



Review article

Need and opportunity in health management and education

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ABSTRACT

In order to resolve the multifaceted issues faced by worldwide healthcare systems, health management and education are necessary factors. In chronic diseases, upcoming new infections and new life style-based diseases factors are increasing demand to requires special protection, extra precautions and expert health education. If the people's groups and society of human take right decision, adopt right life style can prevent self and whole the community, this true education of health. In this review article we covered all the basic need of health educations contents and some new policy and guidelines of regulatory authorities discussed.

Keywords: Oral thin films, Mucoadhesive films, Bioavailability, Drug delivery system.

INTRODUCTION

India's healthcare system is a complex, multidimensional association with a combination of governmental and private sector involvement. The public healthcare system is regulated some government agencies such as the Ministries of Ayush and Health and Family Welfare, provides a broad range of primary healthcare services. This network basically more active in tribal area but facing some problems like financial, infrastructure and required more trained health staff for better services to peoples^[1-2].

Importance of health management and education in improving public health

Indian health system is suffering from many health challenges which can be remove out by proper guideline and health education. Ideal health management represented the efficient use of resources, provide good healthcare facilities and able to provide good patient care services. Good Health management education system (GHMES) required good professionals, expert professional give right direction and precautions for the prevention of upcoming new diseases. GHMES required discussing all the precautions at school, colleges and community level time to time, and promote improvement in public health outcomes. Moreover, public health education is necessary for building a workforce able of addressing both communicable and non-communicable diseases, which remain a significant burden in India^[2-3].

Exploring current challenges and emerging opportunities

The goal of this article is focus out the opportunities of health care system and requirements for increase health facilities in India. Indian health care system required to improve by using following full fill requirements such as increase the number of good employees, increase health care systems and good governance etc. In addition, by using digital technologies increase the health care systems in India such as teletherapy and artificial technology health care system can provide health facilities to major tribal area^[4-6].

Current state of health management in India

Urban vs. Rural

In Indian health care systems having major difference between village, Tribal and metro cities. Metro cities having 100 to 500 bedded hospitals with super speciality facilities but village and Tribal area not the available primary facility. This major difference of health system indicates that in Indian health sector do more work for providing good health facilities. Therefore much tribal area suffering many problems with health issues and many people's become death due to unavailability of health facilities^[7-8].

Public vs. Private

Basic all Indian health system is classified into two types. Type first is government and second private system. In government health systems required some more experts, infrastructure and more health technologies facilities, in private health system having all the

health facilities but very expensive, this private health facilities not take the benefits by the poor people's due to lack of many. Under the NHRM (National Health Rural Mission) scheme government provide cash less facilities to poor people. This cash less facilities provided by government to poor peoples and take private facilities from NBH (National Board of Hospital) approved private hospital [9]. But still these all facilities not having the Indian Public Health Standards (IPHS) norms [10]. For example, healthcare utilization among the elderly is 7 percentage points higher in urban areas compared to rural areas, primarily due to better education and economic status in urban regions [11].

Healthcare outcomes

Healthcare outcomes also vary significantly between urban and rural areas. When compared to metropolitan regions, rural areas have higher rates of both maternal and infant mortality (MMR and IMR). For instance, the IMR in rural areas was 24 points higher than in urban areas in 2004. Despite improvements, these disparities persist, with rural areas continuing to lag behind in key health indicators [12].

Mortality rates

If the any countries have lowered the health facility that is reflect in the percentage of death rate. For instance, compared to other states, the North-Eastern Region (NER) has poor health indices such greater than before infant mortality and shorter life expectancy. Although there has been important success, the maternal death rate in high-focus states decreased by 17.9% nationwide between 2004–2006 and 2007–2009. However, rural areas continue to have higher death rates than metropolitan areas [13].

The healthcare infrastructure in India is characterized by significant disparities between urban and rural areas and between public and private sectors. While urban areas and private healthcare facilities offer advanced medical services, rural areas and public healthcare facilities, inadequate infrastructure and workforce.

