











FORMATIVE RESEARCH FOR STRENGTHENING COMPREHENSIVE PRIMARY HEALTH CARE IN MYSURU CITY

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List of Abbreviations

AB-PMJAY	Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana
ADB	Asian Development Bank
AMO	Assistant Medial Officer
ANC	Antenatal Care
ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
AW	Anganawadi
AWC	Anganawadi Centres
AYUSH	Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy
BMI	Body Mass Index (BMI)
CBC	Complete Blood Count
СВО	Community-Based Organizations
CHC	Community Health Centres
СНО	Community Health Officer
COPD	Chronic Obstructive Pulmonary Disease
COVID-19	Coronavirus Disease
CSR	Corporate Social Responsibility
DBP	Diastolic Blood Pressure
DC	District Commissioner
DD	Deputy Director
DHO	District Health Officer
DoHFW	Department Of Health and Family Welfare
ECG	Electrocardiography
FGD	Focus Group Discussion
FP	Family Planning
GDP	Gross Domestic Product
GoK	Government Of Karnataka
GRAAM	Grassroots Research and Advocacy Movement
GST	Goods And Service Tax
HBI	Health Based Institution

HIV	Human Immunodeficiency Virus
HWC	Health & Wellness Centres
ICDS	Integrated Child Development Service
ICTC	Integrated Counselling and Testing Center
IDI	In-Depth Interview
IP	Inpatient Care
IT	Information Technology
JHA	Junior Health Assistant
JSS Hospital	Jagadguru Sri Shivarathreeshwara Hospital
КАР	Knowledge, Attitude and Practices
KII	Key Informant Interview
LMIC	Lower and Middle Income Countries
MAS	Mahila Arogya Samitis
MCC	Mysuru City Corporation
MD-NHM	Mission Director - National Health Mission
MNCH	Maternal, Neonatal And Child Health
MO	Medical Officer
MoU	Memorandum Of Understanding
MSM	Men having Sex with Men
NABARD	National Bank for Agriculture and Rural Development
NCD	Non-Communicable Disease
NFHS	National Family Health Survey
NGO	Non-Governmental Organisation
NGT	National Green Tribunal
NHS	National Health Service
NITI	National Institution for Transforming India
NUHM	National Urban Health Mission
OOPE	Out-of-Pocket Expenditure
OPD	Outpatient Department
ОТ	Operation Theatre
PE	Public Engagement

РНС	Primary Health Care
PNC	Postnatal Care
POC	Point Of Care
POCT	Point Of Care Testing
РРР	Public-Private Partnership
RMNCHA	Reproductive, Maternal, Neonatal, Child, Adolescent Health
SBP	Systolic Blood Pressure
SC	Sub-Centre
SDG	Sustainable Development Goals
SJMC-IEC	St John's Medical College-Institutional Ethics Committee
SNO	State Nodal Officer
SRS	Sample Registration System
ТВ	Tuberculosis
TG	Transgender
TSU	Technical Support Unit
UGD	Underground Drainage
UHC	Universal Health Coverage
UK	United Kingdom
ULB	Urban Local Body
UNDP	United Nations Development Programme
UPHC	Urban Primary Health Centres
WHO	World Health Organization

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Executive Summary

The urban population is rapidly growing in India, and by 2030 around 40% of the country's population will live in urban areas. With a growing population, there is a growing need and demand for urban healthcare services. The complexities of urban health care are unique and multidimensional. Urbanization is associated with various health challenges related with environmental factors such as risks due to air pollution, climate change and diminishing green spaces structural factors housing related health risks, water and sanitation, socio-economic factors like life style issues, nutrition insecurity and unhealthy diet and functional issues like access to social safety services and primary health care. In terms of risk factors and health services, the urban poor suffer almost as much as rural communities; this is known as the 'urban health disadvantage'.

Government has recognised this challenge and has been taking measures improve urban health care delivery system. NUHM launched in 2013 was the first such major step. Ayushman Bharat (AB) scheme was launched in 2018 to deliver Comprehensive Primary Health Care(CPHC) services through Health & Wellness Centres (HWC) and health insurance scheme Pradhan Mantri Jan Arogya Yojana (PM-JAY) to support secondary and tertiary care. In addition, several other initiatives are taken up to improve determinants of health including piped water supply, affordable housing schemes, waste disposal, transportation etc. Consequently, urban landscape is witnessing some changes. However, these are proving to be largely inadequate owing to the pace of urbanisation. The 74th constitutional amendment envisages to devolve power and decentralises urban administration empowering the urban local bodies with greater authority and responsibility, which is yet to be implemented in true spirit and to full potential.

The formative research was taken up in the light of emerging importance urban primary health care challenge in the city of Mysore. This study is part of a larger implementation project which aims to strengthen and improve the existing primary health care system in Mysuru city. A mixed-method study approach was undertaken, which included a household survey, facility assessment and this qualitative situational assessment. The present report discusses the qualitative study and based on its findings, attempts to provide recommendations for improving CPHC in Mysuru city. The findings from the quantitative household survey and facility audit will be presented in a separate report.

Mysuru city is a city corporation with a population of 9.2 lakhs according to the 2011 census, which is estimated to have reached around 11 lakhs in 2020. Slums and slum-like areas house approximately 18% of the city's population. Mysuru, while being a rich economic and cultural centre of Karnataka and South India, has also achieved the status of one of the cleanest cities in India. Five wards in Mysuru city were purposefully chosen for the qualitative study, based on socio-demographic and population characteristics. Fifty-seven interviews were conducted, including 6 Key Informant Interviews (KII), 4 Public Engagement (PE) programs, 12 Focus Group Discussions (FGD), 35 In-Depth Interviews (IDI); there were also field observation and field notes covering about 211 participants. Participants included policymakers, program implementers, community members, private practitioners, and representatives from health and non-health-based institutions. Tailored tools/interview guides for each of the above-stated interview techniques were developed and pilot tested in the field, and refined further before the actual data collection. Thematic analysis was undertaken by a team of qualitative researchers. Thematic saturation was attained and validation was ensured by triangulating the findings emerging from different groups of qualitative data. Research ethics were maintained during the study period, especially at the time of data collection.

This study is able to identify the barriers and facilitators to the primary health care in Mysuru at different levels, i.e., community, facility and at health system levels. These findings have enabled the formulation of key recommendations to improve and strengthen primary health care.

Community level findings:

Challenges related adequacy, accessibility, and affordability of health services among the general population standout. Distance to facility, operational timings and waiting time are hindrance to access. Lack of privacy and few female doctors for physical examinations or administering injections etc., make it difficult for women to discuss sexual and reproductive health-related challenges. Issues such as poor cleanliness, lack of space, shortage of medicines, and unavailability of many lab tests reflect adequacy related challenges. These factors contribute to direct as well as indirect expenses, bringing in affordability issue to avail care.

Perception about the quality of service provided in public health care system formed over a period of time based on lived experience and other contributing factors discourage access to care. Services such as Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy (AYUSH) are generally sought after by the community, which are mostly not provided in public health facilities.

Low level of knowledge and awareness about existing public health care facilities and health seeking mechanisms available among the community, acts as barrier to seek health. Care providers generally opine that community accords low priority to health and consequently unhealthy lifestyle is contributing to increase in non-communicable diseases (NCDs) and its complications among young people and adults. At the same time, gaps in outreach services, subpar health education and counselling services in public health care system indicate, the challenge is bi-directional. Stigma and discrimination originating from sociological, cultural and other factors contribute and influence health seeking behaviour such as health care needs of women are often deprioritized whereas TB and HIV patients hesitate to access care in public health care setting. Community participation and ownership in health care delivery is negligible as there are limited opportunities and efforts towards active engagement. Uptake of public health service is also skewed towards incentive based schemes.

In general, there is gradual improvement in awareness on importance of health care and need for better health services among the community. Increase in uptake of digital services, mobile and internet services in the community offers good opportunity to initiate innovate engagement activities by health system. Generally, it was observed that community expectations are to avail "private like health service" in public health setting with a sense of entitlement.

Facility level findings:

Inadequate infrastructure, shortage of resources including drugs and laboratory consumables coupled with HR related challenges are commonly noted at UPHCs. High work burden is often reported issue by the UPHC staff. The motivation levels of the staff are also adversely affected due to lack of incentives like job security, better salaries or new training to improve their skills. Some of the UPHCs seemed to have a higher footfall of patients than others due to the friendly and helpful behaviour of the Medical Officers. Data management issues including data collection, analysis and using the learnings for health planning and service delivery can be seen at all levels. This has resulted mechanical approach to data handling by the staff who consider data capturing process as burden which is of little value addition.

Implementation of AB scheme is largely ineffective and HWCs are yet to start providing all 12 CPHC services. Consequently, there has been no significant improvement in the delivery of primary health care including OPD services. This has direct correlation with out of pocket expenses of the community. Absence of structured and effective bi-directional referral service between primary and higher care facilities due to lack of coordination between them has resulted in higher congregation of patients at higher care facilities even for minor ailments on one hand and underutilisation of primary care services on the other. In general, most of the services at UPHC are centred around MNCH and gaps in covering important services including NCD, counselling, mental health among others.

Health system level findings

The focus of health system, generally tends to be skewed towards curative component of health than preventive and promotive health components. Gaps in operationalisation of NUHM and Ayushman Bharat on ground is evident, even though there are detailed guidelines and operational plans. This is mainly due to shortage of resources, lack of strategic clarity for implementation, poor inter-sectoral convergence and synergy at the level of planning and implementation. Most healthcare data is either unavailable or dispersed and is not sufficiently digitized. There is also a gap in the gathering, management and most crucially, application of data.

The involvement and contribution of development sector organisations in improving awareness, access and delivery of health services has been noteworthy. The role of private health care providers is increasing and a well-regulated public-private partnership can significantly contribute to the provision of health services.

Recommendations

The recommendations provided by the stakeholders are synthesised and most relevant suggestions are captured. Efforts to increase the awareness among the community on vital aspects pertaining to healthy living, all forms of stigma and discrimination, CPHC services mandated to be provided through HWCs and health insurance feature prominently. At the same time, initiatives to improve the perception about quality of health care provided through public health care system are also important to build confidence in the community. Strengthening the community participation in urban local bodies and empowering them to contribute in the local health care delivery is critical to improve community ownership and acceptance of services.

Harnessing potential resources available within local area/city to augment the existing health care apparatus can address the gaps in the system. Qualified students of medical, paramedical, social sciences and other such institutions can be leveraged to support health care services at the facility level by creating adequate mechanisms facilitated by local administration. Similarly, public private partnership and collaboration schemes can be drawn up and implemented in good spirit utilising existing provisions within the guidelines of AB and NUHM. Utilising digital solutions to streamline the referral process and improving coordination between primary and secondary care facilities has multi-fold benefits such as early diagnosis, reduction of overcrowding at higher care facility and strengthening care continuum.

Developing city health plan encompassing overall current and estimated future needs to be taken up. Commissioning studies, researches and assessments to provide requisite insights to develop the plan, monitor the implementation efficacy and understand emerging trends builds scientific rigour to the process, besides strengthening health system. A thorough understanding of health system, determinants of health and their effects is important to identify major barriers and challenges that require attention in order to effectively implement the Ayushman Bharat scheme and 12 services through Health and wellness centres. The study has also identified enabling factors in the existing health system that can be leveraged to strengthen CPHC. Willingness of community to receive services, improvement in literacy is positive factor in advancing health related knowledge and penetration of digital services provides opportunity to improve quality and reach of care.

The recommendations provided could pave way for evidence-based policy-making, which could be comprehensive, robust, equitable and replicable model of providing health services to the marginalized and vulnerable populations in urban areas.

This is one of many attempts initiated by the KHPT team to contribute towards evidence-based policy-making and program implementation. It will be an iterative process and we hope to continue learning and unlearning from our research and programmatic experiences in the field until an equitable model of primary health care is developed. The comprehensive primary healthcare system once achieved in Mysuru city, can be scaled to more geographies in India.

Background

Primary Health Care

Primary Health Care is defined as "a whole-of-society approach to health that aims to maximize the level and distribution of health and well-being through three components: (a) primary care and essential public health functions as the core of integrated health services; (b) multi-sectoral policy and action; (c) empowered people and communities." (1). In this definition of primary health care, there are four elements:

- Personal care (curative, promotive, preventive, palliative) which is comprehensive, continuous, patient-centred, coordinated, integrated, accessible, available, acceptable, affordable and of quality
- Population care
- Addressing the determinants of health
- Empowering the community

Evidence shows that better health outcomes could be achieved with a robust primary healthcare system(2). A strong primary healthcare system is crucial to achieving health-related Sustainable Development Goals (SDG) and attaining Universal Health Coverage (UHC) (3), including financial risk protection, access to quality essential healthcare services and access to safe, effective, good quality and affordable essential medicines. However, in Lower- and Middle-Income Countries (LMICs) such as India, critical primary healthcare gaps pose a significant challenge to achieving SDGs and UHC.

Primary health care in India

Recent national reports such as the Task Force report on Comprehensive Primary Health Care (4) suggest that primary health care is the only affordable and effective path to achieve UHC. A series of transformative initiatives, including increased investments in primary health care, has seen India make improvements in health promotion, disease prevention and service outreach. However, primary health care remains inadequate and fragmented, and is associated with OOPE. A substantial proportion of people (~70%) are still accessing ambulatory care from the private health sector, where the cost of care remains high, and standards of treatment remain questionable (5). Currently, even a well-functioning PHC caters to less than 15% of all morbidities for which people seek health care (4). Studies show that 11.5% of households in rural areas and about only 4% in urban areas, reported seeking any form of outpatient care at government primary care facilities, indicating low utilization of the public health system(6). A situation analysis of primary health care in India further shows that demographic health indicators are highly skewed across and within states, and between population subgroups, reflecting inequities in service access and coverage(7).

One fundamental problem with current primary health care services in India is the focus on RMNCH+A, neglecting the epidemiological and demographic transitions that have occurred in our country. Data from the Sample Registration System (SRS) shows the top three causes of mortality in young and middle-aged adults to be cardiovascular diseases, including diabetes and hypertension; respiratory diseases, and cancers (8). Self-reported morbidity proportions are about 26 per 1000 for infections and 24 per 1000 for NCDs (cardiovascular diseases, chronic respiratory disease, cancer and diabetes), according to the recent National Sample Survey (2017) (7). The prevalence of hypertension and diabetes among adults over 30 years of age was found to be 30% and 15%

respectively in an urban slum in Bengaluru (2018). The prevalence of hypertension and diabetes among adults over 30 years of age was found to be 20% and 12% in urban Mysuru (2018) (9).

The government has recently introduced HWCs under the umbrella of Ayushman Bharat (10). HWCs are planned to transform the existing Sub-centres and PHCs, and these centres will deliver CPHC, bringing healthcare closer to the homes of people, covering MNCH and NCD services, including free essential drugs and diagnostic services.

Urban vs Rural Health

Compared to rural areas, urban areas allegedly have an 'urban health advantage'(11), made possible by better access to healthcare, education, sanitary conditions, extensive social networks, infrastructure that supports transport and other amenities. All of this contribute to city dwellers enjoying a healthier life. These potential urban health advantages can only be achieved if they are actively created, planned and maintained through policy interventions.

While both rural and urban areas of India have their share of challenges in organising health care, the urban health system has been facing new challenges and complexities in the recent past. Patient health-seeking behaviour, as well as the organisation of the urban health care system, is quite complex in urban areas. India is rapidly becoming urbanized and large-scale migration poses a challenge to the organization of adequate health service delivery in urban settings.

Urban versus rural comparisons unfortunately also hide as much as they reveal. While the urban averages for health and other indicators may appear better than rural averages, the urban averages tend to hide enormous disparities within urban populations, between urban poor and other population groups. The urban poor suffer almost as much as the rural communities in terms of risk factors and health services. This is the 'urban health disadvantage.'

National Urban Health Mission

Given the neglect of urban health care, the Government of India introduced NUHM in 2013 to provide quality health care to its urban citizens, especially those living in the slums (12). Broadly the focus has been on:

- Health care through UPHCs, but targeted outreach to the urban poor in listed and unlisted slums, as well as vulnerable populations
- A public health thrust in other sectors (solid waste management, water supply, sanitation, etc.)
- Public health capacity-building in Urban Local Bodies (ULBs)
- Community strengthening
- Convergence with National Disease Control Programmes

Mysuru (former Mysore) is one of the major districts in the southern part of the state of Karnataka, India, and is a heritage city. It served as the capital city of the Kingdom of Mysore for nearly six centuries from 1399 until 1956. The cultural ambience and achievements of Mysore earned it the title 'Cultural Capital of Karnataka'.

Mysuru city is a City Corporation with a population of 9.2 lakhs (2011 census) in 2,15,061 households. Of this, 11.6% and 5% belong to the Scheduled Caste (SC) and Scheduled Tribe(ST) communities, respectively. Using a conservative decadal growth rate of 20%, we estimate that the

population of Mysuru city will be about 11 lakhs in 2020 (Figure 1). This population is spread over 65 wards at a median population of 12,600 per ward (7000 to 31,600 people). Around 18% of the city population lives in slums and slum-like areas. The literacy rate of Mysuru is 86.84%, and 38% of the total population is employed in varied income generation activities.

