

# **Analysis and Action for Sustainable Development of Hyderabad**

# Hyderabad as a Megacity of Tomorrow: Sustainable Urban Food and Health Security and Environmental Resource Management

Project funded by Federal Ministry of Education and Research (BMBF), Germany:

"Research for the Sustainable Development of the Megacities of Tomorrow"

# HEALTH SERVICES AND DISEASE PROFILE OF HYDERABAD CITY

A Pilot Study

SHEELA PRASAD AND C. RAMACHANDRAIAH

**Research Report 6** 

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Project funded by Federal Ministry of Education and Research (BMBF), Germany: "Research for the Sustainable Development of the Megacities of Tomorrow"

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Research Reports are outcomes of the Pilot Projects implemented jointly in Hyderabad by the Pilot Project Groups of the Megacity Project of Hyderabad. These reports for analysis and action focus on *knowledge generation and application* as well as on *institutions and governance structures* concerning the core issues of poverty, food, nutrition, health, transport, environment and resource degradation. This has been possible through joint research efforts, involving institutions of urban governance, integration of organisations of civil society in communication, participation, co-operation and network linking. Views and opinions expressed in the reports do not necessarily represent those of the Project Consortium.

# Health Services and Disease Profile of Hyderabad City A Pilot Study

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#### **Abstract**

The objective of this study was to primarily get an overview of the availability health services and disease patterns in Hyderabad. Some broad picture has emerged as an outcome of this study but it needs to be again mentioned that this is only an incomplete picture as a lot of health data is not represented in this study due to non-availability. A major observation of this study is that data on health in Hyderabad is sketchy and no complete data bank on health is available.

Nonetheless, the major outcomes of the study indicate some important trends that need to be highlighted and considered for further research.

- 1. Distribution of health services in the city is not uniform. Private health care is more used and spread over the city, outnumbering government health facilities. But in poorer areas, outskirts, and parts of the Old City, private health facilities are fewer. It is in these areas that government health care needs to address the health needs of the people with more facilities. This is not to say that government health facilities in other areas need to be ignored. Circles 1, 11, and 111 have fewer health facilities than other Circles.
- 2. While the poor do see government health care as their first choice, they are forced to shift to the private health sector due to lack of doctors, proper treatment and proximity. There is therefore an urgent need for strengthening and improving services in government health sector.
- 3. The disease profile shows a resurgence of infectious and communicable diseases in the city. TB, Diphtheria, Malaria are major causes of morbidity. The rise of Chikungunya in 2006 further emphasizes that most of these diseases are preventable. The very high numbers of diarrhea and enteric fever cases, specially among children clearly points to the poor public health facilities in slum colonies.

- 4. Women in the slums are in poor health with high numbers reporting anemia linked problems, RTI and UTI. STD cases also appear quite high in Salivahana Nagar. As the treatment for these diseases is long drawn and involves the spouse/partner, the urban health post needs to include men also in treatment for it to be effective.
- 5. Data from both the UHP shows that family planning by pushing contraception seems to be a major agenda, besides immunization.

In conclusion, this study argues that health care has to be a state concern with the state being the major provider. The private health sector can only be an option, not the main health care provider. In a situation, where economic inequality is sharp and wide with 30% of Hyderabad's population in slums, State responsibility in public health and primary health care provision is absolutely critical. Moreover, the comeback of old and emergence of new diseases in the city in recent years, supports this demand for greater government role. New diseases like Chikungunya make no class, caste, area, gender distinction thereby suggesting that a collapse of public health and poor environment can lead to both old and new epidemics. This study claims to only unravel the tip of the iceberg and the signals it sends are disturbing and need urgent attention by health planners.

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#### 1 Introduction

Any discussion on health needs to engage with the fundamental question of how we define health. Is health a basic right or is it a commodity determined by market forces? Health policies for countries are framed based on the answer to this question. In countries that see health care as a basic right, the state is the main provider of health care, which is largely subsidised. In countries where health is seen as a commodity, the private sector is the dominant provider and cost of health care is market driven. China, Cuba, the UK, Canada and Serbia have the state as the major provider of health care, while in the USA and Australia it is the private sector. India began with a welfare approach to health care as a right, but in the last three decades the private sector has emerged as the dominant player in the health sector, though health policy continues to be determined by the State. This shift of health care from the public/government to the private/corporate sector has been encouraged by the State and has resulted in a crisis in the Indian health care system today. Very specialised health care in the corporate sector (encouraging what is popularly known as medical tourism) coexists with inadequate and poor quality government health care. A minority of those Indians who can afford it can now access high levels of specialised health care at a cost, but for the majority the collapse of government health care translates into denial of access to basic quality health care, as the cost of private health care is way above the paying capacity of most. In countries like India, with a high social and economic stratification and a significant (>30%) population below the poverty line, the role of the State in health care provision cannot be compromised.

It is in this context that one argues that the analysis of health services and institutions must be located in the physical, socio-cultural, economic and political settings of a country or region. In the case of India, colonialism played a very defining role in shaping the present health institutions and services. The introduction of Western medicine was a colonial project imposed on pre-existing; indigenous medicine systems that were localized and effective. The first medical colleges outside the West were set up in Calcutta, Bombay and Madras in 1835¹ (the first medical college in China was set up only in 1925) India's health institutions established in the colonial period retain most of their original form even today. These structures/health models served colonial interests and resulted in inequities in health care across regions and populations which continue even today.

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<sup>&</sup>lt;sup>1</sup> Banerji, D. 2001, "Landmarks in the Development of Health Services in India" in Qadeer, et al (eds.) *Public Health and the Poverty of Reforms: The South Asia Predicament*, Sage, p.41:

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#### 1.1 Structure of India's Health Care System

India has a variety of health care methods, with different ownership patterns and organizational forms. Allopathy, Ayurveda, Homeopathy, Unani, Siddha, Folk medicine among others, are the different methods of medicine available in India, though Allopathy is the dominant system. The public health care system provides curative, promotive and preventive health care while private health care is almost entirely curative care. The latest estimates suggest that nearly 70% of all hospitals, 40% of all hospital beds and 75% of all Allopathic doctors are in the private sector, and 80% of all these are located in urban areas. The public health sector too is concentrated in urban areas, comprise of over 5000 hospitals, 22,975 primary health centers (PHC) and 1,37,271 sub-centres, the last two serving only rural areas.