Need for health education

Health education can play key role for getting better public health outcomes, by providing knowledge about health, precaution, and providing health education at school. Health care education also government advertisement before upcoming seasonal diseases through the television, radio and local newspapers [14-16]. Low health education increases the chances of circulating the communicable diseases to others. These diseases can be stop by adopt primary precautions like cleanliness, vaccination and health tips. These all the health related education very important for the prevention and healthy lifestyle promotion and manage the all life style diseases very easily such as diabetes, hypertension, thyroidal and anxiety and depression etc [17].

Combination of communities and government mission

Combination of communities and government mission can remove out the health literacy and improved people's mental, physical health. By providing dietary supplements or providing health education and personal forms of communication are emphasized as effective methods for improving health literacy and

empowering individuals [18-19].

Opportunities for improving health management

Leveraging technology (telemedicine, AI in healthcare, digital health records)

Patient-professional associations are improved health awareness by digital health education. These agencies give advice and education information regarding chronic care management has benefited from the use of technologies including patient-professional communication tools, self-monitoring systems, customized self-care support, self-care education, care planning, and community forums for peer-to-peer interactions [20]. Digital health education is essential is very essential to increase healthcare access, quality, and outcomes mainly in tribal places [21].

Public-Private partnerships to expand healthcare infrastructure

Public-private partnerships (PPPs) improve healthcare access and quality by coverage, and performance of health services, and recover sensitivity and decrease dissimilarity in service delivery [22-23]. Public-private partnerships (PPPs) partnerships can remove out all the health challenges by leveraging private sector resources for financing, innovation, development, and distribution [24]. Public-private partnerships (PPPs) can be beneficial, they often face challenges such as maintaining existing power relations and ensuring efficient collaboration [25-26].

Capacity building for healthcare professionals (training, continuing education)

Effective capacity building interventions: Training and workshops, internet-based instruction, technical assistance, self-directed learning, communities of practice, and multi-strategy interventions have been shown to improve knowledge, skills, and confidence among healthcare professionals [27]. Management capacity building: Strengthening management within health systems is critical, especially in low-income settings, to efficiently use resources and achieve health goals [28].

Role of non-governmental organizations (NGOs) and community health workers

NGOs and community health workers in capacity building: NGOs play a significant role in building community capacity to identify, implement, and sustain health improvement efforts through action-oriented partnerships [29-40].

CONCLUSION

In India required modern technologies, trained health care employee, good infrastructure and good governess urgently for providing health elite facilities. Upcoming days many health challenges may come like COVID-19. Therefore, need to build up for prevention of death and for life saving. NHRM and Ayushmaan type of health facility scheme required to make and do more work to reach health facility to poor and last peoples of India. Private and government sector when make some rule for providing first aid facility to all the peoples for life saving.

REFERENCES

1. Singh R, 2016. Integrated healthcare in India - A conceptual framework. Ann Neurosci. 23(4), Pages 197–198. Doi: 10.1159/000449479.

