LANGUAGE IN INDIA

Strength for Today and Bright Hope for Tomorrow

Volume 13 : 2 February 2013

ISSN 1930-2940

Utilization of Secondary Health Care Services among Urban Population in Dindigul District, Tamil Nadu

R. Kumaresan and Dr. K. Ramu, Ph.D.

==========

Abstract

Health and socio-economic developments are so closely interconnected that it is impossible to achieve one without the help of the other. The economic development in India has been gaining momentum over the last decade. Our health system is at crossroads today. Even though Government initiatives in public health have recorded some noteworthy successes over time, the Indian health system is ranked 118 among 191 WHO member countries on overall health performance. Building Health Systems that are responsive to community needs, particularly of the poor, is a must. Health sector is complex with multiple goals, multiple products and different beneficiaries. India is well placed now to develop a uniquely Indian set of health sector reforms to enable the health system to meet the increasing expectations of its users and staff.

Secondary health care is a basic health service which provides an integrated promotive, preventive and curative health care to the urban and rural population. The National Health Plan (1983) proposed reorganization of secondary health centers based

on one Government Hospital for every 50,000 population. In this paper, an assessment is made of the secondary health care services and the efficiency of health care services provided in urban health centers.

Introduction

India has one of the lowest health budgets in the world. It is held that even after 64 years of Independence, the health sector has not received necessary allocation of funds from the planners. According to National Health Policy (NHP), 55 per cent of the outlay would be for the primary sector and 35 per cent and 10 per cent for the secondary and tertiary sectors respectively. The NHP report indicates that the attainment of health indices has been very uneven across the rural-urban divide. The statistics brings out the wide differences between the realization of health goals in the better-performing states as compared to the low-performing states. Given a situation in which national averages in respect of most indices are themselves at unacceptably low levels, the interstate disparity implies that for vulnerable sections of society in several states, access to public health services is nominal and health standards are grossly inadequate.

It has been already several years since the media published reports on the proposed National Urban Health Mission (NUHM) (*The Hindu*, 25 February 2008). A high-profile National Rural Health Mission (NRHM) was proposed as a five-year mission. The then Union Minister for Health and Family Welfare was quoted as saying, "This is the second largest health programme that will fill the lacunae created after the implementation of the NRHM and take care of the unmet needs in the fast urbanization process". Specifically, it sought to address the health of the urban poor and other disadvantaged sections and facilitate their access to the health service system. Slated to benefit 22 crore people with special emphasis on five crore slum-dwellers, the Rs. 9,159 crore mission was to be implemented in 429 cities including 100 cities that would be taken up in the first phase. The Minister on two grounds expressed optimism: (i) the NRHM would provide a template for guidelines of "administration and operationalisation" and (ii) it would have a faster "take-off" because of "awareness, presence of non-governmental organizations and better accessibility in the cities.

Public Health System in Tamil Nadu

The health care sector in Tamil Nadu as in the other states of India consists of both private and public providers. Recent studies (NSSO 2006) have shown that public institutions in Tamil Nadu cater to 29 per cent of all outpatients (ambulatory) care (rural and women) compared to the all India average of 19 per cent. In rural Tamil Nadu, they account for 32 per cent as compared to the Indian average of 18.3 per cent. In addition, it is worth noting that public institutions account for 52 per cent of the total inpatient days for childbirth (rural and urban) while they account for about 35 per cent of the total institutional deliveries in the state.

The public health system in the state of Tamilnadu as in the other states of India is structured as follows: at the lowest level, there are health sub-centers (HSCs) covering a population of about 5,000 each. Above this level, there are primary health centers (PHCs) offering primary (ambulatory) care, delivery and minor surgical and public health services for a population of about 30000. At the higher levels, there are community health centers roughly for a population of about 1,00,000 and district hospitals offering services up to the level of secondary health care. The CHCs are designed to accommodate about 30 beds. While the size of district hospitals is not governed by any norms and so their sizes vary from 66 beds to 608 beds. There are a few public hospitals located in the state capital and other larger towns offering tertiary health care, besides catering to the primary and secondary care needs of the population. Typically, there is no referral system in practice within the Government health system.

Secondary Health Care

Secondary health care is a basic health service which provides health care to the urban and rural population in an integrated promotive, preventive and curative manner. The National Health Plan (1983) proposed reorganization of secondary health centers on the basis of one GH for every 50,000 population.

Though urban health centers provide free treatment for urban population, sometimes people visit private hospitals for treatment. The inpatients and outpatients of urban health centers also face problems in using health care facilities. As such, a research study on ‘Extent of use of urban health care services among urban population’ was undertaken with the following objectives:

Objectives

- To study the organization and management of selected urban health centre.
- To study the beneficiary assessment of people utilizing urban health care services.
- To study the efficiency of health care services provided by urban health centre.

