

**Healthcare in Delhi:
The Appreciation Deserved and Criticism
Justified**

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By

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Executive Summary

The Delhi Government's ministry of Health and family welfare, headed by the principal secretary is responsible for the state's health services. Through this study, an attempt has been made to study the structure and function of the department and its policies regarding services like dispensaries, prevention of food adulteration, drug procurement, emergency services, mental health etc. with particular focus on government hospitals. The constraints under which the system works, and the planning and implementation level lacunae have been identified. In the later part of the paper, model being followed in Kerala has been analyzed through a case study to assess its applicability in Delhi's scenario. In the end, some possible solutions and recommendations have been presented- to build a system providing quality healthcare that is accessible and affordable.

The Department of Health and Family Welfare of the Government of NCT of Delhi caters to health needs of nearly 1.70 crore population of Delhi and also has to share the burden of migratory population from neighboring states which constitute nearly 33 per cent of total intake at major hospitals in Delhi.

"The Delhi government has done very good work in the healthcare sector. The hospitals are under pressure because they cater to a huge population from outside Delhi; if they had to meet only our needs the situation of quality would have been very different. It is a larger problem of imbalance in regional development; people come here because they don't get good quality treatment in their states" explains Professor Kiran Walia, Minister of Health and Family Welfare, Delhi Government.

However, population pressure is one among many problems experienced by this sector. There are hurdles of lack of trained personnel, bureaucratic delays, corruption and improper implementation. But the aim of this paper is not just to criticize the system. Humbled by the magnitude of this sector, and with utmost respect to the thousands of health workers who keep us going; I wish to present a balanced, unbiased and objective study, hoping it does justice to the sources of information, and of course, to the reader.

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Chapter 1

Healthcare in Delhi
“An overview”

Delhi is the national capital of the largest and one of the most vibrant democracies in the world, and also it is one of the most rapidly expanding economies. A city of hopes and promises for the common man - leading to a common belief that whatever was not possible at their local place could be achieved at Delhi - a trust that needs to be upheld. The city has its own share of problems too-partly inherent and partly due to a large number of in-migrations of people from other states-leading to very high population density of over 9000 persons/sq. km (93 per cent urban) compared to the national average of about 350 persons/sq. km (25 per cent urban). This extra share of population load puts additional pressure on all the infrastructure facilities that are already overstretched to their extreme. There is a lot of stress on the public facilities in Delhi – especially on the Health sector. Medical care and treatment cannot be denied to a fellow countryman on any ground.

As per the Census of 2001, the population of Delhi is about 13.8 million with a projection of 17.7 million by 2007, if the present trend of migration of population from the adjoining states continues. Though during the last decade, the birth rate has fallen from 28.52 to 23.33 per 1,000, the growth rate of Delhi has remained unaffected due to continued in-migration.¹

1.1 Health care delivery system in Delhi

Delhi has fairly well established infrastructure for its people with one of the highest bed capacity (2.14 beds²/1000 persons) compared to the national average of about 0.7 beds per 1000 persons. Public Health expenditure of the Government of Delhi has consistently remained above 6 per cent of the total plan budget during the last 20 years reaching up to 10.35 per cent of the plan outlay for the 10th plan (2002-07) – the highest for any state government in the country. Delhi's per capita expenditure on health is Rs. 685 against the all India expenditure of Rs. 260 per annum.¹

However, there is multiplicity of agencies operating their health care outlets in different areas or for defined subset of populations in different areas like Delhi Government, MCD, NDMC, CGHS, DGHS, ESI and Army etc. leading to some overlaps/duplications of services with wastage of efforts and resources on one hand and deficient services on the other.

Growth of Medical Institutions in Delhi since 1992

Year	No. of Hospitals	PHCs	No. of Dispensaries	No. of Maternity Home, M&CW Centers & SCs	Poly Clinics	No. of Registered Nursing Homes	No. of Special Clinics	Total No. of institutions
1992	82	8	656	219	10	105	45	1125
1995	84	8	675	209	11	132	37	1156
1996	86	8	740	214	11	136	43	1233
2002	70	8	808	203	4	460	43	1596
2004	87	7	993	209	5	559	44	1904
2005	86*	7	972**	204	5	558	44	1876

Note: * One health facility under Social Welfare Deptt does not have any indoor beds now hence the total number of hospitals has reduced by 1 as compared to last year.

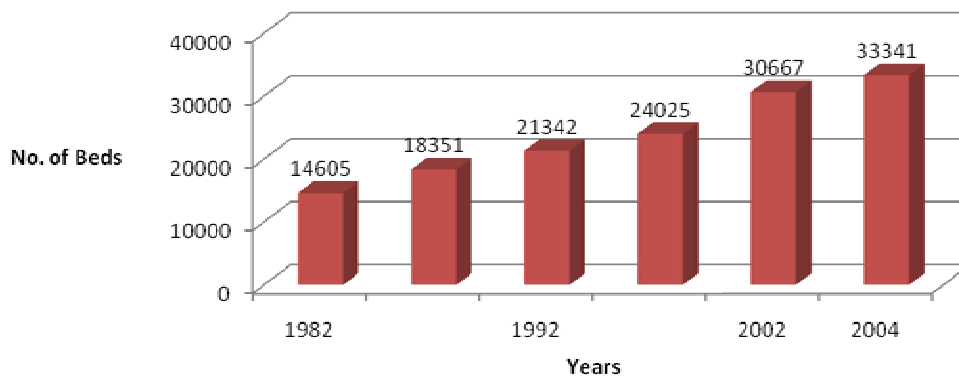
** The number of dispensaries has decreased because, school health clinics at 70 locations are being run by 16 functional teams only and existing clinics have closed due to handing over of the scheme to NGOs.

Source: Directorate of Health Services, GNCTD, *Economic Survey of Delhi, 2005-06* p.192.

¹ Delhi Development Report, Planning Commission GOI p. 277

² Economic Survey of Delhi 2008-09, Express Newslines, New Delhi, June 19

Growth of Beds capacity since 1982



Source: Directorate of Health Services, GNCTD

1.2 Some Programmes related with Health Problems in Delhi

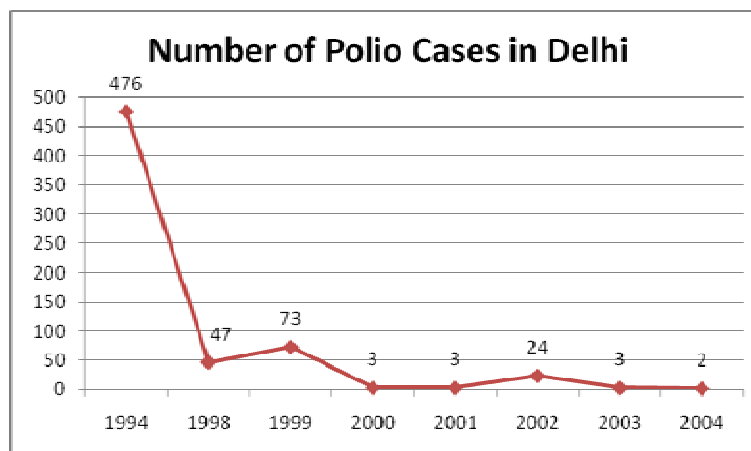
- Tuberculosis

Tuberculosis is still a major public health problem in Delhi. As per National Family Health Survey 2 (NFHS2), the prevalence of Tuberculosis in Delhi is 511 per 100,000 people. This is slightly less than national estimate of 544.

A Special drive on control of tuberculosis under Revised National T.B. Control programme (RNTCP) has been launched in Delhi since 1993. Delhi Tapedic Unmulan Samiti has been formed under which there are fourteen district level T.B. control societies. The drugs are given free to the patient, as per DOTS (Directly Observed Treatment Supervised) strategy through the DOTS centres near their homes. At present there are 20 chest clinics functioning under this programme. Under the chest clinics, 325 DOTS Centres and 120 microscopy centres are functioning. Apart from this, 57 NGOs and 23 Private Practitioners are also participating in RNTCP.

- Polio

Delhi was the first state to start pulse polio immunization in 1994 for polio eradication. The number of polio cases has been significantly reduced ever since then. After initial good results, programme received a setback in 2002 when polio cases increased to 24 from 3 in the previous two years. However, the number again came down to 3 in 2003.



Source: Various reports of MNOHFW GOI

- Maternal and Child Health Programmes

Promotion of maternal and child health has been one of the most important components of the Reproductive and Child Health Programme (RCH) of the Government of India. The goal for each pregnant woman is to receive at least three antenatal³ check-ups, two tetanus toxoid⁴ injections and a full course of iron and folic acid⁵ supplementation. In Delhi as per NFHS-3 74.4 per cent of mothers had at least 3 antenatal care visit for their last child birth. This is an improvement over the figures of NFHS-2, which were only 68.9 per cent. NFHS-3 shows that 60.7 per cent births in Delhi were institutional deliveries and 50 per cent women received post natal care from doctor/nurse/LHV⁶/ANM⁷/other health personnel within 2 days of delivery for their last child birth.

To improve the maternal health, Delhi Government has launched special programme called *Stree Shakti Programme* and also conduct campaign under *Matri Suraksha Abhiyan*. The goal of these programmes is to reduce MMR⁸ through provision of comprehensive health care to all mothers during antenatal, natal and postnatal period.

As far as immunization of children is concerned, as per NFHS-33, 63.2 per cent children received complete immunization (3 doses each of Polio, DPT⁹, BCG¹⁰ and Measles). This is slightly less than the figures of NFHS-2, which was 69.8 per cent.

- HIV/AIDS

Delhi falls under low Prevalence Stat for HIV/AIDS. However, 42,000 HIV positive cases are estimated till January 2006, a total of 2759 cases were reported till August 2006 will 322 deaths were reported till January 2006. The data from antenatal clinic shows that the HIV infection is still within 1 per cent in Delhi.

However, 3 lakh deliveries occur in Delhi per year. Considering 0.3 per cent HIV prevalence in ANC (Antenatal Clinics) woman and 30 per cent transmission rate about 270 children are born every year with HIV. Government of Delhi has launched a special drive for prevention of HIV transmission from an infected mother to the foetus.

- Fourteen Centres have been set up under the Prevention of Parent to Child Transmission Programme along with antenatal check-ups clinics in various hospitals. Four more will shortly be opened. Another ten will be started at Maternal & Child Welfare Centre (MCW centre) of MCD. This way the programme can penetrate at the grass root level.
- 28 Voluntary Counseling & Testing Centre (VCTC) have been established.
- Mobile Integrated Testing and Wellness Access (MITWA) is providing outreach services to slums & JJ Cluster through 13 mobile van and the package includes treatment of Sexually Transmitted Diseases (STD), free condom distribution and counseling and test for HIV.
- There are 52 licensed blood banks out of which 8 are regional blood transfusion centres.
- 3 Community Care Centres
- 6 ART¹¹ centres
- Tele-Counseling services

³ Systemic medical supervision of women during pregnancy

⁴ A bacterial toxin whose toxicity has been weakened or suppressed

⁵ Vitamin B9

⁶ Lady Health Worker

⁷ Auxiliary Nurse Midwife

⁸ Maternal Mortality Rate

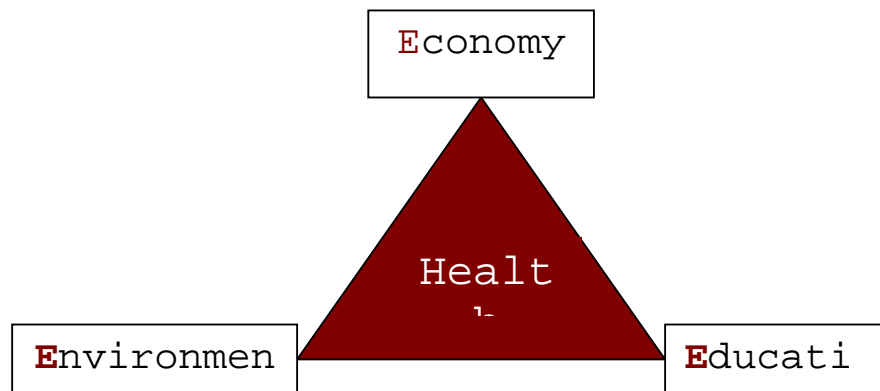
⁹ Diphtheria, Pertussis and Tetanus

¹⁰ Bacillus Calmette-Guerin

¹¹ Anti-Retroviral Therapy

1.3 Factoring Healthcare in a city

Healthcare is not an isolated concept; the study or implementation of an effective healthcare system catering to a population as huge as the NCT of Delhi cannot be carried out in individuality. It is a complex interplay of various factors that need to be considered together. Sustaining the system is hence not just the responsibility of the healthcare workers but the entire society at large that, directly or indirectly, at some point in time, comes in contact with healthcare.



Economy: India is still far from being a fully medically insured country like the United States. In this regard, the cost of healthcare is an important factor determining the choice of institution for a patient. Free treatment at Government hospitals presents a great contrast to expensive private institutions. In medical treatment, everything costs; from equipment to medicines and from maintaining the hospitals to paying the medical/paramedical staff. In fact, the treatment that appears free to the consumer at a Government set up may actually cost up to Rs. 8000/bed/day to the taxpayer!

The state has constantly allocated more than 7 per cent of the Plan outlay to the Health sector and has utilized more than 80 per cent of the outlay. During the 8th Five year plan the total plan expenditure on Health (Medical sector, Public Health and Nutrition) was Rs. 459.4 crore (7.41 per cent) out of the total plan expenditure of Rs. 6208.32 crore, while in the 10th Plan the outlay for the health sector has been planned at Rs. 2318.5 crore (10.35 per cent) out of total plan outlay of Rs. 23,000 crore.

Environment: Water borne diseases like Cholera and Gastro-enteritis play havoc in Delhi every year. There were 945 and 67,101 reported cases of Cholera and Gastro-enteritis respectively in 2005¹².

Delhi had 2.55 million households (13.8 million population) in 2001. On an average, 75.72 per cent of the households in Delhi had piped water supply, 20.06 per cent depended on hand pumps/tubewells and the remaining 4.22 per cent used wells, rivers and canals for drinking water.¹³ However, despite 75 per cent of the houses having been connected to piped water supply system, the quantity and quality of water is far from satisfactory. Although the treatment capacities have increased from 2 MGD¹⁴ in 1951 to 337 MGD in 1991 and to 600 MGD in 2000, the average current shortfall is about 276 MGD. Deteriorating surface (Yamuna River) and ground water quality is one of the most serious environmental problems for NCT of Delhi. This is accentuated by urban air pollution, lead exposure and

¹² Various reports of DGHS GNCTD, Delhi Development Report, Planning Commission GOI, p. 284

¹³ Delhi Statistical Handbook, 2002. Delhi Development Report, Planning Commission GOI, p. 287

¹⁴ Million Gallons per day

climate changes causing many diseases like lung and skin cancer, brain disorders etc. Several initiatives have been taken up; conversion of public transport system to CNG based system, introduction of Metro Rail, Yamuna Action Plan and relocation of hazardous industries are some steps in this direction. There is still hope that we haven't reached the point of no return in destructing our environment.