The primary drainage system is a closed system and water is supplied by the Corporation through taps from treated sources. Nearly 96% of homes were electrified, and 86.5% of houses had toilets. There were 4,622 industries and 43,122 commercial entities in the city in 2011. The city has been one of the top performers in the cleanliness rankings by the Government of India for urban areas.

Mysuru city: Health Status

The Department of Health and Family Welfare (DoHFW) has a network of 21 UPHCs spread over Mysuru city, which is staffed by a total of 37 MOs, 21 staff nurses, 90 ANMs, 21 lab technicians and 20 pharmacists. The average population covered by a UPHC is 57,250 (± 9,152) with a range of 42,326 to 74,816. The average slum population is 17.5% (2,11,482), with a range of 2% to 40% per ward. Nineteen of the 21 UPHCs have several Mahila Arogya Samitis (MAS), with an average of 13 MAS per UPHC (range 2 to 35). The average population covered by a MAS is 5,000 (870 for slum population). Other than the UPHCs, there are two urban CHCs, two medical colleges, 69 private clinics, 34 hospitals, 2 Ayurveda colleges, 0 Homeopathic colleges, 0 Unani colleges, and 22 nursing colleges. (13)

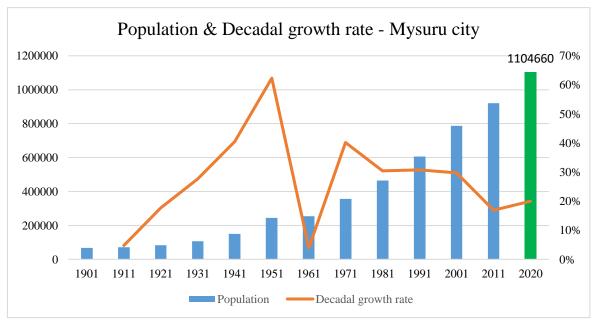


Fig 1: Population growth in Mysuru

The data from the NFHS 5 shows that under nutrition among children and over nutrition among adult females is quite prevalent (refer Table 2). The proportion of adults with diabetes and hypertension is relatively low because the denominator is only up to 49 years of age. Using Karnataka's burden of disease data as a proxy, it suggests that the causes of premature mortality are ischemic heart disease, suicide, stroke, and chronic obstructive pulmonary disease(COPD) (Figure 2)(14).

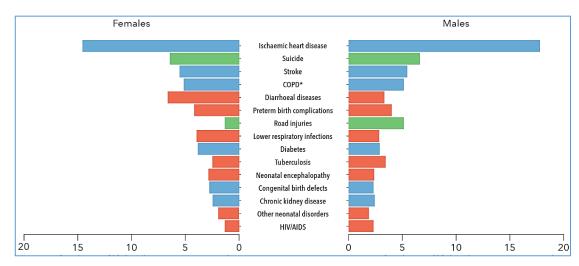


Fig 2: Percentage of total years of life lost due to pre-matured mortality-Karnataka(15)

Services provided

Government health facilities offer a mix of primary, secondary and tertiary care. This is also provided by private health facilities, especially formal ones. Unfortunately, data from the private sector is unavailable.

Outputs

Despite an educated urban population and a relatively generous distribution of PHCs in Mysuru, with a high proportion (85.7%) of pregnant women receiving full ANC and 97.2% of children (NFHS-5) received full immunisation (Table 1), the performance of other preventive services like screening for cancer is also very low. The prevalence of undernutrition is widespread among children, and high anaemia among all categories is found.

Table 1:NFHS-5 (2019-2020)- Factsheet Mysuru

Indicator	Value
Pregnant mothers who received full ANC	85.7
Institutional delivery	100
Institutional delivery at government facility	56.2
Caesarean section rate	43.7
Mothers who received PNC within 48 hours	93.5
Average OOPE for delivery	INR 4143
Unmet family planning (FP) needs	5.6
Children (12 – 23 months) who received full immunisation	97.2
Children (< 36 months) breastfed within one hour of birth	49.9
Children (<60 months) who are wasted (weight for height)	15,6
Women who were screened for CA Cervix	0.9%
Women who were screened for CA Breast	1.0%
Women who were screened for CA Oral cavity	0.3

Implementation gaps and the need for an assessment

The above indicators in show that there are gaps in providing healthcare services in Mysuru. The preventive care indicators are poor, indicating weak primary health care services. Even with the caveat that this data is nearly four years old, it would be useful to assess the status of primary health care in Mysuru using similar indicators. It is also essential to understand the underlying reasons for the poor performance of health system and formulate recommendations on strengthening primary health care in Mysuru, as well as in Karnataka.

Through a formative assessment, situational analysis has been done and possible pathways to strengthen primary health care have been identified. The suggestions and recommendations from stakeholders at different levels (community, facility, system) to address the barriers and gaps faced are key focus areas of the study. The set of recommendations presented form the evidence to work on design options for strengthening primary health care and to develop an intervention model for future implementation.

Indicator	<u>Mysuru</u>	<u>Karnataka</u>
Children (<60 months) who are severely wasted	7.2%	8.4%
Children (<60 months) who are stunted (height for age)	27.5%	35.4%
Children (<60 months) who are underweight (weight for age)	28.2%	32.9%
Women whose BMI < 18.5 kg/m ²	14.7%	17.2%
Men whose BMI < 18.5 kg/m ²	10%	14.3%
Women whose BMI > 25 kg/m ²	36.4%	30.1%
Men whose BMI > 25 kg/m ²	23%	30.9%
Children (5 – 59 months) who are anaemic	57.2%	65.5%
All women who are anaemic	48%	47.8%
Women with blood sugar > 140 mg/dl	13.8%	14%
Men with blood sugar > 140 mg/dl	14%	15.6%
Women with high BP (SBP > 140 and/or DBP > 90)	25.5%	25%
Men with high BP (SBP > 140 and/or DBP > 90)	27.4%	26.9%

Framework for Primary Health Care

To assess primary health care in Mysuru, we developed a framework (Figure 3) which looks at all the elements required to ensure that primary health care is provided.

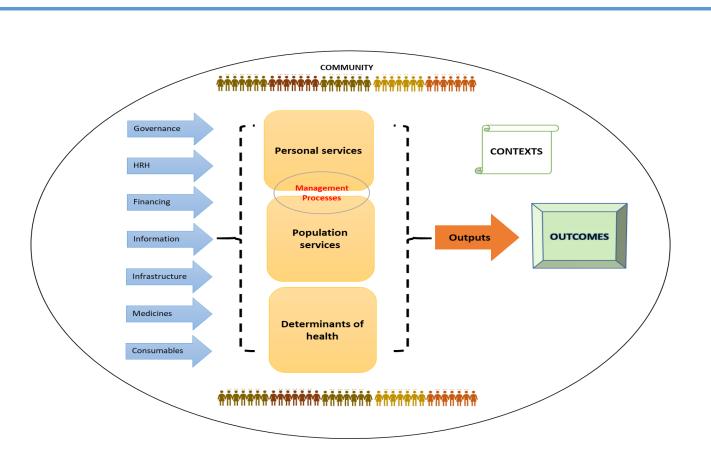


Figure 3: Framework for Primary Health Care

Any primary health care service is expected to provide personal care services, population care services and address the determinants of health.

Personal care services

Personal care services are focused on providing comprehensive care (curative, preventive, promotive and palliative care) according to the local community's needs and requirements. This care should ideally be continuous, coordinated, integrated, accessible, available, acceptable, affordable, and of quality.

Population care services

The primary health care team should also be responsible for the health of the population in the catchment area and take proactive measures to reach out to this population, stratify the population at risk, and provide them with the required services.

Determinants of health

The primary health care team is expected to connect with other sectors/departments that affect health, e.g. the water and sanitation, food and nutrition, education and the pollution control.

Primary health care requires good governance, adequate healthcare financing, competent human resources, adequate supply of medicines, consumables and equipment. The entire primary health care should have a robust information system that can help supervisors, as well as the community, make appropriate decisions based on evidence. To achieve optimum health outcomes, it is essential that all aspects of primary health care are adequately addressed.

Objectives of the assessment of primary health care services in Mysuru city

The overall objective of the formative research study is to describe the current status of the urban comprehensive primary health care system in Mysuru city, identify and analyse barriers and facilitators to comprehensive primary health care and develop design options to strengthen urban primary health care.

Specific Objectives

- 1. To identify and explore the role of key stakeholders in the provision of urban primary health care
- 2. To describe the current status of urban comprehensive primary health care in Mysore city at three different levels health systems, facilities and community
- 3. To identify and explain barriers and facilitators to comprehensive primary health care
- 4. To identify design options for strengthening urban primary health care.

(This qualitative report addresses objectives 1 and 3, specifically. Objective 2 will be addressed by St John's Research Institute, Bengaluru, through quantitative household and facility-level surveys. Objective 4 will be addressed in a separate document. A few components of objective 4 as part of recommendations are included in this report)

Methodology

The present research assessed the situation of primary health care, identified the gaps and facilitators, and shortlisted the recommendations to improve and strengthen the existing system of urban health care in Mysuru. A mixed-method study approach was undertaken in the first phase, which included a household survey, facility assessment and this qualitative situational assessment. This report, therefore, discusses only the qualitative exploration and suggested recommendations emerge from the qualitative findings only.

The present qualitative study has mainly focused on 'why' and 'how' questions. Key Informant Interviews(KII), Public Engagement (PE) Programs, In-depth Interviews (IDI), Focus Group Discussions (FGD), and Participant Observation were the key techniques used to elicit information from different stakeholders at different levels of health care.

Key informant interviews	State level: State Nodal Officer (SNO), Deputy Directors (NCD, child health, communicable diseases) District level: District Health Officer (DHO) and Community Health Officer (CHO)
In-depth interviews	Government: Program Officers – preventive & curative, counsellors, pharmacists, lab technicians, Anganawadi workers (AWW) Private: Obstetricians, Internal medicine, AYUSH practitioners, lab owners and pharmacists Non-Government: Academicians, Health activists, NGOs

Focus Group Discussion	Front line workers: ASHA, ANM, Staff nurses Community: Elderly, adults, pregnant women, mothers, adolescents, patients with communicable and NCDs
Public engagement	 PE1- Health-based institutions (NGOs, CBOs, academicians, health activists) PE2 - Program officers- Non-health (Slum board, water and sanitation, education, civil supplies, Resident Welfare Association (RWA) PE3- Program officers- government (MOs, DHO, DTO, JayadevaInstitute of Cardiovascular sciences & Research) PE4- Program officers- private health sector IMA, FOGSI, private practitioners
Observation	Facility: PHC, Pharmacies, FLWs' community interaction Community: Anganawadi, Community structure, AG meetings, RKS meeting

Based on the socio-demographic and population characteristics, five wards in Mysuru city were purposively selected for the qualitative study. Each ward was characterized by vulnerable groups and covered low to middle socio-economic strata. Brief overview of each ward is given in Appendix 4.

A specific study tool/interview guide for each of the above-stated interview techniques was developed. Tools were pilot tested in the field and refined further before the actual data collection. The different methodologies used for data collection are depicted in Figure 4. The rationale for the flow of data collection was that KII interviews at the state level provided a basic understanding of the perspectives and prospects on guidelines and implementation; the next phase of data collection involved conducting Public Engagement programmes with four different categories of stakeholders and bringing them together to a common platform to ideate and identify barriers and suggest recommendations. The participants for IDIs were identified during the process of PE. In parallel, FGDs with the community and frontline were conducted. The team was also conducting participant observations in the sample geography throughout the duration of qualitative data collection. The flow of data collection followed the pathway in figure 4 based on the feasibility, availability and convenience of the participants.

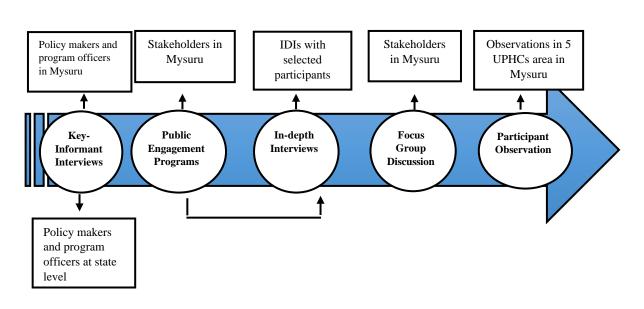


Figure 4: Methods for qualitative data collection

Sampling for qualitative assessment

The study team developed a master list of respondents who could potentially participate in this study. This comprehensive list of individuals represented different departments and institutions, both at the state and district levels. The master list included the names of the concerned persons, their designation, department/institution, and contact number. Respondents for each of the proposed methods were purposively selected. The overall sample included 57 interviews (6 KIIs, 4 PE programs, 12 FGDs, 35 IDIs, and Field Observation field notes from five selected wards), covering about 211 participants. Other respondents, especially in the policy maker category, were included based on their availability, readiness to participate in the study, and the need for further information to fulfil the study objectives. The principle of data saturation purely guided the sampling. The details of the sample are mentioned in Appendix 2.

I. Stakeholder Sampling

A preliminary listing of stakeholders was undertaken as a desk-based exercise. This list was expanded based on discussions with government officials at the state level and at the district/city level.

In addition, key partners from the private sector were also included. Experts from the curative and preventive health sector domains, representing medical, allied health, waste management, sanitation and education department, etc. were included. Community organizations were represented and patient interest groups were also included.

II. KIIs

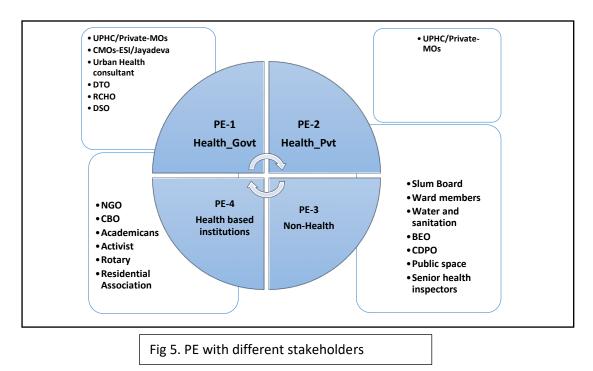
The KI interviews were semi-structured and relied on a list of issues. This was similar to conversation among acquaintances and allowed a free flow of ideas and information. Along with a semistructured interview guide, interviewers framed questions spontaneously, probed for information and took notes/recorded conversations, which were transcribed later. The respondents for KIIs included policymakers at the state level and in Mysuru city. The semi-structured interview guide included specific questions on priorities for urban health, current gaps and scope for CPHC, rural health vs. urban health, urban health response to NCD, health financing, the role of the private health sector, convergence between the health and non-health sector and the feasibility of delivering CPHC in the urban health setting. The research team briefed the participants about the objectives of the interview and took consent.

III. PE programs

The PE programs were a participatory exercise through which a group of people were engaged through different activities to conceptualize a problem, share their thoughts and concerns and provide recommendations to solve the problem.

The team developed a PE module to capture data bringing together diverse stakeholders on a common platform. This method helped to maximize knowledge flows, and learning among the stakeholders and the research team. It was specifically helpful in eliciting information from a greater number of respondents in a shorter duration.

PE programmes were conducted in support of a local partner named GRAAM in Mysuru. They were chosen because of their expertise of working with various organisations present in Mysuru and their understanding of the local context, along with their knowledge of the geographical and political dynamics in the region. They supported with conducting the PE programmes and also collating the key findings emerging from them. The respondents were purposively selected from different sectors. A total of four PE programmes were conducted. Each PE programme consisted of 15-20 participants representing both health and non-health sectors, and both academic and non-academic institutions in Mysuru city. A total of 75 participants attended the PE meetings. The specific venue and the dates for each PE programme were decided and an invitation from KHPT was sent well in advance. The activity for each PE programme was planned for half a day. Specific questions on CPHC in Mysuru city were framed in advance; different participatory activities such as a 'problem tree', 'solution wall', 'desired changes', 'low-hanging fruit', etc. (16) were used to encourage the discussion and elicit in-depth information. A total of four PE programmes were conducted, and details of participants representing each group are depicted in Figure 5.



IV Focus group discussions (FGDs)

We conducted FGDs with a homogeneous group of respondents representing different sectors within Mysuru city. FGDs were conducted with different community members and frontline workers. Different homogeneous groups were formed among adolescent boys, adolescent girls, pregnant women, new mothers, men with NCDs, women with NCDs, elderly men, elderly women, adult men and women aged 30-50 years. FGDs were also conducted with ASHAs and ANMs. FGDs are different from PE programmes, and allowed us to go into an in-depth discussion with participants on their views and opinions on specific issues. Each FGD was led by a moderator and assisted by a note-taker. All FGDs were audio-recorded and a seating chart, along with a debriefing form, were used to contextualize the process of data collection. Respondents representing the five wards in Mysuru city were purposively selected.