At present, the government health care delivery system in India is organized at three levels: primary health care provides basic heath care at the rural village level; secondary\_health care provides medical care at the district/sub-divisional level and is located in urban centres; tertiary health care provides research and super-speciality medical care and is located in large urban centres. Indian health care services are provided by the State, private sector and voluntary trusts. The largest provider of health services has been the State, but today, in many parts of the country, the private health sector has become the more dominant player. In fact, for India as a whole, private health sector growth has been very rapid since the 1980s, when the Indian economy began to liberalise and restructure, while growth of the government health sector has been sluggish.

#### 1.2 Shifts in Health Policy

Health policy in India is formulated in each of the Five Year Plans and was based largely on recommendations of the Bhore Committee. While planning is central, health is a State subject in India. The Bhore Committee report (1946) provided a blue print for health care planning, as it included comprehensive, well-thought-out proposals relevant for the Indian context. Some of the major recommendations of this Committee were: expansion of rural health services; decentralisation; preventive/public health approach; primary health care focus; training of larger numbers of nursing and para-medical personnel instead of doctors; and a minimum 10% plan outlay on health. Most of these suggestions were diluted in their implementation, while countries like China and Sri Lanka incorporated some of these strategies more seriously and, consequently have a better health profile than India.

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In India, priority in health policy shifted from improving public health care to improving curative technologies and encouraging private health care. Multilateral and other donor agencies have encouraged creating separate institutional structures and programmes for controlling specific communicable diseases. The spread of democratic institutions has also affected public health services, because electorates typically prefer public funds to be used to provide private goods (such as medical care), rather than public goods (such as sanitary measures to protect the health of the population as a whole). In the developed world, this means that public health authorities have to fight to ensure adequate funding, while in the developing world it can lead to serious neglect of public health services. It is notable that the non-democratic regimes of East Asia; were the most successful in the developing work in improving health outcomes, by focusing their scarce resources on public health measures rather than on providing advanced medical care; (M. Das Gupta "Public Health in India: Dangerous Neglect", Economic and Political Weekly, December 3, 2005, p. 5161). In India, even more that most developing countries, public funds for health and education have been funneled towards tertiary rather than primary levels of health care. The National Health Policy in 1983 and 2002 recognised that basic health care in the country was poor, but continued with the curative/urban bias anyway.

#### 1.3 Disease Profile in India

Recent data on diseases in India shows that about 50% of the burden of disease continues to be communicable diseases. Non-communicable diseases account for 33% and injuries 17%, of the disease burden. The dominant communicable diseases are infections and parasite diseases and respiratory infections. TB and malaria pose a special threat, with a rise in incidence in the last two decades, to about 14 million TB cases and 2 million new cases a year. The more recent challenge is from rising HIV positive cases, which now number over 4 million. Diarrhea continues to account for over 80% of the infant/child deaths in the country. Malnutrition rates in India are one of the highest in the world, and anemia among women is disturbingly high. India is also witnessing a rapid rise in cases of diabetes, cancers and cardiac diseases.

#### 1.4 Health Services and Disease Profile of Andhra Pradesh

In the government sector, A.P. has 71 hospitals, 50 Community Health Centers, and 105 dispensaries (most of these are in urban centres). In the rural areas, A.P. has 1,570 PHCs and

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12,522 sub-centres with 45 mobile medical units. The private sector, which is much larger in A.P. than in other states, has made rapid inroads into rural areas also. In 1998, it was reported that 64% of hospital beds in the state were in the private sector. West Godavari (87%) had the highest percentage of private hospital beds, followed by Prakasam (85%); Nellore (76%); East Godavari (76%) and Khammam (75%). The districts with the lowest number of private hospital beds were Vizianagaram (20.5%), Anantapur (30.6%) and Kurnool (35%). Among the three regions of A.P., Rayalaseema had the lowest number of percentage private health sector beds, followed by Telangana and then Coastal Andhra. If North Coastal Andhra is separated from the Coastal Andhra region, the picture changes, with the former region having the lowest number of private hospital beds, in the entire state. About 87% of these private hospitals had 30 or less beds and large 100-bed hospitals accounted for 17-20% of the total beds (Mahapatra et.al.2002, "Structure and Dynamics of Private health Sector", Institute of Health Systems, Hyderabad. pp. 25-28).

HIV cases in A.P. number 567,000 – the third largest number of cases in the country. In 1999, there were over 180 deaths of children from encephaliti, 3,000 deaths from malaria and 877 deaths from diarrhea. Data on morbidity in the state shows a rise in the number of cases of communicable diseases between 1991 and 1999, though there has been a marginal decline since then. In 1998-99, reported cases of malaria were 114,700, gastroenteritis 34,909, filarial 53,359, TB 83,543 and encephalitis 1,032. A majority of these cases are from the tribal areas where, unfortunately, health facilities are the most inadequate (Strategy Paper on "Health and Family Welfare in Andhra Pradesh", Government of Andhra Pradesh, 2001).

#### 1.5 Focus and Objectives of this Study

The present study attempts to analyse and map the pattern of health services and trends in disease incidence in the city of Hyderabad. As this is a pilot study, it largely looks at data on diseases collected from one government hospital in the city. The major objectives of the study are to:

- determine the disease trends in Hyderabad;
- map the availability of health facilities in Hyderabad, both in the public and private sector; and
- document the user profile, disease patterns and health expenditure in two selected Urban Health Posts in the city for a more micro-level analysis.

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#### 1.6 Methodology and Data Sources

This study was a three month pilot, and a major portion of the project tine was spent in collecting data on health indicators. It is well known that any information on health is not easy to access and, moreover, the data sets available are sketchy and not complete. Most of the health data complied is only from government sources and pertains to cases in government hospital/clinics only. The private sector which is today the major provider of health care in A.P. and in Hyderabad, is not reflected in government data. Further, the diseases covered in this study are only of the infectious and communicable kind, not the new generation diseases. This lacunae needs to be constantly kept in mind in any analysis or discussion of the findings of this study. The study is, therefore, largely based on secondary data from government sources: the District Medical and Health Officer, Hyderabad; the District Malaria Office, Hyderabad; Fever Hospital, Hyderabad; and the Property Taxes and Trade Licenses wing in MCH Office.

