Health Expenditure and Access Disparities in India: Should not the TNMSC Model be Adopted Nationwide?

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ABSTRACT *Even though the Government of India constituted National Commission for Macroeconomics and Health, the object of raising health expenditure as a percent of GDP remains un-met. An efficient health system is essential for building a healthy society, which in turn will accelerate future growth. In countries like India, the issue equally important is public access to essential medicines. This warrants a country wide sound and competitive procurement and distribution system. This paper examines India's current status of health expenditure and the access issue with success models of procurement and distribution systems.*

Keywords: *Health expenditure, Access disparities and Essential drugs.*

Introduction

Government of India constituted its National Commission on Macroeconomics and Health(NCMH) in March 2004 following the recommendation of WHO Commission on Macroeconomics and Health(WHOCMH) to establish the centrality of health to 'development' and make an evidence-based argument to increase investment in health. The NCMH report envisaged that investing in health is nothing but investing in economic development and equitable growth. However, the country did not achieve target public health expenditure and the distributional goal. The Commission was to place 'health expenditure' as a crucial and a policy macroeconomic variable. But India's investment allocation for health is one of the lowest among other countries. This paper examines the growth of health expenditure in India and its distributional efficiency in terms of access to essential drugs.

Objectives

- To evaluate the growth of health expenditure in India.
- To examine the public access to essential drugs with respect to efficient models.

Methodology and Data Sources

This is a descriptive and analytical study based on secondary information. Various reports of Government of India and international agencies have been examined. Economic surveys, NSSO data and information available in official web portals of GoI are also form the basis for arguments.

Data and Discussion

Health and Economic Development

The relationship between health and economic development is well established. Health is often regarded as one of the pillars of human capital, promoting economic productivity. Healthy individuals enhance their future economic security by improving learning capacity and productivity. As good health contributes to growth, it has a significant bearing on poverty reduction in the long term. Menon (2017) demonstrates that health contributes growth through multiple channels. First, improved health increase worker productivity and thus affects economic growth by increasing longevity and resulting human capital accumulation. Further, health reduces disease burden so that individuals are able to function in their full capacity. While we speak of health expenditure, the nature of health services, whether it is a private good or public good needs attention. Even though the WHOMCH emphasis the growth of public health expenditure, it indirectly promotes private spending. Investment allocation for health in different countries can be read from table1.

Table 1: Health spending as a share of GDP

Country	Health spending as a % of GDP		
	Public spending	Private spending	Total
United Kingdom	7.8	1.5	9.3

Germany	8.6	2.7	11.3
United States	8	8.9	16.9
France	8.9	2.7	11.6
Italy	7	2.2	9.2
India	1.3	2.7	4

Source: OECD health statistics 2014

India's public spending on health is lower than the world average. In most developed countries, total health expenditure stood around 10 per cent of GDP while India's is just 4 per cent. She is at the worse end that the government bears only 32.5 per cent of total expenditure on health. Even in United States of America, the country which has been regarded as the champion of privatization, the government share of expenditure on health is nearly 50 per cent. In most other countries, the principal share of health expenditure is born by the government. This raises reasonable apprehensions about the India's urge for human capital formation. Economies with heavy disease burden face several obstacles to economic development. However, in the history, several "take offs" in economic development like industrial revolution were complemented by improvements in public health and nutritional intake (Fogel, 1997).

Access of Essential Drugs

Another serious issue is the public access to essential drugs. India's health system has evolved through different phases. Though initially it was state centric and welfare oriented, gradually started privatization and finally the state redefined itself as a financier rather than a provider. Consequently, the private sector has grown without much regulation and seriously affected the access of common public to essential health services.

As far as the issue of access to essential medicines is concerned, priority should be given to ensuring equity and fairness. This aspect is mostly settled by how the health system is financing for health expenditure. Like many other developing countries, in India too, access to health services is very much dependent upon one's ability to pay**.** The public expenditure on health in India is recorded lower than the international standard of spending. The health spending in the country is dominated by private out-of-pocket spending (Hooda 2013). National Health Account estimates that 64.2% of total health expenditure is met through out-of-pocket spending by households. A component wise analysis of health expenditure reveals that drugs are the single most vital component of household health expenditure.