Education: From lowering fertility rates to aiding better understanding of healthcare, from making rational allocations to protecting the environment, *education* forms the base of sustaining any system for the society. As explained earlier, the system is interlinked – and education aids better understanding of all the factors involved. This can be seen from Kerala's example; high literacy rates have resulted in the lowest fertility rates and sex ratios. An educated family would be more aware of health concerns, take necessary precautions and access medical care timely. They also tend to be more judicious users of resources, preventing wastage and pollution.

A healthcare system, no matter how efficient, cannot reach every doorstep. The attempt has to be directed in creating educated and aware individuals – apart from smoothening the functioning of the system, this would also protect vulnerable patients from being cheated by medical quacks and being sold fake/expired drugs.

Chapter 2

Research Design

2.1 INTRODUCTION

A Research Design is the framework or plan for a study, which is used as a guide in collecting and analyzing the data collected. It is the blue print that is followed in completing the study. The basic objective of research cannot be attained without a proper research design. It specifies the methods and procedures for acquiring the information needed to conduct the research effectively. It is the overall operational pattern of the project that stipulates what information needs to be collected, from which sources and by what methods.

2.2 TITLE OF THE STUDY

Healthcare in Delhi; The appreciation deserved and criticism justified

2.3 STATEMENT OF THE PROBLEM

This study was undertaken to understand the structure and functioning of the Department of Health and Family of the Delhi Government. Various aspects such as government hospitals, DHS, CATS, IHBAS etc. were studied (policies, fund allocation, manpower, quality) through extensive theoretical research. A survey was undertaken amongst people who have received treatment at four government hospitals; **Guru Teg Bahadur Hospital, GB Pant Hospital, Lok Nayak Hospital and Baba Saheb Ambedkar Hospital**. This aided in supplementing government data with patient responses; a comprehensive outlook could hence be presented on the quality of these hospitals based on predetermined parameters.

2.4 OBJECTIVES OF THE STUDY

- Study the structure and function of the Department of Health and Family Welfare, Government of Delhi
- Study various arms of the department like DHS, CATS, IHBAS etc.
- Understand the functioning of government hospitals – facilities, quality of services, patient care, drug and equipment availability etc.
- Identify the lacunae in the healthcare system of Delhi with focus on these four hospitals and make recommendations for improving the overall system
- Study the concept of health insurance and its application in the form of successful schemes running in Delhi. This will be used as a base to make recommendations.
- Study cases of initiatives taken in other states (Kerala) and assess applicability in the overburdened scenario of Delhi.

2.5 RESEARCH METHODOLOGY

2.5.1 Type of Data collected

There are two types of data used. They are primary and secondary data. Primary data is defined as data that is collected from original sources for a specific purpose. Secondary data is data collected from indirect sources¹⁵.

A) Primary Sources - These include the survey or questionnaire method, telephonic interview as well as the personal interview methods of data collection.

B) Secondary Sources - These include books, the internet, company brochures, product brochures, the company website, competitor's websites etc, newspaper articles etc.

¹⁵ Marketing Research, Sumathi and Saranavel

2.5.2 Sample Size and sampling technique

The sample size for the survey conducted was **200 (50 respondents from each hospital)**. Convenience sampling technique was used in the survey conducted.

2.5.3 Plan of analysis

Tables were used for the analysis of the collected data. The data is also neatly presented with the help of statistical tools such as graphs and pie charts. Percentages and averages have also been used to represent data clearly and effectively.

2.5.4 Limitations of the study

- ❖ The study was limited only to four out of 36 hospitals run by the Delhi Government
- ❖ Only one or two days were spent at each hospital collecting data
- ❖ The study is based on the assumption that information provided by the respondents is true.
- ❖ The study is restricted to 50 respondents in hospitals having a daily influx of 800-1000 patients. **Hence, this data is not being used to prove a point, but only to supplement secondary data and give an idea of the situation.**

Chapter 3

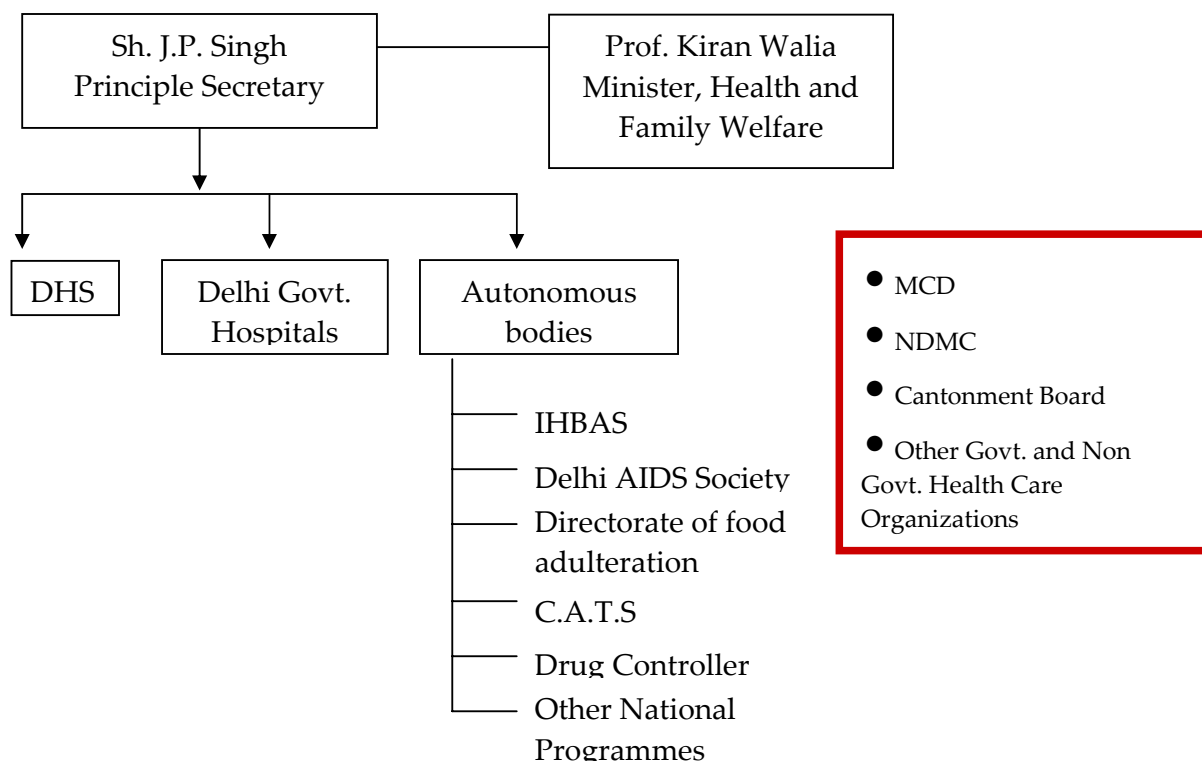
Theoretical Framework

3.1 The Department of Health and Family Welfare, GNCTD

Health & Family Welfare Department of Govt. of NCT of Delhi has tremendous health care responsibilities. The department caters to health needs of nearly 170 lakh population of the ever-growing metropolis and also has to share the burden of migratory as well as floating population from neighbouring states which constitute nearly 33% of total intake at major hospitals in Delhi. The department plays a significant role and is committed to provide health care facilities to the people of Delhi.

The Department of Health & Family Welfare of Government of NCT of Delhi is headed by the Principal Secretary. He is the controlling authority for Directorate of Health Services, Department of Health & Family Welfare; all Hospitals under Government of NCT of Delhi; Autonomous Bodies under Government of NCT of Delhi like IHBAS, Delhi AIDS Society, CATS; Directorate of Food Adulteration; Drug Controller and other National Programmes. This department liaisons with all other local bodies viz MCD, NDMC, Cantonment Board and other Government and Non Government Health Care Organizations functioning in the State of Delhi. The Principal Secretary coordinates for the Government of NCT of Delhi with the Ministry of Health & Family Welfare, Government of India. Directorate of Health Services is the nodal agency among the health care providers of Government of NCT of Delhi in the matters of establishment of hospitals and dispensaries, implementation of various National and State programmes related to Medical and Public Health and for prevention, control and eradication of major diseases.

Structure of the Department



3.2 Directorate of Health Services (DHS)

Directorate of Health Services (DHS) in the Department of Health and Family Welfare coordinates implementation of various National and State Health programmes and regulates the health services being provided by Registered Private Nursing Homes. The Department is headed by Principal Secretary who is assisted by one Special Secretary and two Additional Secretaries. DHS, a subordinate office headed by Director, has overall control over CPA and Central Store. CPA is assisted by Technical Committee (TC)¹⁶, Sample Evaluation Committee (SEC)¹⁷ and Special Purchase Committee (SPC)¹⁸ for procurement of drugs and surgical items. An Equipment Procurement Cell (EPC) established in 1999, procures medical equipment costing more than Rs. five lakh. EPC is headed by an Additional Secretary who is assisted by three committees, namely Technical Advisory Committee¹⁹, Technical Evaluation Committee²⁰ and Purchase Committee²¹.

The DHS is the largest department under Department of Health and Family Welfare, Govt. of NCT of Delhi providing health care facilities at primary and secondary level to the citizens of Delhi through various types of health outlets, spread all over Delhi viz. Dispensaries and Health Centres, School Health Clinics and Mobile Health Clinics. For better administration, Delhi is divided into 8 districts, each headed by one Chief District Medical Officer (8 CDMOs) who are under administrative control of DHS and the CDMOs are responsible for monitoring the functioning of health centres / dispensaries in their respective Districts.

However, in spite of the extensive nature of operations, the DHS suffers from some glaring inefficiencies. In an audit conducted by the **Comptroller and Auditor General of India (CAG 2008)**, it was noted that DHS was not monitoring performance of CPA and the Central Store and there were stock outs in hospitals and dispensaries.

The dispensaries were sending manual reports/returns to DHS (through CDMOs) about OPD attendance, staff strength, stock-outs, status of lab equipments, etc. These returns were not sent to the Central Store who was responsible for procurement of drugs and awarding maintenance contracts for lab equipments in dispensaries. Thus the store was not aware about stock-outs of essential drugs and status of lab equipments for which AMCs²² was to be awarded.

- There were stock outs of essential drugs in each of 25 selected dispensaries and non-functional equipments in 13 dispensaries.
- DHS had incurred an expenditure of Rs. 98.35 lakh in March 2006 for computerization of 38 wings (non-hospital component) including CPA and Central Store. However, CPA and the Central store could not operationalise any module till September 2008 though developed by the firm in June 2006.
- Lab equipments remained non-functional for a period ranging from one month to five years during 2003-08 in 13 dispensaries as detailed in the following table:

¹⁶ Responsible for evaluation of tenders and recommends acceptance/rejection of firms

¹⁷ Responsible for examining samples as per specification of items mentioned in tender document

¹⁸ Responsible for taking final decision of selection/rejection of firms

¹⁹ Responsible for cost effectiveness of purchases and advice on maintenance /repairs of equipments

²⁰ Responsible for evaluation/acceptance/rejection of technical bids, demonstration of equipments

²¹ Responsible for finalization of purchase proposals and justification for its recommendation for purchase

²² Annual Maintenance Contract

S. No.	Name of Dispensary	Name of non-functional equipment	Period of non-functionality (in months)
1.	Laxmi Nagar	Electronic Microscope	3.5
2.	Vasundhara Enclave	Semi auto blood analyser	5
3.	Paschim Vihar	Urine analyser	60
		Hemoglobin-o-meter	48
		ESR analyser	1
4.	Sultanpuri	Glucometer theft*	4
5.	Mangolpuri	Urine analyser	7
6.	Sagarpur	ESR analyser and HB meter	13 and 4
7.	Dwarka Sector-12	Microscope	4
8.	Gulabi Bagh	Electrolyte analyser	12
9.	Seelampur	Microscope	13
10.	Dilshad garden	Electrical Microscope	16
11.	Nabi Karim	Lipid analyser	2
12.	Madipur	All lab equipments	60**
13.	Tajpur	X ray machine and film processor	15***

Source: Performance audit, Deptt of Health and Family Welfare, CAG report 2007-08

* The dispensary lodged a FIR on account of theft of Glucometer

** Due to non posting of lab technician

*** Due to non posting of radiographer

Further, a selected 12 essential drugs²³ which should normally be available in dispensaries were found to be out of stock from 2003-04 to 2007-08. In the absence of any fixed norms, maintenance of buffer stock was left to discretion of each dispensary; as a result 14 dispensaries were adding quantity of 10 to 50 *per cent* drugs while preparing their estimates for the next four months whereas in case of remaining 11 dispensaries no buffer stock was maintained.

3.3 Centralized Accident and Trauma Services (CATS)

Accidents are one of the major causes of death worldwide. The first few moments after an accident are crucial, proper care immediately after an accident till the time medical care is received goes a long way in reducing the incidence of fatality and disabilities.

In Delhi alone, there has been a 132 percent increase in the number of cars in the past ten years, and everyday around 1000 new cars join Delhi roads. Furthermore, the national capital tops in road accidents in the metros, with pedestrians accounting for almost half the fatalities.

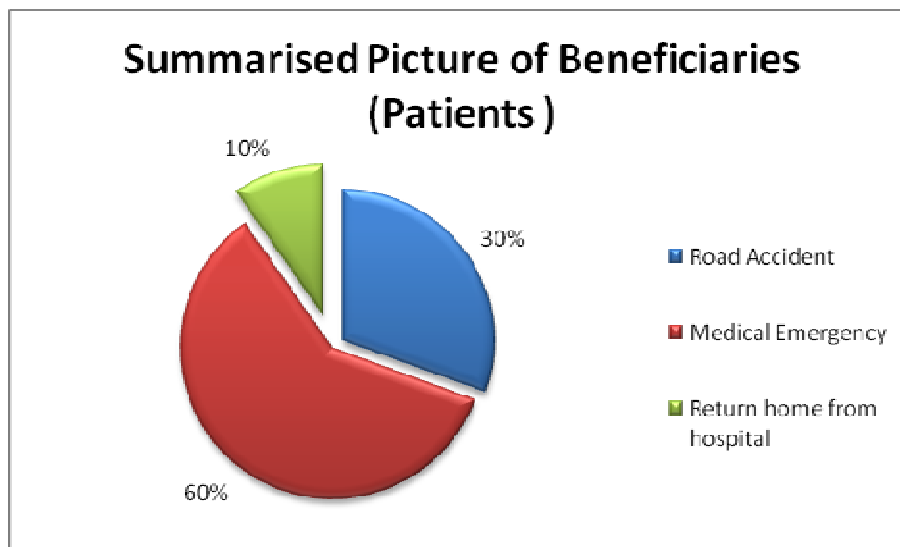
With the objective of providing first aid and emergency services to the patient, quick and safe transportation of patient to the hospital, and liaise with other agencies such as Delhi Police, Delhi Fire Service for proper care of accident victims, the Centralized Accident and

²³ Tab. Paracetamol (anti-pyretic), Syp. Paracetamol (essential anti-pyretic for children), Tab. Diclofenac Sodium (analgesic), Tab. Cetrizine (anti-allergic), Cap. Amoxicillin (anti-biotic), Syp. (antibiotic for children), Tab. Ferrus Sulphate and Folic acid (iron combination very essential for ante and post natal care), Tab. Enalapril (Antihypertensive), tab. Metformin (Insulin and Anti-diabetic), Ointment Clotrimazole (anti-fungal ointment for local application, Injection Tetanus Toxoid (immunological injection also essential in ANC), Soln. Salbutamol for nebuliser (anti-asthmatic).