Primary data was compiled from a survey of two selected Urban Health Posts (UHP) in Hyderabad, one from the South (Shalivana Nagar) and one from the North (Ameerpet) of the Musi river. The survey interviewed 25 women in each UHP with the help of an open-ended structured questionnaire. The Lady Medical Officer at both the UHPs were interviewed about their observations about the health status of their patients. As the UHPs largely offer reproductive and child health services, only women visit them. Hence the case study of the UHPs largely documents women's health experiences. Most of the data collected pertains to the most recent year available this being in most cases 2005. The tabulated data is presented in the form of tables, charts and graphs for greater clarity. The field work for this study was done from October to November 2006. The analysis is presented in three sections:

- 1. The disease profile of Hyderabad with a focus on changing trends both annual and seasonal;
- 2. The spatial pattern of health services available in Hyderabad; and
- 3. A case study of two urban health posts for a more detailed health picture.

## 2 Diesease Patterns in Hyderabad

Data collected from the Hyderabad District Malaria Office shows that malaria cases in the city have been decreasing over the last five years. In 2000, there were 877 Malaria-positive cases, in 2002 there were 633 and in 2005 it declined to 367 cases. It must be mentioned again that this data is confined to cases that came to the government clinics and hospitals only and, hence, comprises only a small fraction of the total malaria cases of the city. This data is useful only to draw inferences for broad indicative trends. What is alarming is that there were significant numbers of the more virulent (Falciparum or brain) malaria cases in 2005 (10%) than in 2000 (8.5%).

Dengue cases have fallen in the city in the last few years, from 51 in 2003 to 9 in 2005; Japanese encephalitis cases also seem to have decreased, with 2 cases reported in 2005. In 2006, the new 'epidemic' threat to Hyderabad was Chikungunya, a viral disease that affects joints and bones, with long and slow recovery period. There has been no documented case of Chikungunya in the previous years, but in 2006 the city saw an epidemic raging across class, locality and gender. The Malaria Office records 1,823 suspected cases and only 33 confirmed cases of Chikungunya, but the numbers were far higher, as is evident from the newspaper reports of last year. An analysis of the hospital data from which is popularly known as Fever Hospital and treats infections and communicable diseases from the city, and also those referred from the districts will provide a more detailed overview of the disease pattern in Hyderabad in recent years.

To get an overview of the types of diseases prevailing in Hyderabad, information has been collected for 34 diseases, more available by the Ronald Ross Institute of Tropical Diseases, and Fever Hospital. It is a major referral hospital for infectious diseases for the poor and low-income people. The patients thus hail from areas beyond the MCH also. The information has been collected for five years, from 2001 until September 2006, in addition to monthly data for 2005 and 2006. The data pertain to the number of inpatients (cases) and morbidity. The data reveals that the number of inpatients has been above 11,000 every year, with the number going up to 15,703 in 2005 (Table 1). A positive feature is the relatively lower number of deaths over the last five years, though the number hasn't fallen below 100.

Of the 34 diseases, we tried to identify those that are the major causes of morbidity and mortality. There are 14 diseases especially diarrhea, malaria, enteric fever and viral pyrexia/fever which account for over 90 percent of the morbidity cases and even a higher

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share of deaths. The cases of gastro-enteritis have come down since 2001, but diarrhea cases are increasing. Diarrhea and viral pyrexia/fever are the two major causes of hospitalization of the poor in the city. It may be noted that both these diseases are related to lack of clean drinking water, poor sanitation and low resistance. Rabies and tetanus, though lower in the number of cases, are highly fatal, accounting for over half of all deaths. The year 2005 appears to have been a very, bad year with a very high number of hospitalization cases. Diphtheria is known to have been controlled through immunisation, but has resurfaced with a vengeance and its numbers are increasing each year, with the number already crossing 800 (highest so far in five years) in the first nine months of 2006. After tetanus and rabies, diphtheria is the third important cause of mortality, followed by diarrhea.

The City Development Plan, prepared by MCH, notes that the "environmental conditions in slums are very poor and lack basic civic amenities like dust proof roads, drainage, protected water supply, street lights and adequate number of community toilets". Based on earlier studies, it is admitted that the "common diseases prevalent in slums in Hyderabad are gastroenteritis, dysentery, liver enlargement, malnutrition, ringworm, scabies and other skin diseases. To overcome these hazards health infrastructure was developed and 64 urban primary health centres were established under IPP VIII. Most of the slum communities and the poor access the services from these centres. However in surrounding municipalities such facilities are not available" (Hyderabad City Development Plan, pp.69-70, Municipal Corporation of Hyderabad, Source: www.ourmch.com accessed in November 2006).

The prevalence of morbidity and mortality over a 12-month period (October 2005 to September 2006) indicates that the hospitalization figures are low, in the cold months of January and February (actually early summer) but reach a peak in May-June and again come down thereafter (Table 2). The two major diseases of diarrhea and viral pyrexia/fever also follow a similar trend. Diphtheria cases are reported more in the cool months of January-February. The 14 diseases (out of 34) that were discussed earlier account for over 90 percent of all hospitalization cases, except in February and May. Infectious hepatitis, malaria and enteric fever are prevalent more in the post-monsoon months of October-November. In terms of mortality, these 14 diseases have accounted for total deaths in eight months of the 12-month period. The number of out-patients visiting the hospital has also been continuously increasing, with 2005 recording the highest number (Table 3). What is disturbing is that even while the number of new victims is rising, the number of visits by the old patients (i.e. repeat visits) is also increasing. This indicates that, even if the patients are not admitted into the hospital, they are not becoming free from health problems and are, thus, forced to visit the

hospital again and again. The disease pattern thus indicates the inadequate provision of clean drinking water and environmental sanitation in the slums of Hyderabad.