V. In-depth Interviews (IDIs)

IDIs are face-to-face interviews. These were useful in eliciting in-depth understanding of specific issues from key stakeholders and their perspectives on an issue of interest. For this study, IDIs were carried out with participants from the participants of the PE programme and also few participants were purposively selected like corporators, counsellors (who were not part of the PE program). The purpose was to get a deeper understanding of the specific topic discussed during the PE programme, and three respondents from each PE programme (a total of nine) were purposively selected for the IDI. An in-depth interview guide was developed based on the key findings from the PE programmes and IDIs were conducted with selected respondents on the next day or within a week of the respective PE programmes.

VI. Participant Observation

This technique was used to gather data informally through observation alone or by both observing and participating with different stakeholders (by asking questions or getting clarifications). Through this methodology, the researcher approached the participants in their own environment. Using participant observation techniques, the research team spent extensive time in all five selected wards with selected participants including the health inspector, private pharmacists in their work settings and ASHAs/JHAs during their house visits in the community and at the Anganawadi Centres(AWCs) and UPHCs. Through transect walks, participatory observation and informal conversations, the study team tried to understand the services available at the hospital, along with people's behaviour towards the healthcare services, inter-personal communication between patients and the healthcare provider and the physical, social and cultural context of the UPHC environment. This process also enabled us to develop a familiarity with the cultural milieu. The data collected was triangulated with the information gleaned from other methods. Detailed notes were written and the key observations were triangulated with the findings from different interviews. The key findings from the observations are integrated into the results section.

Team composition for qualitative assessment

The qualitative study team consisted of a five-member team: one qualitative research lead, field investigators (one female and two male) and one data management officer. The qualitative research lead was overall in-charge of the study and conducted the KIIs at the state level, developed the study tools, analysed the data and wrote the reports. The field investigators assisted the qualitative research lead in data collection and analysis, along with overseeing the quality of data. The three

field investigators were based in Mysuru and were responsible for mobilizing the respondents, as well as conducting FGDs and IDIs at the district level. The study team underwent intensive training on ethical procedures, objectives of the study, qualitative research techniques, field notes writing, and a broad orientation on the CPHC and overall study. The study team closely worked with the CPHC programme team and was supported by the Thematic Lead and qualitative research unit lead at KHPT.

Data collection

Tools were developed according to study objectives, subject and participant group. A systematic workflow and reporting system were developed by the central research team prior to the data collection, which ensured the quality and timely delivery of the data. A research diary was also maintained by the research lead, documenting each and every step, decisions, field experience, and meeting minutes taken during the whole process of data collection. Standards and systems for note-taking, audio recording, transcribing and storing visual data from participatory techniques (such as drawings, graphs), use of metadata, and systems storing were also defined. Data quality was assured through routine monitoring by the study coordinator and field coordinator, and periodic cross-checks against the protocols by the research lead. The data collection process took six months; it began in the month of January 2022 and was completed in July 2022.

Data analysis of qualitative assessment

Centrally, a directory was maintained with details of each respondent, activities conducted, and timelines. The file names and the directory had a pre-determined naming pattern, so as to avoid any kind of confusion during the documenting process. As per the study's needs, at each stage of data collection, a quick analysis was done. It involved documenting the initial findings based on the audio files, without undertaking a detailed process. An iterative process was followed to refine the tools based on the field and program experiences, as well as mock interviews with people with expertise in the public health domain, and the CPHC program team in Mysuru.

Since most of the data collected were in the vernacular, a separate team simultaneously continued to transcribe and translate. All the recordings were transcribed using agreed formats and standards for handling issues like multiple voices, interruptions, and labelling of participatory and other activities. The quality of translations was assured by the research lead, who is fluent in the local language, who checked against the original recording or notes.

Transcripts were imported to NVivo (17)(18), a software to organize, manage and analyze qualitative data. After completion of the fieldwork, in-depth analysis was carried out, and then a coding dictionary was developed based on the interview guide, responses, field notes, and available literature. The new codes/categories that emerged during the analysis were included in the subsequent coding process. The research team checked through each transcript for consistency with agreed standards. Thematic saturation was observed, and extensive memos were written while coding, which provided space to compare the data and to draw inferences and interpretations, based on those comparisons. Themes emerging from the data were narrowed down by careful reading and re-reading of transcripts against the research questions. Validation was ensured by comparing the findings emerging from different groups of qualitative data. The qualitative research lead and the KHPT research team were responsible for writing the report.

Ethics approval for the research study was obtained from the St John's Medical College-Institutional Ethics Committee (SJMC-IEC) in April 2021. Informed consent was obtained from study participants. Ethical Approval No: *IEC/1/375/2021 (Study ref no.109/2020)* dated 20 April 2021.

Results and Findings

A snapshot of the current situation

A robust health system based on CPHC is the most effective means to reduce disease burden, improve quality of life, and achieve Universal Health coverage. With the aim of making health care services accessible to individuals in urban regions, Mysuru, like the rest of India, provides health care through a three-tier structure of health services that consists of primary, secondary, and tertiary health care institutions. An Urban PHC is established for approximately every 50,000 people. Outreach functions in this population, are undertaken by around five ANMs and 1 ASHA for every 2500 people living in slums. Mahila Aarogya Samitis (MAS) were formed in slum areas for 250-500 people (50-100 households). For every 2.5 lakh people (5 lakh population in metros), Urban Community Health Centres (UCHC) are established for secondary care services. Tertiary care is provided by district-level hospitals/ medical college-attached hospitals. With a continued focus on vulnerable communities, the Ministry of Health and Family Welfare, Government of India, in 2018 launched the Ayushman Bharat programme, which aims to provide CPHC through HWCs with the aim of transforming 1,50,000 SCs and PHCs into HWCs by 2022. The other component of Ayushman Bharat is the Pradhan Mantri Jan Arogya Yojana (AB-PMJAY), known as the Ayushman Bharat -Arogya Karnataka (AB – ArK) in Karnataka, which aims to provide financial protection by covering the population under the umbrella of AB – ArK insurance for secondary and tertiary care.

However, qualitative findings suggest that it is only in a few UPHCs that the CPHC guidelines (on services, human resource, infrastructure, laboratory investigation, drugs and supplies, equipment etc.,) are being followed. Similarly, from in-depth discussions with different community members and other stakeholders, it is evident that the Ayushman Bharat scheme is yet to be suitably established and promoted among the masses.

It is noted that certain UPHCs have higher demand for services and footfall of patients as compared to others. Also, private health services play a major role in providing primary health care, as well as specialized/ tertiary care services in urban areas, resulting in OOPE. Inter-sectoral convergence with non-health departments (Urban Development Authority, Slum Development Board, Department of Women and Child development, City Corporation etc.,) is weak. Certain health services like reproductive, maternal, neonatal and child health services have better reach, acceptance and demand, while others services for adolescent heath, communicable diseases and NCDs need to be strengthened. Community awareness has increased over time, but community participation in health programs and accountability mechanisms is still low. Health-based institutions and involvement of NGOs indicates potential show promising energies in supporting the efforts of the government in providing primary health care in Mysuru.

Along with the primary focus on addressing the barriers to providing CPHC, the study also opened up discussions on the need for Mysuru city to have a vision of becoming a healthy city. The collective thoughts of the participants from diverse departments and sectors, when brought to a common platform of public engagement, was that primary health and health per se should be looked at from the view of broader healthy city model. The common thread of thinking was that unless the underlying broader determinants of health are sustainably addressed, achieving CPHC will be challenging. As such data iteratively points to the need to work on health care delivery at community and facility levels and also a very significant need to work on convergence, policy, and advocacy to address multiple issues (pollution, forestry, agriculture, urban development, vulnerable population, water and sanitation), with an emphasis on health as a key agenda. (Annexure 2- PE).

Data finds that UPHCs are indeed the pillar of strength in providing primary health care to the people, especially the urban poor. However, it also notes many multi-layered and inter-connected barriers at the policy, facility and community level to achieve and provide optimal health services. To describe the situation of urban primary health care holistically, the below findings will discuss the barriers to the health system in detail and also distinguish the factors that act as catalysts and facilitators to build a stronger and more equitable primary health care system in Mysuru city.

Barriers at the community level

To understand health seeking behaviour and perceptions, attitudes and experiences of the community towards the primary health care exhaustive FGDs were conducted with various groups of the community.

Perception towards government health services - Barriers to accessing services

Our findings highlight that the demand for government health services is driven by multiple factors, which can be categorized under perception and attitudes towards health services, lack of awareness of the facilities available in the public health system, and preferences for alternative medicines or treatments like AYUSH.

People's perceptions and judgments are often conditioned by assessing their own experiences. Challenges like inadequate and poor health services, issues of accessibility, lack of availability of drugs and diagnostics-based, responsive and timely health services, and witnessing corruption at the PHC, have forced people to avail of alternative services.

Findings from FGDs with men show that distance and timings of PHCs restrain people from availing services at the PHCs. The PHCs are at varying distance from the geography of vulnerable population. The coverage of population and spatial distribution of PHC does not seem to match. Patients seeking government health services are often from the poor, marginalized and slum communities. Spending on transportation to reach the PHC or waiting for long hours at the PHC causes them to lose out on a day wages. Additionally, when a person has travelled a fair distance and foregone their earnings only to reach the facility to find unavailability of quality services, it discourages health-seeking behaviour in future.

"The doctors will arrive at strange hours. They will sit for half an hour and then return, claiming that no patients are present. As a result, patients will find it difficult to consult the doctor, and they (patients) will also lack the patience to wait for the doctor to arrive." (IDI, Representative of Health Based Institution-female)

"If bus facility is improved, it will be helpful for them because poor people and middle class come to us, middle class somehow come if they are at walkable distance, they come by walk if they need to come from distant places then they need proper bus facilities. It will be better if they improve the timings as of now, we are here from morning 9:30 to evening 4:30 and close, if it is open from 4:30 pm till 8:00pm then the working labours can come at that time after finishing their work" (IDI, Medical Officer-Government –03 Female).

"There will be many people at the primary health centre. It will be late there. By the time, that person's turn comes, that person (would have expired) (laughs)" (NCD, female FGD).

"They scold. They will not talk properly, they don't see. One person gives injection, one person... Even if there is emergency also, they say, see all these people are waiting, isn't it? how can you be attended immediately? You also go and sit with them. That is why we feel, let us not go there, and we go to private, even if we have to borrow money from people like you, we go to private hospital and become better or it is left to God." (FGD, Female 30-50 years).

Each group of the FGDs conducted unvaryingly reported that long waiting hours, poor cleanliness, lack of space, shortage of medicines, and unavailability of many lab tests is common at the PHC.

"Not give much time, the cleanliness will not be there, neatness won't be there, over crowded with many people, not get proper place to sit there either, non-availability of clean and neat lounge to wait till the turn comes. What has happened means government health and private infrastructure will be different leading to difference of quality and this is the main issues everyone wants quality these days may be rich or poor" (IDI-Corporator Male).

"There must be constant supply. Most of the time, stock of medicines will not be there. So, these are the...two, three times if this happens, they lose their confidence." (KII-Senior Official, DoHFW Male)

"The poor quality of delivering the service in the government facilities (unclean surroundings, poor quality labor rooms and delivery care, delayed attention to patients, long queues) causes considerable hesitance in people to avail the services govt. offers. (The execution by hospital staff/authorities undermines governments efforts and plans)" (IDI, Academician, HBI Female).

"In government hospital there will be lot of people. You just come and see on Thursday and see people will be waiting. There is no place to stand at all. They keep 20 chits ready with names like Widal, routine, CDC, urine. They give that chit/slip and say you get test done in Sahara. So, you tell me.... why should we go there, we will go directly to Sahara (private hospital). It's like luck by chance you may get service when you need it or you may not get (laughs)" (FGD, Female 30-50 years).

Moreover, the women group reported that due to lack of privacy for physical examinations or administering injections, etc., they find it sometimes difficult to discuss sexual and reproductive health-related issues. Moreover, they hesitate to discuss their ailments because of a lack of female doctors. A few participants in the study, including two MOs, mentioned about Pink clinics and said that a dedicated day in a week was designated for women's health issues. However, none of the women were aware of it.

"We don't feel comfortable sharing our problems with male doctor, even for injections there is no separate room for female patients, it is common.... other men and heath staff keep coming in...we feel shy and embarrassed there..." (FGD, New mothers).

Mistreatment and rude behaviour by the health staff at the UPHC was also observed by many community members. However, during interviews with the health staff, they said that it is due to high burden or work and huge number of patients who become impatient if made to wait for their turn.

"If the patient wants to say that she is having pain, even during that, they will not have the patience to talk to the patient calmly. They will say Hey what? Sleep there. I will come (rudely). They will say like that. Any patient who goes there whether it is for delivery or with fever, patient is a patient. Isn't it? There is a difference in telling them in a nice way and telling them in anger" (IDI, Representative of Health Based Institution-female).

People are less aware of it I think or people are not getting attracted towards it I think because of less information. Maybe they have the opinion in mind that they may not give good treatment if we go there. Not give much time, the cleanliness will not be there, neatness won't be there, overcrowded with many people, not get a proper place to sit there either, non-availability of clean and neat lounge to wait till the turn comes. What has happened means like in government school and private school infrastructure will be different leading to difference of quality and this is the main issues everyone wants quality these days may be rich or poor (IDI, Corporator-02, male).

A lack of trust in the medical services provided by the government health staff was also noted during the FGDs. Findings show that, in general, there is a feeling of apprehension that the quality of services in the public sector is poor, that the health staff are not properly trained and qualified or that they are not serious about the patient's health condition.

"Here...there will be huge crowd there like herd of sheep. They don't bother about anything, even if a person dies there then also they are not bothered. They don't see." (FGD, Female, 30-50 years)

"In few places like inadequate staff, there you need to upgrade the staff, some staff do not have proper training there you need to give them proper training these things have to be first rectified before considering other problems." (IDI, Medical Officer, Government 03 Female)

All these factors lead to poor demand for government health care services and force people to avail of private health care services and incur high OOPE. Many members of the community shared that they preferred healthcare from private practitioners even though they cannot afford to, and as such end up taking loan for these health expenses. Poor economic living conditions, social exclusion, and high health expenditures further push urban slum populations into a vicious cycle of poverty.

Many are poor. You know what happens when poor people go to private hospitals; as I previously stated, for minor procedures, they charge between 5000 and 10,000 rupees. They will save money if they go to government hospitals, but they will have to wait for long time or may be days for the doctors to assist them and perform the operation. Many come to me for relief, because they can't wait nor can they afford but I try to convince them to go to government hospitals who require surgery. (IDI, Bone Setter, male) The patient will start becoming anxious and there will be lot of expenditure, and he has to leave his job and come this side (for the treatment) and he will also be scared. Because of that, since it will have an effect on his physical, mental and financial condition. This will continue to happen if he does not get proper treatment at the right time in the government hospital...his health will continue to deteriorate... (KII, Senior Official, Dept. of Health and Family Welfare, male)

"For people to go to government hospitals, it will take a day. Daily wage workers will lose their wage of around 700-800 rupees. They have to wait a long time too. People prefer to get services fast. It would be easier for the patient to go to small clinics or private doctors to not miss the work and wage. "(IDI, Pharmacist-Private Male)

"They make us wait in the queue for a long time. They take ten rupees. They don't talk to us properly; they simply ask us to stand and they give injection. We have to stand in the queue, we have to pay ten rupees, for everyone they give diclohexa. We have to take diclovan...that also they give one ml or something, they just give paracetamol and we have to take that and come home swallow and sleep. If we are not cured, then we have to go to private. To go there and come back we have to spend 100 rupees, for going and coming. Instead of that we can get medicines for 200 rupees in the medical shop or clinic and get cured..." (FGD, Female 30-50 years)

Interviews with members of the community revealed that corruption in the primary health system is a challenge for them. For example, during an FGD, participants from a women's group said that they have witnessed and experienced corruption at the PHC. Bribery seems to be a secret practice in a few PHCs, especially by the supporting health staff, who demand money from patients for getting a quick consultation with the doctor, or any particular vaccine that is highly in demand, or providing health services in emergency situations. It was also shared that doctors would refer the patients to a particular private nursing home or lab for further tests which are not available in the PHC. People perceive that probably the preference for specific private practitioners is indicative of some mutual exchange of benefits. Two pregnant women in the FGD said that they were not approached by the ASHA, ANM in the first trimester but more frequently in the second trimester and referred to the private hospital directly. Since these experiences have not been associated and validated with the PHCs, they should not be generalized. However, such experiences are indicative of poor governance, weak monitoring systems, and a lack of community accountability mechanisms.

"Then the bribery that is there in the government hospitals you see. Until you stop this menace, the problems that the poor patients face will not end. Bribery is going on in all the hospitals. Wherever there are government hospitals, there, the bribery is going on." (IDI, Representative of Health Based Institution-female)

"Some of the vaccine stocks that nurse got from the government were internally sold for a higher price like Rs.1000 to Rs.2000. They are misusing the free facilities provided by the government." (FGD, Adolescent boys)

"They would ask for money to give early access to see the doctor. Else you keep waiting for long hours until your turn comes. Big people can afford but not everyone has that kind of money." (FGD Male-NCD)

Based on the above findings, the below image tries to depict the tradeoff between government and private healthcare facility and the reasons for preferring one over another.