Methodology and Database

The research study was confined to an urban health centre in Dindigul Municipality, Dindigul district in Tamil Nadu. Dindigul district is one of the most backward districts' in the state of Tamilnadu. The PCI of the district is (below Rs. 10,000) which is less than the state and national PCI. The macro health indicators such as, CBR, CDR, IMR, MMR, LEB are relatively lower than the other districts of the state. The Human Development Index of the district is 0.641, and the HDI rank is 17 when compared with other districts (HDR 2003). Thus the macro health indicators reveal that Dindigul has poor performance in health and human development. Therefore, it implies that the district is under-developed in all sectors. With this backdrop the district has been selected for the present study.

For the study purpose, 50 beneficiaries were selected by random sampling method. The study had used both secondary and primary source of data. For studying the organization of urban health centre, the information about the patients treated, number of doctors and nurses, facilities and equipments available for the period 2005-2010 was collected. The data were collected during December 2010. For analyzing the data collected, the study used the quantitative tools – coefficient of variation, growth rate, Chi-square analysis, simple regression and multiple regression analysis.

Healthcare Services in Dindigul District

Dindigul district has 49 primary health centres (PHC) and 311 health sub-centres (HSC) which extend primary health care services to the rural population (table 3.9). There are 12 government hospitals (GH) which provide secondary health care services to rural and urban population. The total bed strength of the district is 1252; the number of doctors of the district is 257. There are 753 nurses in rural and urban health sectors. The

crude birth rate (CBR) of the district is 17.19 per 1000 population. The crude death rate (CDR) of the district is 7.5 per 1000 population in 2008-09. The infant mortality rate (IMR) is 22.39 /1000 live births and the still birth rate (SBR) is 16.03 per 1000 population. The life expectancy at birth (LEB) is 66 years, which is lower than India's life expectancy at birth (67 years). The total number patients treated in the district from PHC and GH is 2, 10,321 in 2008–09. Health facilities of the district are given in table 3.7. And the targets and achievements of family welfare programmes are presented in table 3.8. The tables explain that targets are achieved fully by the district health department during the study period. It is important to observe that this achievement is a good sign for population control and human development in the district.

3.6 Health facilities of Dindigul District

Classification	Modern Medicine	Indian Medicine					Homoeopathy	Grand Total
		Ayurvedic	Siddha	Unani	combined	Total		
Hospitals	12	1	12	1	1	27	1	28
Dispensaries	8	--	--	--	-	8	-	8
PHC	49	1	13	--	--	63	1	64
HSC	311	-	--	--	--	311	--	311
Bed Strength	1227	--	--	--	25	1252	--	1252
Number of Doctors	229	2	25	1	--	256	1	257
Number of Nurses	750	--	--	--	3	753	--	753

Source: 1. Joint Director of Health Services, Dindigul, 2. D.D Health Services, Dindigul and Palani

Findings of the Study

The major findings of the study are as follows:

A) ***Analysis about the Organization and Administration of the Selected Urban Health Centre***: In the selected urban health centre, number of inpatients treated increased from 15,000 to 31,776 representing 111.84 per cent increase during 2005-2010. Among the inpatients, more females availed the treatment. On an average, in a year, the selected urban health centre provides outpatient treatment for 219 males, 132 females and 156 childrenIn the reference period, the number of doctors, nurses, laboratory technicians and the pharmacists remained constant. There existed demand supply gap in the provision of health care facilities, since the doctor patient ratio increased from 1,875 to 2,130 during 2005-2010. The selected urban health centre is equipped with essential infrastructure – laboratory room, casualty room, office room, review meeting hall, furniture, ambulance

and equipments like generator, electric autoclave, oxygen cylinder, DC electricity generator set.

B) ***Beneficiary Assessment of People Utilizing Urban Health Care Service***: The study found that 48 per cent of the selected respondents were using the service of primary health centre alone and 52 per cent were using both urban health centre and private hospitals for treatment. Further, 64 per cent were getting the treatment regularly and 36 per cent were getting the treatment occasionally.

As compared to joint families, more nuclear families were using the services of urban health care services. The analysis of chi-square indicated that there was association between the type of family and the use of urban health care services since the calculated $\chi^2 = 1.03 < \chi^2_{.05} = 3.84$. However, there was no association between the size of the family and the use of urban health care services as revealed by the calculated figure $\chi^2 = 6.98 > \chi^2_{.05} = 3.84$. The study also noted that low income people made use of urban health care more as compared to high-income group, since with the improvements in income, people shift their health care to private hospitals. The reasons stated by the respondent for the use of urban health centre were free treatment, free accessibility of doctors and nearness to the place of residence. In order to find out the differences in the use of health services by different income groups, the study fitted the following multiple regression equation.