#### Health Services in Hyderabad

Comprehensive data on health facilities in the public and private sectors is not readily available. It appears that there is no rule for compulsory registration of private nursing homes and hospitals. Based on the information available from the MCH (property taxes and trade licenses wing), data on health facilities, diagnostic centers, pharmacies and medical shops (along with those of medical and general stores) is presented circle-wise (Table 4). In the MCH area, there are seven Circles, 35 Census Wards, and 100 Election Wards (the first two are mentioned in Figure 1). Before an analysis of the health facilities, one may notice that circles I, II and III have very high population densities. While e circles I and II represent the old city areas south of Musi river, Circle III covers several areas of the old city north of the Musi. Circle V, which has the lowest density, has recorded the highest population growth rate in MCH while there has been a decline of population in circles VI and VII. The low density in Circle V is due to the posh areas of Jubilee Hills, Banjara Hills, and the upper middle-class areas of Somajiguda and Punjagutta, and the industrial belt of Sanathnagar. Some of these areas have witnessed rapid expansion in population. Circle VI represents the crowded areas of Sultanbazar, Jambagh, Gunfoundry, Nampally etc., and Circle VII largely covers the Secunderabad area, which surprisingly witnessed a great decline in population during 1991-2001.

In terms of the ratio of the health facilities per ten thousand population, it is observed that Circle VI has a higher figure for all facilities (private hospitals and nursing homes, government dispensaries; urban health posts/hospitals; diagnostic centers; pharmacies; medical shops; medical and general stores). This circle covers a small area and has less population compared to others. This is followed by circle V for all facilities except diagnostic centers. A number of new health facilities have been established in this circle in recent years. As discussed earlier, population growth has been high in this area. On the other hand, circle I, which has the highest population, has the least number of private hospitals and medical shops. circle II, which has the highest population density, has the lowest number of government facilities and diagnostic centers. The government facilities are very low in number in Circles I-III, which represent the dense core of the city. Are these the areas that are getting excluded in the changing paradigm of development in the city? This broad overview of health facilities does suggest an unequal spatial distribution in the city. The largely middle and lower-income

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zones of the city that are densely populated, including the old city, have fewer health facilities that the more upmarket, higher-income zones. This data on health services may not be complete and up-to-dated, while it indicates a bias against the poorer localities by the government and private health sectors.



Figure 1: Map of Hyderabad Urban Agglomeration (HUA)

 Table 1: Fever Hospital - Annual Statistics (In-Patients) - 2001-2006

Sl.													
No.		2001		2002		2003		2004		2005		2006	(until
		Cases	Deaths										
1	Chicken pox	303	N	346	2	579	1	740	2	579	1	542	4
2	Diarrhoea ADD	1472	6	1041	1	1121	4	3184	13	4959	21	2081	15
3	Diptheria	519	9	610	21	625	13	825	19	708	19	814	11
4	Gastro Enteritis	2959	9	83	N	52	N	20	N	6	N	2	
5	Infectious Hepatitis	327	3	582	2	870	3	475	2	1999	1	245	2
6	Malaria	663	1	890	N	1020	3	889	2	755	1	244	3
7	Measles	711	3	551	4	527	4	696	1	549	6	275	3
8	Mumps	493	N	368	N	455	N	1242	N	929	N	363	
9	Enteric Fever	1044	1	2043	4	3574	6	1077	1	1139	N	168	
10	Viral Pyrexia/fever	2505	3	2126	1	2663	1	1786	4	2602	4	2656	4
11	UTI	345	1	293	N	401	1	203	N	166	N	85	
12	URTI	366	N	362	N	558	N	215	N	220	1	60	
13	Rabies	95	36	85	35	78	29	90	28	76	16	35	7
14	Tetanus	119	49	132	43	158	39	175	38	129	35	90	24
Total		11921	121	9512	113	12681	104	11617	110	14816	105	7660	73
As %	of total of 34 diseases	88	95	85	96	91	99	91	97	94	100	90	87
All 3	4 diseases	13580	128	11250	118	13972	105	12783	113	15703	105	8511	84

Source: Fever Hospital, Hyderabad.

Note (1)The figures are in numbers.; (2)ADD – Acute Diarrheal Disease; UTI – Urinary Tract Infection; URTI – Upper Respiratory Tract Infection.

Table 2: Number of In-patients (disease wise) from October 2005 to September 2006 - Fever Hospital, Hyderabad

S1.	Diseases	2005	5					200	6																
N o.		Octo	ber	Nov mbe		Dec er	emb	Janı y	ıar	Febr y	uar	Mai	rch	Apr	il	Ma	y	Jun	e	July	7	Aug	ust	Sep er	temb
		C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
1	Chicken pox	7	1	13	N	33	N	63	2	92	N	14 0	N	11 7	2	55	N	26	N	22	N	15	N	12	N
2	Diarrhoea ADD	258	2	20 2	2	21 8	N	16 1	2	190	3	22 6	2	19 6	1	27 7	2	32 5	1	32 7	2	207	1	17 2	1
3	Diptheria	75	1	56	1	66	4	10 3	4	112	N	91	N	91	1	95	N	94	N	65	N	66	1	97	5
4	Gastro Enteritis	N	N	N	N	N	N	2	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
5	Infectious Hepatitis	65	N	39	N	15	N	21	N	27	1	29	N	33	N	34	1	26	N	27	N	28	N	20	N
6	Malaria	69	N	57	N	59	N	30	N	17	N	25	N	25	1	32	N	22	N	31	1	24	1	38	N
7	Measles	19	N	23	N	21	1	41	N	46	N	57	N	41	N	40	3	24	N	10	N	N	N	16	N
8	Mumps	19	N	40	N	40	N	56	N	41	N	77	N	63	N	49	N	29	N	19	N	N	N	29	N
9	Enteric Fever	75	N	62	N	25	N	18	N	1	N	38	N	22	N	20	N	14	N	10	N	13	N	32	N
10	Viral Pyrexia/fev er	343	N	32 4	N	26 0	N	16 1	N	9	N	22 9	N	35 5	1	41 0	2	43 3	1	43 9	N	367	N	25 3	N
11	UTI	13	N	10	N	14	N	5	N	5	N	12	N	10	N	15	N	8	N	11	N	6	N	13	N

12	URTI	13	N	24	N	20	N	6	N	3	N	11	N	8	N	15	N	4	N	6	N	N	N	7	N
13	Rabies	9	1	3	1	6	N	11	2	N	N	3	1	5	2	3	1	4	N	4	1	N	N	5	N
14	Tetanus	11	2	11	4	13	3	10	4	12	N	11	4	7	1	16	6	10	2	10	3	2	N	12	4
	Total	976	7	86 4	8	79 0	8	68 8	1 4	555	4	94 9	7	97 3	9	10 61	15	10 19	4	98 1	7	728	3	70 6	10
	Percent of all 34 diseases	97	100	94	1 0 0	95	10 0	96	7 8	59	5	93	10 0	95	1 0 0	88	94	97	10 0	98	1 0 0	91	60	95	10 0

Source: Fever Hospital, Hyderabad.