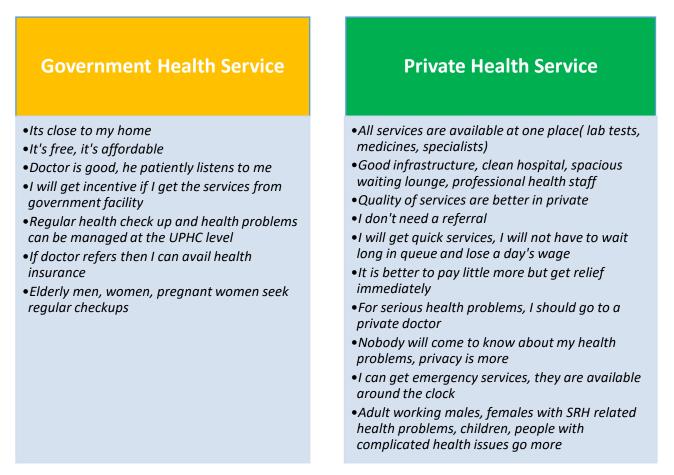


Fig 7. Which one I choose and why?

Clearly, there is low demand for and utilization of government health services, but the reasons must be understood in totality.

Knowledge, practice and behaviour related to healthy living and health facilities

Another major constraint that prevents communities from accessing public health services is their lack of knowledge and awareness of the existing and new government health facilities available to them. Moreover, a lack of knowledge among the community members about referral systems that could facilitate health seeking in the communities is also noted. This is observed more among the women as compared to men's groups. For example, many people are still unaware of the Ayushman Bharat scheme. Similarly, most women did not know about the Arogya Samiti, Mahila Arogya Samiti or Jan/Rogi Kalyan Samiti.

"Before this programme there was other programme bima yojana after removing this they initiated Ayushman Bharat programme, still many people don't know about it, how to get Ayushman Bharat card? Where to go and get it? Who will get it done? Whether they are eligible for it? Where it has to be registered to get the card? Still people are not aware of it; information hasn't reached them." (IDI-Environmental Engineer Female)

Another important aspect of health relates to the Knowledge, Attitude and Practices (KAP) pertaining to a healthy lifestyle and preventing illness. With the increasing prevalence of noncommunicable and chronic diseases, it has become important for people to know the importance of healthy behaviours such as attention to nutrition, hygiene, preventive and promotive health care. However, excerpts from interviews with MOs, private doctors, pharmacists, and front line health workers indicate that people are generally negligent towards preventive and promotive health care. Also, there is a tendency to delay health-seeking unless it becomes a serious illness.

"People are not having that level of awareness that they have to take care of their health like how the older people have in them. Even if they have that awareness, our youth is also lacking in implementing that discipline in taking care of their health. Today I am strong. I don't have that awareness. Like this they have a kind of disinterested mindset, and their friends circle will also be like that. There is no possibility that they will come to this (health awareness) unless they experience it themselves." (KII-Senior Official, Dept. of Health and Family Welfare Male)

Behaviour is interlinked with knowledge and awareness dissemination. The community feels that they do not get sufficient counselling on healthy lifestyles, diet, physical activities, diseases, health schemes etc, either at the facility or during the house visits made by the ASHA or ANMs. ANMs reported that there is reluctance for immunisation and vaccination among certain communities in spite of efforts to provide door step service delivery. Participants in the FLW FGD said that most of the preventive measures have been limited to communicable diseases like TB or vector-borne diseases like malaria and dengue. Others asserted that outreach has been mostly limited to maternal and child health. As informed by the environmental engineer, initiatives to keep the neighbourhood and public places clean and efforts towards segregation of wet and dry waste are hardly seen.

Data shows that there is a high demand for medicines from private pharmacists without any prescriptions. This indicates that there is high trust in local pharmacists. The pharmacists often act as treatment counselors, referral service providers, and also general counselors.

Health Seeking

Interactions with various community members, including young participants, revealed that there is a greater preference for traditional and ayurvedic treatments, especially for common ailments like cough and cold, fever, diarrhea, skin infections, eye problems, headaches, stomach aches and diabetes. People prefer following their age-old home remedies like herbal decoctions or warm or cold compresses, or seeing some local ayurvedic doctors for relief. If their condition does not get cured at home, or becomes critical, then only they resort to formal health care. Since most of the UPHCs do not cater to the demand for ayurvedic treatment, they prefer to avoid UPHCs and take treatment based on their traditional knowledge or advice from the non-medical practitioners. Due to structural barriers to accessing healthcare, including distance, long waiting times, and negligible treatment counselling, people prefer to go to informal providers who are often from nonmedical practitioners. They are often camouflaged as RMPs, but the community lacks clarity about their medical degree, their registration or their specialty, also there is not much significance placed on these factors. They visit them because they are easily available and accessible in and around the slum areas. This not only reduces the utilization of UPHC but also affect the course of treatment and allows for incorrect medication, diagnosis and treatment. When probed further into knowledge of the qualification and affiliation of these doctors, community members could not inform about them.

During the FGD with elderly men, they said that they would prefer to avail ayurvedic treatment at the UPHC, but since it is not available in the UPHCs in the sample geography theyopt for home remedies or visit local non-medical practitioners or private AYUSH practitioners.

"When we will mention that UPHC has Ayurveda services, the number of patients visiting the facility could go up. The workload here might be lighter if you maintain and operate a separate section for AYUSH there. Maybe 100 people will come here. They might be taking it from here and moving on since AYUSH is not present. However, 25% of them may visit AYUSH, receive treatment, and then leave if they find out he is there. More people might visit AYUSH as a result of the progress, and things might be fair for both sides." (IDI, AYUSH Private Practitioner Female)

Gender Discrimination and stigma towards people with TB, Leprosy and HIV

Two other underlying barriers noted in the community are gender discrimination and stigma at home. Women from both young and old age groups shared that their health seeking behavior is conditioned by the gender norms at home. Generally, women are given the least importance in the family while seeking healthcare. Their engagement and duties at home force them to neglect their health needs, and limits access to health care services. Even healthy behavior like eating food on time is seldom seen. It is only after the husband, in-laws and children have eaten and they have finished all their household chores, that women would eat food. They also have to take permissions to go to the PHC. Gender bias is so deeply rooted that, even at the CHC, women reported experiencing differences in money demanded depending on sex of the baby delivered. Birth of male baby is met with more demand for money (*khushi*) than for birth of female baby

"If there is any problem, some husbands take them (for check-up), some don't take them. They will say you always have it, it is common, stay inside the house. They will say it is there now and it will go tomorrow". (FGD, New Mothers)

"Even if we tell our problems and if they don't react and also don't give us any money for the treatment, then how can we get it treated? Only if we have money with us, we can go to the doctor and take the treatment" (FGD, New Mothers).

"Hospital staffs ask for money after delivering babies ... they would charge around 5000 for male baby and around 3000 for female baby." (FGD, Female 30-50 years)

Moreover, TB/HIV patients and those associated with providing health care to them are discriminated and stigmatized in the community. For example, ASHAs also face discrimination because they interact with patients who have TB.

Patients face discrimination from neighbours if they have TB or Leprosy, so they refuse to allow health workers to follow them and instead only visit some quack doctor secretly and take tablets. (IDI, Health inspector, male)

"People are hesitant to report they have TB, HIV due to fear of discrimination, which results in ineffective treatment and follow-up. Community does not accept such patients." (FGD, ANM Female)

"We have to give these many sputum cases every month as a target. In such cases our neighbors will not behave properly with us...because TB spreads through cough and they feel they may also get it." (FGD,ASHA Female)

Lack of community participation

Although community participation is central to the primary healthcare structure, the present study shows that community participation is minimal. Participation can be in the form of cooperation and involvement in the government health programmes and also the community's willingness to question, demand and engage with different authorities and stakeholders to strengthen health systems. The study finds that both kinds of participation need to be increased.

There is hesitancy and resistance to participating in community health drives. As shared by the FLWs, people are not willing to listen to them and are very selective about receiving information or services. When it comes to services which they perceive are beneficial for them they accept easily, like ANC and PNC services, but for services like family planning, Covid 19 vaccination there is resistance.

They find it difficult to send their daughters (alone). They say, you alone have to take them. If we are sending our daughters, it is only because we trust you. If we send our daughter, you alone have to bring her back home to us. It is difficult to conduct meetings with adolescent girls; people are worried about their safety first. (FGD, AWW, female) For example, there are people who do not agree for complete vaccination for their children because of misconceptions around immunization.

Data also shows that parents are not willing to send adolescent girls or young women to the Anganawadi centres.

As often mentioned by FLWs as well as participants from allied departments, when it comes to hygiene and sanitation, in spite of counseling they will not make efforts to keep their neighborhood or environment clean.

One of the policy makers pointed out that it is only when there are incentives, that the community tends to participate or accept services more. this thought is reflected in the experiences and insights of the other participants also.

"To bring any community person they will give money, to get herself immunized you get money, to deliver in government hospital you give money, for lactation you give money. So, everything is incentive based, rather than encouraging community participation. That is a big zero. Where is community participation?" (KII, Senior official, Dept. of Health and Family Welfare Male)

"In some places we would stand outside the closed gate and bang on it for a long time...They would never let us in and used to say "no we don't want". (FGD,ASHA Female)

"Slum people won't bother about waste disposal, clean and all, but in some area people won't wake up early, they wake up late around 9am, by the time waste collection auto would have left the place. At few other places, even if auto comes they won't come out to put the waste, they won't wait for the auto, they just dump the waste in front of the houses" (IDI, Environmental engineer Female)

FGDs with various community members revealed that very few members are aware of and had participated in health platforms (MAS) to discuss their health needs. There is no evidence from community interviews which suggests that any actions are taken to monitor and inform about the health problems of the community. One of the reasons noted for this is that people are not aware of the channels that they can use to voice their problems. Secondly, fear and hesitation due to lack of agency and empowerment among the urban poor and slum population further prevents them from participating in any accountability mechanisms.

"Can't complain like that. what if they (nurse) give 50 ml instead of 5 ml and kill us? They may say, she was very tired so we gave injection and she died! No we don't want that...where we have to get help we have to get help. What if they take our photo and then do something to us? We don't want all that." (FGD, Female, 30-50 years)

"If we say anything or fight, they (medical staff) will file police complaint and send us to jail".(FGD, Female, 30-50 years)

Sense of entitlement and the struggle between reality and expectation

Our interviews with participants from different groups reflect that people have expectations of government clinics which are similar those of the private sector. When these expectations are not met, they tend to brand the services as bad or inadequate. People have a sense of entitlement that they deserve services like the private sector, irrespective of the fact that medical support and treatment are similar or better in the government sector. People prefer private health care because of factors like less waiting time, good seating areas, cleanliness, and friendly staff and not just because of the availability of a good doctor or specialist. As shared by the MO at a government maternity hospital, people have a sense of entitlement and feel it is their right to receive the best quality health services at the government hospital at no cost

"In my opinion, if we go to government hospitals for free services, we are spoiling our own health. In government facilities, instead of treating well, they worsen our health. It is my opinion, even my family thinks the same." (FGD, Adolescent boys)

"People always blame us...meaning blame the government services. They won't utter a word if something goes wrong in a private hospital but if little bit problem they face at the government hospital; they will create a chaos. There will pay and not demand anything, here they will not pay but would expect private like facility". (IDI, Administrative Medical Officer, maternity government hospital, Female)

"One more thing is, for people to go to the government, why they hesitate to go to the government is, if you have to get your BP checked or you want to ask the doctor something means, then you should stand there in the queue and wait there. If in case if you have to get your sugar tested there then, they will say they are not there today, come tomorrow. That is why what the people do is, everybody will say they will go to the private. In private (also) you must sit for hours together there. You have to wait there till the doctor comes. Even then they will wait because they hope that they will treat them well in private. In Government also, they will treat the people. But if they make it little more convenient for the people when they come, it will be good". (FGD, Elderly male)

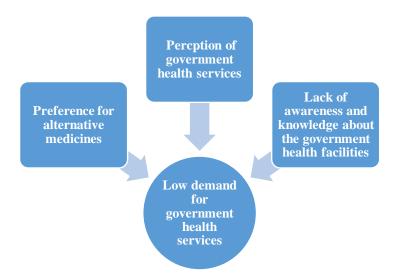


Figure 6: Factors affecting the demand for public health care services

Barriers at the Facility level

Strong primary health care relies on good infrastructure, availability of facilities and a capable, motivated and trusted team of health providers. This study found various barriers at the facility level which affect the primary health care services provided to the urban population.

During the participatory observations, all the UPHCs were found to be crowded, and patients had to wait for an average of 20-30 minutes for their turn. Most of the UPHCs were clean and well-maintained. Most of the patients were standing inside or outside the UPHC, as there was not enough sitting space. There is a room for a laboratory, one room for the Outpatient Department, one room with two-three beds and immunisation counters, and separate male and female toilets. None of the

UPHCs, except one, had separate injection rooms or checkup rooms which could ensure the privacy of the patients. Most of the patients were elderly men or women, pregnant women for ANC or children below the age of 5 years who were brought for their vaccinations. In terms of health staff only, one MO, two female nurses, and one lab technician were present. There was a lady doctor only at one UPHC who used to visit once a week, but had stopped coming a few months prior. Many ANMs reported delays in getting their salaries

Through observations and informal conversations at the Anganawadi Centres, it was noted that generally, they are small but neat and clean. The open area in front of the Anganawadi was a dumping ground for garbage and the path leading to Anganawadi would be swamped with stagnant water during monsoon. Some Anganawadis, which were supported by Corporate Social Responsibility funds, were big and maintained better. It was observed that the community was interested in taking rations and food, but did not show much keenness to listen to sessions on health. Children and pregnant women attended regularly when compared to new mothers and adolescent girls. Mobilizing the community members to the Anganawadi and including them in counselling was difficult. One of the Anganawadis had leaking roof and a congested space, leading to wastage of the ration. Delay in the disbursement of ration was also reported.

Infrastructure

Both the health staff and community members shared that, space is a major problem in the UPHC, as they are congested and small. There are no separate rooms for counsellors or separate injection rooms for men and women. The lab technicians shared that the lab equipment is outdated. They are not provided with new machines that could help them do advanced blood tests. As a result, they are forced to refer patients to private pathologists.

The community shared that basic tests like complete blood tests, X-rays, ECG scans, and ultrasound facilities are not available at the UPHC level; as a result, they are referred the CHC, which is often far and where the waiting time is long. So, they prefer to go to nursing homes where they can find all the facilities in one place.

Government pharmacists and various members of the community shared that there is a shortage of medicines and the patients have to go to private pharmacies. Government pharmacists asserted that they try to provide alternative medicines for the ones that are not available at given point of time. However, this is often a point of conflict as people expect the same prescription. Discussions from the FGDs with community men and women also reflected a lack of trust in the medicines provided at the Jan Aushadhi centres, which was further accentuated by the private pharmacists. Government pharmacists also mentioned that they do not have enough space to keep their medicines in a cold and clean room.

"What will you get in Janaushadhi? You don't get anything. Because when the doctor here, writes a medicine and gives and if we go to the pharmacy here, they will say this medicine is not available here, you have to go to the regular pharmacy and buy." (IDI, Representative of Health Based Institution, Female)

"What medicine they gave there is right or wrong, I don't know. I went there and took it. They said instead of one, take two. I took it. Then, I went and asked pharmacist (private). He said, I cannot say anything about this. These medicines are not the best quality. For some people it will set and for some people it will not set." (FGD, Elderly male)

"We would be going to one private (clinic) regularly. If we change suddenly, they will call us and ask why you are not coming now. We will say we are going to this (janaushadhi) from the centre, then they will say it is not good it seems, it is the seconds medicines which come there. It is not good, is it suiting you? If we say that it has suited us means they will not say anything. If we say, yes, it is somewhat, means then they will say don't take that, it will have side effects." (FGD, Elderly male).

Human resources

IDIs with the health staff revealed that there is a shortage of human resources at the PHC. Although there has been a significant expansion of services at the PHC level with the NUHM and the introduction of HWCs, there has not been a corresponding increase in staffing.

The pharmacists mentioned that they have to undertake multiple tasks at the UPHC due to staff shortages. With only one pharmacist, and so many patients who generally get impatient, it is difficult for them to manage, they said. They also have to maintain inventories and records of the medicines and patients, and support the MO and ANM in conducting outreach field visits and weekly clinics for specialized care.

"There are 65 wards and all wards are not covered under the ICDS. Also, many do not have ASHA workers, but this gap needs to be filled." (KII, Senior official, Mysuru, Male)

Work Culture

During the IDIs with policymakers, it was shared that they feel overburdened with administrative work, and sometimes their abilities to ensure proper implementation and monitoring get compromised. Similarly, interviews with MOs show that, apart from their duties as a doctor at the UPHC, they are overburdened with multiple administrative tasks. In addition, they also have to visit the field to support and monitor the work of health staff.

