC has only 4 bed available, they need bigger room for more bed in ward. Overall, most of the UPHC has common issues regarding number of bed available, toilet and room extension. This matter should be look into it and NUHM should take measures to solve these issues.

b. Training for healthcare workers:

Healthcare worker plays a crucial role in providing essential medical care to patients. Training programs for healthcare workers provide a wide range of topics which include medical ethics, communication, infection control, emergency response and latest advance in technology. It was found that 30% respondents from the healthcare workers and 11% respondents from the beneficiaries felt the needs to have

a well-trained healthcare worker who can perform their duties efficiently. A training can be induction or refresher depending on the needs. Different types of training were conducted by NUHM Mizoram, according to NUHM achievements in Mizoram during the year 2013-2014 ULB Orientation training and orientation of MAS training is conducted. During the year 2015-2016 Orientation campaign for stakeholder/MAS/ULBs and Mahila Arogya Samiti (MAS) training is conducted. Awareness campaign/orientation training of stakeholders under NUHM (Aizawl East, West and Lunglei) was conducted on 18th May 2016, 19th May 2016 and 24th May 2016. During 2017 Financial Management Training of UPHC Accounts Clerk from Aizawl East District and Aizawl West District was conducted. ASHA Orientations and Refreshers training was held on 18th and 19th July, 2017. Training of Urban ASHA's and ANM's on Universal Screening of NCD'S. Orientation of urban Local Bodies of UPHC under NUHM in Aizawl&Lunglei was conducted on 14th – 16th of February 2017 at Civil Hospital Conference Hall. During the year 2018-2019 NUHM workshop of city level staffs was conducted on 2nd February, 2018. Biomedical waste Management Training of Staff Helpers from Aizawl East and Aizawl west district was conducted. ASHA Orientation and Refreshers training was held on March, 2019 1st responder training was conducted.

NUHM has conducted training for different healthcare workers and staff form UPHC every year to ensure the delivery of high quality, efficient and safe health care services to the people.

c. Ensuring better supply of medical equipment:

The availability of adequate supply of medical equipment in primary healthcare settings is crucial for delivering quality healthcare. 25% of the respondent from the healthcare workers felt the need to have adequate medical equipment in UPHC. Many healthcare centers are faced with challenges such as outdated equipment, inadequate supplies, lack of essential tools such as emergency kit to treat patients effectively. ITI UPHC has implications like equipment for autoclave for sterilization and first aid kit. Hlimen and Lawipu UPHC need ultrasound.

Meanwhile, Chawlhmun UPHC have only one oxygen cylinder. Sihphir UPHC need dressing instrument for the patients. These problems not only affect the patients but also the healthcare workers who are striving to deliver a quality and effective care. Due to limited resource available it is difficult to produce quality care. However, to solve these issues we need efficient procurement which includes regular inspection. Furthermore, by developing partnership with reliable suppliers we can help to meet the required standards not only depends on one supplier like Central Medical Store.

Limitations of the study

The study is a case study of NUHM in Aizawl district of Mizoram. It focusses only on the working and functioning of healthcare workers in Aizawl district. The role and functions of UPHC in another district like Lunglei, Sazaikawn and Champhai are not included. The study included only 6 UPHC. Health facilities and health care centers like sub center/ health and wellness center are not included in the study.

The present study explained the functions of Urban Primary health Centers while another health facilities like health clinic and the importance of Anganwadi center are not included in the study. Furthermore, the most important functions of NCD screening under UPHC which is mandatory according to NUHM framework need in depth study. In the study community participation is one of the key aspects for successful implementation of NUHM meanwhile the importance of VHSS is not mentioned.

The present study is a case study and has identified the problems and challenges faced by the healthcare workers like ANM, ASHA, MAS in improving the care services to urban population, health providers like MO, Lab technician, Pharmacist, Staff Nurse and other staff under UPHC their problems and challenges should also be noted. All these limitations cannot be included in the study due to the

study which is conducted only in one district. Because of these limitations, the study may not cover the entire functions of NUHM in Mizoram.

Suggestions for further studies

Here are some of the suggestions that further studies can be conducted by researchers.

1. Role and functions of Village Health Sanitation and Nutrition Committee (VHSNC) at the community.
2. Community participation in implementation of NUHM
3. A comparative study of healthcare workers in rural and urban areas under NHM Mizoram.

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