Note: C – Cases (Number of in-patients); D – Deaths

**Table 3: Number of Out patients visiting the Fever Hospital** 

Patients	Years	Years												
	2001	2002	2003	2004	2005	<b>2006</b> (until Sept.)								
Old	127004	130542	173556	163616	207269	161587								
New	28958	32017	55869	38216	59821	36289								

Source: Fever Hospital, Hyderabad.

Table 4: Health Facilities in Municipal Corporation of Hyderabad area: 2006

MCH Circle	Area (Sq. km)	Densit y 2001	Population 2001	Grow th rate 1991-	Private Hospital Nursing		Disp/UH Hospital		Total Govt)	(Pvt +	Number Diagnost Centres		No. Pharmac Medical General		of & +
				01	Numbe	Per 10000	Numbe	Per 10000	Numbe	Per 10000	Numbe	Per 10000	Numbe	Per 10000	0

					r	pop	r	pop	r	pop	r	pop	r	pop
I	31.02	29053	901226	24.9	175	1.94	90	1.00	265	2.94	23	0.26	175	1.94
II	14.91	32911	490703	23.0	167	3.40	48	0.98	215	4.38	6	0.12	167	3.40
III	17.97	31816	571733	23.0	238	4.16	59	1.03	297	5.19	33	0.58	238	4.16
IV	28.12	20205	568163	22.6	255	4.49	102	1.80	357	6.28	28	0.49	255	4.49
V	45.36	12185	552697	84.4	260	4.70	120	2.17	380	6.88	36	0.65	260	4.70
VI	4.93	23997	118306	-1.3	107	9.04	52	4.40	159	13.44	11	0.93	107	9.04
VII	20.26	20217	409599	-17.5	NA		62	1.51	62	1.51	33	0.81	142	3.47
Total	162.5 7	22,22 1	361242 7	21.9	1202	3.33	533	1.48	1735	4.80	170	0.47	1344	3.72

Source: MCH Property taxes and Trade Licences wing for the number of hospitals.

Note: Circles and the respective Census Wards are as follows:

**I**: 16, 17, 18, 22, 23

**II**: 14, 15, 19, 20, 21

**III**: 1, 2, 3

**IV**: 9, 10, 11, 12, 13

**V**: 6, 7, 8

**VI**: 4, 5

**VII**: 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35

## 3 Case Study of Two Urban Health Posts

An Urban Health Post (UHP) is a health centre located in an urban areas and functions as an equivalent for the primary health centres (PHCs) in the districts. In Hyderabad, there are around 60 UHPs in 7 Circles of the MCH. Other than the UHPs, there are 5 maternity centres which are open 24 hours. The UHPs cater to only women and children (including male children below 10 years.) The UHPs are headed by a Medical Officer (on regular basis), PHNs (Public Health Nurse) and ANMs (Auxillary Nurse Midwife) who are on contract basis. Most of the UHPs have an attached government homeopathy, allopathy or unani dispensary. Some UHPs are provided with 4 beds. Immunization services are provided every Wednesday and antenatal check-ups are done on Fridays, with daily operating hours being 9 A.M to 3 P.M. Each UHP serves the entire population in the area through outreach sessions during which the medical officer as well as nurses visit houses campaigning, providing information, following case treatments etc. Each UHP caters to a population of about 55,000 to 60,000 people.

The health services provided by the UHPs include diagnosing the cases of tuberculosis TB, malaria, filaria, leprosy, blindness, gastro enteritis/diarrhea etc., and looking out for high-risk patients and areas. In addition to detecting cases and reporting, they conduct campaigns and educative sessions on HIV, malaria, dengue, age at marriage, spacing methods, ARI, and diarrhea etc. They also visit schools and hostels for regular check-ups.

The other family welfare services include antenatal check-ups and post natal check-ups. High-risk women are identified and referred to other hospitals and the follow-ups are done by the ANMs. ANCs are counselled on HIV and PMTCT services. Babies with low birth weight are specially taken care of. Diseases affecting children like measles, ARI, neonatal tetanus and diarrhea are also identified and treated. Other activities like number of marriages, age at marriage, number of abortions, number of sterilisations (vasectomies and tubectomies), number of IUD insertions, oral pill cycles distributed and Nirodh/condom pieces distributed and total number of deaths are also recorded (includes maternal and infant deaths). There are no facilities for conducting laboratory tests in the UHPs.

#### 3.1 Shalivahana Nagar UHP

Shalivahana Nagar UHP is located in Circle I of the MCH (Saidabad Mandal of Hyderabad district). It covers a population of 55,000. It is headed by a Medical Officer and assisted by

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one PHN and 4 ANMs and an Ayah/sweeper. To test T.B cases a person from Hylep-Lepra society conducts sputum tests. The area is surrounded by middle class and lower middle class families and the river Musi flows nearby. There are about 15 slums in the 2 blocks: Moosaram Bagh, Sanjeev Nagar, Indra Nagar, Shalivahana Nagar, Veera Bhadra Sangh, B.D. Temple, Teegalaguda, S.S.Banzara, Padma Nagar, Shankar nagar, Shiva Shankar Nagar, Vijaya Nagar, Bhavighat, Ambedkarnagar and Waheed Nagar. Generally the people visiting the UHP are people from the surrounding area. There are at least 40-60 patients per day in this UHP including male members. Around 7-8 males are treated per day. Though male members are not treated in UHPs, they are treated in this UHP. The medical officer feels that since there is no government hospital nearby, and because of the low incomes, the male members accompany female patients, and she treats them as they come for minor ailments. For serious ailments, the males are diagnosed and referred to other hospitals. Male members generally come for ailments like cold/fever, injuries, scabies, asthma, toothache, conjuctivitis, gastretics, pains, URTI, skin diseases, B.P. etc. In the recent past, there has been many cases of Chikungunya, and the patients have been coming frequently for the past 4 months for medicines.