2. Nair KS, 2019. Health workforce in India: opportunities and challenges. *Int J Community Med Public Health*. 6(10), Pages 4596. Doi: 10.18203/2394-6040.ijcmph20194534.
3. Anitha CT, Akter K, Mahadev K, 2022. An overview of public health education in South Asia: Challenges and opportunities. *Front Public Health*. 10. Doi: 10.3389/fpubh.2022.909474.
4. Kalangi S, Thakur H, 2019. Status of health management education in India: Past, present, and future. *Front Public Health*. Doi: 10.3389/fpubh.2018.00375.
5. Hongal P, Kshirsagar Y, 2023. Healthcare management in India: Issues, challenges and prospects. *Int J Eng Manag Res*. 13(2), Pages 73–82. Doi: 10.31033/ijemr.13.2.11.
6. Munavalli JR, 2014. Healthcare of India: Today and tomorrow. *Int J Innov Res Dev*. 3(2), Pages 350–356.
7. Gogoi M, Hazarika S, Phukan KK, et al, 2021. Rural healthcare infrastructure of North-East India and its challenges. *Int J Curr Res Rev*. 13(13), Pages 56–63. Doi: 10.31782/ijcrr.2021.131318.
8. Sahoo PM, Rout HS, 2023. Analysis of public health-care facilities in rural India. *Facilities*. 41(13–14), Pages 910–26. Doi: 10.1108/F-07-2022-0098.
9. Prasad AM, Chakraborty G, Yadav SS, 2013. Addressing the social determinants of health through health system strengthening and inter-sectoral convergence: The case of the Indian national rural health mission. *Glob Health Action*. 6(1), Pages 20135. Doi: 10.3402/gha.v6i0.20135.
10. Dey B, Mitra A, Prakash K, et al, 2013. Gaps in health infrastructure in Indian scenario: A review. *Indo Glob J Pharm Sci*. 3(2), Pages 156–66. Doi: 10.35652/igjps.2013.18.
11. Banerjee S, 2021. Determinants of rural-urban differential in healthcare utilization among the elderly population in India. *BMC Public Health*. 21(1), Doi: 10.1186/s12889-021-10773-1.
12. Nagaraja K, Veerabhadrappa BP, 2018. Rural-urban health disparities in India. *Indian J Appl Res*. 8(8), Pages 31–3.
13. Berkman ND, Sheridan SL, Donahue KE, et al, 2011. Low health literacy and health outcomes: An updated systematic review. *Ann Intern Med*. 155(2), Pages 97–107. Doi: 10.7326/0003-4819-155-2-201107190-00005.
14. Taylor DM, Bradley JA, Bradley C, et al, 2018. Health literacy and patient outcomes in chronic kidney disease: A systematic review. *Nephrol Dial Transplant*. 33(9), Pages 1545–58. Doi: 10.1093/ndt/gfx293.
15. Stormacq C, Wosinski J, Boillat E, et al, 2020. Effects of health literacy interventions on health-related outcomes in socioeconomically disadvantaged adults living in the community: A systematic review. *JBI Evid Synth*. 18(7), Pages 1389–469. Doi: 10.11124/JBISRIR-D-18-00023.
16. Castro-Sánchez E, Chang PWS, Vila-Candel R, et al, 2016. Health literacy and infectious diseases: Why does it matter? *Int J Infect Dis*. 43, Pages 103–10. Doi: 10.1016/j.ijid.2015.12.019.
17. Heine M, Vogel D, Di Bartolo CA, et al, 2021. Health education interventions to promote health literacy in adults with selected non-communicable diseases living in low-to-middle income countries: A systematic review and meta-analysis. *J Eval Clin Pract*. 27(6), Pages 1417–28. Doi: 10.1111/jep.13554.
18. Rosário J, Raposo B, Santos E, et al, 2023. Effectiveness of health literacy interventions on the health outcomes of higher education students. *Eur J Public Health*. 33(Supplement_2). Doi: 10.1093/eurpub/ckad160.1012.
19. Nutbeam D, 2000. Health literacy as a public health goal: A challenge for contemporary health education and communication strategies into the 21st century. *Health Promot Int*. 15(3), Pages 259–67. Doi: 10.1093/heapro/15.3.259.
20. Wannheden C, Ellegaard M, Jackson C, 2022. Digital health technologies enabling partnerships in chronic care management: Scoping review. *J Med Internet Res*. 24(8). Doi: 10.2196/38980.
21. Curioso WH, 2019. Building capacity and training for digital health: Challenges and opportunities in Latin America. *J Med Internet Res*. 21(12). Doi: 10.2196/16513.
22. Ghasemi M, Amini-Rarani M, Shaarbafchi Zadeh N, 2022. Role of public-private partnerships in primary healthcare services worldwide: A scoping review. *Health Scope*. 11(3). Doi: 10.5812/jhealthscope-129176.
23. Sekhri N, Feachem R, Ni A, 2011. Public-private integrated partnerships demonstrate the potential to improve health care access, quality, and efficiency. *Health Aff*. 30(8), Pages 1498–507. Doi: 10.1377/hlthaff.2010.0461.
24. Kostyak L, Shaw DM, Elger B, 2017. A means of improving public health in low- and middle-income countries? Benefits and challenges of international public-private partnerships. *Public Health*. 149, Pages 120–9. Doi: 10.1016/j.puhe.2017.03.005.
25. Bazzoli GJ, Stein R, Alexander JA, et al, 1997. Public-private collaboration in health and human service delivery: Evidence from community partnerships. *Milbank Q*. 75(4), Pages 533–61. Doi: 10.1111/1468-0009.00068.
26. Mays GP, Scutchfield FD, 2010. Improving public health system performance through multiorganizational partnerships. *Prev Chronic Dis*. 7(6).
27. Decorby-Watson K, Mensah G, Bergeron K, et al, 2018. Effectiveness of capacity building interventions relevant to public health practice: A systematic review. *BMC Public Health*. 18(1), Doi: 10.1186/s12889-018-5591-6.
28. Bradley EH, Taylor LA, Cuellar CJ, 2015. Management matters: A leverage point for health systems strengthening in global health. *Int J Health Policy Manag*. 4(7), Pages 411–5. Doi: 10.15171/ijhpm.2015.101.
29. Veazie MA, Teufel-Shone NI, Silverman GS, et al, 2001. Building community capacity in public health: The role of action-oriented partnerships. *J Public Health Manag Pract*. 7(2), Pages 21–32. Doi: 10.1097/00124784-200107020-00005.
30. Auld ME, Moore SF, McAlearney AS, et al, 2020. Health literacy and health education in schools: Collaboration for action. *NAM Perspect*. Doi: 10.31478/202007b.
31. Conard S, 2019. Best practices in digital health literacy. *Int J Cardiol*. 292, Pages 277–9. Doi: 10.1016/j.ijcard.2019.05.070.
32. O'Connor S, Zhang M, Honey M, 2021. Digital professionalism on social media: A narrative review of the medical, nursing, and allied health education literature. *Int J Med Inform*. 153, Pages 104514. Doi: 10.1016/j.ijmedinf.2021.104514.
33. Holst C, Lee S, Kelm L, et al, 2022. Improving health knowledge through provision of free digital health education to rural communities in Iringa, Tanzania: Nonrandomized

