



ORIGINAL RESEARCH PAPER

Community Medicine

HEALTH CARE DELIVERY IN INDIA-SWOT ANALYSES

KEY WORDS: NHP (National Health Policy, healthcare, SWOT analyses, primary, secondary, tertiary health care centers, community health center, District Hospital Medical colleges

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ABSTRACT

Healthcare in India is undergoing a change that will meet the demands of the citizens from the village to the metropolitan city level. The National Health policy announced in 2017 is focused on “wellness” of patients and guarantees healthcare with suitable insurance to cover from primary to tertiary care. Ayushman Bharat Mission is a policy that promotes healthcare with a center-state co-operation. Program Indra Dhanush aims to cover immunization of children in rural and urban areas including those who were not covered in the previous program like Pulse Polio. In general healthcare is to provide and promote quality care, focus on emerging diseases and invest in promoting and preventive healthcare. The policy is patient centric and quality driven. It addresses health security and make in India free for drugs and devices. As National Health Policy varies from State to State according to the political, historical and socio-economic situation prevailing in the country an attempt is made to shorten the gap and make it a universally applicable.

Reflections on the Present Health care scenario

National Health Policy (NHP), which the Union Government announced in March 2017, is on insurance-based model of secondary and tertiary health care delivery routed through private players. The NHP aims to increase government expenditure on health to 2.5 per cent of GDP, which is half of the global average of government health spending. However, government spending on health is only 1.4 per cent of GDP (1). There is an emphasis that the state purchase services from the private sector like say purchase of medical insurance as the Rashtriya Swasthya Bima Yojna (RSBY). (1-2)

The increasing burden of non communicable diseases

(NCDs) in India is an immense cause of concern, especially in the absence of adequate health facilities at the primary, secondary, and tertiary levels. Visceral obesity is one of the major health problems of India and it is one of the main reasons for an increase in NCDs. NCDs account for approximately 4 million premature deaths annually aged between 30-70 years. (3)

As per the World Health Organization’s Global Health Expenditure database, as of 2014, the out of pocket medical expenditure in India was over 62.4 per cent of the overall cost of healthcare. This is an indicator of low government investment in healthcare (3) Out of pocket expenditure in Iraq and Afghanistan are 39.7 and 63.9 per cent respectively. In 2005, NCDs, including diabetes, respiratory diseases, cancer, and cardiovascular diseases (CVDs), accounted for 53 per cent of deaths and 44 per cent of disability-adjusted life years (DALYs) lost in India, with projections indicating a rise to 67 per cent of total mortality by 2030 (4). Available data indicate that premature deaths from NCDs contribute substantially to the loss of productivity; in fact, when “compared with all other countries, India suffers the highest loss in potentially productive years of life due to deaths from CVDs”. (3).

Oncology

In one of the studies it was reported that there is one oncologist for every 1,600 cancer patients in India. The report suggests that 70-80 per cent of cancer patients are diagnosed in the third and the fourth stages. The patients do not get equitable access to multi-modal treatment as 40-60 per cent of the facilities and oncologists are concentrated in 7-8 metropolitan cities while fewer than 15 per cent are government operated. (4-5)

Mental health is the most neglected one in India.

Currently, India spends 0.06 per cent of its health budget on mental healthcare, much lower than Bangladesh’s 0.44 per

cent. Therefore the government plans to enhance its contribution to mental health care with funds and more health personnel. (6)

Seasonal Communicable diseases

The seasonal outbreaks of communicable diseases like chikungunya, malaria, dengue, and Japanese Encephalitis (JE) have also crippled the Indian health system in varying degrees. As Primary Health Centers (PHCs) and Community Health Centers (CHCs) are not equipped to provide care for JE. There has to be good communication and co-ordination between the PHCs, CHCs and District hospitals. (7)

Palliative Care:

Medical Council of India (MCI) in late 2010 accepted palliative medicine as a specialty and even announced an MD course. Subsequently, a Master’s degree in palliative care was started at the Tata Memorial Hospital, Mumbai, in 2012, and at the All India Institute of Medical Sciences (AIIMS), New Delhi, in 2016 .Before this, AIIMS had a two-day course on palliative care organized twice a year starting 2009. (8). In 2012, a National Palliative Care Strategy was drawn up that was to be implemented during the 12th Five Year Plan period to create the basic infrastructure of this specialized care (7,8).