Women usually come for several types of ailments such as antenatal care, post natal care, treatment of cold, cough, fever, urinary tract infections, back pains, arthritis, headaches, gastro problems, vomiting, leucorrhea, anaemia, stomach aches, fungal infections, irregular periods, contraception etc. It may be noted that women of the middle-income group come here only for immunization and gynecological problems, not for treatment. Most of the women who come here are daily wage labourers, domestic servants, housewives etc.

The annual report 2005-06 of this UHP indicates that the total numbers of out patients treated at this UHP is around 18,546. The number of antenatal cases examined at the PHC is around 1242. The total numbers of children less than year old immunized at the PHC (BCG, POLIO, D.P.T, Hep- B and Measles) below 1 year are around 2114. The number of sterilizations conducted is around 330. Around 784 cases of ARI and 612 cases of diarrhea have been treated among infants below the age of 1 year. Around 190 cases have been referred to other hospitals. Around 396 cataracts cases also have been reffered. Maternal and infant deaths have also been audited. T.B (48 cases), Leprosy (10 cases,) RTI (473 cases) and STD (648) cases have been detected and treated. Different clinics like ANC, Immunization and RTI/STI clinics are also organized by the UHPs. Campaigns on age at marriage, spacing methods, ARI and diarrhea have been conducted for better health awareness among the local people.

#### 3.2 Ameerpet UHP

Ameerpet UHP is located in Circle V (Sanathnagar mandal of Hyderabad district). It covers a population of roughly 60,000 and has homeopathic dispensary attached to it UHP. It is headed by a Medical Officer, 4 ANMs (2 regular and 2 on contract basis), 1 Assistant paramedical officer (APMO); a health worker from the leprosy department and T.B. department visits this UHP once in 10 days. There is also one sweeper and a night watchman. On average 20-25 patients come for treatment each day. A government civil dispensary, private nursing homes and hospitals are located closeby, as a result of which there are few patients to this UHP. This UHP caters only to female patients unlike Shalivahana Nagar UHP. Generally, the people visiting the UHP are more from the lower income group. The other middle income groups visit it only for immunization purpose. The doctor noticed that the high income group members may not like to visit here as their maid servants and other people working in their house visit it. There are around 8 slums under this UHP namely Balkampet, Dasara basti, Bapunagar, B.J.J.R. Nagar, Shamarkunta, Harijan Basti, Gangubai Basti and B.K.Guda. The type of diseases treated in this UHP are skin infection, URI, UTI, cold and cough, back pain, stomach pain, abdomen pain, acute pharaniytis, fungal infections, scabies, constipation, diarrhea, tooth aches, leuchhorrhea, missed period, vomiting and motions, anaemic and other gynaec related problems.

The annual report of this UHP for 2005-06 reveals that the total numbers of out patients treated at this UHP is around 10,505. The number of ante-natal cases examined and counselled on HIV and PMTCT services are around 936. The total number of children immunized at the PHC forBCG, POLIO, D.P.T, Hepatitis-B and Measles) below 1 year are around 2300. The number of sterilizations conducted is zero. 4 IUD insertions have been done. 16 women have been distributed oral pills and 16190 nirodh pieces have also been distributed. 32 cases of diarrhea have been treated among infants below the age of 1 year. 87 cases of high risk ANCs have been referred to hospitals. T.B (18 cases), RTI (17 cases) and diarrhea (12cases) have been detected and treated Different clinics such as ANC, Immunization and RTI/STI clinics are also organized by the UHPs. Campaigns on age at marriage, spacing methods, ARI and diarrhea have been conducted by the Ameerpet UHP. 57 women have benefited from Sukhibhava scheme, 110 pregnant women from National Maternity Benefit Scheme (NMBS) and 130 women for fully immunizing their children.

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#### 3.3 Profile of the Patients

A total of 50 women patients were interviewed at the two UHPs (25 in Shalivahana Nagar and 25 in Ameerpet).

#### Socio Economic Profile:

A total of 25 women were interviewed in Shalivahana Nagar UHP the majority of which were in the age group of 20-29 years. They had come to the UHP for different reasons such as immunization, treatment of children etc. Except one, all the women were married. Most of the women had 2 children. Around 52 percent of the women were illiterate and belonged to the lower income group. On an average the annual income of the families ranged from Rs.18,000 – 72,000. Most of the women interviewed are migrants from the nearby districts who have come for work. Thus majority of the families are daily wage labourers (construction work), domestic servants or have some private business like selling plastic items, or work in a tea stall, hotel etc. It is to be noted that the family size of most of the respondents was 4\_(husband, wife, two children) and the elderly had been left behind in the villages.

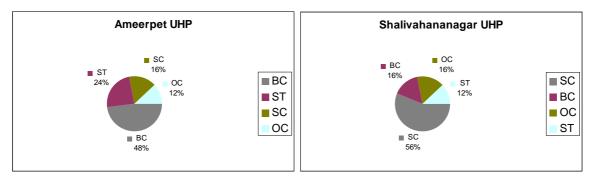


Figure 1: Social Composition of the Families visiting the UHPs

A total of 25 women were interviewed in Ameerpet UHP, of which majority were in the age group of 20-29 years. All the women were married and their family size varied from 2-6 members. Most of them had one or two children except for 3 women who had 3 children. Around 36 percent of the women were illiterate and belonged to the lower income group. On average, the annual income of the families ranged from Rs. 30,000-1,20,000.

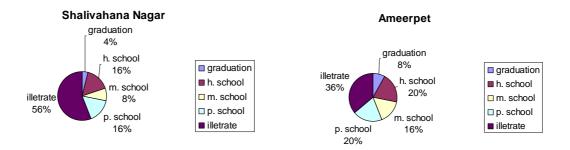


Figure 2: Educational Levels of the Respondents

Most of the respondents are housewives, and the heads of the household work in private service like running an auto rickshaw, travel, accountant in shop, lecturer, painter etc. There is a difference in the socio-economic profile of the patients visiting the Shalivahana Nagar and Ameerpet UHPs. The family income level of Ameerpet UHP is higher than Shalivahana Nagar UHP. Comparatively, the numbers of literates visiting the Ameerpet UHP is also higher than those visiting the Shalivahana Nagar UHP.