Trauma Services (CATS) was conceptualized in Delhi as a plan scheme in 1984 during the 6th Five Year Plan. Implemented under the aegis of All India Institute of Medical Sciences (AIIMS), the idea came into execution in 1991 with 14 ambulances and the subsequent establishment of the CATS society by the Delhi administration.

Originally running from 4 centres in West Delhi, the ambulances under CATS are now stationed in 21 strategic points throughout the NCT of Delhi. The ambulances are equipped with wireless equipment and other sophisticated first-aid equipments like collapsible stretcher-cum trolley, manual suction pump, medical antishock trousers, inflatable air-splints pneupacs²⁴, oxygen cylinder, resuscitation bags, first-aid kits etc. The control room situated in Trauma Centre at Metcalf Road is fitted with state of the art wireless equipments along with 10 MTNL lines for emergency response. The ideal response time ranges from 10-20 minutes.

Delhi is the only metro to have launched this type of service, which is proving to be very beneficial particularly to the trauma victims.



Source: Report of Evaluation study on CATS, February 2001. Evaluation unit, planning deptt, Govt. of Delhi.

3.4 Institute of Human Behaviour and Allied Sciences (IHBAS)²⁵

It is an apex institution of psychiatry, neurology, and behavioural sciences having a multidisciplinary approach consisting basically of three objectives:

1. To provide tertiary level facilities in the field of psychiatry, neurology, neurosurgery and allied subjects, along with a mix of primary and secondary care through community outreach programmes.
2. To provide training to medical and paramedical personnel in the aforementioned fields.
3. To conduct advanced research in basic and complex issues related to psychiatry, neuro and behavioural sciences.

The institute came into existence in 1993-94, after taking over the administration of Hospital for Mental Diseases. Growing from a modest size, the institute has established itself as one of the largest and reputed centre for neuropsychiatric diseases in North India.

²⁴ Respiratory ventilator designed for short- or long-term ventilation

²⁵ IHBAS Annual Report 2005-06

There has been a gradual increase in number of patients, 1.97 lakh outpatients were registered during 2005 which was 11.3% more than the previous year. **This was accompanied by a reduction in waiting time (registration) of patients from 45 minutes to 30 minutes. In-patient and emergency services witnessed growth, with around 10,000 patients attending emergency services during the year.**

Apart from OPDs, special clinics are conducted in the afternoon for patients who require special attention and comprehensive approach for different disorders.

- Child and Adolescent Psychiatry Clinic provides services to the psychiatric and behavioural problems (for eg. ADHD) in children upto 16 years of age. There was a 20.2% increase in attendance with 2992 children and adolescents attending the clinic, with involvement of parents from time to time
- Mental Retardation Clinic provides Information regarding medical, family and social needs of the mentally retarded children is imparted to their parents by organizing special parent training programmes. 22.7 % increase in cases occurred with total of 4346 patients availing the services through this clinic.
- Tobacco Cessation Clinic - This clinic is part of a national tobacco cessation initiative by the Ministry of Health and Family Welfare, Government of India, and the World Health organization. 533 patients utilized the services of the clinic with increase of 42.9%.

The institute has been consistently involved in community outreach programmes, week long mental health awareness campaign and Dementia Awareness campaign were organized during 2005. A large number of psychiatric disorders are managed at these community services. The common problems reported by the patients attending these services include depression, anxiety depression, obsessive compulsive disorders, other anxiety disorders, dissociative disorders, schizophrenia, bipolar illness, post - partum psychosis, dementia and substance abuse.

3.5 Health Insurance in Delhi

On July 19, 2008 Delhi Chief Minister Sheila Dikshit Saturday formally launched a government scheme to provide health insurance to people living below poverty line (BPL). The Rashtriya Swasthya Bima Yojana (RSBY)²⁶ was launched by distributing smart cards to BPL families that would enable them to avail free treatment in more than 80 private hospitals and private nursing homes. The chief minister said all the 28,000 BPL families holding ration cards in the city will get the smart card.

Apart from the treatment cost, the beneficiaries would be entitled for a transport allowance upto Rs.100 for commuting to and from hospitals, with a maximum limit of Rs.1,000 per annum. A family of five would be able to avail medical treatment upto a limit of Rs.30,000 per annum.

As per the latest update on the RSBY scheme, 9 districts have been covered in Delhi with a total of 41,990 smart cards distributed²⁷. The following hospitals have been covered under the scheme in collaboration with the **Oriental Insurance Company**:

- Central district – 8 hospitals

²⁶ Under the Union Budget 2009-10, the Finance Minister has proposed an increase in budgetary allocation for the RSBY by 40% to 350 crore.

²⁷ 12/07/09, Ministry of Labor and Employment, GOI website

- East district – 11 hospitals
- North district – 18 hospitals
- South district – **none**
- North east district – **none**
- South west district – 3 hospitals
- New Delhi district – **none**
- North west district – 20 hospitals
- West district – 33 hospitals

Hence it can be seen that the scheme has been implemented very well. As against a proposed coverage of 28,000 BPL families and 80 hospitals, the scheme has covered around 42,000 families and 93 hospitals all over Delhi. However, districts like south, north east and new delhi district remain completely uncovered by the scheme.

About the Scheme

The Rashtriya Swasthaya Bima Yojna is a Central Government Scheme announced by Prime Minister Manmohan Singh on August 15, 2007. The majority of the financing, about 75 per cent, is provided by the Government of India (GOI), while the remainder is paid by the state government. State governments engage in a competitive bidding process and select a public or private insurance company licensed to provide health insurance by the **Insurance Regulatory Development Authority (IRDA)**. The technical bids submitted must include a number of elements as per GOI requirements. The insurer must agree to cover the benefit package prescribed by GOI through a cashless facility that in turn requires the use of smart cards which must be issued to all members.

The insurer must also provide a list of empanelled hospitals that will participate in the cashless arrangement. These hospitals must meet certain basic minimum requirements (e.g., size and registration) and must agree to set up a special RSBY desk with smart card reader and trained staff. The list should include public and private hospitals.

BPL families are entitled to more than 700 in-patient medical procedures with a cost of up to 30,000 rupees per annum for a nominal registration fee of 30 rupees. Pre-existing medical conditions are covered and there is no age limit. Coverage extends to the head of household, spouse and up to three dependents. The dependents would include such children and/or parents of the head of the family as are listed as part of the family in the BPL database. If the family size is more than five, the head of the family would decide as to who all should be left out.

How it works

An electronic list of eligible BPL households is provided to the insurer according to a pre-specified format. The list is posted in each village prior to the enrollment and the date and location is publicized in advance. Mobile stations are set up at local centers (e.g., public schools). These stations are equipped with the hardware required to collect biometric information (fingerprints) of the members of the household covered and to print smart cards with a photo. The smart card along with an information pamphlet describing the scheme and the list of hospitals is provided on the spot once the beneficiary has paid the 30 rupee fee.

The process takes less than ten minutes.

Three individuals must be present at each enrollment: A district-level, state government

officer is present and must insert his own, centrally-issued smart card to verify the legitimacy of the enrolment. (In this way, each enrollee can be tracked to a particular state government official). In addition, a smart card vendor and insurance company representative must be present. At the end of the day of enrolment, the list of households issued smart cards is sent to the state government and centralized at the district level.

The smart card entitles its bearer to a list of pre-specified in-patient services in the second month following enrollment. So, for example, someone enrolled in the month of February can use the card at designated hospitals as of April 1st of the same year through March 31st of the following year. (Provisions exist for pro-rata premium payments to the insurance company in the event of partial year enrolment subject to a minimum of six months.) The transaction process begins when the member visits the participating hospital and his or her card is swiped. If a diagnosis leads to a procedure, the appropriate prescribed package is selected in the software menu. Upon release, the card is again swiped and the pre-specified cost of the procedure is deducted from the 30,000 rupee total on the card. A receipt is printed and provided to the member.

The OPD facilities are not covered under this scheme. However, OPD consultation is free. Beyond consultation, if any expenditure is incurred in the OPD, which does not lead to hospitalization, will be met by the beneficiaries. Common exclusions have been listed out in the detailed Guidelines. These common exclusions include:

- Conditions that do not require hospitalization
- Congenital external diseases
- Drug and Alcohol Induced illness
- Sterilization and Fertility related procedures
- Vaccination
- War, Nuclear invasion
- Suicide
- Naturopathy, Unani, Siddha, Ayurveda

Chapter 4

Analysis and Interpretation

As per the Drug Policy (April 1994) of Delhi Government, a limited list of carefully selected drugs should always be available at all health centers and hospitals of Delhi state. These drugs should be procured at reasonable prices thus enabling the drug budget to be used for larger number of persons.

A procurement cell, Central Procurement Agency (CPA) for drugs was set up under the state Drug Authority in 1994, later transferred to the DHS (March 2000) with the objective of procuring high quality drugs and other medical stores at competitive rates for hospitals/autonomous bodies/dispensaries. In addition, CPA also finalized rate contract with firms for lab testing of samples of drugs and surgical items. Central store under the control of DHS carried out procurement, storage and distribution of medicine and surgical items for 188 dispensaries. Procurement of drugs and surgical items was done on the basis of the rate contract finalized by CPA. An Equipment Procurement Cell (EPC) established in 1999, procures medical equipment costing more than Rs. five lakh.

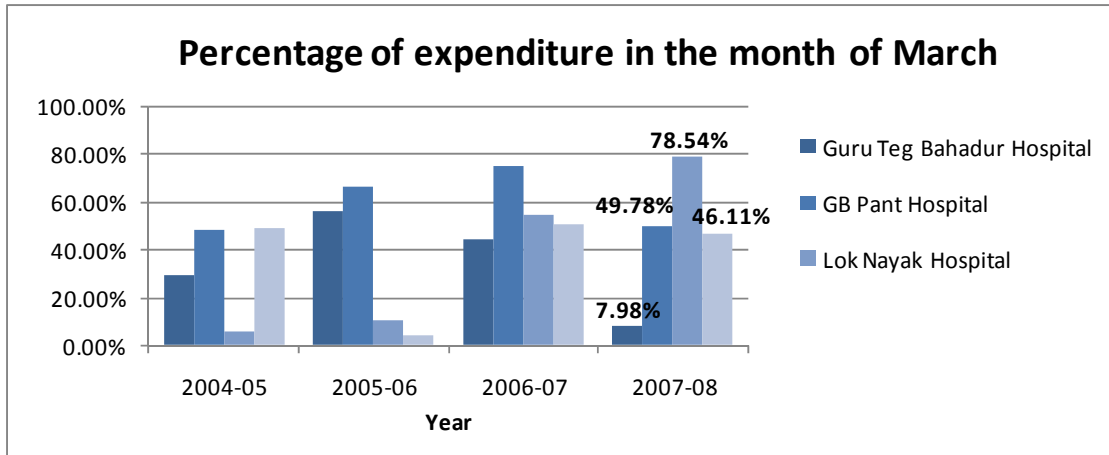
4.1 Lacunae identified at the studied hospitals – GTBH, GBPH, LNH & BSAH

4.1.1 Lack of Budgetary control

- There was no separate detailed head for procurement of drugs and surgical items and equipments in the detailed demand for grant for the department. Budgetary allocation was being done for two heads, namely supplies and material and machinery and equipments. Under supplies and material head, expenditure on drugs, surgical items and other miscellaneous expenditure were being booked making it difficult to ascertain exact amount incurred by the department annually on procurement of drugs and surgical items separately.
- Similarly, expenditure on drugs, surgical items and equipments during the years 2003-08 were booked under both "supplies and material" and "opening of health centres" by the Central Store. Further, during 2003-08, DHS imposed a penalty of Rs. 33.55 lakh in 330 cases on suppliers during 2003-08 for delayed supplies, which was utilised for purchase of drugs and other miscellaneous items. But DHS had booked net expenditure (gross amount payable to suppliers minus penalty imposed for delay in supply) under these heads.
- Savings ranging up to 39 *per cent* in the grant were not surrendered during 2003-08 indicating that expenditure could not be planned and estimated properly.

4.1.2 Rush of Expenditure

According to Rule 56(3) of General Financial Rule, rush of expenditure, particularly in the closing months of the financial year, shall be regarded as a breach of financial propriety and shall be avoided. In the studied hospitals the percentage of expenditure incurred during March under M&E head ranged up to 78.54 *per cent* during 2003-08 as per the details given below:



In GBPH, the percentage of expenditure incurred during March showed increasing trend from 47.69 *per cent* (2004-05) to 74.70 *per cent* (2006-07), whereas in GTBH it went upto 55.56 *per cent* during 2005-06, in LNH, 54.03 *per cent* and in BSAH, 50.60 *per cent* during 2006-07. In fact, LNH spent 78.54 *per cent* of its budget in the month of March 2007-08 in violation of the GFR provision *ibid*.

4.1.3 Procurement manual and guidelines not documented

As per the CVC guidelines, a more transparent and effective system must be adopted for tendering process for procurement. All departments and organizations should prepare codified purchase manuals and instructions containing detailed purchase procedures, guidelines and also proper delegation of powers so that there is a systematic and uniform approach in decision-making. **CPA, the Central Store, EPC, GTBH, GBPH, LNH and BSAH had no documented written procedure and practices on procurement.**

Similarly there were no guidelines for preparing estimated requirements or emergency procurement. In the absence of comprehensive procurement guidelines, the systems being followed were ad-hoc.

4.1.4 Procurement of drugs and surgical items

Drug Policy of 1994 of the GNCT of Delhi aimed at achieving the following goals for procurement of drugs and surgical items: (i) preparation of Essential Drug List (EDL)²⁸ for the three levels of health care i.e. primary, secondary and at tertiary hospital; (ii) organizing central procurement of drugs; (iii) establishment of centralized procurement, storage and distribution system; (iv) quality assurance of the drugs and surgical items purchased and stocked; and (vi) monitoring and evaluation of the programme.

Further, the policy envisaged that there would be pooled procurement of drugs on the list of essential drugs for all hospitals in Delhi State by establishing a Central Drug Procurement Storage and Distribution Center. The pooled procurement programme was to be implemented in three phases²⁹. However, Central Procurement Agency (CPA) set up in 1994

²⁸ EDL represents a list of minimum generic drugs needed for a basic health care system, listing the most efficacious, safe and cost-effective drugs for priority conditions with the objective of providing drugs to maximum number of patients.

