

# Health System in India : Opportunities and Challenges

Madan Mohan Laddunuri

**Abstract:-** At present health system of India has 3-tier composition which offers all-round health services to the people. Health care services at all-levels including, primary, secondary and tertiary run by State Governments of India. Every state government afford medical services for free of cost or sometimes very minimal charges. India is one of the fastest growing and the third biggest economies of the world. Regrettably, the delivery of health services and rate of its progression has not been proportionate with the changing tempo of the economy. The healthcare centres in the public sector are with inadequacy of hospital beds, lack of adequate staff, limited maternal & child healthcare services, combined with high prices. Moreover, the rural-urban divide, in relation to the availability and accessibility of quality healthcare services, remained a challenge.

Total expenditure of India including private and government and on health in 2012 was around 4.0 % of Gross domestic product, which was one of the lowest among all BRICS countries and also entire world<sup>25</sup>. Low financing on the health system is a significant root cause for deprived performance and poor utilization of the public health system.

**Keywords:-** Health Systems, Opportunities, Challenges, Tertiary Health Care.

## I. INTRODUCTION

### A. Overview of Indian Health Care System

At present health system of India has 3-tier composition which offers all-round health services to the people<sup>1</sup>. Health services at all-levels including, primary, secondary and tertiary run by State Governments of India. Every state government afford medical services for free of cost or sometimes very minimal charges. In addition to public health services, there is a wide spread of private health care system which covers complete range of services. The details of 3-tier, health system is discussed below.

### B. Primary Health Care system

Primary health system serves the community. It serves widely includes immunization, paediatric and obstetric services, family planning, preventive of local epidemics, provides suitable treatment for local common diseases, provision of essential drugs, nutritional food, safe drinking water and health education<sup>2</sup>. In rural areas, Primary health centres provide primary health care, while in urban areas; these services offer through Family Welfare Centres. Every Sub-Centre comprises one supporting nurse, midwife and one multipurpose health worker, which serve up to five thousand population in plains and three thousand population in hilly and tribal areas. The Primary Health Centre (PHC) has following staff, one Medical Officer and other paramedical staff serves about thirty thousand people in the plains or twenty thousand people in hilly and tribal areas.

Every Primary Health Centre (PHC) should manage six Sub-centres.

### C. Secondary Health Care system

It is a second-tier of health care system. Patients referred from primary health centres to higher level hospitals where specialists are available to for specific health problems. These health centres located at block and district levels as community health centres and district hospitals respectively.

### D. Tertiary Health Care system

It mainly refers to the 3rd level of health care system. Patients referred from primary and secondary health care centres to these highly sophisticated Tertiary Health Care Centres for specific medical expertise care. Key features of tertiary health care system are specialized intensive care Units; highly developed diagnostic component and extremely skilled medical personnel. In India, medical colleges and health related research institutes provide tertiary care services.

## II. GRIM PICTURE OF PUBLIC HEALTH SYSTEM IN INDIA

India is one of the fastest growing and the third biggest economies of the world. Regrettably, the delivery of health services and rate of its progression has not been proportionate with the changing tempo of the economy. Public health in India presents a gloomy picture. Health indicators illustrates that about 43 % of children with 0-5 years of age group are underweight<sup>3</sup>; India accounts for the highest number of maternal deaths in the world, 100, 000 mothers in India die every year which accounts to 1 maternal death every 5 minutes.

What is sad is here is that more than 75% of this mortality could be preventable with proper medical care<sup>4</sup>; Child mortality (before five years) is approximately 2.2 million, and 1.1 million from total 2.2 million, die before one month from the birth<sup>5</sup>.

In relation to Human development, India's rank remained in the list of lowest 40 countries<sup>6</sup>. Moreover the rural-urban divide, related to accessibility and availability of quality healthcare services remained a big challenge. Rural population accounts 69 % of the total country's total population<sup>7</sup>. In India, 28.4 % of the population still remained to 'below poverty line'<sup>8</sup>, struggle to avail healthcare services.

The miserable condition in health is mainly because of unsafe drinking water, living and working conditions, poor sanitation, limited obstetrics services, poor public health centres etc. The healthcare centres in the public sector are with inadequacy of hospital beds, lack of adequate staff, limited maternal & child healthcare services, combined with high prices (Ministry of Health & Family Welfare)<sup>9</sup>.