Table 2: Component wise analysis of average medical expenditure in public hospital inpatient care during 2004-05 in India in Rs. (per cent of total expenditure)

	Dr. fee	Diag. test	Other services	Medicines	Blood etc.	Food	Total
Rural	61(4.16%)	17.5(1.19)	64(4.36)	976(66.5)	55(3.75)	137(9.34)	1467
Urban	66(4.64)	21.5(1.5)	83(5.84)	886(62.31)	65(4.57)	107(7.53)	1422

Source: Indranil et al (2017) calculated using NSSO 60th and 71st round unit records

But the pattern of public health expenditure is different. The share of drugs in the health budgets of Central and State Governments is too low, whereas salaries account for the bulk of health sector expenditure in India (Sakthivel 2005). This often means partial or no purchase of drugs leading to serious ill health effects. Therefore, the meager access to drugs creates a significant burden on households. Ironically, though India is being one of the largest pharmaceutical manufacturers, a large portion of population is deprived of essential drugs. The inadequate access creates a major barrier to the goal of delivering essential health care **(**Singh et al., 2012). Along with this, the high out-of-pocket expenditure for medicines pushes many people into poverty.

Table 3: Percentage of people impoverished due to Out-of-Pocket Expenditure on medicines in India

Year	Rural	Urban	Total
1993-94	4	2.6	3.6
2004-05	3.1	2.1	2.9
2011-12	3.68	1.64	3.1

Source: Indranil et al (2017) calculated using NSSO 60th and 71st round unit records

Therefore, the efforts to augment investment in health must resolve the access issue. Government initiatives in this sector include drug price control and public procurement of essential drugs, but in many states quite

ineffective. In India, drug prices generally rise; but shown enormous upswings during recent decades despite the existence of mechanisms for price control. However, it needs to be noted that prices are fixed with enormous margins. Trade margins are among the highest is in the pharmaceutical industry.

Public Procurement of Essential Drugs

The Central and State Governments spend approximately Rs 2000 crores per year for procuring drugs. This is grossly quite inadequate. Scaling up funds for expenditure on drugs is very important. Equally important is the optimum utilization of available resources. Efficient procurement policies have a significant role in ensuring the availability of right medicines in the right quantities at lowest prices to secure the maximum therapeutic value to the largest number of beneficiaries. In India, Central and State Government institutions follow one or more of these arrangements for public procurement: (i) Central Rate Contract System, (ii) Pooled Procurement either by the government or through an autonomous corporation, (iii) decentralized procurement, and (iv) local purchase.

The Success Story of TNMSC

The Tamil Nadu Medical Service Corporation (TNMSC) set up in 1994, is a pioneer in drug procurement and distribution system in India. The success of the TNMSC lies in its centralized drug procurement and distribution policy supported by a digitalized system of drug management. TNMSC has set up warehouses in all district headquarters for supplying drugs to hospitals. There exists a passbook system where the allotment of each facility is given in money terms so that hospitals can purchase different combinations using a given budget. They can obtain drugs from the approved list if funds are available in the passbook. The TNMSC has also a unique Drug Distribution Management System (DDMS) which monitor procurement and distribution of drugs. District warehouses are linked to the central computer. Receipt and issues of drugs are digitalized real time, resulting in instantaneous stock adjustments. This is the basis of movement of drugs based on needs, thus avoiding shortages. Two envelope system of TNMSC ensures speedy and transparent procurement. Contracts are given to only those manufacturing units, which have a Good Manufacturing Practices (GMP) certificate of the WHO and should ideally have a minimum annual turnover. The superiority of TNMSC model is evidenced by the lower prices mainly due to the competitive bidding and bargaining power (Table 4).