Status of PHCs and CHCs

Between 2005 and 2016, the number of sub-centers (SCs) has increased by six per cent, the number of Primary Health Centers (PHCs) by nine per cent and the number of Community Health Centers (CHCs) by 65 per cent. The problem with this growth is that the number of SCs, which is the first contact point for patients, has not increased in proportion to the population, which grew by 15.7 per cent during this period. This resulted in increasing the burden on the PHC and the CHC. The CHCs are already in a severe crisis with a shortfall of nearly 81 per cent of specialists. Thus, poor patients are stuck between understaffed and inadequate SCs, and PHCs and the CHCs where there are no doctors available. In the name of infrastructure, the government has achieved success in providing buildings for SCs, PHCs, and CHCs, which have increased to 65 per cent, 45 per cent and 91 per cent, respectively, since 2005 .But, these buildings do not have basic amenities and resources for providing health care. Rural Health Statistics (RHS) 2016 states that 71 per cent of PHCs have labor rooms but the report does not mention the equipment available and functional status of these labor rooms as per Indian Public Health Standard norms. (9)

Maternal mortality rate(MMR)

To control MMR, India has programs like *Janani Suraksha*

Yojana and Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA). Despite these programs, we could not achieve MMR targets of 137 per 100,000 births, as envisioned under the Millennium Development Goals MDGs, due to a shortage of frontline workers. Many of the public hospitals lack basic infrastructure to facilitate safe deliveries. The RHS states that 82 per cent of the CHCs have new born care corner, but there is a shortfall of 80 percent pediatricians; 92 per cent of the CHCs have labor room, but there is a deficit of 77 per cent obstetricians and gynecologists, which is the primary cause of death among pregnant women during complicated pregnancies.

Apart from lack of medical care, expectant mothers in rural areas often lack nutrition which affects reproductive health. (10)

Mortality among children from many preventable diseases is quite high in India. The Pneumonia and Diarrhea Progress Report 2016 shows that India ranks among top 15 countries with 2,96,279 deaths . The NITI Aayog Report 2015 on the functioning of Anganwadi states that that 41 per cent of Anganwadis are cramped for space, 71 per cent are not visited by doctors, 31 per cent have no supply of nutritional supplementation, and 52 per cent have bad hygienic conditions. (7)

The 2017-18 budget has also not done much to increase infrastructure and resources at the primary level. According to PRS Legislative Research's analysis of the budget, 104 per cent increase in Pradhan Mantri Swasthya Suraksha Yojana will be utilized for setting up government colleges. The budget has also earmarked an additional Rs. 2,000 crore for NRHM to fund 'health system strengthening', which will result in transforming 1.5 lakh health sub-centers into 'health and wellness centers'. However, the Ministry of Finance's Notes on Demands for Grants, 2017-2018 shows that no money was allocated for the Human Resources for Health under NRHM. This will restrict the functioning of the sub-centers. The NHP 2017, with a target to increase the health budget expenditure by 2.5 per cent of the GDP by 2025, was initially envisaged for 2020 in the draft National Health Policy. In the current scenario, it would be difficult to achieve the goal of converting sub-centers into health and wellness centers with the stipulated increase in health budget by 2025. (11-13)

India also faces challenges of man-made threats to public health, especially that of pollution. Though the issue of air pollution was highlighted after smog engulfed Delhi last year, which was declared an 'emergency' by the government, the WHO data shows that the situation is far worse in Tier-2 and Tier-3 cities. It is striking that WHO considers air unsafe if PM2.5 and PM10 are above 10 micrograms per cubic meter and 20 micrograms per cubic meter, respectively. "India's prescribed limits for the same are 20 micrograms per cubic meter and 60 micrograms per cubic meter, respectively." (14) According to data from the Organization for Economic Co-operation and Development (OECD), India has 0.7 doctors per 1,000 people, which is lower than Pakistan's (0.8), China's (1.5), and UAE's (2.5). Rural Health Statistics 2014-15 indicates that there is a huge shortfall of surgeons (83.4 per cent), obstetricians & gynecologists (76.3 per cent), physicians (83 per cent), and pediatricians (82.1 per cent) in rural India. Overall, the statistics noted that there is a shortfall of 81.2 per cent specialists at the CHCs. This situation becomes worse due to rampant absenteeism among doctors at these health centers who, however, could be seen attending their private practice regularly. (15-17)

As per MCI data, India is short of 50,00,000 doctors to fulfil the WHO norm of 1:1000 doctor-population ratio. Currently, India has one doctor for every 1674 patients. Not only doctors, there is a serious shortage of staff at the PHC and the CHC level as well. The CHCs need to have four specialists—a surgeon, a physician, a gynecologist, and a pediatrician. However, as per

the Rural Health Survey 2016, India is facing a shortage of 84 per cent surgeons, 77 per cent gynecologists and obstetricians, 83 per cent physicians and 80 per cent pediatricians at the CHC level. (18)

Reflections:

The death three children due to lack of food in New Delhi, a poor farmer who was forced to carry his wife's corpse for many miles, continued outbreak of chikungunya, encephalitis and other communicable diseases reflect poorly on the health status of our nation.