Being the only doctor at the UPHC with an increasing number of patients results in spending less time with each patient and exhaustion. Also, the Additional Medical Officer (AMO) shared that she is the only doctor at the maternity hospital, which requires her to stay available 24/7. She shared feeling stressed due to being overburdened with work.

Work burden on the doctors is too high. For this centre I think you should post three or four doctors, so that we can give time to them also. And even after six hours duty we can go 'aaram se' (easily) without any stress. So that someone else will take over the charge. As doctors we need also need to relax for work efficiently, but people simply don't understand (IDI- Additional Medical Officer, Maternity Government Hospital, female).

"if one Taluk hospital has one obstetrician she does and she will come at 4:30 a.m., does the cesarean section goes back at 5:30 or 6 and you expect her to come back fresh and start the OPD at 8:30 is not possible. If it's one day it's okay, if it's for ten years it's not okay. That is why we feel overburdened. Otherwise, if there are five obstetricians, five physicians, five anesthetists, five paediatricians like how the private sector runs, nobody will feel the pain of seeing people..." (DD, Communicable diseases, Male)

"Everybody has got a time constraint. Too many meetings. Most of the times, the meetings will override the work, so most of times our time is wasted for meetings. Wherein, we need to go to our field and then we have to see and make corrections over there." (KII, Senior official, Dept. of Health and Family Welfare, Male)

"I'm conducting 60 deliveries, sometimes it went up to 84 deliveries. Now, actually, I've reduced because I'm not able to concentrate everywhere. So, I have to look after maternal health, child health, and I also have to do 60 to 80 OPDs. And Tuesday, Wednesday, Thursday, Friday and all I'll have OTs. Either caesarean or tubectomy, like that. Moreover, I have to do lot of administrative and monitoring work, If I don't do on time, the salaries of the staff would get hold...Just tell that to provide admin support also and even as a gynaecologist, 24 hours you can't be on call. Single doctor can't be on call. Even he requires six hours duty and like how staff nurses will even he should have a free mind after going out..." (IDI, Additional Medical Officer, Government maternity hospital, Male)

"50,000 is a huge population which the PHC is unable to cover as an OPD. We are covering as field workers; we have 5 workers they are going out and doing their job. But an OPD with one running medical officer and a staff nurse, probably we are not covering the whole 50 percent. There is too much pressure on the OPD, we cannot take a break a single day, if we take means there is no substitute for us to see the sick patients." (IDI, Medical Officer-Govt-02, Female)

Population Coverage

The population that the ASHA is mandated to cover under the NUHM is often spread over a vast area in the urban setting, unlike in rural areas where each village or hamlet is generally clustered together. Due to the time spent travelling, outreach services often get affected. Moreover, due to their multiple roles, ASHAs are often overburdened with work.

It was also observed that the roles and responsibilities of ASHA and ANM overlap, and therefore often there seems to be a doubling of tasks.

"Mysuru has a population of 13 lakhs; peri-urban and total urban. We only have 160 ASHAs there" (IDI, District Health Officer, Mysore, Male)

"As you said, promotive, preventive, all this comes in the field level. And as I said, ten thousand for one person is humanely not possible. Whereas in rural they can go at least once a week. Here as you see there are four floored houses, which is quite tiring for a person." (IDI, Medical Officer –Gov03, Female)

"We cannot have the same kind of a norm what we have in a rural area. For example, for 1000 population, 1 ASHA. So, here it is disproportionately high. For 1 ASHA we have 5000, even nearing up to a 10,000 population also, which is practically difficult now, these days. And...urban structure we have two extreme kind of a people...to have a different kind of strategies in urban areas needs more resources. That all we have not decrypted yet." (KII, Senior official, Department of Health and Family Welfare, Male)

"Still we have uncovered population also. Because a lot of expansion of Mysuru city so the whole of Ring Road, the layouts in the Ring Road, none of them are covered by any of the PHCs. Jayanagar is not covered by any of the PHCs. This has become a huge problem, because they are not getting access to the basic facilities which we are supposed to provide them." (IDI, Medical Officer-Govt.-03, Female)

"When you expect an ASHA to reach out to every 2500 population, you need a radio or a TV broadcast services but none is available" (KII, Senior official, NUHM, Male)

Motivation

Health staff are mostly contractual employees with poor wages, no health insurance or benefits, no transport facility, and no pension or gratuity. Each of the interviews with the health staff reflects that although they are undertaking most of their duties and responsibilities, they lack the motivation to work.

"We have to spend money from our pockets and we have done so many times like this in case of emergencies, we would only get auto to go spending on travel, for the sake of the beneficiaries." (FGD, ASHA workers)

The MOs, pharmacists and counsellors shared that there is also a lack of motivation due to the absence of any refresher training or workshops that help them learn about new medical advances and techniques, or share their problems. The ASHAs also shared that they should also be given frequent training on communication skills.

Findings suggest that some UPHCs have higher footfall and caseloads as compared to other UPHCs. Narratives of stakeholders indicate differences among the MOs in motivation, willingness and efforts to provide the best healthcare with the same infrastructure. This clearly translates

We don't allow everyone to take leave at a time because hospital has to run, we won't take any leave, if the staff wants leave, we won't say no, we say them, you can take leave by giving your charge to others if not 100% at least 50% of their work has be taken responsibility by some other person in that place. This way staff is also happy and patients also don't suffer... (IDI-Medical Officer, Govt 03, female)

into more demand and preference for treatment from particular MOs and UPHCs, as compared to others. Even participants from different community groups indicated a clear preference for a UPHC, depending on the doctor and his behaviour towards the patients. Therefore, there are certain better-performing PHCs in high demand, and then there are average and moderate-performing PHCs. It is difficult to conclude why few doctors are more motivated than others.

Whether it is only their intrinsic motivation or whether they are given incentives like appreciation, recognition etc., that make them perform better, could be explored further.

"There is too much burden here (UPHC) as people from other PHCs as well prefer to come here and get government services as well." (IDI, Medical officer, Govt-02 Female)

"So, I went to a hospital in one of the districts...There...PHC Medical Officer was telling, this PHC was getting 70 patients at one point of time. Today that doctor got PG and he left. Today we are getting only five patients. It is not system built; it is the individual." (IDI, Senior official, Dept. of Health and Family Welfare, Male)

"In this area people come and take the services (UPHC), they ask for government services, in other areas like Saraswathipuram (middle and high income geography) PHC, people won't come to take government services, as my friends working there say; but here they come and insist for check-up, we can't say no to the people, but the work burden is more, everyone seems to be coming here". (DI, Medical officer-Govt 03 Female)

> I take the staff into confidence, I don't give them heavy work, I make their work simple and easy, like a staff nurse work like a staff nurse only and pharmacist do the job of a pharmacist only, what job has been chalked out to them they are determined to do that job. I do my job, I don't feel any burden, time will fly past me, I come at 9:30 am in the morning stay here till 4:30pm. At the end of the day I get satisfying sleep, as I feel I have done a good job, not only me others are also happy with their work. Others may have many problems at their work place but my staff are very supportive to me. ... (IDI-Medical Officer, Govt 03, female)

Monitoring and Utilization of Data

Another important thing pointed out by study participants as well as noted in the analysis, is the lack of monitoring mechanisms that could inform not only about the quality of work of the staff but also about the burden of disease or health needs of the people in those geographies. According to the UPHC mandate, each UPHC should have one monitoring and evaluation unit. However, none of the UPHCs covered under the qualitative study had any person designated for the same. Even if the data was collected by the FLWs, it is not analyzed and utilized for planning or re-strategizing health services.

"Like, we have...some structure to collect the reports and all in the rural areas but that kind of things are not there in the urban areas. And unless we know all these things the data driven decisions will not come. And that's why people keep addressing what they feel is the priority for the day. They don't even think for a week or so, whatever is the priority for the day they will address that." (KII, Senior official, Dept. of Health and Family Welfare, Male)

Poor inter-sectoral convergence

Interactions with different policymakers and service providers from health and related departments illustrate that inter-sectoral convergence is inadequate and not prioritized.

Although each department is likely to function well independently, there are no interactions or joint efforts with health department and allied departments which can cater optimally to the health needs of the city and its population.

For example, an MO expressed that they have to inform the Municipal Corporation to carry out mosquito fogging or to clear the drains and water logging in the community. However, he complains, that these precautionary We all have enrolled for waste management, there are some 26 hospitals in Mysuru all have authorization, we cannot just throw medical waste as such we have bought necessary equipment for that purpose, we are doing proper disposal of medical waste, hospital wise everything is going on well. But other departments have to join hands.... (IDI-Medical Officer-Govt 02, female)

activities should be undertaken by the Municipal Corporation on its own and not be directed every time by the MO. Similarly, there is a strong need for making lifestyle changes, which also require physical activities. However, there is a lack of clean and safe spaces like gardens, parks and community halls; these need to be established and maintained by the Municipal Corporation. An excerpt of an IDI with the Corporator also shows that there is a lack of interaction between the departments and poor knowledge about the appropriate channel of interaction.

In slum-like areas, 6-7 people will be living in one house which will be very small. It will not be even ten by ten feet. They will not have access to public toilets also. They have made enough provisions for toilets under Indian household latrine (IHHL). But still, there are many people who are devoid of such facility. So, the basic facilities have not reached many people to 100% level. People without clean water and sanitation facility will have health issues, we cannot only talk about UPHC but all-round services that affects health (IDI, Corporator-02, male)

"The whole ward will be knowing who the Health Inspector is, the elected persons and those before them and everybody will be knowing who he is. But when they come to Health Department, they are almost restricted to our office. Only the ASHA workers, staff nurses and the doctors will be knowing. Other than them, even doctors will be meeting them rarely. Other than that, nobody else will be knowing. Like this, Corporation means, the Commissioner will be known to everybody. Even the general public also will know only the Commissioner. If they have to go and give a complaint, then they will say, if you don't do this, then we will go and tell the Commissioner only. But nobody there will say I will go and tell to the DHO. So, involvement with the public is less. At the same time, with the other departments." (IDI, Corporator_02 Male)

"We don't have any official platform to address the issues, we need to communicate with DHO. When the gastroenteritis cases are more, we check for pipeline damages, we take the photo and send the notification. We inform Vanivilas hospital and send it to them. That time they do the work, other works also they need to do like proper drainage." (IDI, Medical officer, Govt 01 Male)

"Challenges are definitely there. Because it is difficult. Within our department we can contact somebody and get it done. When we have to do intra-department, it has to come from the top. All this bureaucracy comes in, so...probably they don't listen to us also." (IDI, Medical officer, Govt 02 Female)

Insurance and HWC

Two other important elements of the NUHM are the Ayushman Bharat scheme and the HWC. One of the major objectives of the Ayushman Bharat- Arogya Karnataka scheme is to provide cashless and paperless access to healthcare for patients at the point of care.

However, this study finds that it the Ayushman Bharat is not very helpful to the people as it has not been able to decrease the families' OOPE on health, or increase the utilization of hospital care substantially. In addition, it does not offer/cover outpatient consultation, which is a more common but recurring expenditure.

Social health insurance is very important when death takes place health insurance important than that of the insurance. Why means the kind of life being lead now days by human being has become complicated? Disease will come suddenly or some attacks will come many families are suffering financially because of the diseases. They have to spend a lot on treatment now. They will even lose their property at the time of Covid many people have lost their money. (IDI, Corporator-0, male)

Separately, we found that the newly integrated HWCs were hardly functional.

None of the participants in the FGD was aware of the newly-introduced health services available under the HWCs. Even among the policy makers, the priority to integrate and provide all the 12 health care services at the primary health care is low.

"Now, in PHC level also, Health and wellness Centre has been introduced. It requires good infrastructure but only 3 months back govt had sanctioned for hiring buildings for sub centers. So, it's taking much time to provide full-fledged services as planned under the Ayushman Bharat." (IDI, District surgeon/DHO Male)

"Obviously it is an augmentation of human resources. That's all it is!! Though so many services are promised, it will take lot of trainings to staff to provide such services" (KII, Senior official, Dept. of Health and Family Welfare Male)

First of all, there is migration population. Second thing is multilingual, they have got different castes, different languages, different places and they keep upgrading. They are all the migrated population, awareness is the major challenge, creating of the referral network is one of the biggest challenges. Creating awareness is very difficult because people will be in one slum today and in another next day or maybe shifting to the middle or the elite population. (KII, Senior Official, Department of Health and Family Welfare, male)

Referral system

Excerpts from the interviews with MOs and community members also reflect that there is ineffective referral system. Inadequate governmental referral system, coordination between different levels of the referral system, bypassing the referral system, and insufficient knowledge about the referral system among the community members are some of the challenges mentioned by the participants.

The migration among the urban population makes it particularly difficult to track and set up proper referral systems.

Findings show that there is a general tendency among the health staff to refer to private practitioners and labs for services that are not available at the PHC. Instead of referring them to the specialist at the CHC, they are sent to private services.

The study also found that there is a tendency among the community members to bypass primary care facilities and directly go to a higher centre, thus increasing the burden on higher-level facilities. This can be attributed to two things, a lack of knowledge about the facilities available at each level of the health care system and secondly, the avoidance of the unnecessary paperwork for referral, as well as long waiting hours at the primary level.

The study also observes that there are no proper health records which can be accessed by any health staff using a unique number, and could help the MOs to check prior health history and referrals done earlier.

"When you need a specialist, I have to send them to tertiary care hospital. That's where we need specialists coming in, so that they can access without going to the main. As you know, care hospital is handling the most, so the access to specialists are little less. So, when I have to refer somebody, I have to refer to tertiary care hospital or district hospital, which is quite a distance for many people. You should have transportation. All that becomes a problem for the lower income groups. Then I have to refer them to a private specialist nearby, what to do" (IDI, Medical officer-Govt-03 Female)

"We need more specialty centers or may be private doctors who can come on certain days and patients can avail their services at the UPHC only. This will save them from travelling and high cost of treatment. Government must rope in the private. They should also commit to serve the poor, isn't it?" (IDI, Medical officer-Govt-02 Female)

Mental health and Counselling

Based on the interactions with the community, we realized that there is a need for and expectation from the community of the UPHC to provide counselling not only related to physical diseases, but also on stress and anxiety management, etc. For example, many persons with diabetes or hypertension are informed that doctors do not spend much time understanding their problems or explaining what else must be done other than taking medicines. We also found that adolescents felt that they need mental health support sometimes to discuss their anxiety- related issues. However, at present, there is a gap in diagnosis, treatment, counseling and referral when it comes to mental health.

Elder care is more of a focus here. They would have left their parents and moved out, so how would they take their medication at home? There would be a lot of mental depression and other things... the caretaker is crucial. (IDI, NCD Counsellor, female) So far, counselling has been limited only for people with TB and HIV, and the focus is more on ensuring treatment adherence. Interviews with the counsellors also suggest that there is a demand for treatment counselling by patients, who need time and mental health support to battle their issues especially the elderly population.

"If you talk to the general patients like diabetic patients or high blood pressure, or it could be a variety of other problems or communicable diseases that they are unable to manage and are under a great deal of stress. These types of issues are all caused by work stress. There could be other underlying mental health factors like anxiety and depressions. If treatment for that must be initiated once it is discovered that they, have it, I believe that giving them counselling and teaching them how to manage it is preferable." (IDI, Counsellor, ICTC Female)

Uniformity in Services

From the discussions with the three MOs and other health staff, it was difficult to set out any uniformity in the specialized services provided at the PHCs. A few health staff mentioned operating dedicated services for different population groups including women, children, adolescents, persons with NCDs, etc. on specific days. Others did not have any such provision. It would be easier to access and avail health services from UPHCs if there is clarity and single operating guidelines for all the UPHCs.

Barriers at the system level

IDIs with key people in policymaking, as well as heads of medical colleges and academia, highlight four major system- level barriers to primary health care.

Political will and involvement in primary health care is lacking/ Gap in implementation of the policy, program and schemes /Health investment is still poor

The implementation of government policy and programs is mentioned to be propelled by political interest, will and commitment. It is often a prerequisite to the mobilization and allocation of finances in public health. Detailed interviews with senior stakeholders in policymaking, show that there are plans, operating guidelines and mandates to undertake various activities under the NUHM and Ayushman Bharat, however, due to a lack of financial allocation and poor inter-sectoral coordination, the implementers are not able to provide optimal health services. There is a lack of strategic planning based on the evidences from the geography served. Although the guidelines consider the urban poor and urban needs, it has not accounted for the distinct urban epidemiological challenges and ever-expanding population size.