intervention study. *J Med Internet Res.* 24(7), Doi: 10.2196/37666.

34. De Wit L, Fenenga C, Giannarchi C, et al, 2017. Community-based initiatives improving critical health literacy: A systematic review and meta-synthesis of qualitative evidence. *BMC Public Health.* 18(1). Doi: 10.1186/s12889-017-4570-7.
35. Friedman DB, Tanwar M, Bergeron CD, et al, 2020. Development of a clinical-academic-community collaboration to improve health literacy. *J Prim Care Community Health.* 11. Doi: 10.1177/2150132720957440.
36. Milford E, Wofford M, Borrelli M, et al, 2016. Out of the classroom and into the community: Medical students consolidate learning about health literacy through collaboration with Head Start. *BMC Med Educ.* 16(1), Doi: 10.1186/s12909-016-0635-z.
37. Kumar S, Kaif M, Tiwari A, et al, 2025. Pharmacist's role in managing anemia disease. *Journal of Hospital Pharmacy.* Pages 1–11.
38. Kumar S, Kaif M, Tiwari A, et al, 2025. Role of clinical pharmacist in the treatment of COPD in current scenario. *Journal of Hospital Pharmacy.* Pages 1–17.
39. Shukla AK, Yadav VK, Yadav V, et al, 2024. Healthy Life Style and Yoga. Noida/London: SLC India Publishers.
40. Yadav R, Vaidya A, Kumar R, et al, 2021. Psychological distress in healthcare workers during COVID-19 pandemic. *Journal of Medical Pharmaceutical and Allied Sciences.* Pages 2644–2652. Doi: 10.22270/jmpas.V10I1.1019.