Various studies have found that the Indian health system is besieged by inadequate infrastructure, paucity of skilled human resources, inadequate drug and medical supply, lack of preparedness, all of these further burdened by an increase in communicable, non-communicable, and vector borne diseases. It is a further worry that at a time when the public health system is already in a bad shape and we have humongous Sustainable Development Goals (SDGs) to achieve, the government is withdrawing from providing health services and encouraging the private sector to play a greater role.

Reference that you used and any citation sources must be seen in the text and you have to put them at the end of the reference accordingly

A glaring feature of public health delivery today is the government's unwillingness to increase funding and prioritize public health. Increasing cost of medication, high out-of-pocket expenditure, and corruption in the health system have adversely affected public health and have combined to cripple the public health sector.

SWOT ANALYSES

1. Buildings and Infrastructure

Strength: Elaborate network of healthcare facilities

- Locational advantage of all healthcare buildings in the government sector

Weaknesses

- Inadequate buildings as SCs, PHCs and CHCs, poor functioning
- A skewed distribution of healthcare infrastructure, poor regulation marketing of devices and equipment
- Poor maintenance
- A lack of faith in some of the locally manufactured equipment

Opportunities

- Commitment of the government to improve the present situation
- Increasing domestic market for production of devices and equipment, for setting up of laboratories and diagnostics, facilities for medical education, etc.

Threat

- The government has not been able to maintain its buildings. Generally, it lacked funds to do so. In course of time, because of political interests and pressures, it may

References:

Debasis Barik and Amit Thorat. Issues of Unequal Access to Public Health in India. *Front Public Health*. 2015; 3: 245. doi: 10.3389/fpubh.2015.00245.PMCID:

2. Human Resources

Strength

- Very large workforce of volunteers (ASHAs)

Weaknesses

- Acute shortage of manpower at most of the levels in healthcare delivery

- Skewed distribution of manpower
- Absence of a uniform and effective HR Policy
- Inadequate HR database
- Long-term retention of qualified healthcare staff in rural areas

Opportunities

- Large population engenders massive domestic demand for healthcare services
- Large employable population
- Elaborate network of healthcare centers in rural areas
- Coexistence of different systems of medicine, provides varied options of employability and equally varied options of treatment to patients
- Low cost qualified manpower potentially makes it possible to provide treatment to
- overseas patients at very competitive prices
- Low cost labor is attractive for the local and foreign manufacturers of drugs, medical equipment, appliances, etc.

Threat

- Private sector, lucrative in terms of salary and work environment, is very inviting for the medical and allied health workers to shift out of government healthcare set-ups

References:

Priya Sinha and Sigamani P .Key challenges of human resources for health in India .Global Journal Of Medicine And Public Health | www.gjmedph.com Vol. 5, No. 2016 ISSN#-2277-9604

3. Drugs Strengths

- Production of generics at low cost; strong manufacturing sector with domestic

players having prominent international presence

- Domestic capability to manufacture most medicines
- A good number of FDA approved manufacturers (only second to USA)

Weaknesses

- Difficult to co-ordinate and regulate the pharmaceutical sector, since it is controlled by multiple government departments
- Poor supply chain management in the public sector

Opportunities

- Increasing domestic focus on generics
- Adequate availability of professionally qualified manpower
- High demand for drugs, both for the communicable and non-communicable diseases; massive growth of domestic as well as international markets
- Under-used potential of IT applications
- A favorite country for clinical trials because of established advantages
- Huge demand for low cost, high quality generics in other countries¹⁵⁰
- Rising purchasing power of the domestic consumers
- Untapped potential of the rural markets
- Rising importance of health insurance
- Increasing consumer awareness and demand for better health services

Threats

- Increasing uncontrolled high out-of-pocket expenditure, most of which is on account of purchase of drugs
- Frequent cancellation of approvals of selected Indian drugs by the U.S. authorities

References:

1. Narayana, S. A., Pati, R. K., & Vrat, P. (2014). Managerial research on the pharmaceutical supply chain: A critical review and some insights for future directions. *Journal of Purchasing and Supply Management*, 20(1), 18-40. doi:10.1016/j.pursup.2013.09.001.