#### Public Health Amenities

Among the 25 in Shalivahana Nagar, 36 percent of the families have a Municipal water connection, while 64 percent of the families fetch water from public standposts. About 60 percent of the families have their own toilet facility, 28 percent defecate in the open and 32 percent share common toilets. About 40 percent do not have any facility to garbage disposal and throw it out near the river/drain passing by. Thirty-six percent families use the municipal dustbin with a tricycle rickshaw collects the garbage from 24 percent families. Most of the respondents live in rented houses; 4 to 5 families share 1 house with each family staying in 1 or 2 rooms and using common toilets and bathroom. The families who live near to the Musi river live in Kutcha houses, collect water from public tap and defecate near the river. They even throw their garbage near the river itself.

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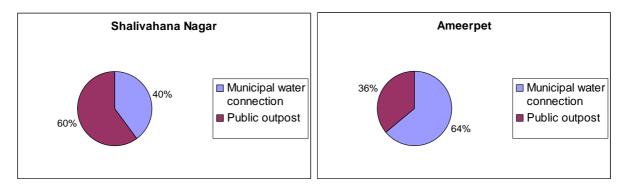


Figure 3: Source of Drinking Water

Among the 25 families surveyed in Ameerpet UHP, 64 percent have a municipal water connection (some individual and some shared), while the remaining 36 percent depend on public standpost. Around 48 percent have personal latrine facilities while the remaining 52 percent share common toilets. Around 76 percent use the Municipal dustbin, while 16 percent pay a rickshaw puller who comes and collects the garbage and 8 percent families throw the garbage into the open disposal. In Ameerpet too, the live in rented houses and share common bathrooms, and toilets. Many respondents from slums live in semi-pucca houses and share common bathroom and toilets.

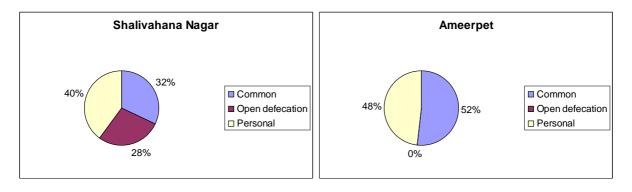


Figure 4: Sanitation (Toilet) Facilities

#### Disease Profile:

The patients who visit a Shalivahana Nagar UHP were coming for different reasons, such as immunization of a child, pre-natal check up, general cold or fever, Chikungunya, general gynaecological check-up, insect bite, UTI etc. The visits to the UHP range from 1-8. They walk to the UHP, as it is located nearby to them. Around 36 percent of the children who came for treatment were there for ailments like cold, cough, fever, diarrhea, allergies, skin diseases, scabies, insect bites, ear pain, asthma etc. All the children who have visited the UHP had been

immunized or an immunization process was going on. It was found that for the old age person's joint-pains was the biggest problem. Other than joint pains the other diseases found among the elderly are memory loss, diabetes, hearing disorder and cataract problems. Among the women, the major diseases were anaemia and menstrual disorders, followed by back and joint pains, and urinary tract infections. About 40 percent of the women underwent sterilization and 36 percent have not been using any contraceptives. The majority of the patients who came suffered from Chikunguna which has lasted for about 3-4 months and the patients were still suffering; they had been visiting the UHP for painkillers. As most of the symptoms were joint-pains, some women (especially domestic servants) had to forgo work for several person-days; that is, if they were working in 4-5 houses earlier, now they were working only in 2 houses as a result of which there has been a loss of income. Women generally suffered from anaemia and body pains. Many of people (especially men and women who live near the Musi) complained of allergies and skin infections on the feet. It was also observed that the women who had 2 children hardly had one year of gap between the two children and underwent sterilization for the incentive of receiving Rs.500 from the government.

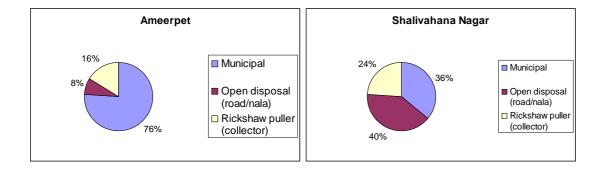


Figure 5: Garbage Disposal Facilities

Most of the respondents who visited Ameerpet UHP came for immunization of their children (60 percent), 12 percent each for Chikungunya and general fever. Others were there for asthma of a child, prenatal check-up, skin disease and urinary tract infections. The respondents' visits to the UHP ranged from 1to10 visits. Around 28 percent of the children reported coughs, colds or fever. Other diseases among the children were diarrhea, stomach ache, malaria, fits, scabies, insect bites, eye infection, ear pain and asthma. All the children in the respondents' families were immunized or receving immunization. Among the old-age

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diseases, joint pains, cataracts, high blood pressure, anaemic, insomnia, hearing disorders, diabetics, and paralysis are important. Anaemia was around 28 percent among the women, followed by back- pain, joint-pains, fungal infections and menstrual disorders. About 40 percent of the women have undergone sterilization, 36 percent are not using any kind of contraceptives and 16 percent are using contraceptives. Women have undergone sterilization for the incentive offered by the government. In Ameerpet UHP, the doctor noted that there has been a case of dengue and a few cases of malaria. During the rainy season diarrhea has been rampant in the slum areas.

#### Use of Health Care Services

In Shalivahana Nagar UHP, 64 percent of the women have been using both private and government health facilities, while 24 percent used only government and 12 percent only private facilities. About 68 percent of the respondent families have been using both government and private health facilities, 20 percent have been using only private and 12 percent only government. In the last 6 months, all the respondents or their family members have been to only private hospitals for hospitalisation purposes. The women visit a government health facility in case of minor and personal treatments. Or they initially come for treatment and slowly shift to private hospitals. As they say, the treatment in the government hospital is temporary until the disease subsides; if not they immediately rush to a private hospital.

In Ameerpet UHP, 36 percent of the respondents have been using private and government facilities, 28 percent used only government and 36 percent only private facilities. About 16 percent of the respondent families have been using private and government facilities, 76 percent private facility and 8 percent only government facilities. In the last 6 months, 40 percent of respondents' family members were admitted in private hospitals and 16 percent were admitted to government hospitals.