### III. THE DEPICTION OF HEALTHCARE WORKFORCE

A number of studies have emphasised the scarcity of workforce in health system including doctors, auxiliary nurses and midwives and allied health professionals.<sup>10, 11, 12, 13.</sup> According to the World Health Organisation, the standard point is 25.5 healthcare professionals (physicians and auxiliary nurses) per 10,000 population. But in India, it is about 12 health care professionals per 10,000 population. The doctor and nurse ratio is also not sufficient.<sup>14,15</sup>.

The total number of doctors at Primary health centres are 2490 in 2012<sup>16</sup>. But according to reports, Primary health centres without any doctor were 900, without lab technicians 7677, lacking pharmacists 5550, and absence of female doctor 5440, while at community health centres the shortfall of specialists including surgeons, physicians, paediatricians, gynaecologists and obstetricians was 12300.<sup>17</sup> The amount of lady doctors was utterly low, the number is about 6 per 10,000 of population, or 2 per 10,000 women. This is a miserable share of female doctors<sup>18</sup>. According to a study report, there is a need of 7 million trained paramedical staff. This shortage of paramedical staff in rural areas again aggravated by its skewed distribution.<sup>19</sup> Most of the physicians are concentrated in urban areas. The distribution of the physicians in urban areas 13.5 per 10,000 population which is more than 3 times higher than rural areas (4.0). The situation is the same with nurses & midwives: urban areas (16.0) which is 4 times more than rural areas (4.0)<sup>20</sup>.

To attract and keep hold on health professionals in under-served and rural areas, states should adopt different initiatives, including various financial and non-financial incentives. In Tamil Nadu, doctors after their graduation need to sign rural service. In some states provide reservations in postgraduate education for those who served rural service after their graduation<sup>21,22</sup>.

### IV. INDIA IN COMPARISON TO INTERNATIONAL RANKING

According to WHO, health is human right which ensures social-well being<sup>23</sup>. WHO in 2000 ranked health care system of India was 112 out of 190<sup>24</sup>. Total expenditure of India including private and government and on health in 2012, was around 4.0 % of Gross domestic product, which was one of the lowest among all BRICS countries and also entire world<sup>25</sup>. Low financing on the health system is a significant root cause for deprived performance and poor utilization of the public health system<sup>26</sup>. According to a study, a country should at least finance above 5 % of its Gross domestic product on health to produce desired results<sup>27</sup>. Majority of the countries including even developing countries investing a big percentage of GDP on health, but in Indian government spending approximately one percent of Gross domestic product on health. But government of India's expenditure on health is one of the lowest as compared to the international standards.

It is also well-noted that about 75% of health finance in India is paid by private individuals<sup>28</sup>. It is noticed that health sector in India was not financed well and also urban

biased. Studies noticed that many states invested more than 50% of funds on tertiary care; obviously it is biased trend<sup>29</sup>. This biased trend leads to the service delivery more urban-centred, broadening the rural-urban gap in related to the availability and accessibility of health-care services, and diseases expansion and extended health inequalities<sup>30&31</sup>. Indian health system including public and private sectors are not adequate enough to serve the health needs of the masses.

Some suggestions are made to bring significant improvement in health systems as follows

- Government of India should increase drastically health funding.
- Special incentives should be provided to the health professional in order to work in rural areas to reduce the rural-urban gap.
- It is necessary to increase substantial number of medical colleges to keep adequate human resources in health sector domain.

### V. CONCLUSION

Every state government afford medical services for free of cost or sometimes very minimal charges. But the healthcare centres in the public sector are with inadequacy of hospital beds, lack of adequate staff and limited maternal & child healthcare services etc. Moreover, the rural-urban divide, in relation to the availability and accessibility of quality healthcare services, remained a challenge. Low financing on the health system is a significant root cause for deprived performance and poor utilization of the public health system.