4. Environment Strength

- Near adequate number of existing laws

Weaknesses

- Poor enforcement of laws
- Inadequate provision of safe drinking water and sanitation
- Ineffective/lack of inter-sectoral coordination and convergence
- Rapid urbanization of population and changing demographics has resulted in a mismatch between the requirements and distribution of infrastructure
- Unsupportive work environment

Opportunities

- Slew of existing development program
- Rapid economic growth

Threats

- Unbridled corruption
- Dual burden of disease
- Absence of national pride
- Low levels of literacy
- Unmitigated poverty which affects affordability

References:

1. Urbanization and development: emerging Futures. World Cities report 2016
2. Wankhade, K. Urban sanitation in India: Key shifts in the national policy frame. *Environ. Urban.* 2015, 27, 555-572. [CrossRef]

5. Finance and Insurance Strength

- Presence of a large network of all kinds of banks, financial institutions, life and general (including medical) insurance companies

Weaknesses

- Low budget allocation/inadequate public spending on health
- Failure of states to utilize funds allocated under the NRHM
- Problem of fundability with the states
- Low insurance coverage
- Funding is based on bed strength, etc., and not on the case load handled
- Problems of tracking in centrally sponsored schemes (funds are tracked only up to their release and not their actual utilization) /dysfunctional financial control system
- Ineffective auditing framework

Opportunity

- Availability of funds in the NRHM; opportunity for states to spend and reduce the unspent budget

Threat

- Growing corruption and its expanding domain in handling of finances

References:

1. Dipti Jain . Budget 2018: India's health sector needs more funds and better management 3 min read .Live Mint Updated: 25 Jan 2018, 08:54 AM IST
2. ENVISIONING INDIA 2030. Federation of Indian Chambers of Commerce and Industry 2018 :p.19-28.

6. Education

Strength

- Numerous medical colleges provide huge potential for pursuing research

Weaknesses

- Regional imbalances in distribution of colleges
- Questionable quality of several medical colleges;
- Poor coordination between medical education and government health departments

Paramedical education is not accorded due importance and respect

- Reservations in admissions
- Weak infrastructure in colleges and research institutes
- The technological approach overpowers the humanistic approach to medical education
- Research does not get the due importance or encouragement

Opportunities

- Medical profession being viewed as valuable, people show preference to engaging in it
- Low doctor to patient ratio presents considerable scope for employment
- Untapped potential of IT in this sector
- Existence of an organized three tier infrastructure (PHC, CHC, DH)
- Considerable interest of private players

Threats

- Brain drain; qualified people are moving out to other countries for greener pastures
- Growing mistrust of people in the medical fraternity
- Most private sector players are focused only on their profits, which results in large scale commercialization

Reference:

N. Ananthkrishnan .Medical education in India: Is it still possible to reverse the downhill trend? https://www.researchgate.net/publication/47447063_Medical_education_in_India_Is_it_still_possible_to_reverse_the_downhill_trend [accessed Jul 23 2019].

7.Administration

Strength

- Elaborate and functional structure and system at all levels for the administration of healthcare services

Weaknesses

- Inequity in the distribution of healthcare services are to an extent the result of personal preferences and political influences
- A lack of synergy between different departments directly/indirectly affects performance of public health
- Quality standards are not clearly prescribed, communicated or monitored
- Non-functional framework for accountability
- Unreliable, biased, or perfunctory appraisal of employee performance
- Excessive bureaucracy presents an insurmountable obstacle to the effective delivery of public health services

Opportunities

- Many involved departments, if coordinated well, can help to speedily achieve better health for the masses
- Policy of the government towards decentralization presents the potential for bringing about the desired changes

Threat

- Political interference

References:

1. Matthew, J. C., 2018. Budget 2018: Insufficient allocation for the health sector. February.10.Maya, C., 2017.

Prevalence of NCDs high, says study. The Hindu, August. 11.

2. Mohan, D., 2017. New National Health Policy Paves Way for More Hope and Less Action. TheWire, March.

CONCLUSION:

To sum up, the demand for healthcare services (in terms of medical staff such as doctors, nurses and midwives, drugs and pharmaceuticals, medical education medical equipment and appliances, buildings and constructed space, etc.) is found to be so large as compared to the supplies (in terms of physical facilities, the number of medical colleges and seats for student admission, investments, etc.) that even with the most ambitious strategic initiatives it would take several decades for supplies to match demands. This implies that the demand for healthcare services will in no way have a restrictive impact on the formulation of strategy or limit its choice. From the point of view of environment, the final strategy, as far as possible, should be able to leverage on all the strengths and opportunities in the environment and provide protection against its weaknesses and threats. (18-20) Strategic initiatives, which are derived from the strategy, will need to confirm that the items of SWOT have been favorably addressed.