"Fatigue has developed and there is no interest in investing in public health" (DHO, Mysuru, Male)

"Then, political involvement. Political interest is also very important. For example, it might be there in many areas also. In my area, it might be many of the Corporators or it might be many of the elected persons, just because of the reason that they have not been voted there, they will not allow that area to be cleaned. They will say, don't go to that road and clean. They have not voted for us. Now, since they are the elected persons, we have to listen to them. Even if we don't listen to them, they will see that we listen to them." IDI, Corporator-02 Male)

"Population is growing and we need to scale up our health system accordingly. Planning does not consider the ever-growing population." (IDI, CHO, Mysore Male)

"We cannot start treatment without doing tests like we cannot start treatment for anaemia just like that, the lab technician should do the test and give a value then we will do the necessary activity to rise the value, we cannot blindly do everything clinically. To do complete blood count test we need a cell counter machine, that may cost around 1,50,000rupees for basic machine and goes up to 5,00,000 rupees for advanced machine, there are fully automated, semi-automated and advanced machine, we don't have that. Funds received are just inadequate to upgrade the latest equipment and infrastructure." (IDI, Medical Officer-Govt-02 female)

Monitoring and Digitalization

The IDIs with the policymakers, MOs and the dean of JSS Medical college inform that the system has not been able to set up a proper monitoring system at the PHC level. Healthcare data is largely unavailable or fragmented and not adequately digitized. There is a lacuna in data collection, its management and more importantly, in utilization. Currently, there are no means or initiatives at the sub-centre level to use data to strengthen or deliver services tailored for the health needs of the population. There is also no platform to track the burden of disease, fatalities, hospital bed availability, health staff, medicines, etc., in the health management information system. For example, if there is an increasing burden of NCD, then patients' data and their details must be recorded to analyse the patterns and needs of the population. It could also help to prepare for future health needs. This may also help in preparing for the supply of medicines and treatment.

"In health sector or in any public health domain or government sector there is no difference between people who work and people who don't work. In fact, people who don't work enjoy every benefit of not working. People who work are always under the constant stress of getting into some kind of troubles. So, there should be a mechanism wherein the 'bads' are weeded out."." (KII, Senior Official, Department of Health and Family Welfare Male)

"No, they were doing surveillance. State is not equipped to deal with the data, they have gigabytes of data. There is no system of that data, there is no forecasting, there is no roadmap. So, I think this is where we are at a standstill." (KII, Senior Official, Department of Health and Family Welfare Male)

Data suggests mixed opinion about inclination of the government towards public-private partnerships. However, conversations with stakeholders suggests that PPP to be very promising in

delivering quality healthcare to patients in urban areas. However, findings suggest that there is no strict regulating system to monitor their (private sector) work and ensure the well-being of poor patients. Especially during the COVID pandemic, the city witnessed exemplary support from private institutes in giving vaccines and providing medical care to patients. However, many private practitioners are not regulated. There is no publicly available system to see their details of licensing, accreditation and standards of care. It is necessary for both government monitoring and community awareness. There is also negligible information on patients' inflow, prescription of medicines handed out and line of treatment given by these private health services, which could help to inform and regulate OOPE for poor patients. This is also true for private pharmacists, who have generally dispensed medicines without doctors' prescriptions.

"...So, most of the times they (private practitioners) may not be knowing (protocols) we have not trained private doctors in protocols." (KII, Senior Official, Department of Health and Family Welfare Male)

Emphasis on curative and not preventive and promotive healthcare

There is a tendency of the government to emphasize curative health, especially if there is an outbreak of disease. IDIs with Deans of medical colleges and representatives of HBIs and FLWs show that there is an inadequate focus on preventive and promotive health. Moreover, preventive care is mostly channelized through the FLWs, who are responsible for delivering many other health services to the community. Sometimes, awareness and other promotive activities get diluted. Also, narratives reflect that preventive and promotive health care requires effective soft skills for FLWs.

"ASHA workers will approach the house and ask, Namaste Amma, how are you doing, what did you eat, what did you do, are you fine? They will simply ask for the sake of asking. If there are four houses, they will not provide adequate information to the community" (IDI, Representative of Health Based Institution-Male)

"Environmental health aspect in the urban areas is confined only to the solid waste management and that too by the environment engineers. They never bothered about prevention of communicable diseases or the vector borne diseases...nothing is taken care of over there. And you know, it, everything is planned with the assumption that people here know everything, it is not so." (KII, Senior Official, Department of Health and Family Welfare Male)

"In order to give birth for healthy baby and strong baby we have to strengthen there itself at the primary level to make our society stronger. We have to create good health before birth for them. Create good health means healthy babies will be born society will develop...so basically if you prevent malnutrition among mothers the chances of healthy baby are more, right? But this still needs to be improved." (IDI, Corporator Male)

Facilitators

This study also tried to identify the enabling factors that have helped in ensuring primary healthcare to the urban population of Mysuru city.

Involvement of NGOs and CBOs

IDIs with various stakeholders and representatives of NGOs and CBOs show that there has been a greater interest and willingness among NGOs and local CBOs to work on various issues of primary health including creating awareness, community outreach, capacity building of FLWs, linking the community with health schemes and counselling, etc.

It is important to form a union itself, to form a Domestic workers' union and to make 2,000 members, it took 4 years. We did house visit, did their counselling, spent hours together near their houses, spoke to them, spoke to them regularly and finally they came and became members. Because we did like this, it was possible for us to enrol 2,000 members in 4 years. Otherwise, the government had not taken the domestic workers into consideration. They had not recognized them as labourer. Only when we formed a union to recognize the domestic workers and went to them, they recognized workers from 14 categories as labourer. Now at least they have some rights. Similarly, patients or community members should form unions or associations to demand for their rights!! (IDI, Representative, Health Based institution, female)

This has helped not only people to be aware of their health and avail services, but has taken some of the pressure off the government. Their participation and involvement can accelerate the efforts of strengthening the public health system.

"We had partners like KHPT who could also give us inputs on the understanding, their understanding what the private sector wants. And based on what the private sector wants we tailored our instincts and our approaches." (KII, Senior Official, Department of Health and Family Welfare, Male)

Community willingness for change

Although the level of awareness and participation is somewhat limited to certain pockets of communities and regions, there has been an increase in realization, awareness and open discussions about the importance of health and wellness issues, and also the need to demand improved healthcare from the state. More people are questioning the services and joining hands with local authorities and NGOs in demanding healthcare. It is a positive sign when involvement of people in the social accountability mechanisms can strengthen monitoring mechanisms and they can demand tailored health services according to their needs.

From the FGDs with women groups, MOs, ASHAs and ANMs, it was noted that there is high demand for and uptake of MNCH services. Also, there is an increasing awareness of NCDs and lifestyles.

"I can tell them about the preventive measures and about NCD diseases and even about how they can change their lifestyle, initially when they come here. Earlier there were barriers they

were not taking we needed to insist them too much but now people are educated and they cooperating very well in the process." (IDI, Medical officer, Govt-03 Female)

"Now days people have started participating with us. Even people from the public they participate. And even COVID care centres were handed by lot many NGOs. So, that is the way public participation plays a very important role and Mysuru City Corporation or Mysuru city blessed with good city participation. The civil societies should always be a part of the system." (IDI, CHO, Mysore Male)

Increased use and reach of technology

Our study found that reaching out to the community and accessing information about any healthrelated needs can be easily done through technology. Deputy Director-NCD and environmental engineer mentioned that with the increasing uptake of technology for electronic health records or sending SMS reminders or using electronic IEC materials, there is a promising environment to improve healthcare accessibility and affordability. The Ayushman Bharat scheme is linked to a mobile number and even poor households have at least one mobile at home. Using existing and rapidly increasing technology can further help in accessing health services.

"A PHC of a particular area should have the mobile connectivity of that PHC limits so that people will be connected and we can update to them of the available services, we can send them SMS, we have introduced smart IEC boards, we send them SMS through mobile phones. ASHA workers know all the houses in their ward in PHC limits, they have their mobile numbers and address, they can send SMS to the concerned parents, suppose if a child comes to PHC, and they can send SMS of the available services like vaccination and other things, should be provided immediately to the parents, they should appoint a person for registration in each PHC." (IDI-Environmental Engineer, Female)

Availability and accessibility of private health care services in the city

As per the interactions with the community members, policymakers and other stakeholders, it is evident that there is increasing utilization of private health care. Due to the increased burden of the population in the urban areas, it is difficult for the public sector alone to handle the health needs of the people. The presence of accredited and affordable private healthcare services will help in meeting the demand of the urban population. At the same time, it is equally important to regulate and channelize the private sector service provision keeping the needs of vulnerable populations in sight.

Covid time, our involvement was very great. Every time they used to call us, we used to get involved, we tried to understand the new policies, new strategies of handling the infection, prevention the infection, including the vaccination strategies. All these meetings effectively we were all called because they wanted all private healthcare providers to get involved to make provision for bed provision, oxygen provision and also the vaccination provision. (IDI, Dean -JSS, male) The departments that will send students out into the field and train them are only recently being established in medical colleges. However, this workforce, which includes students, is actually being put to good use as a preventative element of society's education, which will be very helpful. But it needs to be formalized and made compulsory for students to help the doctors at the UPHC. This way they will also get the real-life experience and reduce the burden of work at the PHCs... (IDI, Dean JSS, male)

"So they (private health care service providers) play a major role, wherein without their support (clinical services and reporting), it will be very difficult implementing the programs in the urban areas. Either it may be communicable or the non-communicable disease." (SNO, NUHM Male)

"It's not only public sector.... private sector is also working already, JSS have joined hands, they have started urban health care, if private sectors start, there will be healthy competition between public and private sectors. If private sector joins hands, it won't be that difficulty to make a healthy city." (IDI, Medical Officer, Govt 02 Female)

Strengthening of MNCH services and improved uptake

According to the DD-Child Health and DD-Communicable Diseases, there has been high prioritization and community-based care of MNCH services through vertical program, and as such there has been a lot of improvement. Even the demand and uptake of MNCH services has greatly improved. This shows that targeted, incentive- based and community-centric outreach can improve health behaviours and indicators. If a similar approach is taken up by the health system for provision of all 12 CPHC services, then other health needs can also be addressed by the primary health system.

"It's drastically improved in government sector. Drastically improved because we are doing caesarean sections, we are doing tubectomies, like, for MNCH its excellent improvement in government sector." (IDI, Additional Medical Officer, Government maternity hospital, Female)

Discussion

In India in2021, 35% of the total population is urban (19). India has experienced rapid urbanisation, and there has been an increase of 100 million population in just ten years, from 2001 to 2011 (20). The urban poor is around 30% and this section of the population faces a large number of health disparities due to multiple reasons. The vulnerabilities of the urban poor are multi-layered, particularly because it is heterogenous population, floating and migratory in nature, and experiencing social and economic inequity. Poor living conditions, including inadequate and insecure housing and poor access to water, sanitation, and nutrition; social factors such as gender, caste, religion, and associated social exclusion, and occupational challenges such as intermittent or

hazardous work conditions all intersect to contribute to health vulnerability in urban areas. These elements interact to produce distinct aspects of vulnerability felt by the urban poor (21).

Further, accessing health care is a major challenge due to poor planning and limited implementation of tailored health services for the needs of the ever-growing population. Moreover, the urban poor has been often clubbed under a common umbrella while designing for health needs in the city(22). They are exposed to lifestyle adaptations that are easily available in urban areas but are not equipped well to manage their health needs. Poverty, lack of access and availability of quality and affordable healthcare, pushes them further to neglect their health or bear OOPE (23).

The NUHM was instrumental in strengthening the health services in urban areas and the Ayushman Bharat scheme in 2018 prioritized providing primary health care and financial support for the urban poor. The Ayushman Bharat scheme broadly has two components: Pradhan Mantri Jan Arogya Yojana (PMJAY) and HWCs. The AB-PMJAY is a publicly funded health insurance scheme for rural and urban residents who are socio-economically disadvantage, while the HWCs aim to expand 12 health services and integrate them at the UPHC level. Primary health care in urban areas revolve around the UPHC, which aims to provide CPHC to the community and ensure services which are based on the principles of equity, responsiveness, efficiency and effectiveness (24).

However, there are numerous challenges in the urban health sector, including issues of availability, accessibility and affordability (25). Although there are various government bodies, NGOs and other relevant stakeholders, along with a strong presence of private health care, there lies a gap in availing the optimal health services by the urban poor. The barriers towards primary health care should be studied from the different perspectives of the stakeholders who are involved in demanding, supplying and designing health services *for* the urban poor (26).

It is of utmost importance to understand the challenges faced by the community and the barriers that restrain them from accessing and demanding the best primary health care for themselves. The challenges can be listed under three sub-categories. First are the perceptions formed by their own experiences with the UPHC and other healthcare facilities available at the secondary and tertiary levels. The distance from the UPHC is a major setback for poor people seeking to access primary health (24), as it often means losing out on their daily wage and incurring transport costs to reach the health care facility only to find high waiting times and a shortage of medical facilities at the centre (27). UPHCs have been noted to be unclean, have congested waiting areas and long waiting hours(28). Moreover, the timings are not suitable for the labourers and particularly those working in the informal sector. Unavailability of medicines, lab tests and emergency services were noted as some of the major challenges at the UPHC, which remains true for rural areas as well (29). The unpleasant behaviour and attitude of the health staffs further discourage people to visit the UPHC. A few UPHCs have also gained a bad reputation for corruption and bribery by the health staff in favour of providing early access to the doctor or demanding a tip for providing medicines or injections to the patients. There has been a sense distrust in the government health services (30)Corruption is usually due to poor governance characterized by lack of transparency, weak accountability and inefficiency, and lack of community participation (31).

Second, a lack of knowledge and awareness about their own health needs prevents people from practicing and encouraging a healthy lifestyle (32). Accurate information on the available health services at the primary, secondary and tertiary level is often not known. People often do not know or know only partially about new schemes of the government, including the new health insurance scheme. Who could be the beneficiaries, what services are offered, what is the coverage, and how to access it very inconsistently known. As a result, government health services are underutilized(33).

Third, one of the critical barriers is the lack of community participation in government health programs and accountability mechanisms. It has been found that community participation is motivated either through incentives or their own willingness to voice for improvement. Fear and hesitation often restrict people from participating. It is critical to recognize that any primary health care system would require, "full participation of the community and at a cost that the community and the country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination" (34).

Together, this adds up to underutilization of public health services and forces people to avail private health care, even by bearing OOPE. Among poor ,OOPE is the major source of financing health care, and is catastrophic to a large number of households (35). Poor health and inaccessibility to primary health care, added with distress health financing further pushes people into the vicious cycle of poverty. With the rise in NCDs and other emerging communicable diseases, often the OOPE is much more than the in-patient health services (36). However, lack of coverage of these diseases for outpatient services makes it difficult for poor people to avail any services.

Some of the other underlying factors that affect health are the deep-rooted social and gender norms in the community related to health behaviour. Not prioritizing women and their health in the daily lives of a socio-economically backward family limits women's health behaviour and access to health services. Women looking after the health of the rest of the family even at the expense of their own health is a norm. Their lack of decision-making power affects their health seeking behaviour(37). This is further reinforced when people in charge of providing health services also encourage genderbased health services. Female sex workers, members of transgender communities, and women from poor economic backgrounds often face discrimination from the health service providers when compared to their counterparts.

Irrespective of nationwide community-centric targeted efforts of the government to eliminate TB and HIV, the provision of all-inclusive, patient-friendly health services remains a gap. Stigma and discrimination can prevent people from utilizing healthcare services for getting tested for HIV and TB, and adhering to treatment and its prevention and control (38). Even those providing outreach services to these persons face a barrier in the community and provide support for those who are suffering (39). Therefore, screening, identifying, initiating and tracking adherence to treatment among persons with TB and HIV is not enough. There is a greater need for sensitization and to leverage support for those working in the community.

Despite the mandate to have UPHC staff sensitized with skills and training to provide basic care and counselling to mentally ill persons including other critical patients, as well as a strong referral network with institutions to provide mental health care facilities, it is seldom found. NCDs and other co-morbidities are often associated with a high level of stress, anxiety and other underlying mental health concerns and hence counselling support along with medical treatment at the primary level is essential. Geriatric persons, persons on palliative care and adolescents also require counselling to manage their health in a better way. Therefore, it is important to make mental health and basic counselling services functional in primary healthcare on a priority basis (40)

It is imperative to recognize that the actions and behaviours of the community are also driven by the services provided at the facility, i.e. the UPHC in this context. However, these facilities are limited by their own structural and functional barriers. UPHCs often have insufficient infrastructure, and are sometimes unclean, with congested waiting rooms, lack of proper health equipment, outdated laboratory devices, and no separate rooms for injections or physical examinations for men and women separately. Inadequate lab facilities and a shortage of medicines in the dispensary force patients to avail services from private diagnostics and pharmacies. More than 65% of the human capital is vacant in urban health centres across India (25), this shortage leads to overburdening on the existing health staff. Inadequate human resources for a large population coverage and existing human resources being made to take up multiple duties end up providing unsatisfactory services to the people.

The viability of health services is critical in ensuring continuous demand for health services. Therefore, it is important to measure them through the quality of care, cost-effectiveness and institutional efficacy, which in turn is based on sufficient staff recruitment, appropriate cash flow and monitored supply costs. The efficacy, efficiency, accessibility, and viability of health services are mostly determined by the performance of the people who provide them (41),which in turn is guided by their motivation to work. The motivation of health staff has been associated with the benefits and facilities provided to them. However, the contractual nature of the job, no job security, low salary with negligible employee or health benefits, multiple duties and high burden of work discourages health staff including FLWs from effectively carrying out their duties. It is also associated with a lack of incentives, training programs, and feedback platforms which could boost their morale and address their problems.