### REFERENCES

- [1]. Majumder A and Upadhyay V. An analysis of the primary health care system in India with focus on reproductive health care services. *Artha Beekshan* 2004;12(4): 29-38. <[http://amlan.co.in/yahoo\\_site\\_admin/assets/docs/Amlan\\_First\\_Paper\\_Health\\_Careamlancoin.16115720](http://amlan.co.in/yahoo_site_admin/assets/docs/Amlan_First_Paper_Health_Careamlancoin.16115720)>
- [2]. Rao, M.G., & Choudhury, M. (2012). Health care financing reforms in India. *The Economics of Public Health Care Reform in Advanced and Emerging Economies*, International Monetary Fund. Retrieved from [http://www.nipfp.org.in/media/medialibrary/2013/04/wp\\_2012\\_100.pdf](http://www.nipfp.org.in/media/medialibrary/2013/04/wp_2012_100.pdf).
- [3]. Malnourishment a national shame: Manmohan Singh. (2012, January 11). *The Times of India*. Retrieved from <http://www.timesofindia.indiatimes.com/india/Malnourishment-a-national-shame-ManmohanSingh/articleshow/11443478.cms>.
- [4]. Barnagarwala, T. (2014, May 7). India has highest number of maternal deaths. *Indian Express*. Retrieved from <http://indianexpress.com/article/india/indiaothers/india-has-highest-number-of-maternal-deaths/#sthash.RPQTg0Fg.dpuf>
- [5]. Sharma, S. (2008). Childhood mortality and health in India. *Population Research Center, Working Paper Series No. E/292/2008*. Institute of Economic Growth. Retrieved from <http://www.iegindia.org/workpap/wp292.pdf>