REFERENCES

1. Karan.A, Winnie Y, and Ajay Ml. Extending health insurance to the poor in India: An impact evaluation of Rashtriya Swasthya Bima Yojana on out of pocket spending for healthcare. Soc Sci Med. 2017 May; 181: 83–92.doi: 10.1016/j.socscimed.2017.03.053.PMCID:PMC5408909.
2. World Health Organization, 2017. " Out-of-pocket health expenditure (% of total expenditure on health", World Health Organization Global Health Expenditure database, 2017. [https://data.worldbank.org/indicator/SH.XPD.OOPC.TO.ZS].
3. Banerjee A. Noncommunicable diseases in India: Challenges and the way forward. J Postgrad Med [serial online] 2019 [cited 2019 Jul 24];65:5-6. Available from: <http://www.jpgonline.com/text.asp?2019/65/1/5/250952>
4. Ghosh, A. 2014. " Over 20% More Cancer Cases in 2020: Govt Report", The Indian Express, July 18.
5. Ernst & Young, 2015. " Call for Action: Expanding Cancer Care in India" Ernst & Young LLP, July 2015.
6. Laura Shields-Zeeman, Soumitra Pathare, Bethany Hipple Walters, Nandita Kapadia-Kundu, and Kaustubh Joag. Promoting wellbeing and improving access to mental health care through community champions in rural India: the Atmiyata intervention approach.. Int J Ment Health Syst. 2017; 11: 6. Published online 2017 Jan 4. doi: 10.1186/s13033-016-0113-3.
7. Pallavi Mishra and Ankit Agarwal Public Health in India: Gaps in Intent, Policy, and Practice Hindu Centre for policy and politics. Issue Brief No. 7 25 OCT 2017 17:25 IST.
8. Kar S S, Subitha L, Iswarya S. Palliative care in India: Situation assessment and future scope. Indian J Cancer [serial online] 2015 [cited 2019 Jul 24];52:99-101. Available from: <http://www.indianjancer.com/text.asp?2015/52/1/99/175578>
9. Chauhan R, Mazta SR, Dhadwal DS, Sandhu S. Indian public health standards in primary health centers and community health centers in Shimla District of Himachal Pradesh: A descriptive evaluation. CHRISMED J Health Res [serial online] 2016 [cited 2019 Jul 24]; 3: 22-7. Available from: <http://www.cjhr.org/text.asp?2016/3/1/22/172390>
10. World Health Organization (WHO). Trends in Maternal Mortality: 1990 to 2010– WHO, UNICEF, UNFPA and The World Bank Estimates. Geneva: World Health Organization. Accessed November 10, 2012.
11. NITI Aayog. 2015. "A Quick Evaluation Study of Anganwadis Under ICDS", NITI Aayog, Government of India, June. Last accessed on October 19, 2017. [http://niti.gov.in/writereaddata/files/document_publication/report-awc.pdf].
12. PRS Legislative Research. 2017. "Demand for Grants 2017-18 Analysis Health and Family Welfare", PRS Legislative Research, March 1. Last accessed on October 20, 2017. [http://www.prsindia.org/administrator/uploads/general/1488370622~DfG-%20Health%20and%20Family%20Welfare.pdf].
13. Ministry of Finance. 2017. "Notes on Demands for Grants, 2017-2018", Government of India, February. Last accessed on March 6, 2017. Page 137 [http://indiabudget.nic.in/ub2017-18/eb/allsbef.pdf].
14. Sharma AK, Baliyan P, Kumar P Air pollution and public health: the challenges for Delhi, India. Rev Environ Health. 2018 Mar 28;33(1):77-86. doi: 10.1515/reveh-2017-0032.
15. OECD Health Statistics 2019
16. Health at a Glance 2017; OECD Indicators; Published on November 10, 2017
17. Rural Health Statistics. Government of India Ministry of Health and Family Welfare Statistics Division. 2014-2015.
18. Sreemoyee Chatterjee. India has just 1 doctor for every 1,681 persons: MCIBY -TNN E. Times- Entertainment News. Updated: May 4, 2016, 16:04 IST.
19. Perianayagam Arokiasamy. India's escalating burden of non-communicable diseases. Lancet Global Health 2018;6(12):PE1262-E1263.
20. Indrayan A. Forecasting vascular disease and associated mortality in India. Burden of Disease in India. National Commission on Macroeconomics and Health. Ministry of Health and Family Welfare, Government of India, New Delhi: 2015
21. Seigel KR Patel SA Ali MK Non-communicable diseases in South Asia: contemporary perspectives. Br Med Bull. 2014; 111:31-44