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$$

Where

Y = Total expenditure of the household

X_1 = Expenditure on food

X_2 = Expenditure on health

X_3 = Expenditure on housing, clothing and education and

e = Error term

The estimated equation for the high-income group was

$$Y = 0.141 + .900\ X_1 + .0670\ X_2 - .148\ X_3 \quad \ldots (1)$$

(.231) (8.511)** (1.081) (2.071)*

R^2 = .89, F = 51.03, N = 23

The estimated equation for the low-income group was

$Y = 1.055 + .610 X_1 + .116 X_2 - .278 X_3$ … (2)

(3.064) (10.754) ** (3.561) ** (5.053) **

R^2 = .93, F = 105.68, N = 27

To find out the beneficiary assessment by education, the multiple regression equation was fitted. For the literary sample, the estimated equation was

$Y = .428 + .740 X, + .103 X_2 + .257 X_3$ ... (3)

(1.139) (9.348)** (3.323)** (5.674)**

R^2 = .99, F = 191.89, N = 12

For the illiterate group, the estimated equation was

$Y = .674 + .794 X_1 + .107 X_2 + .137 X_3$ ... (4)

(1.573)(11.478)* (2.466)** (1.840)*

R^2 = .88, F = 82.96, N = 38

Equation (1) implies that for high-income group people, an increase in health expenditure by one per cent brings out an increase in total expenditure by 6 per cent. But from equation (2) it is evident that for low income group, the impact of health expenditure on total expenditure was to the extent of 11 per cent. However, equations (3) and (4) make it obvious that the impact of health expenditure on total expenditure was equal (10 per cent) for the literate and illiterate sample.

The major problems stated by the respondents in using the service of primary health centre were waiting in long queue. There was non-availability of cesarean facilities. For patients taken to primary health centre in case of emergency, only the first aid has given To improve the operational efficiency of urban health centre, the respondents recommended that there is need for arranging for the visit of a specialist once in a week, construction of an operation theatre, providing better medicines and

provision of super specialty beds.

IV. Conclusion

The Urban health systems are highly complex entities involving "sub-actions" across many institutions with numerous goals. Despite recognizing the urgency for revitalizing urban health services, the National Urban Health Mission is yet to be rolled out. The efforts at improving urban health have suffered from truncated visions. The range of participatory process that marked the formulation of the NRHM has been lacking for NUHM.

Urban health needs serious debate and academic introspection. That ought to be the starting point for renewal of urban health systems which undoubtedly need to be reformed, much beyond the conventional. From the research study, it is seen that the health care sector should be accorded the status of a core sector. To reduce the demand and supply gap with regard to secondary health care, it is necessary to increase the number of doctors, nurses and health assistants in the urban health care unit.

==========

References

Dindigul District, Statistical Hand Book- 2009, Government of Tamil Nadu

Emmel, N.D. (1998). "Health For-All for 21st Century: Demise of Primary Health Care", *Economic and Political Weekly,* Vol. 33, No. II, pp. 577-580.

Global Health Watch (2008): An Alternative World Health Report (London and New York: Zed Books).

Human Development Report-2009, Dindigul District, State Planning Commission, Government of Tamil Nadu Chennai.

Hadded (1998): "Community Perceptions of Primary Health Care Service in Guinea", *Social Science and Medicine,* Vol. 47, No.3, pp. 381-394.

International Labour Organization (2005): "Global Employment Trends", Geneva.

Johnfry and John Hasler (1986): "*Primary Health Care 2000",* Churchill Livingstone,

Edinburgh, pp.17-27.

Mitra Arup (1994): "Urbanisation, Slums, Informal Sector Employment and Poverty" (Delhi: B.R. Publishing Corporation).

Moser, Caroline, O.N., Alicia J. Herbert and Roza E. Makonnen (1993): "Urban Poverty in the Context of Structural Adjustment: Recent Evidence and Policy Responses", TWU Discussion Paper No. 4, Urban Development Division (Washington D.C.: World Bank).

Reddy, Ranga (1993): "*Health Care Services Management for under Privileged",* Delta Publishing House, New Delhi, pp. 135-141.

Sharma, B.B. and P.P. Talwar (1990): "Health for All and Population Stabilization in India". *Journal of Rural Development,* Vol. 10, No. 6, pp. 779-793.

The Business Line (1999). "Accord Health Care Core Sector Status", March 17th.

Verma, K.K. (1990). "*Health and Family Welfare",* Mittal Publication, New Delhi, pp. 94-105.

World Bank (1991): "Urban Policy and Economic Development: An Agenda for the 1990". World Bank Policy Paper, Washington, D.C.

==========

R. Kumaresan, Ph.D., Scholar
Department of Economics
Annamalai University, Annamalai Nagar-608 002
Cuddalore district, Tamilnadu, India
kumaresheco@yahoo.com

Dr. K. Ramu, Ph.D.
Assistant Professor
Department of Economics
Annamalai University, Annamalai Nagar-608 002
Cuddalore district, Tamilnadu, India
kramueco@yahoo.in