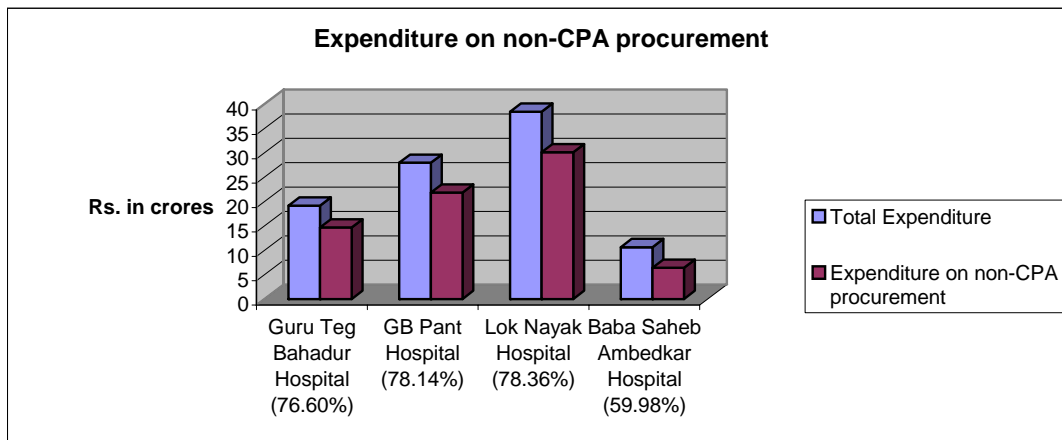
²⁹ **Phase I-** Rate contract to be prepared centrally by the Central Procurement Agency for drugs to be ordered
Phase-II- Drugs for all hospitals to be ordered centrally but drugs delivered to hospitals directly
Phase-III- After establishment of computerized environment, all drugs would be ordered and stored centrally and distributed to hospitals therefrom.

and subsequently transferred to DHS (March 2000) with the objective of procuring high quality drugs and other medical stores at comparatively low cost, failed to cater the needs of the hospital/autonomous bodies.

4.1.5 Expenditure on non-CPA procurement

As per the drug policy of Delhi government, only 10 *per cent* of total budget would be spent on procurement of non-CPA drugs. None of the studied hospitals were maintaining details of expenditure incurred on CPA and non-CPA items separately.

In 2006-07 all the hospitals incurred more than 10 *per cent* of expenditure on non-CPA items as detailed below:

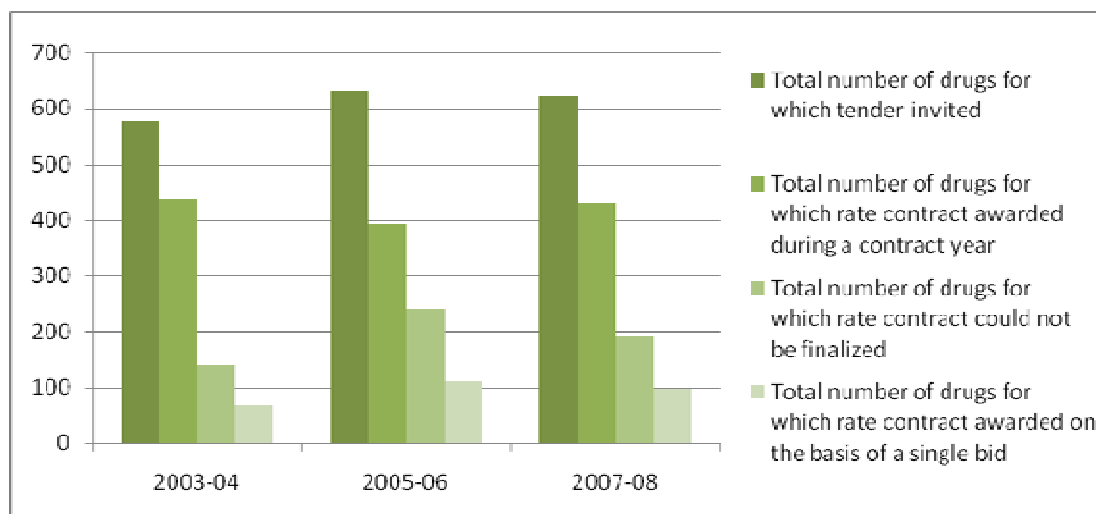


It could be seen that all hospitals exceeded limit of 10 *per cent* for purchase on non-CPA items during 2006-07 and percentage of expenditure on non-CPA items ranged from 57.91 to 78.36 *per cent* of their budget on supplies and material.

4.1.6 Award of rate contract for drugs without obtaining competitive bids

The Special Purchase Committee (SPC) of CPA noted that seven out of eight samples which failed in quality control tests were of the firms whose annual turnover was less than Rs. 20 crore. Hence it recommended on 15 October 2004 an **increase in minimum turnover from existing Rs. 12 crore to Rs. 35 crore per annum** in immediate preceding two years and a minimum of three years of manufacturing and marketing experience for a firm to become eligible to participate in the tendering process in respect of supply of drugs.

As a result, it was observed that 15 to 28 *per cent* of the total rate contracts were finalized on single bid only in the three tenders floated during 2003-04 to 2007-08 as indicated in the table below :



Thus, an increase in criteria of turnover from Rs 12 crore to Rs 35 crore lowered the competition to a large extent in subsequent tenders.

4.1.7 Stock out of essential drugs and surgical items

As per instructions of CPA, the hospitals while placing their supply orders for the next four months should keep buffer stock for three months to meet the demand in case of emergency/delayed supply³⁰/non-supply³¹ to prevent stock out of essential drugs and surgical items. There was no realistic basis of assessment of requirement in GTBH, GBPH, LNH and BSAH. Also, there was a delay in sending their requirements to CPA by GTBH, GBPH and BSAH. **18 selected essential drugs were out of stock in all studied hospitals** during 2003-08. Even essential drugs were not available for periods ranging from one month to three and half years.

Hospital	Number of surgical items out of stock	Number of days of stock out during 2003-08
Guru Teg Bahadur Hospital	13	60-1110 days
GB Pant Hospital	20	31-837 days
Lok Nayak Hospital	3 (out of 18 selected)	8-72 days
Baba Saheb Ambedkar Hospital	18 (randomly selected)	31-541 days

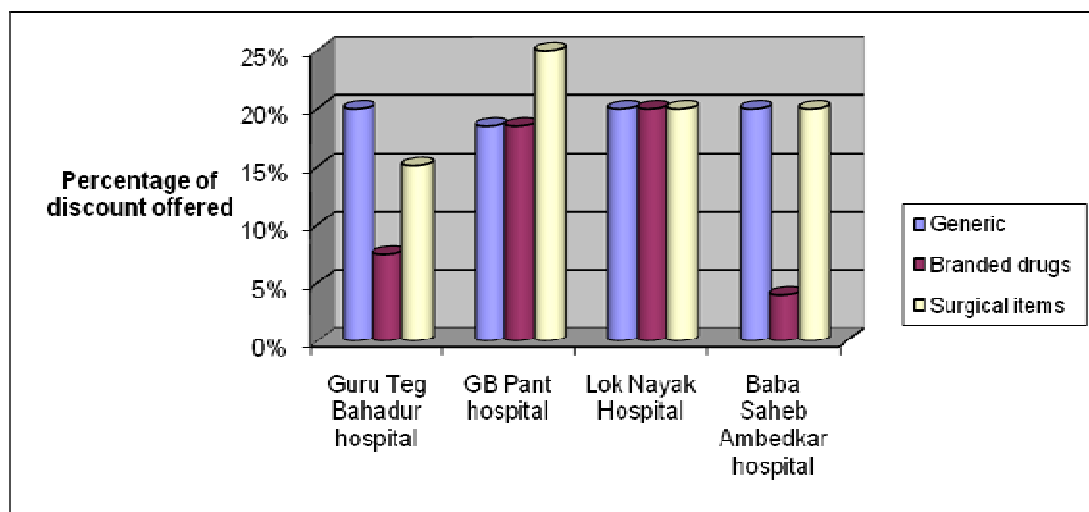
The stock out of essential drugs was further compounded by lackadaisical approach of the purchase department for making these available to needy patients in timely manner and thus adversely affecting delivery of health services.

4.1.8 Local purchases made through chemists by various hospitals

There were no guidelines defined for purchase of drugs from the local chemists. The items not available in the drug store were normally purchased for specific patients on the basis of written prescription of the attending physician. There was variation in discount rate at which hospitals procured drugs, surgical items, devices and implants from local chemists as detailed below:

³⁰ Drugs received within 14 days after permissible time of 42 days of supply order with levy of penalty.

³¹ Drugs not received after 56 days of placing supply order, could be treated as a case of non supply



It would be seen from above that the rates of discount offered by local chemists varied from four to 25 *per cent*. Further, during the same period (2007-08) BSAH was getting a discount of only four *per cent* on branded drugs while the LNH was getting 20 *per cent* discount.

4.1.9 Overburdened pharmacy counter

As per committee report on norms for manpower in 100/200 bedded hospitals for Government of NCT of Delhi 2003, a pharmacist can entertain 180 patients depending upon number of drugs per prescription. No such exercise seems to have been done to assess the requirement of pharmacy counters in the studied hospitals. However, scrutiny of records made available revealed that pharmacy counters were over burdened in all hospitals except GBPH during 2007-08 as detailed below:

Sl. No.	Hospital	Pharmacy counters	Average daily attendance of patients	Patients to counter ratio
1.	GTBH	8	4600	575:1
2.	LNH	9	3074	342:1
3.	BSAH	4	4192	1048:1

4.1.10 Poor reporting of test laboratories

As per the section 17 (A) (d) of the Drugs and Cosmetics Act 1940, any drug shall be deemed to be adulterated if it bears or contains, for the purposes of colouring only, a colour other than one which is prescribed. Further, Rule 58(i) envisaged that drugs not of standard quality shall be confiscated and destroyed.

Central Store had procured 9250 and 27000 bottles of drug namely *Chlorhexidine mouthwash* in December 2007 and April 2008. The sample had green colour which was other than prescribed brilliant blue **but was declared of standard quality by the testing lab**. In June 2008, the supplier replaced the entire batch due to discoloration on the instructions of Central Store. Instructions for stopping distribution of drug to patients was received in CDMO (North-East) office on 3 July 2008, which was further, communicated to dispensaries after a delay of 28 days. In contravention to above provisions 20,841 bottles were returned to the supplier in August 2008 instead of destroying the medicine as **balance was already issued to patients**.

Similarly, Central Store procured 18,000 vials (two batches) of *Sulphacetamide Eye drop* on 10 May 2007 under CPA rate contract. Samples of both batches were declared of standard

quality by two testing labs on 26 June 2007 and 27 July 2007 respectively **inspite of the fact that one batch was of pale yellow color and another batch was clear colorless solution.** In the meanwhile, both batches were issued to patients by various dispensaries. Further supply of 37,000 vials was received on 22 June 2007 by the Central Store. Test report of sample having pale yellow liquid was again declared of standard quality. All vials were issued to the dispensaries till April 2008. The Central Store stopped distribution (July 2008) after receiving a complaint from one of the dispensaries about the solution becoming turbid.

GTBH issued 3,09,160 tab. of *Diclofenac Sodium*, 22,000 tab. of *Phenytoin Sodium*, 6,875 bottle of *Paracetamol* syp and 7,000 bottle of *Promethazine* syp to patients which subsequently failed in lab testing. Similarly, the Central Store also distributed drugs to dispensaries for issue to patients without waiting for their quality test reports which resulted in consumption of sub-standard drugs by patients viz. 7679, 1370, 19138 and 17025 bottles of syrups *Calcium*, *Diphenhydramine*, *Promethazine* and *Cyproheptadine* respectively. Subsequently, the suppliers replaced the stock of unconsumed drugs in all these cases.

Further, instead of confiscating sub-standard drugs, hospitals and the Central Store allowed suppliers to replace the batches which increased the risk of these drugs being sold in the open market.

4.1.11 Inadequate action taken against firms supplying sub-standard drugs

As per agreement finalized by CPA with supplying firms, if a drug(s) supplied by the tenderer is found "Not of Standard Quality", the firm would be debarred from supplying that drug for a period of two years. Test check of records revealed that 22 samples of drugs and 4 samples of surgical items were found "Not of Standard Quality" during 2003-04 to 2007-08. Scrutiny of records revealed that there were seven manufactures whose samples of more than one drug failed to satisfy quality standards. Accordingly, these manufactures should have been debarred for supply of any drugs for the two years, however, audit noted that CPA failed to initiate action even after a period of more than 5 years and continued to issue supply orders to these manufacturers. **Further by allowing suppliers to replace sub standard drugs, chances for these appearing in local markets could not be ruled out putting at risk life of patients.**

4.1.12 Delay in installation of equipments

Hospital	No. of equipments	Time taken in installation			
		More than 6 months	3 to 6 months	1 to 3 months	Less than 1 month
GTBH	43	6	10	10	17
GBPH	35	14	12	6	3
LNH	48	9	6	16	17
BSAH	08	Nil	03	04	01

Guru Teg Bahadur Hospital : CT Scan machine installed at a cost of Rs. 4.25 crore in the GTBH on 27 March 2001 was not being utilized as per its capacity mainly due to non-availability of X-ray tube.

GB Pant Hospital : GBPH procured (July 2007) 18 ICU ventilators at a cost of Rs. 1.23 crore for providing resuscitation to serious neuro surgical patients requiring artificial respiratory support. 17 ICU ventilators were installed after 15 months (October 2008) of their receipt as the new modular OT ICU complex where these equipments were to be

installed was not ready. One ICU ventilator has not been installed as it was 'non-functional'. No action has been taken against the supplier till date.

Lok Nayak Hospital : LNH procured 10 Ceiling OT lights costing Rs 1.61 crore in June 2007 for use in emergency operation theatre. These lights could not be installed till October 2008 due to non-completion of work of operation theatre. Audit noted that the hospital had also imported two infant ventilators for Rs 13.22 lakh in June 2005, which have still not been installed after more than three years.

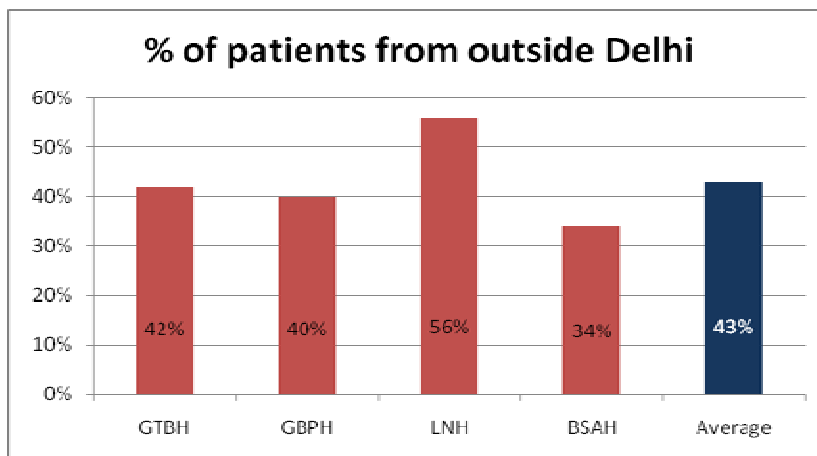
Baba Saheb Ambedkar Hospital : BSAH imported two multi parameter monitors in March 2005 by spending Rs. 10.70 lakh upto August 2008. The monitors could not be installed as of October 2008 as the accessories did not match and two paediatrics saturation probes were also short supplied. The equipment was still lying idle and no action has so far been taken against the firm.

4.2 Patients Point of View

A lot about the problems in the existing system can be gauged from the above data. However, like mentioned before, the aim of this paper is not just to highlight the failures but also identify the strengths in the system on the basis of which we can hope for a better future. A survey was conducted among patients at 4 of the largest Delhi Government hospitals. The attempt was to understand the overall experience of patients. 50 responses were collected from each of the four studied hospitals; the total 200 responses were then compiled to produce the following results.