Table 4: Drug Price Difference between Retail Market and TNMSC

Disease conditions	Therapeutic drug	Formulation	Strength and No.	Retail Price (Rs.)	TNMSC price (Rs.)	Price difference (%)
Cancer	Cyclophsphamide	Endoxan-N	50mg;10	36.35	13.218	275
Cancer	Fluorouracil	Fluracil	5ml	11.67	1.001	1166
Child and infectious disease	Chloramphenicol	Chloromycetin	250mg;10	30.76	4.4	699
Child health	Phenytoin Sodium	Dilantin	100mg;10	131.55	9.75	1349
COPD and Asthma	Betamethasone	Walacort	0.5mg; 10	3.55	1.043	340
COPD and asthma	Salbutamol	Asthalin	4mg;10	5.21	0.522	998
CVD	Verapamil	Veramil	40mg;10	5.02	4.392	114
CVD	Atenolol	Aten	50mg;14	25.75	1.2	2146
Diabetics	Insulin NPH	Actrapid	10ml	129.28	86.85	149
Diabetics	Glibenclamide	Daonil	5mg;10	6.60	0.454	1454
Injuries	Bupivaccine HCl	Sensorcaine	0.5%;20ml	34.34	15.5	222
Injuries	Ketamine	Ketalar	50mg;10ml vial	89.50	15.15	591
Japanese encephalitis	Ceftriaxone	Lyceft	1g;vial	90.00	16.11	559
Lymphatic Filariasis	Diethylcarbamazine	Banocide	50mg;10	3.88	0.707	549
Malaria	Chloroquine	Melubrin	250mg;10	4.36	2.233	195
Maternal health	Carboprost	Prostodin	1amp	80.13	68.5	117
Maternal health	Ferros Sulphate	Ferrochelate-Z	150mg;10	19.94	0.495	4028
Mental health	Chlorpromazine	Chlorpromazine-NP	25mg;10	5.95	1.81	329
Mental health	Alprazolam	Alprocontin	0.5mg;10	22.55	0.442	5102
Tuberculosis	Rifampicin	Rifacilin	150mg;100	99.68	66.6	150
Tuberculosis	Pyrazinamide	PZA-Ciba	500mg;10	42.46	5.188	818
Others	Rantidine	Consec	150mg; 10	7.51	2.205	341
Others	Dopamine	Dopinga	5ml	25.00	6.05	413
Others	Ciprofloxacin	Ciplox	200mg;100ml	27.00	6.41	421
Others	Paracetamol	Calpol	500mg;10	8.78	1.24	708
Others	Diclofenac Sodium	Diclonac	50mg;10	11.03	0.686	1608
Others	Diazepam	Calmpose	5mg;10	13.70	0.4	3425
Others	Dexamethosone Sodium Phosphate	Decdan	2ml	10.36	0.222	4667
Others	Cetrizine	Alerid	10mg;10	31.50	0.561	5615

Source:For Retail Price—Monthly Index of Medical Specialities, India, August, 2004
For TNMSC Price—Tamil Nadu Medical Services Corporation (TNMSC). Available from URL: http:/www.tnmsc.com/system.html

Source: Sakthivel (2005)

However, these developments and the success achieved by TNMSC did not induced policy ramifications at Central Government, which continues to have multiple agencies for procurement and distribution of drugs for its various health schemes.

Summary and Conclusion

Even with the constitution of a National Commission on Macroeconomics and Health, the public expenditure on health in India compared to developed countries remains very low. The country failed to make any significant improvement in public spending on health over the years. Scaling up of health expenditure is very important for the social development of any economy, but the governments blissfully ignore it mainly due to the shrinking fiscal spaces. Equally important is the access issue relating to essential medicines, which could be resolved to a great extent by adopting sound procurement policy rather that to resort on to the price control. The TNMSC model has proven its merit in ensuring low priced supply of essential drugs, but is unfortunately not replicated by other states. The macro character of the nexus between economic development and health underlines the increasing necessity of a nationwide health policy and expenditure systems with fair and equitable access to the common man.

References

1. Fogel, R. W. (1997).New Findings on Secular Trends in Nutrition and Mortality: Some Implications for Population Theory. In Rosenzweig, M.R.& Stark,O.(Eds.),Handbook of Population and Family Economics, Vol. 1a. (pp. 433–481). Amsterdam: Elsevier Science.
2. Hooda, Shailender Kumar (2013) Changing Patterns of Public Expenditure on Health In India - Issues and Challenges, Working Paper Series 01, ISID-PHFI Collaborative Research Programme, New Delhi, Institute for Studies in Industrial Development, March 2013
3. Indranil ,M., Sakthivel, S., Vaidyanathan ,G. (2017,June). Free Medicines in Tamil Nadu: Sustainable Reforms and Effective Financial Protection. Paper presented at 3rd International Conference on Public Policy,Singapore.
4. Menon, N.(2017, May). Health Policy and Economic Growth in India: Lessons from International Growth Center Projects.IGC Synthesis paper ref. no. s35408 INC2.
5. Singh,P.V., Tatambhotla,A.& Kalvakuntla, R. (2012). Understanding public drug procurement in India: a comparative qualitative study of five Indian states. BMJ Open, Advance online publication. doi:10.1136/bmjopen-2012- 001987.
6. Sakthivel, S. (2005). Access to Essential Drugs and Medicines. In Lal P.E.& Byword(Eds.), NCMH: Background papers on Financing and delivery of Health Care Services in India(pp.185-212).New Delhi: Cirrus Graphics Private Limited.
7. WHO (2001). Macroeconomics and Health: Investing in Health for Economic Development (Report of the Commission on Macroeconomics and Health). Geneva: World Health Organization.
8. www.oecd.org accessed on 28/05/2018