In order to provide effective and quality health services, it has become increasingly important to monitor and evaluate the performance of each primary health care unit. It is done through a set of indicators and measures that assist healthcare quality monitoring and evaluation in several areas, such as governance, management, assistance and support (42). Inadequate surveillance, monitoring and most importantly, insufficient utilization of the data is reducing the chances of identifying, strategizing and strengthening the health system. This, of course, requires establishing standard systems of data collection which are systematic, consistent, regular and digitalized for further use. Recent experiences have shown that private parties can play a key role in providing primary health care. This convergence has the potential to boost the public sector and share the burden of the public sector as a whole. However, the unregulated private sector and weak governance and

accountability remain major challenges to the health care system in India (43), which needs to be regulated closely.

Recent years have witnessed a substantial improvement in maternal and child health in India. The gains can be contributed to majorly the following factors. First, there has been a concerted effort to increase access to high-quality maternal health care. Secondly, state-subsidized demand-side financing, such as the Janani Shishu Suraksha Karyakram, provides free transportation and no-expense delivery, including caesarean section, to all pregnant women delivering in public health institutions. This has been made possible due to the allocation of concentrated funds to MNCH programs and constant monitoring of the programmatic MNCH indicators to understand the status and needs of the program. Now, with a lurking burden of NCDs, there needs to be more focus on budgetary allocation and generation and use of data for NCDs as well.

Intersectoral and multisectoral approaches are essential to address current health challenges. Although it has been widely recognized that health is influenced by a multitude of medical and nonmedical factors, each department has not been able to sufficiently address all the non-medical factors. For example, to provide optimal health, it is also important to provide a healthy environment through clean water and sanitation facilities, safe walking and playing public spaces, clean and closed drainages, waste management, frequent surveillance and fogging, pollution control, information and awareness etc. This means that it is not only the health department but the municipal corporations, housing and education departments that all need to be working in sync with each other. Delays in planning and implementation and taking up of responsibilities by the concerned departments due to bureaucratic complications often become hurdles in optimizing health needs(44). Congruent priorities, shared responsibilities along with clear roles for each sector, with a strong lead for partnership by the health sector can direct the inter-sectoral efforts in ensuring primary health care in the city (45).

The Ayushman Bharat scheme offers to support the poor with health insurance facilities, but seldom is this facility utilized to its maximum. Lack of awareness, appropriate governance and quality assurance, as well as complicated and slow referral pathways in both public and empanelled private healthcare providers make the scheme ineffective(46). Most importantly, it does not account for the high outpatient or diagnostic expenditure, which is sometimes more and frequently needed that the hospitalization or related expenditures at the secondary or tertiary health car. For example, frequent tests are required to check diabetes and the purchase of insulin for poor persons might be difficult.

HWCs are not optimally operational at many UPHCs and the awareness about the newly integrated services under the HWC among the community is limited. Providing awareness to beneficiaries at the grassroots level about the continuity of care is a critical indicator for ensuring the demand and delivery of primary health care to the people (47).

The health system in India is hierarchical, starting with primary care to secondary care facilities and ending at the highest level of tertiary care. Even though many of the health services are available only at the tertiary level, it requires patients to navigate through a proper referral system to avoid an unnecessary load of patients which can be managed at lower health care like UPHC. Unfortunately, the lack of linkages between different levels of the referral system, self-referential behaviour and circumventing the referral system, and a lack of information about the referral system remains common (48).

We observed that few UPHCs have integrated services and have made efforts to provide for the needs of the specific group or population. For example, initiating pink clinics, Sneha clinics, and MNCH days were focused attempts made to address the patients. However, this is not universal across the UPHCs, and the added lack of awareness among the community members about these services limits their utilization.

In the larger context, political inclinations pave the health agenda in any country. Low political priority and inadequate spending on urban health are largely due to the limited understanding of the problem in urban areas and the onus to improve the health indicators of the country by focusing on the rural population (49). Political will should also reflect in the process of generating resources to carry out policy and programs (50). Even though India's healthcare sector has grown rapidly over the last five years, the recent COVID-19 pandemic has highlighted persistent challenges such as a weak primary health system, a lack of quality infrastructure, and low quality of service delivery to vulnerable populations. Therefore, political commitment and health investments and easy financing for planned schemes and programs have become much more relevant and important for improving the effective implementation of CPHC services and financial protection to the vulnerable populations(51).

The provision of preventive and promotive health care is as important as curative health care for reducing causes of death, disease, and disability. Appropriately investing in prevention and curative raises a population's well-being, which can be inferred by increases in income and health stock (52). However, the efforts of the government seem to be more targeted towards curative health and focused on the elimination or eradication of diseases like polio, TB and HIV in a vertical fashion. The national programs catering to the specific needs of the community like Rashtriya Bal Swastha Karyakram, Rashtriya Kishor Swastha Karyakram, Janani Suraksha Yojana, must be integrated at the service implementation level, but the planning and funding clarity must come from the government. Due to its recent focus and investment in urban primary health, the development of urban health has been somewhat organic and haphazard and further, there is a lack of coordination due to overlapping jurisdictions and a plurality of health providers in the urban areas (21).

Despite all the challenges and barriers to existing primary healthcare services in Mysuru, it was declared the cleanest city in India for two consecutive years in 2015 and 2016, and again in 2020. It fared well in managing the COVID crisis by utilizing the existing primary health care facilities and effectively liaising with private health services(53). This provides the opportunity and conviction to pilot efficacious models for strengthening urban CPHC in Mysuru.

Conclusion

The findings of this formative study could be used to strengthen evidence-based policy decisions and serve to better design health services within the existing health system. The study provides as understanding of the perspectives as well as challenges faced by the stakeholders. The analysis throws light on the gaps in the service provision and how the demand for services is affected.

Considering CPHC the Ayushman Bharat scheme can be made more effective by raising awareness, implementing adequate governance, and focusing on quality assurance and rapid referral channels among both public and private healthcare providers to establish a continuum of care. While CPHC delivery through HWCs builds on existing systems, it will require change management and system design at multiple levels to reach its full potential, which includes strong institutional capacity at the national, state, and municipal levels and expanded service availability, including integration of AYUSH along with sufficient and well-maintained infrastructure.

The rapid growth of urbanisation, expanding sub-urban areas, the influx of migrating population, and preference for urban health care from the nearby rural areas will require Mysuru city to be prepared to provide for the increasing demand for healthcare services. The intake of trained public health professionals in the health system and the urgent need to take up further research studies to generate evidence for refined strategies within each department is critical.

Lastly, there is a need for greater commitment and investment in the primary health care sector and this calls for support, not only from the government but also from non-government organizations, community-based organization, philanthropists, and international funders.

Some of the recommendations made in the study can be implemented in the short term, while others require policy-level interventions. However, these recommendations should pave the way to make necessary changes in the primary health, which is going to be more demanding, complicated and constantly evolving in the coming times.

Recommendations

Based on the findings, this study makes suggestions to strengthen the existing public health system to function optimally and ensure the best services that are need-based and community-centric. The recommendations from the study opened up the scope of health to a larger scope beyond health. The study identified the need for urban areas to work on the concept of healthy cities. Health was emphasized on in terms of immediate as well as long-term goals for multi-functionaries and polices to come together and address the issues. The suggestions, therefore, can be seen at two levels, one to provide optimal primary health care services and two to think of health as not just as the absence of disease, but as a continuous sustainable process to ensure physical and mental and holistic well-being of the urban population.

"Happy people in the city with lesser Hospitals in this city."

"Importance should be given to the health, sanitation and mental wellbeing."

"Healthy people can build a healthy city." (Participants of PE program)

These suggestions also include and are in line with the recommendations made by various stakeholders to strengthen the primary health system.

City is like a big house, in a house there will be five members, but in a city there will be thirteen lakh people, same thing will apply here, to keep it clean public support is needed, they should have awareness that once cleaned they should not throw garbage or make the place dirty, all the KSRTC buses coming from Bangalore has to pass through this area, if a person throws a bit of paper the place looks dirty as if not cleaned, though cleaning It is not always easy to maintain the city clean, everybody has to join hands, treat the city like their own home....(IDI, Environmental engineer, female)

> If DC administration join hands, making Mysuru a healthy city won't be a big thing. There won't be any difficulty, if DC office does the enough funds monitoring, then it will be easy to make Mysuru a healthy city. We are ready to do the extra work related to this. We need to convince people in the community to join hands to make Mysuru a healthy city, then Mysuru will become noted and people (civic body) of Mysuru will also get good name, there will be more beneficiaries, who get support by this, downtrodden people and last man standing will get more facilities this way we have to convince the people. (IDI, Medical officer-Govt-03, female)

The recommendations emerging from this study can be categorized into 10 broader categories. Some of them would require community level involvement, while others would call for programmatic and policy-level changes. Ultimately, they will have to work in coordination and demand has to be met according to the changing needs of the urban poor. An outline of the actionable suggestions classified under the community, facility and system level has been provided in Figure 8, at the end of this section.

At the Community-level

Awareness

The findings of the study emphasize the need for creating awareness among the population regarding the existing public health facilities at each level. There is a need for them to clearly know about the services available at UPHC and the ones available at the secondary or tertiary level. This will help in reducing the burden at the tertiary level and improve the utilization of services at the primary level.

Secondly, there is a greater need for disseminating knowledge and awareness about the services available through the HWC, which can improve the demand and thus the obligation to provide all the comprehensive 12 services to the community at the level of the UPHC. Awareness programs should also focus on gender sensitization and address issues of disease-based discrimination in the community and by the health staff.

There is a need to create awareness about health insurance and the referral systems and channels through which the patients can easily avail financial support. There is also a need for community awareness about various platforms/forums/helplines/associations through which they can raise

their concerns about the health system, health requirements etc. This will help in generating demand and also involve the communities in the social accountability mechanism.

Lastly, there is a need for image building and mass advertisement of the revived public health care system. It requires marketing research and strategies to popularize the public health system among the urban poor. This should be done to increase the uptake of public health services over private health services.

Community Participation

The study highlights the significance of strengthening community participation and empowerment. It was found that there is discussion about and understanding to improve community participation, however, the idea and strategies to do the same seem to be vague. Community participation would come from community empowerment, which in turn will require knowledge and awareness of their health rights. NGOs, CBOs and FLWs can play a major role. Also, there is a need to create systems where the community can raise their concerns and be part of the planning and social accountability mechanisms. For example, in rural areas, there are Village Health, Sanitation and Nutrition committees (VHSNC);similarly, in urban areas, groups could be formed. Patient welfare associations, slum resident associations, women's health groups, etc., could be strengthened and represented in regular meetings with the Corporator or DHOs. Similarly, there is a greater need for promoting the participation of vulnerable groups. It is important that a representation from different groups be included in the system to make it more accountable in nature for the service providers and the third sector, i.e. the community.

Facility level

Focusing on effective and functional referral linkages

Establishing a functioning referral linkage between UPHCs or HWCs to secondary and tertiary care services, including AB-PMJAY, should be the focus for policy design and implementation. There should be a clear referral system, with a protocol to be strictly followed, unless there is an emergency. The ASHA /ANM should play a vital role in ensuring referrals to the UPHC and informing eligible persons about health insurance facilities. Having a smooth referral system would also require making the first point of contact, i.e. the UPHC, easily accessible with all basic healthcare facilities, supply of drugs and patient-friendly services.

Strengthen preventive and promotive health

Although there is a provision for preventive and promotive health through the HWC and UPHC, in practice, the focus is largely on curative health. Therefore, there is a greater need to work towards promoting healthy behaviour and lifestyle, preventing illness through vaccinations, early detection, and treatment initiation. For example, children, adolescents and youth should be made aware of substance abuse, young adults and older persons should be sensitised about NCD management, women given awareness on cervical and breast cancer, and SMS/digital reminders sent to persons taking medicines, etc. Healthy lifestyle tips and community workshops about food and physical activity, cleanliness habits, and waste management could be promoted on a large scale. Integrating health promotion and disease prevention would require methods that target numerous risk factors,

employ diverse strategies at various levels of influence, and necessitate cross-sector collaboration of both health and non-health.

Capitalize on existing resources

Lastly, it is important to utilize existing resources for strengthening the public health system in urban areas. This could be done by involving medical students to serve at the UPHC on a part-time basis. It will help them to gain first-hand experience and training and will reduce the burden on the health staff. Similarly, attempts should be made to bring in the expertise of private specialist doctors by creating a system of polyclinics or public-private partnerships wherein they can provide health services at the primary level on specified days. For example, an orthopaedic specialist or dermatologist can come to the UPHC once or twice a week or be available in nearby polyclinics on particular days. This will help in reducing the burden at the tertiary level and simplify the referral system. The private sector can manage the design, infrastructure financing and operation of health facilities (such as hospitals, ambulances, lab equipment, polyclinics, primary care centres, and maternal and paediatric clinics), but the management of clinical services remains with the public sector. This will help in ensuring the quality of services and financial equity of the patients. This will help provide a private-like facility but at an affordable price like that of the government sector.

At System level

Investment

Investment is required at three levels. First, investment in infrastructure, second in building a strong battery of public health professionals, and lastly in health financing.

The UPHC centre requires spacious, well-ventilated buildings and rooms, with sufficient waiting space, separate rooms for male and female examination, a pharmacy space with cold good storage and the latest lab equipment. It is important to ensure that the supply chain of drugs at the UPHC for the commonly demanded and critical drugs is seamless. Hygienic, clean and well-maintained health services will surely attract more patients.

Expanding primary health care for everyone necessitates a sufficient workforce that is skilled, highly motivated, well-resourced, and available where needed, along with accessible infrastructure and functional equipment.

It is important to recruit, train the MOs, health staff and FLWs, and sufficiently allot them according to the population size and coverage. There is a need for providing job security, regular training and workshops, along with incentives, to keep them motivated about their work. FLWs should also be trained on soft skills, team work and administrative responsibilities.

Evidence suggests that there is a greater need and demand for financial support for vulnerable communities. The government could invest in providing support for outpatient services for at least chronic diseases. There is also a need for financial support for expensive diagnostic tests. If these

can be included in the AB-PMJAY scheme then it will be better utilized, helping in reducing OOPE and improving the health of the urban poor.

Need for building evidence and responding accordingly

This study has identified the need for implementation research and participatory action plans for vulnerable communities. It is important to identify and conduct in-depth research with the vulnerable communities about their health needs and challenges in accessing primary health care. It is important to map out the high-risk population and prioritize them in health planning and in ensuring services. A detailed SWOT analysis and resource mapping could be undertaken for primary, secondary and tertiary health care systems in urban areas. Mechanisms to identify outbreak of diseases such as seasonal, vector born, food & water born etc. along with other epidemics, and system preparedness for effective and efficient response to prevent and mitigate impact on community to be established.

Digitalized monitoring and evaluation systems

This study strongly promotes the integration of computerized health information systems and the collection of standardized indicators from UPHCs and services on regular basis. This means there should be a mechanism to collect key indicators on the available infrastructure, health staff, population coverage, services available, patient footfall and treatment requirements, referred cases, and drug disbursement for each UPHC. However, it must be ensured that the data is collected in a non-biased independent manner, without putting undue burden on the existing health staff. This data needs to be analysed and utilized for strengthening primary health care services. This will create a sense of accountability among the service providers and increase awareness and trust in government health services among the communities. It could help in curbing corruption in the short term and generating evidence for strategizing the regular work and altering the long-term plan and investments of the government in the health sector.

There is also a need to create universal standardized health cards, which can be accessed by any MO or private doctor, in order to know health history. This data can also be used to analyse diseases and population health risks and trends.

Well-defined mechanism for Inter-sectoral convergence and involvement

There should be a unified approach between health and non-health stakeholders to address the public health requirements in the city. There should be support and coordination with other non-Health sectors including Housing and Urban Development, Environment, Road Transport, Education, and Water and Sanitation. Corporate Social Responsibility funds, philanthropists, NGOs, CBOs, development partners and experts join hands and invest in meeting the public health needs of the city.

Strengthening and regulate the public-private partnership

Given the high demand for primary health care services in the city and the limited capacity of the public infrastructure, public-private partnerships could be promoted in the primary health sector. This means the private health providers should be encouraged to bring their expertise in terms of specialists, know-how and technology. They should be encouraged to make investments towards affordable quality healthcare facilities. Evidence from this study suggests delays and bureaucratic procedures in the release in reimbursements of health insurance often discourage them from providing health services to poor patients. However, they must also be regulated through proper accreditation and licensing. They must also be monitored for their pricing, treatment methods and prescription of drugs.

Ensuring a continuum of care

This study highlighted the need and demand for AYUSH services among community members. UPHCs should consider the provision of AYUSH services and also it should be covered by health insurance, if the case is referred to the private sector. The HWC must be integrated into all the UPHCs for providing all 12 healthcare services. Counselling and support for basic mental health problems should be addressed by the doctor. A separate referral and support system should be provided to those who require mental health support. Although adolescent health is already included in the primary health care units, the services need to be friendlier and tailored to the needs of the adolescents. Special training and counselling could be provided to the MOs for providing services to the adolescents. Similarly, palliative and geriatric health need to be addressed and managed at the UPHC level. One of the major concerns emerging from the community findings is the need for 24/7 services at the UPHC level, where doctors could be available in shifts. This is to ensure that health services are catering to working people and for emergency cases.