4.2.1 Patients from Outside Delhi

The official Delhi Government statistics put migratory patients at 33% of the total intake at various healthcare institutions in Delhi. Since this study was limited to the large hospitals, it shows 43% people as patients from outside Delhi. Lok Nayak Hospital showed the highest number of outstation patients as against Baba Saheb Ambedkar Hospital. These patients are usually referred to physicians in Delhi by their counterparts in other states. However, some come to Delhi directly due to lack of facilities in their native places. This poses increased pressure on resources and services in the capital.

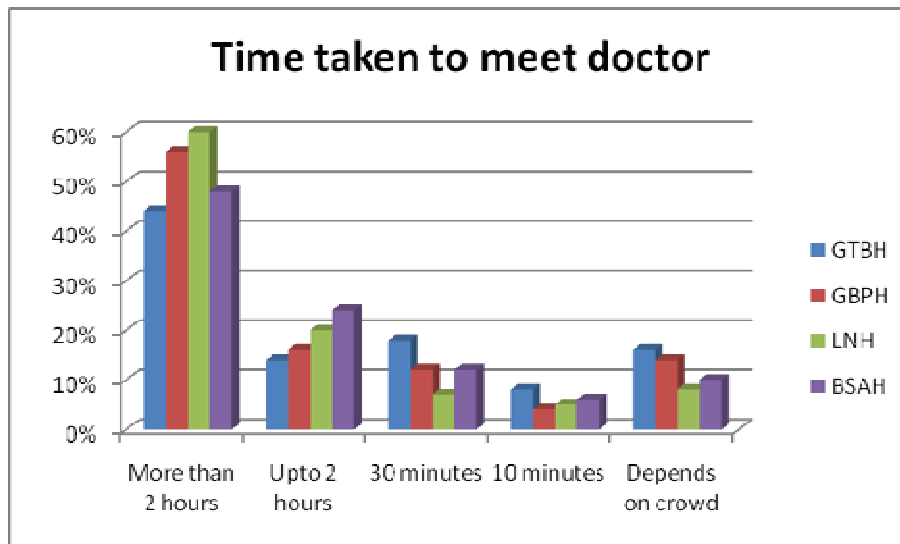


4.2.2 Time taken to meet the doctor

On an average, 50% of the patients had to wait for more than two hours to meet the doctor, going up to days and even weeks in some cases. Many patients had to come to the

hospital repeatedly for months to be able to get consultation. However, most of them understood this as a problem of overcrowding in the hospital. They do not blame anyone for this as they understand the doctor must give due attention and time to all patients and this would cause delay in the process.

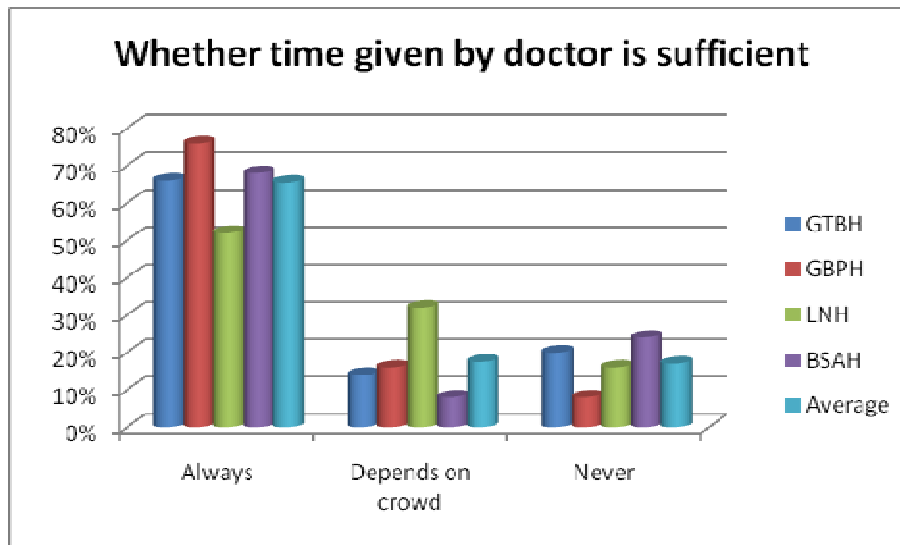
However, there was a particular case at Lok Nayak Hospital. A man in his late 70's, diagnosed with Tuberculosis was lying outside the emergency for the past 8 days. He was given relief when his problem got acute and then discharged again, repeatedly over the week. He was alone and seemingly had no place to go. On requesting for a referral card for the nearby Tuberculosis centre which would help him get admitted, it was denied. Like mentioned in the recommendations, a trustworthy and interlinked system has to be designed to cater to needs of such patients, who if left untreated, also pose as a hazard to people around them due to the communicable nature of disease.



4.2.3 Time and Attention given by the doctor

As shown by the figure below, most of the patients feel that the doctor provides sufficient time and attention to the patient. Even in cases when it is not possible, patients understand it to be because of overcrowding. On an average, 66% patients were satisfied, with about 17% feeling the doctor either gave time depending on the crowd, or never did.

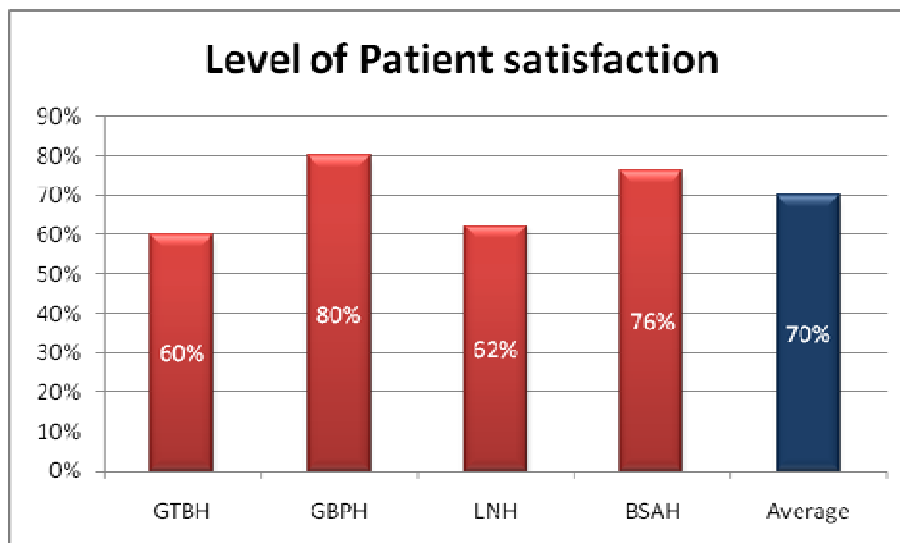
However, many variations were seen. While at GB Pant hospital, nearly 75% patients were very satisfied, at the adjoining Lok Nayak Hospital, the figure stood at 50%. A large number of patients at LNH felt the time and attention given by the doctor depended on the number of patients. This was not so at Baba Saheb Ambedkar Hospital, where about 68% patients were satisfied.



4.2.4 Level of Patient satisfaction

Though this is a very subjective matter, most of the patients interviewed were very happy with the treatment received at the respective hospitals. GB Pant showed a spectacular 80% patient satisfaction, with many patients saying private hospitals may be better in terms of cleanliness etc., but they can never compete with the medical staff here.

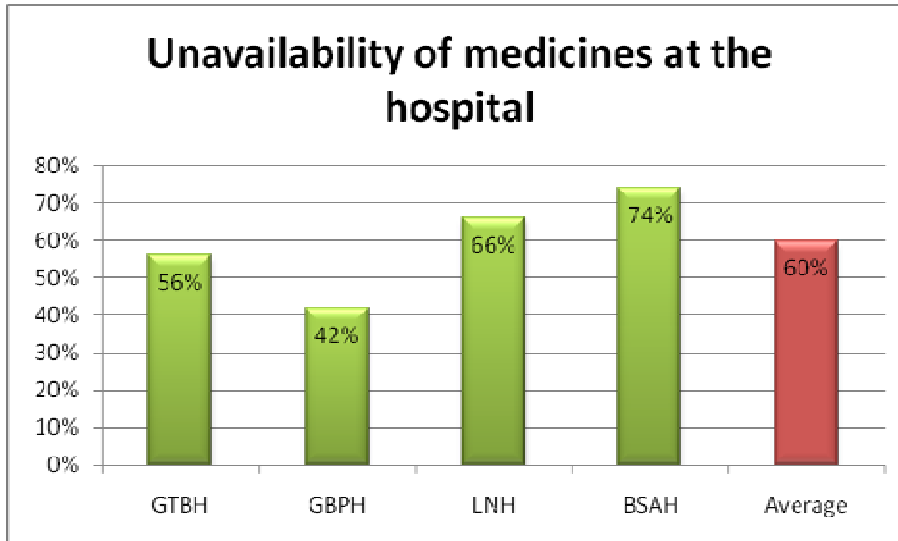
At Guru Teg Bahadur Hospital, many respondents complained regarding the attitude and malpractices of the class 4 employees and of unavailability of medicines – yet they were happy with the doctors and the treatment they received. Even at Lok Nayak Hospital, while overcrowding and lacking drugs were major reasons of concern, most of the patients continued to visit the hospital because of very good treatment.



4.2.5 Unavailability of medicines

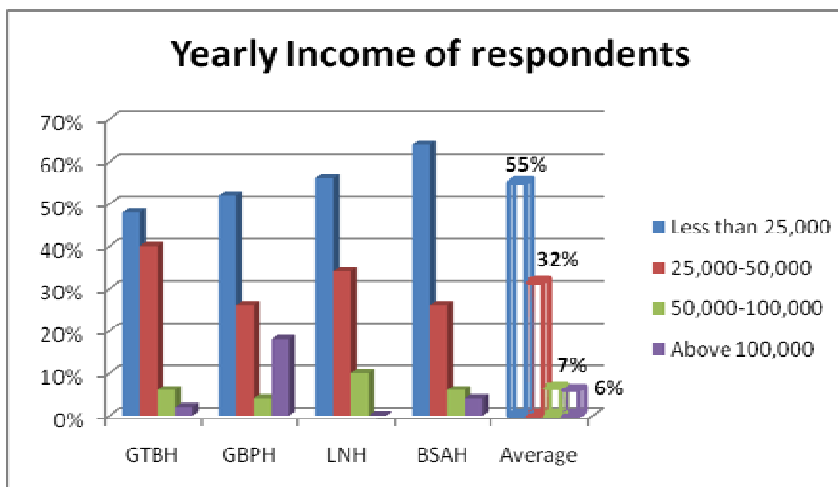
While a lot of variation can be seen across hospitals, but unavailability of medicines, especially the relatively expensive ones, proved to be the biggest problem faced by patients. At Baba Saheb Ambedkar Hospital, there was a strong feeling among respondents that there was a nexus between the hospital authorities/dispensary with chemists outside. For some

very expensive drugs, patients were promptly told to make purchase from outside as medicines were not available in the hospital. At Lok Nayak Hospital, many respondents complained of deteriorating standard of care and service; medicines were always available 5-10 years earlier as against nowadays. At Guru Teg Bahadur hospital, a large number of chemist shops were mushrooming right outside the hospital – named Guru Teg Bahadur dispensary – showing a flourishing market of medicines on sale outside when about 60% patients suffered because of unavailability inside.



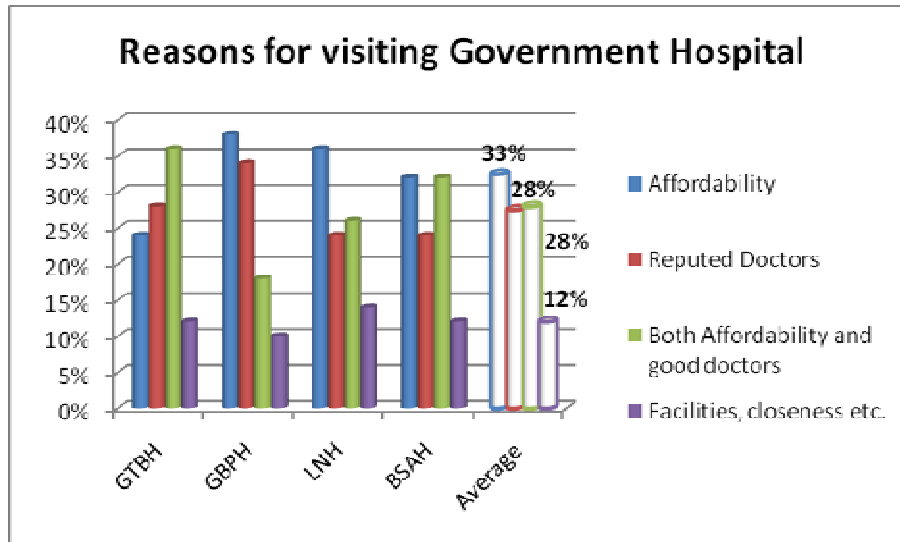
4.2.6 Yearly income of respondents

With about a 15% variation among various hospitals, on an average 55% of the respondents earn less than Rs. 25000 annually. A lot of them were casual labors, rickshaw pullers, vegetable vendors, and construction workers etc., who have variable income dependent on daily work. In this regard, the government hospitals form an immense support system for healthcare in the city. They provide free treatment and medicines to everyone who comes seeking for medical care. Even when procedures are performed, very minimal rates are charged for disposable supplies, equipment etc. Although 6% is a very small figure, especially with regard to this sample size, it being the percentage of patients earning above Rs. 100,000 annually and still visiting a Government hospital shows the faith in the institution because some of the city's best doctors work here. However, on an average, the Government hospitals cater to the economically weaker section of the society.



4.2.7 Reasons for visiting Government Hospital

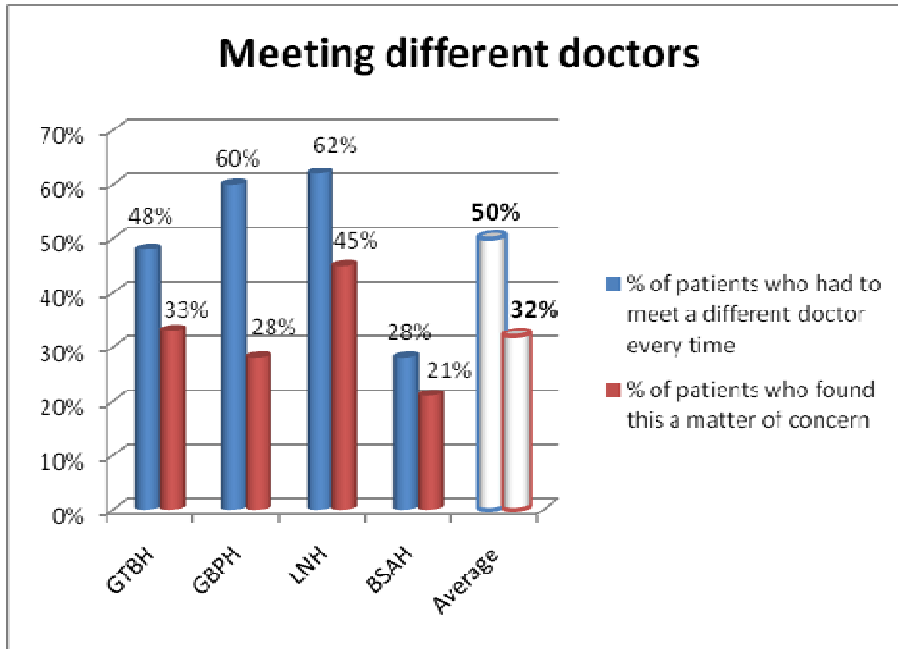
As mentioned above, affordability is the major consideration for visiting a Government hospital. In spite of various problems that patients have to face, getting free treatment from the best trained doctors available is very high incentive. In keeping with these preferences, one third of the patients turn to government hospitals only because they cannot afford to pay for treatment at a private clinic. Yet, a large 28% respondents visit a government hospital for the twin advantage of "Good and Cheap", as well as for the reputed doctors.