- [6]. Bhandari, L., & Dutta, S. (2007). Health Infrastructure in Rural India (pp. 265-285). India Infrastructure Report. Retrieved from <http://www.iitk.ac.in/3inetwork/html/reports/IIR2007/11-Health.pdf>
- [7]. Chandramouli, C. (2011). Rural Urban Distribution of Population. New Delhi, India. Retrieved from [http://censusindia.gov.in/2011-provresults/paper2/data\\_files/india/Rural\\_Urban\\_2011.pdf](http://censusindia.gov.in/2011-provresults/paper2/data_files/india/Rural_Urban_2011.pdf)
- [8]. Planning Commission. (2014a, December 22). Percentage of Population below Poverty Line by States & UTs for 61st (2004-05) Rounds. Retrieved from [http://planningcommission.nic.in/data/datatable/data\\_2312/DatabookDec2014%20105.pdf](http://planningcommission.nic.in/data/datatable/data_2312/DatabookDec2014%20105.pdf)
- [9]. Ministry of Health and Family Welfare. (2005). Report of the National Commission on Macroeconomics and Health. Government of India. Retrieved from <http://www.who.int/macrohealth/action/Background%20Papers%20report.pdf>
- [10]. Balarajan, Y., Selvaraj, S., & Subramanian, S. V. (2011). Health care and equity in India. *The Lancet*, 377(9764), 505-515. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3093249/>
- [11]. Husain, Z. (2011). Health of the National Rural Health Mission. *Economic & Political Weekly*, 46(4), pp. 53. Retrieved from <http://www.epw.in/specialarticles/health-national-rural-health-mission.html>
- [12]. Ma, S., & Sood, N. (2008). A Comparison of the Health Systems in China and India. Retrieved from [http://www.rand.org/pubs/occasional\\_papers/OP212.html](http://www.rand.org/pubs/occasional_papers/OP212.html)
- [13]. Raha, S., Berman, P., & Rao, K.D. (2009). Challenges in Recruitment of Doctors by Government. *India Health Beat*, 1(4). Retrieved from [https://www.phfi.org/images/pdf/hrh\\_policy\\_note\\_4.pdf](https://www.phfi.org/images/pdf/hrh_policy_note_4.pdf)
- [14]. Rao, K.D., Bhatnagar, A., & Berman, P. (2009a). Using multiple sources of information to estimate India's Health workforce. *India Health Beat*, 1(2). Retrieved from [https://www.phfi.org/images/pdf/hrh\\_policy\\_note\\_2.pdf](https://www.phfi.org/images/pdf/hrh_policy_note_2.pdf)
- [15]. Rao, K.D., Bhatnagar, A., & Berman, P. (2009b). India's health workforce: size, composition and distribution. *India Health Beat*, 1(3). Retrieved from [http://www.phfi.org/images/pdf/hrh\\_policy\\_note\\_3.pdf](http://www.phfi.org/images/pdf/hrh_policy_note_3.pdf)
- [16]. Government of India. (n. d.a). Retrieved from [http://data.gov.in/catalog/allopathicdoctors-primary-health-centres#web\\_catalog\\_tabs\\_block\\_1091](http://data.gov.in/catalog/allopathicdoctors-primary-health-centres#web_catalog_tabs_block_1091)
- [17]. Government of India (n. d.b). Retrieved from [http://data.gov.in/catalog/numberprimary-health-centres-phcs-doctors-and-without-doctorlab-technicianpharmacist#web\\_catalog\\_tabs\\_block\\_10](http://data.gov.in/catalog/numberprimary-health-centres-phcs-doctors-and-without-doctorlab-technicianpharmacist#web_catalog_tabs_block_10)
- [18]. Rao, K.D., Bhatnagar, A., & Berman, P. (2012). So many, yet few: Human resources for health in India. *Hum Resource Health*, 10(1), 19. Retrieved from <http://www.human-resources-health.com/content/10/1/19>
- [19]. Public Health Foundation of India. (2012). From 'Paramedics' to Allied Health Professionals: Landscaping the Journey and Way Forward. Ministry of Health and Family Welfare, Government of India, New Delhi. pp 3-10. Retrieved from <http://www.mohfw.nic.in/WriteReadData/1892s/NIAHS%20Report.pdf>
- [20]. Rao, K.D., Bhatnagar, A., & Berman, P. (2009b). India's health workforce: size, composition and distribution. *India Health Beat*, 1(3). Retrieved from [http://www.phfi.org/images/pdf/hrh\\_policy\\_note\\_3.pdf](http://www.phfi.org/images/pdf/hrh_policy_note_3.pdf)
- [21]. Sundararaman, T., & Gupta, G. (n. d.). Human Resource for Health: The Crisis, the NRHM Response and the Policy Options-Policy Brief. Retrieved from [http://www.iamrindia.gov.in/Policy\\_Brief\\_Health.pdf](http://www.iamrindia.gov.in/Policy_Brief_Health.pdf)
- [22]. Public Health Foundation of India, National Health Systems Resource Center, State Health Resource Center. (2010a). Which Doctor for Primary Healthcare? An Assessment of Primary Healthcare Providers in Chhattisgarh, India. Retrieved from <http://cghealth.nic.in/ehealth/studyreports/Which%20Doctor%20For%20Primary%20Health%20Care.pdf>
- [23]. Mann JM, Gostin L, Gruskin S, Brennan T, Lazzarini Z, Fineberg HV. Health and human rights. *Health Hum Rights*; 1994; 1: 6-23.
- [24]. World Health Organization; World Health Report 2000.
- [25]. Rao, M.G., & Choudhury, M. (2012). Health care financing reforms in India. The Economics of Public Health Care Reform in Advanced and Emerging Economies, International Monetary Fund. Retrieved from [http://www.nipfp.org.in/media/medialibrary/2013/04/wp\\_2012\\_100.pdf](http://www.nipfp.org.in/media/medialibrary/2013/04/wp_2012_100.pdf)
- [26]. Baru, R., Acharya, A., Acharya, S., Shiva Kumar, A. K., & Nagaraj, K. (2010). Inequities in access to health services in India: caste, class and region. *Economic & Political Weekly*, 45(38), pp. 49-58. Retrieved from <http://www.epw.in/specialarticles/inequities-access-health-services-india-caste-class-and-region.html>
- [27]. Savedoff, W. (2003). How Much Should Countries Spend on Health? Discussion Paper Number 2. World Health organization, Geneva. Retrieved from [http://www.who.int/health\\_financing/en/how\\_much\\_should\\_dp\\_03\\_2.pdf](http://www.who.int/health_financing/en/how_much_should_dp_03_2.pdf)
- [28]. Balarajan, Y., Selvaraj, S., & Subramanian, S. V. (2011). Health care and equity in India. *The Lancet*, 377(9764), 505-515. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3093249/>
- [29]. Reddy, K.S., Selvaraj, S., Rao, K.D., Chokshi, M., Kumar, P., Arora, V., Bhokare, S., & Ganguly, I. (2011b). A Critical Assessment of the Existing Health Insurance Models in India. Public Health Foundation of India. Retrieved from [http://www.planningcommission.nic.in/reports/sereport/ser\\_heal1305.pdf](http://www.planningcommission.nic.in/reports/sereport/ser_heal1305.pdf)
- [30]. Balarajan, Y., Selvaraj, S., & Subramanian, S. V. (2011). Health care and equity in India. *The Lancet*, 377(9764), 505-515. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3093249/>
- [31]. Ma, S., & Sood, N. (2008). A Comparison of the Health Systems in China and India. Retrieved from [http://www.rand.org/pubs/occasional\\_papers/OP212.html](http://www.rand.org/pubs/occasional_papers/OP212.html)