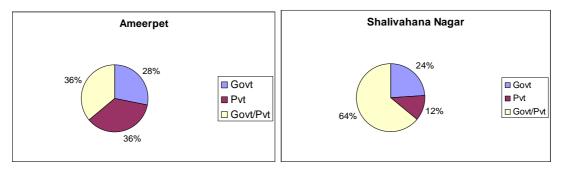


Figure 6: Health Facilities used by the Respondent Families

The majority patients have visited private hospitals as they feel that proper personal attention and treatment are given there. Many women specified that, because in a government hospital they do not have to spend money on medicines or for minor treatments such as colds and fever, they prefer it there. The main reason for visiting a private hospital, especially for deliveries, is that the government maternity centre is quite far from their homes and the expenditure of carrying food, attending to the patient, travel etc., make it expensive, so it is better to be admitted to a private hospital near home.

#### Health Expenditure

On average, in Shalivahana Nagar the respondents spend around Rs 100-750 per month, mostly for doctors' fees (for private consultation) and medicines. In this UHP, in the last 6 months, 8 members have been admitted in a hospital, all in a private hospital. The hospitalization charges varied from Rs. 1,000-20,000. Most of the hospitalisation cases were related to Chikungunya and deliveries. The monthly expenditure varies for each month. In one month the family might not spend a single rupee while in another they may have to spend Rs. 500-600. In some cases the women do not know the monthly expenditure on health, as it is the head of the household who takes care of it.

On average, in Ameerpet UHP the monthly income expenditure towards health is Rs. 100-500. In the last 6 months, in this UHP people ten persons have been admitted to private hospitals and four in government hospitals. In the private hospital, the charges ranged from Rs. 3000-50,000 while in government hospital the charges have been Rs. 700-3000. The hospitalisation cases were for delivery; and there were 5 cases of Chikungunya that were treated in a private hospital.

#### Comparison of the two UHPs

A comparison of the two UHPs suggests that health conditions of the poor are not uniform; they vary from location to location. Shalivahana Nagar UHP (SN-UHP) is located closer to the old city, on the periphery of the municipal limits, and serves a large number of slums. Ameerpet UHP (A-UHP) is situated in the heart of a densely populated area and though it includes fewer slums, it serves a larger population than the SN-UHP. The latter UHP has more migrants and a lower income profile compared to the former which has older residents and a higher income. In terms of public health facilities, it is seen that SN-UHP has fewer

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single tap connections, no garbage collection system and continued defecation in the open. The situation in A-UHP is a little better with more tap connections and some efforts at garbage collection.

It is in the availability of health services that one finds a lot of difference between the two areas. In Shalivahana Nagar, the UHP is the major health care provider and hence more people use this facility, including men. On the other hand, in Ameerpet the UHP is not used so much as the area has a number of private clinics/hospitals that are more accessed. As a result, one finds that health expenditures are much higher in Ameerpet. An interesting difference between the two areas is regarding sterilisation - Shalivahana Nagar had higher number of sterilisations last year while Ameerpet UHP had none. The reasons for this need further analysis, but a question that comes to mind is that the government-promoted health services are more aggressive on family planning.

The disease pattern in both the areas appear fairly similar, though preventable diseases like diarrhea and skin infections are reported more often in Shalivahana Nagar. This micro-level study strongly brings out the epidemic form that Chikungunya took in Hyderabad last year. The city witnessed an unprecedented number of Chikungunya cases in 2006, a disease not reported earlier in the city. Both Shalivahana Nagar and Ameerpet UHPs report a high number of reproductive and urinary tract infections, and TB cases are also high. Nutritional related problems, especially anaemia are high among women. The severity of health problems seems greater in Shalivahana Nagar. Based on the analysis of disease patterns and health services in the two areas, it may be concluded that poverty and poor living conditions are the major contributors to poor the health of the people. If living conditions improve, there is a noticeable change in health.

## **4 Concluding Comments**

The objective of this study was to primarily get an overview of disease patterns and the availability health services in Hyderabad. A broad picture has emerged as an outcome of this study but it needs to be again mentioned that this is only an incomplete picture, as much health data is not represented in this study due to non-availability. A key observation derived from this study is that data on health in Hyderabad is sketchy and no complete data bank on health is available.

Nonetheless, the conclusions to be drawn from this study indicate some important trends that need to be highlighted and considered for further research.

Distribution of health services in the city is not uniform. Private health care is more used and spread over the city, outnumbering government health facilities. But in poorer areas, outskirts, and parts of the old city, private health facilities are fewer. It is in these areas that government health care needs to address the health needs of the people with more facilities. This is not to say that government health facilities in other areas need to be ignored. Circles 1, 11, and 111, have fewer health facilities than other Circles.

While the poor do see government health care as their first choice, they are forced to shift to the private health sector due to lack of doctors, proper treatment and proximity. There is, therefore, an urgent need for strengthening and improving services in the government health sector.

The disease profile indicates a resurgence of infectious and communicable diseases in the city. TB, Diphtheria, Malaria are major causes of morbidity. The rise of Chikungunya in 2006 further emphasizes that most of these diseases are preventable. The very high numbers of diarrhea and enteric fever caseses, specially among children, clearly points to the poor public health facilities in slum colonies.

Women in the slums are in poor health, with high numbers reporting anemia-linked problems, RTI and UTI. STD cases also appear quite high in Salivahana Nagar. As the treatment for these diseases is drawnout and involves the spouse/partner, the urban health post needs to include men also in treatment for them to be effective.

Data from both of the UHPs shows that family planning through pushing contraception seems to be a major agenda, besides immunization.

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In conclusion, this study argues that health care has to be a state concern, with the state being the major provider. The private health sector can only be an option, not the main health care provider. In a situation where economic inequality is sharp and wide with 30% of Hyderabad's population in slums, State responsibility in public health and primary health care provision is absolutely critical. Moreover, the comeback of old and the emergence of new diseases in the city in recent years support this demand for a greater government role. New diseases, like Chikungunya make no class, caste, area of gender distinctions thereby suggesting that a collapse of public health and poor environment can lead to both old and new epidemics. This study claims to only unravel the tip of the iceberg; the signals it sends are disturbing and need urgent attention by health planners.