4.2.8 Meeting different doctors every time

Treatment for some diseases lasts over a long period of time. In such cases, it is preferable for the patient to meet the same doctor, as he doesn't have to repeat the history and the doctor has an idea about the patient's case. However, there is another view – the details of the patient, disease and treatment provided is mentioned in the card prepared by the doctor. This has to be carried to the hospital each time, and even if the patient meets another doctor, all information is available and treatment can be continued smoothly. But in this regard, more people are of the view that meeting the same doctor through the course of the treatment is better.

- Out of 48% respondents in GTBH who could not meet the same doctor, 68% felt this was a matter of concern; hence (68% of 48) 33% patients were concerned.
- Out of 60% respondents in GBPH who could not meet the same doctor, 46% felt this was a matter of concern; hence (46% of 60) 28% patients were concerned.
- Out of 62% respondents in LNH who could not meet the same doctor, 72% felt this was a matter of concern; hence (72% of 62) 45% patients were concerned.
- Out of 28% respondents in BSAH who could not meet the same doctor, 75% felt this was a matter of concern; hence (75% of 28) 21% patients were concerned.
- **On an average, 64% of the 50% patients (i.e. 32%) who had to meet different doctors found this as a matter of concern, and felt this interfered in the smooth process of treatment.**



Chapter 5

Recommendations

5.1 Create a trustworthy and interlinked system for providing healthcare³²

The National Capital Territory of Delhi has a “healthy” network of healthcare centers; 31 hospitals including 3 hospitals under ISM&H (Indian System of Medicine and Homeopathy), 174 Allopathic Dispensaries, 70 Mobile Van Dispensaries, 433 School Health Clinics, 20 Ayurvedic Dispensaries, 62 Homeopathic Dispensaries and 8 Unani Dispensaries³³.

However, these centers are far from networked.

There are two aspects of this problem, which are not necessarily mutually exclusive.

Firstly, there is a lack of trust in the system. Out of the host of centers mentioned above, many lie underutilized with as low as 40% occupancy rates, on account of lack of facilities, medicines and doctors. On the other hand, there are centers with as much as 200% occupancy rate, with patients sharing beds and lying on the floor. The reason clearly is the variability in services provided. A patient with a head injury enters hospital X and is turned out and asked to go elsewhere because the CT Scan is not functional. He dies on the way to hospital Y. The family will never go to X again, and directly visit Y in future. It is justified - Supply creating its own demand is probably the earliest economic principle known to mankind.

Secondly, the aspect, which is very closely related to the first, is the lack of links between these centers. In case of unavailability of medical personnel, equipment etc. at any one center, the patient is asked to leave for another hospital, which has the required facilities. The patient may be a resident of Delhi or may have been referred from another state. Irrespective, he/she is expected to arrange for transport to get to the right place. Two kinds of problems arise on account of this:

- In critical cases, there is high chance of death on the way.
- In not so critical cases, the entire process of finding one's way around a hospital, registering there and narrating the history to the doctor has to be repeated. A lot of time and money is spent in the process, apart from the inconvenience caused to the patient.

Through the course of this research, it was found that there is excessive pressure on the multi specialty government hospitals in Delhi. Based on the level of health service delivery and the approach to health care practice, healthcare is broadly divided into Primary, Secondary and Tertiary care. As defined by the **World Health Organization** in 1978, **primary care** provides both the initial and the majority of health care services of a person or population. It is the basis of a health care system, as seventy-five to eighty-five percent of the population seeks primary health care yearly. This is in contrast to **secondary health care**, which is consultative, short term, and disease oriented for the purpose of assisting the primary care practitioner. **Tertiary care** is for patients with unusual illness requiring highly specialized services.

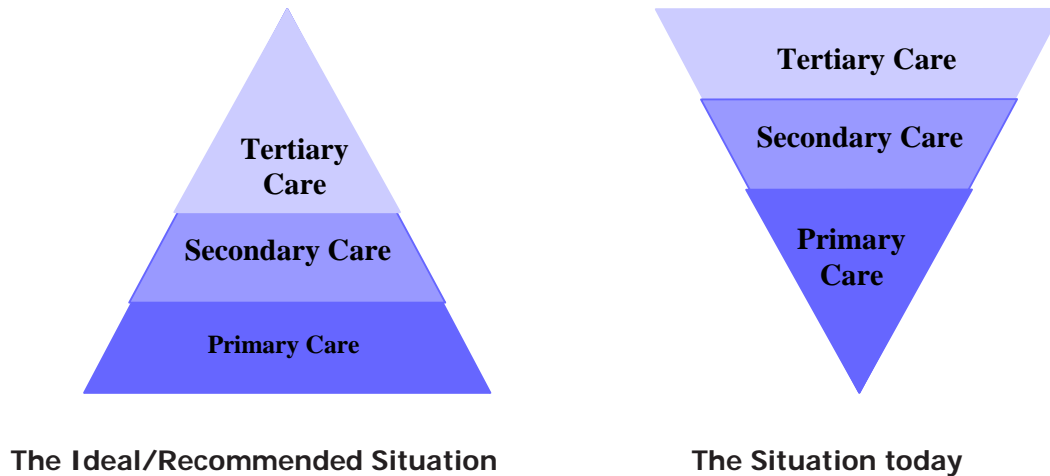
Ideally, for a developing country like India and its capital city, primary health must receive the greatest attention and resources. In a perfect system, there would be no mismatch between the requirement of the patient and the services provided by the center accessed by him. To continue with the above example, it is assumed that hospital Y is a tertiary care center. The family will visit it irrespective of its needs, which could often be of primary or

³² Based on recommendations of ICHA (Indian Confederation of Healthcare Accreditation) as explained by Dr. Ashok Sanghal, CEO

³³ Delhi Development Report, Planning Commission, Government of India p. 278

secondary care. The reason is that the family has no “trust” in hospital X (assume primary or secondary), but the repercussion would be a patient of no tertiary care need occupying a bed in a tertiary care center, hence denying treatment to a person needing that kind of care. We must have a broad based primary care system acting as the first point of access for the patients; Those attending secondary and tertiary health facilities must be referred by the primary health care unit as per requirement. However, the present scenario operates on completely opposite principles. To explain diagrammatically:

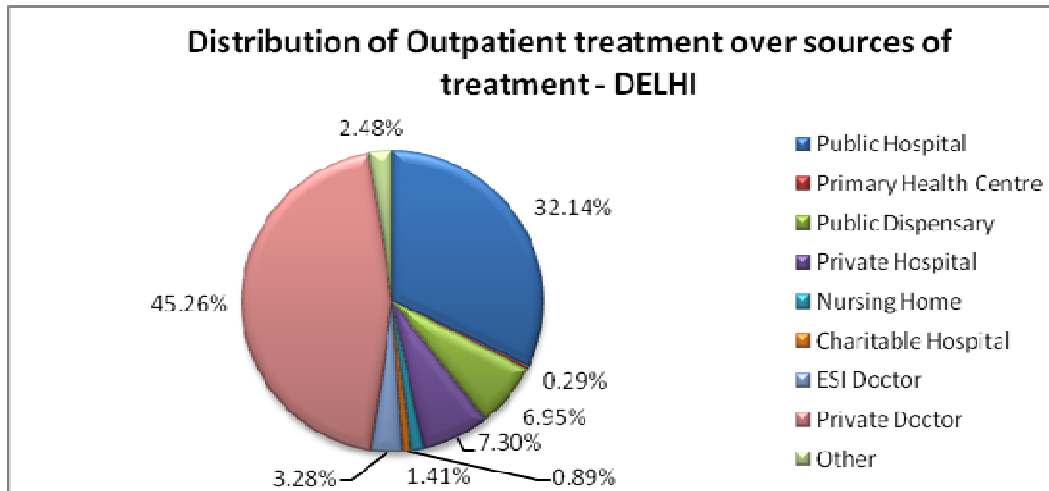
Resource Distribution in Healthcare



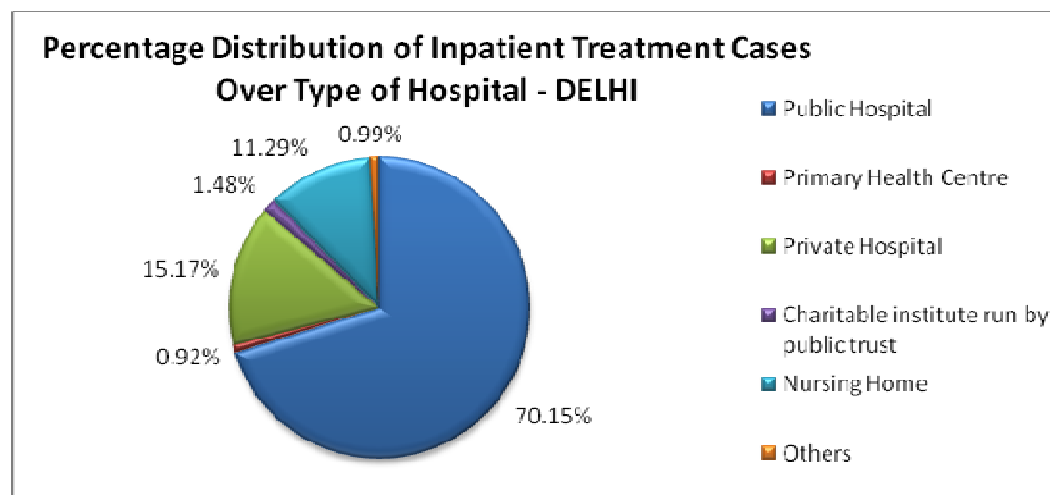
The above distribution and allocation of resources undoubtedly results from the great pressure on tertiary care center. However, it is not without reason. As discussed above, this is a larger trust problem. An analysis of studies on the private sector in India suggests that a considerable section of the population in both rural and urban areas and across states, access the services of individual private practitioners for primary level care (Sunder, 1992; Krishnan, 1999). Micro-level studies from Delhi, Hyderabad and rural Uttar Pradesh show that people from different sections of the population, in both rural and urban areas, use these practitioners as a first resort for acute conditions, but also use government facilities (Nanda and Baru, 1993; Vishwanathan and Rhode, 1985). These utilisation studies show that the private practitioners are consulted for a variety of minor illnesses. **However**, these studies also show that there is **much heterogeneity among providers in terms of qualifications, systems of medicine and practices**. They include herbalists, indigenous and folk practitioners, *compounders* and others (Vishwanathan and Rhode, 1985; Baru, 1998). These practitioners being easily available and accessible locally are utilised extensively. The really poor are unable to afford the doctor’s charges and hence, either opt for government hospitals or often go without care (Bisht, 1993; Soman, 1992; Vijaya, 1997; Kakade, 1998).

The studies from Delhi, Chennai and Hyderabad show lack of basic and uniform standards for service provisioning, which has implications for the quality of care provided (Baru, 1998; Muraleedharan, 1999). Chemist shops and pharmaceutical representatives influence the prescription patterns of both qualified and unqualified practitioners. In addition, the former also dispense medicines for a variety of ailments and act as providers of primary level care. Given the poor knowledge base of these practitioners, it is not surprising that their treatment of even common ailments is often irrational, ineffective and sometimes harmful. With a primary care system lacking standardization and dependability, isn’t the common man left with no other option that to access the “**big government hospitals**” or “**public**

hospitals”? The data presented below, though old, throws light on some very relevant aspects of both inpatient and outpatient care distribution over various sources.



Source : *Morbidity and Utilisation of Medical Services, Report 364, 42nd Round, National Sample Survey, Central Statistical Organisation, Government of India (1989), cited in Baru (1998).*



Source : *Morbidity and Utilisation of Medical Services, Report 364, 42nd Round, National Sample Survey, Central Statistical Organisation, Government of India (1989), cited in Baru (1998).*

The recommendation is to attempt to “create a trustworthy and interlinked system” for providing healthcare. Following would be the features of such a system:

- All primary care centers must be upgraded to a specified standard; they must be capable of assessing the need of the patient, stabilizing emergencies if any, and send patients to secondary or tertiary centers only if needed. These units must be used as filters to restrict overcrowding at tertiary centers, but not by compromising on the quality of primary care. This would help in providing adequate care and attention to the primary needs, as well as in preventing overcrowding of secondary and tertiary centers with people who do not need those services.
- Like mentioned above, the National Capital Territory of Delhi has a vast network of healthcare centers, under the Delhi Government, DHS and MCD. One way to capitalize on these assets is to make the patient the responsibility of the system the moment he enters it. At the point of entry, the details of the patient, the illness/accident etc. are collected. If he/she must be shifted to another center,

transport must be provided and transfer with all records must be done, with proper information flow from the physician sending the patient to the one receiving him/her. This would create greater faith in the system, and the patient would prefer going through it instead of approaching the big hospital directly.

The attempt of this recommendation is not to undermine the fact that the healthcare system of Delhi works under great pressure. However, that is just one side of the picture. The pressure is created because the units actually functioning are far fewer from those on paper. Efficient utilization of the resources at disposal and smart management of the crowd can bring about constructive change in the system, benefiting the doctors, paramedics, nurses and of course, the patients.

5.2 Professional Management of Government Run Hospitals

Professional management of Government hospitals is essential for better efficiency of services and duly qualified hospital administrators should be placed head of institutions and selection should be based on performance, efficiency, skill, dynamism, vision and ideas and not merely on length of service or seniority basis³⁴. A step in this direction could be para/non medical management working a) under the guidance and b) according to the requirements of the medical staff. This would help in the following ways:

- Reduce the burden on the doctors
- Provide specialized administration in government hospitals and
- Bring in the attitude of ethical and competitive practice by the private hospital and nursing homes.

Through the survey conducted in Guru Teg Bahadur Hospital, GB Pant Hospital, Lok Nayak Hospital and Baba Saheb Ambedkar Hospital (four of the largest Delhi Government hospitals) and through secondary data from newspapers (see annexure) , it was seen that the problems at big government hospitals are largely management related. **With an average 70% patient satisfaction (see para 4.2.4), it can be clearly seen that the medical fraternity at these hospitals is doing their best possible.** However, problems like drug unavailability, excessive waiting time, meeting different doctors every time, non functional equipment etc. are problems that can only be sorted through an efficient management driven towards the twin goal of

- A) Providing a dignified work environment to the doctor with equipments, medicines and other facilities at ready disposal. Doctors are humans too; the extremely overburdened situation in which they operate affects the time and attention they can devote per patient, and even their judgment in some cases.
- B) Providing a good standard of care to the patients. An average 55% of the patients who visit government hospital earn less than Rs. 25000 annually (see para 4.2.6); however this does not entitle them to unhygienic conditions, lack of facilities and medicines. 60% respondents face the problem of having to buy expensive medicines from outside (see para 4.2.5) – sometimes indicating to the possibility of a nexus between the hospital dispensary and the local chemists. The patients also bear the brunt of inadequate attention from the doctor due to the immense pressure.