At Policy level

The study emphasised the need to consider health from the broader perspective of a healthy city. The need to address underlying broader determinants of health, whether it is poverty or infrastructural issues, or the desirables for long term consideration in terms of organic farming. The constant need for advocacy and policy changes and the vision of a healthy city was reflected in the thoughts and discussions of the participants of the study.

The recommendations from various stakeholders also indicated that recommendations need to be seen as vital, essential and desirable. Vital recommendations are those that need to be prioritized for better service delivery and strengthened CPHC; it is essential to strengthen the system and addressing some of the broader determinants of health. Long term changes that need to be brought about in the system to address better health and wellbeing are desirable.

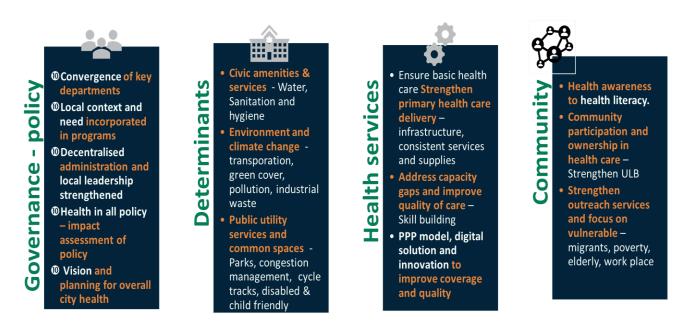


Fig.8 Recommendations for strengthening primary healthcare at the community, facility and policy level

Along with the specific recommendations, this study has been able to come up with an implementation design model and actionable strategies at each level that can improve and strengthen CPHC in Mysuru city. The model has been developed through a rigorous iterative process, which included public engagements, IDIs with key stakeholders and reflections and recommendations emerging from the qualitative and quantitative findings. Along with these, analysis exercises like sprint workshops were undertaken with health experts and stakeholders to develop this model, where specific plans were put together. These will be shared in a separate report.

Limitations of the Study

Although the community members participating in the FGDs were from the slum areas and represented the urban poor, the vulnerabilities of the urban poor should not be generalized as one homogeneous category of slum dwellers. This study lacks the rigour to capture the layered and differential challenges in accessing primary health care by the homeless, pavement dwellers, rag pickers, and street children. Neither does it count the challenges faced by unlisted slum dwellers.

The study was also not able to triangulate many of the findings, as all the participants were not linked to respective UPHCs or sample geography. This should be understood as their lived experiences with any primary health care services and not necessarily the one they are attached with in terms of service provision.

Lastly, there are also possibilities socially acceptable responses. This could be due to their respective positions and expected roles. There are instances in the data that reflect diplomatic responses or responses to gain the sympathy of the researchers. Utmost care has been taken to eliminate subjectivity of any sort while analysing the data.

References

- World Health Organization, Fund (UNICEF) UNC. A vision for primary health care in the 21st century: towards universal health coverage and the Sustainable Development Goals [Internet]. World Health Organization; 2018 [cited 2023 Feb 2]. Report No.: WHO/HIS/SDS/2018.15. Available from: https://apps.who.int/iris/handle/10665/328065
- 2. Shi L. The Impact of Primary Care: A Focused Review. Scientifica. 2012 Dec 31;2012:e432892.
- 3. Gera R, Narwal R, Jain M, Taneja G, Gupta S. Sustainable Development Goals: Leveraging the Global Agenda for Driving Health Policy Reforms and Achieving Universal Health Coverage in India. Indian J Community Med. 2018;43(4):255–9.
- Report of Task Force on Comprehensive PHC Rollout.pdf [Internet]. [cited 2023 Feb 2]. Available from: https://nhsrcindia.org/sites/default/files/2021-03/Report%20of%20Task%20Force%20on%20Comprehensive%20PHC%20Rollout.pdf
- 5. KI_Health_75th_Final.pdf [Internet]. [cited 2023 Feb 2]. Available from: http://164.100.161.63/sites/default/files/publication_reports/KI_Health_75th_Final.pdf
- Garg S, Bebarta KK, Tripathi N. Performance of India's national publicly funded health insurance scheme, Pradhan Mantri Jan Arogaya Yojana (PMJAY), in improving access and financial protection for hospital care: findings from household surveys in Chhattisgarh state. BMC Public Health. 2020 Jun 16;20(1):NA-NA.
- Banerjee S, Roy Chowdhury I. Inequities in curative health-care utilization among the adult population (20-59 years) in India: A comparative analysis of NSS 71st (2014) and 75th (2017-18) rounds. PLoS One. 2020;15(11):e0241994.
- 8. Jain N, Kumar A, Nandraj S, Furtado KM. Same Data, Multiple Interpretations. 2015;
- 9. Jain N, Kumar A, Nandraj S, Furtado KM. Same Data, Multiple Interpretations. 2015;
- Jayanna K, Swaroop N, Kar A, Ramanaik S, Pati MK, Pujar A, et al. Designing a comprehensive Non-Communicable Diseases (NCD) programme for hypertension and diabetes at primary health care level: evidence and experience from urban Karnataka, South India. BMC Public Health. 2019 Apr 16;19(1):409.
- 11. Chen X, Orom H, Hay JL, Waters EA, Schofield E, Li Y, et al. Differences in Rural and Urban Health Information Access and Use. J Rural Health. 2019 Jun;35(3):405–17.
- 12. Implementation_Framework_NUHM.pdf [Internet]. [cited 2023 Feb 8]. Available from: https://nhm.gov.in/images/pdf/NUHM/Implementation_Framework_NUHM.pdf
- clinics in Mysore, Mysore and List of clinics in Mysore, Mysore City Guide > Karnataka > Mysore city Directory > City Guide India > Display Page:- 7 [Internet]. [cited 2023 Feb 8]. Available from: https://city.webindia123.com/d-py/karnataka/mysore/clinics-365-6/7/
- 14. Mysore.pdf [Internet]. [cited 2023 Feb 8]. Available from: http://rchiips.org/nfhs/NFHS-5_FCTS/KA/Mysore.pdf
- 15. Karnataka_-_Disease_Burden_Profile[1].pdf [Internet]. [cited 2023 Feb 8]. Available from: https://www.healthdata.org/sites/default/files/files/Karnataka_-_Disease_Burden_Profile%5B1%5D.pdf

- Karnataka_-_Disease_Burden_Profile[1].pdf [Internet]. [cited 2023 Feb 3]. Available from: https://www.healthdata.org/sites/default/files/files/Karnataka_-_Disease_Burden_Profile%5B1%5D.pdf
- 17. Given LM, editor. The Sage encyclopedia of qualitative research methods. Los Angeles, Calif: Sage Publications; 2008. 2 p.
- Rolfe D, Ramsden V, Banner D, Graham I. Using qualitative Health Research methods to improve patient and public involvement and engagement in research. Research Involvement and Engagement. 2018 Dec 1;4.
- Nations U. Around 2.5 billion more people will be living in cities by 2050, projects new UN report [Internet]. United Nations. United Nations; [cited 2023 Mar 28]. Available from: https://www.un.org/en/desa/around-25-billion-more-people-will-be-living-cities-2050-projects-newun-report
- 20. Bhagat R. Urbanisation in India: Trend , Pattern and Policy Issues. 2018.
- 21. Mishra A, Seshadri SR, Pradyumna A, Pinto EP, Bhattacharya A, Saligram P. Health care equity in urban India [Internet]. Bengaluru: Azim Premji University; 2021 [cited 2023 Feb 3]. Available from: https://publications.azimpremjiuniversity.edu.in/3038/
- World Health Organization. Regional Office for South-East Asia. Comprehensive Guideline for Prevention and Control of Dengue and Dengue Haemorrhagic Fever. Revised and expanded edition [Internet]. WHO Regional Office for South-East Asia; 2011 [cited 2023 Mar 28]. Available from: https://apps.who.int/iris/handle/10665/204894
- 23. Sharma O, Sultan AA, Ding H, Triggle CR. A Review of the Progress and Challenges of Developing a Vaccine for COVID-19. Front Immunol. 2020 Oct 14;11:585354.
- 24. Nair SB. Beneficiary Satisfaction and Utilization of Health Care Services of Urban Primary Health Centres in Kerala.
- 25. Gangadharan1 K, S.2 SK. Improving Public Health Care in India through Urban Primary Health Centres-Trends, Progress and Concerns. Indian Journal of Public Health Research & Development. 2020 May 18;11(5):147–54.
- 26. An-Exploratory-Analysis-of-Urban-Healthcare-Stakeholders-in-India.pdf [Internet]. [cited 2023 Feb 2]. Available from: https://cprindia.org/wp-content/uploads/2022/01/An-Exploratory-Analysis-of-Urban-Healthcare-Stakeholders-in-India.pdf
- 27. Dror DM, Koren R. First we go to the small doctor': first contact for curative health care sought by rural communities in Andhra Pradesh & amp; Orissa, India. The Indian journal of medical research [Internet]. 2011 Jan 1 [cited 2023 Feb 2]; Available from: https://www.academia.edu/5707215/First_we_go_to_the_small_doctor_first_contact_for_curative_h ealth_care_sought_by_rural_communities_in_Andhra_Pradesh_and_Orissa_India
- 28. Sriram S. Availability of infrastructure and manpower for primary health centers in a district in Andhra Pradesh, India. J Family Med Prim Care. 2018;7(6):1256–62.
- 29. Mustafa A, Shekhar C. Is quality and availability of facilities at Primary Health Centers (PHCs) associated with healthcare-seeking from PHCs in rural India: An exploratory cross-sectional analysis. Clinical Epidemiology and Global Health. 2021 Jan 1;9:293–8.

- 30. Naher N, Hoque R, Hassan MS, Balabanova D, Adams AM, Ahmed SM. The influence of corruption and governance in the delivery of frontline health care services in the public sector: a scoping review of current and future prospects in low and middle-income countries of south and south-east Asia. BMC Public Health. 2020 Jun 8;20(1):880.
- 31. Ciccone DK, Vian T, Maurer L, Bradley EH. Linking governance mechanisms to health outcomes: a review of the literature in low- and middle-income countries. Soc Sci Med. 2014 Sep;117:86–95.
- Kasthuri A. Challenges to Healthcare in India The Five A's. Indian J Community Med. 2018;43(3):141–
 3.
- 33. Sivanandan A, Kumar SG, Krishnamoorthy Y. Awareness and preference in utilizing primary health-care services from rural health center as first point-of-care: A community-based cross-sectional study in South India. Journal of Education and Health Promotion. 2020 Jan 1;9(1):85.
- 34. Declaration of Alma-Ata [Internet]. [cited 2023 Mar 28]. Available from: https://www.who.int/teams/social-determinants-of-health/declaration-of-alma-ata
- 35. Kastor A, Mohanty SK. Disease-specific out-of-pocket and catastrophic health expenditure on hospitalization in India: Do Indian households face distress health financing? PLoS One. 2018 May 10;13(5):e0196106.
- 36. Sirag A, Mohamed Nor N. Out-of-Pocket Health Expenditure and Poverty: Evidence from a Dynamic Panel Threshold Analysis. Healthcare (Basel). 2021 May 3;9(5):536.
- 37. Patel R, Chauhan S. Gender differential in health care utilisation in India. Clinical Epidemiology and Global Health. 2020 Jun;8(2):526–30.
- George LS, Rakesh PS, Vijayakumar K, Kunoor A, Kumar A. Social stigma associated with TB and HIV/AIDS among Kudumbashree members: A crosssectional study. J Family Med Prim Care. 2020 Aug;9(8):4062–6.
- Jittimanee SX, Nateniyom S, Kittikraisak W, Burapat C, Akksilp S, Chumpathat N, et al. Social Stigma and Knowledge of Tuberculosis and HIV among Patients with Both Diseases in Thailand. PLoS One. 2009 Jul 23;4(7):e6360.
- Lodha. Geriatric mental health: The challenges for India [Internet]. [cited 2023 Feb 2]. Available from: https://jgmh.org/article.asp?issn=2348-9995;year=2018;volume=5;issue=1;spage=16;epage=29;aulast=Lodha
- 41. Dussault G, Dubois CA. Human resources for health policies: A critical component in health policies. Human resources for health. 2003 May 1;1:1.
- Klazinga N, Stronks K, Delnoij D, Verhoeff A. Indicators without a cause. Reflections on the development and use of indicators in health care from a public health perspective. Int J Qual Health Care. 2001 Dec;13(6):433–8.
- 43. Patel V, Parikh R, Nandraj S, Balasubramaniam P, Narayan K, Paul VK, et al. Assuring health coverage for all in India. Lancet. 2015 Dec 12;386(10011):2422–35.
- 44. Ramani S, Könings KD, Ginsburg S, van der Vleuten CPM. Feedback Redefined: Principles and Practice. J GEN INTERN MED. 2019 May 1;34(5):744–9.
- 45. Adeleye OA, Ofili AN. Strengthening Intersectoral Collaboration for Primary Health Care in Developing Countries: Can the Health Sector Play Broader Roles? J Environ Public Health. 2010;2010:272896.

- 46. Sriee G V VP, Maiya GR. Coverage, utilization, and impact of Ayushman Bharat scheme among the rural field practice area of Saveetha Medical College and Hospital, Chennai. J Family Med Prim Care. 2021 Mar;10(3):1171–6.
- 47. Lahariya C. Health & Wellness Centers to Strengthen Primary Health Care in India: Concept, Progress and Ways Forward. Indian J Pediatr. 2020 Nov;87(11):916–29.
- 48. Srinivasan R. Health care in India : vision 2020. Indian vision 2020 : the report plus background papers ; report of the Committee on India Vision 2002, Planning Commission, Government of India. 2004;
- 49. Shawar YR, Crane LG. Generating global political priority for urban health: the role of the urban health epistemic community. Health Policy Plan. 2017 Oct 1;32(8):1161–73.
- 50. Richmond B. Systems thinking: Critical thinking skills for the 1990s and beyond. Syst Dyn Rev. 1993 Jun;9(2):113–33.
- 51. AIM-NITI-IPE-whitepaper-on-Blended-Financing.pdf [Internet]. [cited 2023 Mar 28]. Available from: https://www.niti.gov.in/sites/default/files/2022-02/AIM-NITI-IPE-whitepaper-on-Blended-Financing.pdf
- 52. Wang F. The roles of preventive and curative health care in economic development. PLoS One. 2018 Nov 7;13(11):e0206808.
- 53. COVID-19 Information | District Mysuru, Government of Karnataka | Heritage city | India [Internet]. [cited 2023 Mar 28]. Available from: https://mysore.nic.in/en/covid19info/

ANNEXURE 1- SAMPLE DETAILS

Table 1: Details of study tools and sample

Study method	Total conducted	Number of participants		
Key informant interviews	6	6		
In-depth Interviews	35	35		
	12	95		
Focus Group Discussion				
Public Engagement	4	75		
Total	57	211		

Table 4: Details of study participants

Sr. No.	Category	Designation	No. of inter view	Mode of data collection
1	Policy makers: State	SNO	1	KII
		DD-Non-Communicable Diseases	1	KII
		DD-Communicable Diseases	1	KII
		DD-Child health	1	KII
2	Policy makers: District	DHO	1	KII
		СНО	1	КП
3	Program implementors: Curative_Govt	ASHA	1	FGD
		AWW	3	IDI
		ANM/PHCO	1	FGD
		Staff nurse/nursing officer	1	IDI
		Lab technician	2	IDI
		Pharmacist	2	IDI
		Counsellor-NCD and ICTC	2	IDI
		AMO – gynaecologist	1	IDI
		RMO_Jayadeva institute	1	IDI
		Tertiary facility_District surgeon	1	IDI
		Mos	3	IDI
4	Tertiary	Dean, JSS Medical college	1	IDI
5	Program implementers_Curative _ Private	General physician- internal medicine	1	IDI
		General physician- AYUSH- private	1	IDI
		Lab tech private	2	IDI
		Pharmacist	3	IDI
6	Program implementers_Preventi ve	DDPI	4	IDI
		Environmental engineer-MCC		
		Senior health inspector-MCC		
		Health inspector		
7	Ward members /corporators	Ward members /corporators	2	IDI
8	Health-based institutes	President, Dhwani Mahila Okkoota	1	IDI
		Director Ashodaya	1	IDI

		Health Activist, Snehabandhu Charitable trust	1	IDI
9	Traditional healers	Bone setter	1	IDI
9	Mothers under 5 age children		1	FGD
	Adolescent girls		1	FGD
	Elderly population_male		1	FGD
	Adolescent boys		1	FGD
	Pregnant women		1	FGD
	Elderly population_female		1	FGD
	Community_30-50 age (Male)		1	FGD
	Community_30-50 age (Female)		1	FGD
	NCD_Male		1	FGD
	NCD-Female		1	FGD

Annexure 2- WARD DETAILS