The proposal of the recommendation is NOT to introduce an imposing management over the medical staff. The doctors, nurses and other paramedical staff are undoubtedly the lifeline of any medical institution. The introduction of professional

³⁴ Delhi Development Report, Planning Commission GOI, p. 295

management must only act as a facilitator for these members for the ultimate goal of good patient care. The management must take an active role in solving problems of

- Drug procurement
- Quality of drugs
- Any malpractice in procurement/distribution
- Cleanliness
- Equipment installation and maintenance
- Easy registration process for the patient, directions in the hospital etc.
- Ambulances for transfer to/from networked hospitals and dispensaries
- Check on malpractice by class 4 employees who take bribes etc from patients

For problems of excessive waiting time because of large crowd and meeting different doctors every time, a model can be formulated under guidance from the doctors. This is actually in practice in most hospitals in the form of fixed OPD³⁵ days mentioned behind the doctor's visiting card. Better communication of this information and implementation of this system can help the patient consult the same doctor and get good advice.

5.3 Increased Health Insurance

The elaborate government health care system in Delhi belies the fact that the private health care sector has grown at a phenomenal rate, and today forms an equally significant part of the health system. About 57 percent of hospitals and 32 percent of hospital beds in India are in the private sector (Bhatt, 1999). In Delhi, there are nearly 562 registered private nursing homes/hospitals with bed strength of over 12,000³⁶. But merely stating that private provision is an important part of the health care system is not enough. The highly pluralistic health care system comprise several kinds of systems within - allopathic, homeopathic, ayurvedic, unani etc. - all of which are significant in their presence. The elaborate government health care system in Delhi, is mainly supposed to cater to those who are less privileged.

However, the data revealed that this is more the exception than the rule. A greater percentage of high and middle-income households use government facilities, and a greater percentage of lower income households use private facilities. Also, the lower income households are also those with least insurance coverage and they are also seeking largely allopathic as well as institutional care (rather than indigenous practitioners)³⁷.

Since health care is an essential expenditure, the market mechanism places unnecessary burden on those with lesser ability to pay. There is a more than three times difference between expenditure in a private and a public facility and even the public facilities are not as inexpensive as one would think.

Health insurance in Delhi for the BPL population is covered by the RSBY (see para 3.5). However, in the course of the study conducted at Government hospitals, a large percentage of respondents were those who are above the poverty line but earned less than Rs. 25,000 annually (see para 4.2.6). Many of them would prefer visiting private clinics because of:

- A) Closeness to their homes
- B) More personal attention
- C) Cleanliness

³⁵ Out Patient Department

³⁶ Delhi Development Report, Planning Commission GOI, p. 288

³⁷ Health-seeking Behavior in urban Delhi: An Exploratory Study, Indrani Gupta and Purnamita Dasgupta

However, due to financial problems they are left with no other option but Government hospitals. **The aim of this recommendation is to propose more exhaustive and inclusive implementation of the scheme over Delhi. As against the charge of Rs.30 for BPL families, a higher fee can be charged from those with higher incomes to provide them insurance cover.** These people end up spending a lot in the process of travelling, buying medicines, paying for treatment etc and would not mind paying a fixed premium that would reduce this burden.

The Government could also introduce an incentive mechanism for various private setups, including hospitals/nursing homes and insurance companies that would encourage them to collaborate. This would have the following major advantages

- Provide support to the marginalized population of Delhi and those coming from outside so that good quality healthcare can be accessed. This scheme also helps divert the crowd from the large public hospitals to local private clinics/nursing homes.
- In order to get empanelled on the scheme, the hospitals/nursing homes etc. have to meet certain quality standards. Hence the popularization of the scheme will lead to an overall improvement in quality of care provided at these centers.

5.4 Lessons from the Kerala health model – A case study³⁸

Kerala, a state of 29 million people in southern India, is poor--even for India--with a per capita income estimated by various surveys to be between \$298 and \$350 a year, about one-seventieth the American average. When the American anthropologist Richard Franke surveyed the typical Keralite village of Nadur in the late 1980s, he found that nearly half the 170 families had only cooking utensils, a wooden bench, and a few stools in their homes. No beds--that was the sum of their possessions. Thirty-six percent also had some chairs and cots, and 19 percent owned a table. In five households he discovered cushioned seats. But here is the odd part.

- The life expectancy for a North American male, with all his chairs and cushions, is 72 years, while the life expectancy for a Keralite male is 70.
- After the latest in a long series of literacy campaigns, the United Nations in 1991 certified Kerala as 100 percent literate. Your chances of having an informed conversation are at least as high in Kerala as in Kansas.
- Kerala's birth rate hovers near 18 per thousand, compared with 16 per thousand in the United States--and are falling faster.

Demographically, in other words, Kerala mirrors the United States on about one-seventieth the cash. It has problems, of course: There is chronic unemployment, a stagnant economy that may have trouble coping with world markets, and a budget deficit that is often described as out of control. But these are the kinds of problems you find in France. Kerala utterly lacks the squalid drama of the Third World--the beggars reaching through the car window, the children with distended bellies, the baby girls left to die.

Kerala's attitude toward female children is a beautiful anomaly. Of 8,000 abortions performed at one Bombay clinic in the early 1990s, 7,999 were female fetuses. Girl children who are allowed to live are often given less food, less education, and less health care, a bias not confined to India. In China, with its fierce birth control, there were 113 boys for every

³⁸What is True Development? The Kerala Model, Bill McKibben.

100 girls under the age of 1 in 1990. There are, in short, millions and millions of women missing around the world--women who would be there were it not for the dictates of custom and economy. **So it is a remarkable achievement in Kerala to say simply this: There are more women than men.** In India as a whole, the 1991 census found that there were about 929 women per 1,000 men; in Kerala, the number was 1,040 women, about where it should be. And the female life expectancy in Kerala exceeds that of the male, just as it does in the developed world.

Health Development Indicators – Kerala and Delhi (for 2001-03)

	Kerala ³⁹	Delhi ⁴⁰
Birth Rate (per 1000)	15	18.1
Death rate	6.40	5
Infant Mortality Rate	14	29
Total Fertility rate	1.70	2

However, apart from the socio-economic factors, the universally available public health system in Kerala has also contributed to this much acclaimed health system of the people. The state has a three-tier-system of health care –

- ✓ The Primary Health Centres (PHC),
- ✓ Community Health care Centre (CHC),
- ✓ Taluk & District hospital and Medical Colleges

evenly distributed in the rural and urban areas. Apart from this, there is an extensive network of medical care institutions practicing homeopathy and ayurveda in government, voluntary and private sectors.

In the state, there exist 7831 public health institutions, comprising of all the three disciplines. Of this, 71.8% are PHCs (including sub centres), 8.2% are CHCs and 11% are hospitals (census 2001) – This is in compliance with the ideal distribution of resources (see para 5.1, Resource Distribution in Healthcare). Apart from this there are 81 co-operative hospitals functioning effectively in Kerala. The number of sub-centres continues to be 5074 for the last 12 years and there is a sub-centre for every 6.16 sq.km and a primary health centre for every 33.3 sq.km thereby assuring the accessibility of health care to the downtrodden section of the society. In terms of health personnel, there are 25225 medical and para medical personnel and there is one medical officer for every 8244 population in Kerala.

What Delhi can learn from Kerala cannot be put in very discreet terms; the states are completely different in terms of history, culture, economy and social structure. However, there are some basic values, which if inculcated by our system can be of immense help:

- Education of the girl child; a small step towards big solutions like population control, higher literacy rates, more awareness and healthier society
- Focus on primary healthcare; make medical care simpler and more accessible
- Patronize alternate medicine; with a large population to cater and the fast results provided by modern medicine, alternate medicine in Delhi has taken a back seat. More than faith, it is a matter of awareness and availability. If through Government schemes and individual initiative, alternate medicine can reach people, it will help achieve better standard of care and lesser burden on the modern medicine system.

³⁹ Directorate of Health Services, www.india.gov.in

⁴⁰ Delhi Development Report, Planning Commission GOI

5.5 Overall recommendations

1. There is a need for higher proportion of public spending on health – it is merely 0.9 per cent of GDP in India, which ranks at poor 171st position out of the 175 countries studied⁴¹. This is in contrast to the figures of 8.1 per cent of GDP for Germany, 7.3 per cent for France, 6.2 per cent for USA, 3.2 per cent for Brazil and 2.0 per cent for China on Health. On the other hand, private spending on health in India is 4.2 per cent of GDP and ranks 18th in the world tally, which is disproportionately high as compared to public health spending for a country like ours which is home to so many poor people.
2. Encourage development of high class health care infrastructure in NCR towns as well as in the neighboring states of Delhi through incentives and/or soft loans to entrepreneurs ensuring comparable quality at competitive costs.
3. Inclusion of health related topics in school and college curricula.
4. Control of stray dogs and stray animals to minimize traffic hazards/accidents and to reduce the cost of superfluous use of Anti Rabies Vaccine, besides indirect saving on man hours – Annually 3-5 crores are spent on ARV in GNCTD hospitals.
5. Management Information System should be strengthened at all levels for tracking status of supplies, monitoring suppliers, monitoring installation of equipments within prescribed time schedule and for ensuring compliance with terms and conditions of agreements. A copy of full rate contract of all hospitals may be displayed on the department's website for ensuring procurement of drugs economically.

⁴¹ Human Development Report 2004

ANNEXURES

A.1 Questionnaire

1. Are you from Delhi or just here for medical treatment?
2. For how long have you been visiting this hospital?
3. How long did you have to wait between arrival to the hospital and consulting the doctor?
 - a) 0-10 minutes
 - b) 10-30 minutes
 - c) 30 minutes-1 hour
 - d) 1-2 hours
 - e) More than 2 hours
4. Has the doctor been able to give you enough time to narrate your illness? (Y/N)
5. Are you satisfied with the treatment you receive at this hospital? (Y/N)
6. Do you experience unavailability of medicines at the hospital? (Y/N)
7. If you had a choice, would you still come back to this hospital? (Y/N)
8. Have you been denied treatment on account of non availability of doctor or equipment? (Y/N)
9. Annual income
 - a) Less than 25,000
 - b) 25,000 – 50,000
 - c) 50,000 – 100,000
 - d) 100,000 – 300,000
 - e) 300,000 – 500,000
 - f) 500,000 and above
10. Reasons for seeking treatment in this hospital
 - a) Affordability
 - b) Reputed doctors
 - c) Closeness to residence
 - d) Facilities
 - e) Any other
11. Were you explained about your disease and medication properly by the doctor? (Y/N)
12. Are you able to consult the same doctor every time you visit the hospital? (Y/N)
13. If not, is that a matter of concern to you? (Y/N)

A.2 References

1. Comptroller and Auditor General of India report 2008. Performance Audit, Civil Departments.
2. Delhi Development Report 2008, Planning Commission, Government of India.
3. Economic Survey of Delhi 2008-09.
4. Evaluation Study report on Ayurvedic dispensaries of Delhi Govt., September 2006. Planning deptt, Evaluation Unit, GNCTD.
5. Health seeking behavior in urban Delhi: An Exploratory study. Indrani Gupta & Purnamita Dasgupta.
6. Human Development Report, 2004
7. Directorate of Health Services reports www.india.gov.in
8. What is True Development? The Kerala Model, Bill McKibben.
9. Bhat Ramesh & Jain Nishant, 2004. "[Analysis of Public Expenditure on Health Using State Level Data](#)," [IIMA Working Papers](#) 2004-06-08, Indian Institute of Management Ahmedabad, Research and Publication Department.
10. Recommendations of the Indian Confederation of Healthcare Accreditation (ICHA), as explained by Dr. Ashok Sanghal, CEO.
11. Ministry of Labor and Employment, Government of India <http://www.rsby.in/statenew.aspx>
12. http://www.thaindian.com/newsportal/politics/delhi-launches-health-insurance-for-poor-families_10073586.html
13. IHBAS Annual Report 2005-06
14. CATS Annual Report 2001
15. The Times of India epaper
16. The Indian Express epaper
17. Infochange India
<http://infochangeindia.org/200210045930/Health/Backgrounder/Health-Background-Perspective.html>
18. Indmedica Journals
<http://www.indmedica.com/journals.php?journalid=6&issueid=104&articleid=1434&action=article>
<http://www.indmedica.com/journals.php?journalid=6&issueid=24&articleid=218&action=article>
19. Productivity measurement and benchmarking in a hospital setup, Prashant Bajaj.
<http://www.expresshealthcaremgmt.com/20020615/prescribe2.shtml>
20. Measuring Hospital Performance: The importance of Process Measures
http://www.commonwealthfund.org/usr_doc/1046_Shih_measuring_hosp_performance_process.pdf?section=4039
21. 132 per cent increase in cars on Delhi roads
http://www.dnaindia.com/india/report_132-per-cent-increase-in-cars-on-delhi-roads_1145659
22. Delhi tops road accidents in metros
http://www.siliconindia.com/shownews/Delhi_tops_in_road_accidents_in_metros_Study-nid-58040.html
23. GNCTD Department of Health and Family Welfare
http://www.delhi.gov.in/wps/wcm/connect/doi_health/Health/Home/
24. National Accreditation Board for Hospitals and Healthcare Providers – Nehru Bal Chikitsalaya
<http://www.qcin.org/nbqp/qualityindia/Vol-2-No3/publichealthcarepage10-15.html>
25. National Institute of Health and Family Welfare newsletters
http://www.nihfw.org/Publications/News_letter.html

A.3 Healthcare in News

Top babu takes hospital by surprise, finds it ailing



Principal Secretary (Health) J P Singh

VIDYA KRISHNAN
NEW DELHI | JUNE 6

WHEN an unassuming man walked into the Sushruta Trauma Centre at 9.45 am on Friday, little did anyone expect that drastic changes would be set in motion. It was only when the visitor sat in his chauffeur-driven car on the way out that the duty doctor came to know that he had just given a guided tour of the hospital to the Principal Secretary of the Health department, J P Singh.

Singh and Delhi Health Minister Kiran Walla will meet the hospital management next week and seek an explanation for a number of absences, vacancies, defunct machines, locked up rooms and a majority of the staff clocking in late.

Only two senior employees were present at the hospital at the time of the inspection. While Medical Superintendent Dr Yadu Lal was on leave, without handing over charge to anyone, the Casualty Medical Officer was not present.

Singh spent close to three hours inspecting every department of the hospital in great detail without anyone realising who he was. The hospital staff assumed that he was from the Administrative Reform Department, which routinely conducts inspections in government offices. "No one asked me and I did not mention it. The objective was to conduct a surprise inspection and after going there I realised a lot needs to be done in that hospital," Singh told *Newsline*.

THE HOSPITAL

The rooms in which the CT Scan and ultrasound machines are kept were locked. "We open them when patients come," the duty doctor at the trauma centre said.

Another startling revelation was that the hospital's blood bank had neither applied for a licence nor had it stored enough units of blood to cater to patients. "We will be looking at sorting these things out once the MS joins back. They had very less blood stocked but for some reason had overstocked on medicine for the next seven months," Singh said.

For the last 18 months, the blood bank at the trauma centre has been running without a licence from the State Blood Transfusion Council.

Truth behind rising infant deaths in city

TOI June 24

Govt says it's due to migration and lack of education. The real reasons lie in crumbling healthcare for the poor, says Subodh Varma

Buried in the Economic Survey for Delhi released on Friday was a statistic that puts India's capital on a par with the most backward regions of the world. It showed that infant mortality rate (IMR) in the capital climbed by 50% per year between 2005 and 2007, making Delhi the only state in the country — and perhaps the only place on earth outside some hapless regions of central Africa — to have a rising IMR.

According to the survey, in 2005, about 4,000 babies died in Delhi within the first year of life. Just two years later, infant deaths had jumped to more than 8,000. IMR is considered the key indicator of human development. Its steep rise in what is being billed as the global city of emerging India indicates that something's rotten at the core of the healthcare system in the city.

Once this stunning news came out, there was a flurry of reactions from doctors and ministers, putting the blame on migration and lack of education of the parents who lost their newborns. These explanations do not cut much ice. Here's why.

Migration to Delhi has been taking place for several decades. Yet the IMR declined from 32 per 1,000 live births in 1991 to 13 in 2005. There was no significant jump in migration in the next two years — about 2.4 lakh people migrated to Delhi every year in recent times. So, why should migration suddenly become the cause for rising infant deaths?

Similarly, there is nothing to show that lack of education became a problem between 2005 and 2007. Delhi has one of the highest literacy rates in India and it's increasing over the years. Even in districts where most of the migrant population lives — north-east and north-

UNHEALTHY NUMBERS



8,000 infants die in Delhi in first year of life

40,000 untrained deliveries take place at home

50,000 people served by each Delhi govt dispensary

2 hospital beds per 1,000 Delhiites

west Delhi — literacy rates are 78% and 81%.

What actually explains this shameful trend is a slew of factors like the rising number of urban poor; a crumbling public health system and floundering welfare schemes like the Integrated Child Development Services.

Official poverty counts are usually underestimates, but even these for the city are staggering. The survey says over 22 lakh people live below the poverty line in Delhi. They are the most vulnerable to diseases and need government support.

The two major causes of infant deaths are respiratory and gastro-intestinal diseases. These ailments require medical attention. With the government's network in a shambles and private care being expensive, a good section of the city's population is thus deprived of proper healthcare.

► Costly healthcare, P 6

Month after first patient admitted in RML, how is Delhi fighting the flu?

VIDYAKRISHNAN
NEW DELHI, JUNE 30

■ The Delhi government has decided against sending samples of H1N1 influenza cases to the National Institute of Virology (NIV), Pune, as the institute takes up to 48 hours to report back. Experts say test results should not take more than six hours. Officials say since suspected patients are kept in the same wards as patients confirmed with H1N1 flu, it increases chances of getting infected. Now, the government will send samples only to the Delhi-based National Institute of Communicable Diseases (NICD).

■ Another change: hospitals designated to treat H1N1 influenza patients will soon get books and plasma-screen televisions with cable connections for its patients to rid them of boredom.

THESE are the latest steps in a series of on-the-run changes the Delhi government has made since the first suspected H1N1 influenza patient was admitted in the Ram Manohar Lohia (RML) Hospital on June 1.

A month on, Delhi leads the country's tally of patients with 31 cases, but has the government got its act together and, more importantly, learnt its lessons from best practices followed globally?

A senior doctor ques-



RML: Nodal hospital faced teething troubles

**H1N1
INFLUENZA**
ALERT LEVEL: TAKING STOCK

tioned the government's late reaction in getting books and TVs for patients. "How did they not see it coming?" the doctor wondered. "They knew patients will have to be isolated — these things should have been thought about when authorities sat to chart out a plan."

Delhi's Health Secretary J P Singh reasoned this is the first time the state machinery is dealing with a pandemic, so there should be some margin for error. "Things take some time to settle down; in-

fact we are actually not doing as badly," he said. "Given the circumstances, we have done well to contain the spread of infections."

Banking on 'institutional quarantine'

As per the World Health Organisation, the flu comes in waves, and history has it that the second and the third waves are more dangerous.

"We are expecting another wave and it is difficult to comment about the virulence," Singh said. "As against the international concept of social distancing, we have been relying on institutional quarantine — this has worked very well in con-

taining the infection."

Social distancing means closing schools, malls, workplaces and other public places to control the virus from spreading.

Health Minister Kiran Wallia agreed the strategy might delay the spread but cannot altogether prevent it. "We have never been under any illusion that we would be able to prevent the spread indefinitely," she said. "We will modify our policies to suit the situation and address the problem at hand. "Right now, our focus is containment and institutional quarantine has given better results than home quarantine."

"But when cases increase, we will rethink the decision."

'Learn from US, Mexico'

Experts say the government needs to learn lessons from countries that have tackled more H1N1 influenza cases. "The government needs to learn what the US or Mexico did and modify those strategies to suit Indian conditions," Dr Bir Singh, professor of Community Medicine at AHMS, said.

"Keeping in mind the congestion in our cities, there is little doubt the spread will be far higher in India. So it's important to adapt quickly by learning from other countries."

AT GOVT'S END: CONFUSION, LATE DECISIONS

■ At RML, getting information was so difficult that even Health Minister Wallia had to visit the hospital at 11 pm on June 10 to get an update on the number of patients

■ The government had initially designated only three hospitals — RML, Lok Nayak and Airport Hospital — to treat patients. But as cases started trickling in, the authorities designated 11 hospitals

■ After saying only government hospitals would handle swine flu cases, government recently approached private hospitals to increase "bed capacity". Barring Max Healthcare, all private hospitals refused

■ Helpline numbers for suspected patients was changed from 1075 to 23921401. No reason was offered

■ Bed linen and bathrooms of isolation wards were cleaned at RML after protest from patients admitted there

■ While it is considered a good practice to start prophylactic (or preventive) treatment while waiting for the test results, patients in many cases were not given Tamiflu until results came in, which took up to 48 hours for NIV, Pune

Casualty figure at Hindu Rao Hospital soars with mercury

VIDYA KRISHNAN &
DEEPU SEBASTIAN EDMOND
NEW DELHI, JUNE 28

OVER the last 24 hours, 30 people died at the Municipal Corporation of Delhi's Bara Hindu Rao Hospital in East Delhi.

The mortalities usually range from five to 10 per day and have shot up due to the heat, the doctors said. Four deaths are being directly attributed to the heat wave — the patients were severely dehydrated. And the heat was a contributing factor in the other deaths.

The last victim was 72-year-old Kamla Bai. At 5.30 pm on Sunday, she succumbed to severe dehydration in the hos-

pital's Ward 15. "We have a fan and a cooler, but there was no electricity for over an hour in the ward. She did not drink enough water and it worsened her condition," said Manju, her daughter-in-law, a resident of Rajouri Garden.

The hospital's Public Information Officer, Dr Madhu Jain, said most patients coming in these days are suffering from dehydration.

A look at the register shows how the heat wave has affected the casualties. There were 12 deaths in the hospital on Wednesday, five on the Thursday and 14 on Friday. Between Saturday midnight and Sunday afternoon, there were 30.

Medical Superintendent Dr P P Singh

said like most areas in the Capital, the hospital has been experiencing water and power shortage. "We usually call in tankers. But the heat does affect the patients," said Dr Singh. According to him, nearly 150 patients are being admitted daily with summer ailments — heat stroke, dehydration and gastroenteritis.

"It does not surprise me that the mortality rates have shot up," said a doctor on duty. "There is no ventilation, no cool drinking water and though some areas have coolers, we do not have water for them. The fans are barely effective. The condition of patients with cardiac problems or diabetes worsens in such oppressive heat."

5-yr-old dies shuttling between hospitals in West Delhi

Sanjay Gandhi Hospital sends child to Sushruta Trauma Centre without first aid; out-of-order CT Scan leaves her dead at trauma centre; health minister says 'gross negligence'



Diksha's mother awaits postmortem report. TASHI TOBGYAL

ZAHID RAFIQ & VIDYA KRISHNAN
NEW DELHI, MAY 20

INJURED in the dust storm that swept the city on Tuesday evening, a five-year-old girl fell victim to negligence and lack of infrastructure at two of West Delhi's hospitals.

With the CT Scan in the hospital out of order, Diksha Kumar died at the Sushruta Trauma Centre.

According to her father Ashok Kumar, Diksha had fallen from the roof in the dust storm on Tuesday evening. She was bleeding from her ears after sustaining a head injury, and Kumar rushed the child to the nearby Sanjay Gandhi Hospital. But the hospital, he said, referred him to Sushruta Trauma Centre, without even administering first aid.

"They saw her condition but still did not arrange for an ambulance," Kumar said.

At the trauma centre, the family was informed that the CT Scan was out of order. "The ventilator was occupied and she reached us in a bad condition," the duty doctor at the trauma centre said. "She had no pulse and was continuously vomiting. Sanjay Gandhi Hospital should have at least stabilised her before sending her to us."

Diksha was declared dead within 10 minutes of reaching the trauma centre.

None of the six main hospitals in North-west Delhi and Outer Delhi have a CT Scan. The hospitals in these areas are Maharishi Valmiki, Raja Harishchandra (Narela), Ambedkar Hospital, Babu Jagjivan Ram, Sanjay Gandhi Hospital and Bhagwaan Mahavir (Pitampura).

The only CT Scan in the area — at the Sushruta Trauma Centre — is out of order.

With a note saying "CT could not be done because the machine was out of order," the trauma centre sent Diksha's body back to Sanjay Gandhi Hospital, where it now awaits postmortem. Though a case has been registered at Aman Vihar police station, SHO Rajveer Paughat said the autopsy would not be conducted. "When the family is not interested, we cannot force them to insist on a postmortem," SHO Paughat said.

"In any case, no one can be blamed for this incident — the girl fell from the roof due to a dust storm; if any investigation happens in this case it will have to be against the storm," he said jokingly. He added that the post-mortem should be waived off.

Calling it "gross negligence", Health Minister Kiran Walia said, "I will look into the case in detail and ensure that responsibility is fixed. We want to put systems in place to ensure such incidents do not take place."

Patient deaths: Mayor to inspect Bara Hindu Rao Hospital today

EXPRESS NEWS SERVICE
NEW DELHI, JULY 2

DELHI Mayor Kamwar Sain will be conducting an inspection at the Bara Hindu Rao Hospital on Friday in the wake of a sudden surge in patient mortality rate at the MCD-run hospital. The visit comes after 30 patients died in the span of 24 hours at the hospital during the heat wave in the Capital last week.

The hospital has been reeling under a severe water and power shortage, with the heat aggravating problems that led to the high mortality rate. "I have not visited the hospital since I took over as Mayor. Since I am a doctor myself, I would like to see how the hospital is functioning. I have heard reports of the shortage of oxygen cylinders, electricity and water at the hospital. We will try to do the best



The MCD-run hospital has been facing a severe water and power crisis, a factor leading to in patient deaths. EXPRESS ARCHIVES

we can," said Kamwar Sain, speaking to *Newsline*.

Bara Hindu Rao, the largest MCD hospital in East Delhi, witnessed an extraordinarily high number of casualties every day of the last week. According to the hospital's records, 12 pa-

tients died in the hospital on Wednesday, five on Thursday and 14 on Friday. The highest number of deaths was, however, recorded between Saturday midnight and Sunday afternoon — 30. Four of these deaths were due to dehydration.

Hospital Medical Superintendent Dr P P Singh maintained that like most areas in the Capital, Bara Hindu Rao Hospital too was experiencing water and power shortage during the heat wave. "We usually call in water tankers. But the heat does affect the condition of patients. We have been getting an extremely high number of dehydrated patients, and we are doing our best in the given conditions. We would like the Mayor to see the working condition at the hospital," Dr Singh said. According to Dr Singh, close to 150 patients are being admitted to the hospital on a daily basis with summer ailments ranging from heat stroke to dehydration and gastroenteritis.

Poor ventilation, lack of drinking water and coolers has also contributed to the high number of patient deaths, added the doctors on duty at the hospital.



Dr Ram Manohar Lohia Hospital where the H1N1 patients are being quarantined.

NEWSLINE

With ACs, clean sheets, RML's flu ward gets overhaul in 12 hrs

VIDYA KRISHNAN

NEW DELHI, JUNE 12

AIR-CONDITIONERS were fitted, bed linen changed, bathrooms cleaned and water supply arranged — all in 12 hours at the isolation ward for H1N1 patients, admitted at the New Ward Block of Dr Ram Manohar Lohia Hospital.

The overhaul came after a few 'affluent' patients walked out, choosing home quarantine over government hospitals.

The hospital administration took over two months to realise the ward — identified for treatment of H1N1 patients — required basic facilities like water and air-conditioning, said Shankar Raju Gaur, Central Administrative Tribunal judge and relative of a patient who arrived from Boston with the infection. Gaur said the government is taking the H1N1 threat very casually.

After relatives of patients complained and 'pulled strings', sweeping changes were clearly visible on the third floor of the New Ward Block.

"The ward was filthy; the staff are rude and complacent.

The area is not even air-conditioned and worse, the wash-rooms have no water. One can only imagine what poor patients go through every day to get treated at such hospitals," added Gaur.

In defence, the hospital's Medical Superintendent, Dr NK Chaturvedi said it was not fair to compare the services here with those in the West. "All H1N1 patients are from abroad. It is an unfair comparison. We are doing our best.

There was some problem with the pipeline and we have fixed it to ensure uninterrupted water supply to the ward.

The air-conditioner has also been fixed. Other minor problems were sorted out," added Dr Chaturvedi.

Worried at the news that hospital employees were reluctant to come near infected patients, state Health Minister Kiran Wallia said treatment was of paramount importance. "We have already met nodal officers and instructed them to ensure that patients and their families are not harassed. All Delhi government hospitals are ready for contingencies," Wallia said.



TOI June 15

Injured worker dies waiting for CT scan

New Delhi: Kailash, a 28-year-old labourer at a construction site in Pitampura paid with his life after being transferred from one hospital to another due to the absence of CT scan machines. Kailash had fallen from the building's third floor and suffered a head injury. Along with internal bleeding, Kailash was having convulsions when he was brought to Ambedkar Hospital around 5pm on Saturday.

However, with no neurosurgeons available at Ambedkar Hospital all such patients are referred to nearby hospitals. Said Dr Amareshwar Narain, DMS, Ambedkar Hospital, "We don't have the facility for neurosurgery here. So, we refer the patients to other hospitals, the closest being RML and Sushutra Trauma Centre. We had information that the CT scan machines were not operational in Sushutra Trauma Centre on Saturday so we referred the patient to RML Hospital. An attending doctor accompanied the patient there."

However, at RML, too, the accompanying doctor was told that the CT scan machines were not functional. So Kailash was put on artificial respiration and then referred to Lok Nayak Hospital. Kailash's condition deteriorated considerably and by the time he reached LN Hospital around 9pm, he was declared brought dead. Said Dr A K Agarwal, dean and MS, Lok Nayak Hospital: "The patient was brought dead to our hospital."

Delhi health minister Kiran Wallia visited Ambedkar Hospital on Sunday to take stock of the matter and ordered an inquiry. Despite repeated calls to the medical superintendent at RML, he was not reachable on Sunday.