



Health Infrastructures in India with Special Reference to MSME Sector - An Assessment

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Abstract

The healthcare enterprise consists of each the general public and business sectors and consists of scientific tourism, hospitals, fitness insurance, scientific equipment, and outsourcing. The creation of healthcare products, inclusive of scientific equipment, instruments, and services, in addition to for biotechnology and diagnostic laboratories via way of means of Indian Startups affords an answer within side the shape of healthcare services and products and quickens technological innovation to face up to international competition. The National Health Policy, which changed into posted in 2017 to construct the fitness care infrastructure, and the Pradhan Mantra Ayushman Bharat understand the significance of pharmaceutical agencies for enhancing healthcare. The pinnacle 20 markets for scientific gadgets are closely encouraged with the aid of using the scientific tool sector. MSME makes up 6.11% of the GDP from manufacturing, 24.63% of the GDP from services, and 45% of the whole exports. According to the Medical Tourism Index (MIT) for 2020–21, scientific era in India is predicted to attain US \$50 billion with the aid of using 2025 and is now positioned 10th. Out of forty six international locations, India's healthcare marketplace is predicted to attain US\$372 billion with the aid of using 2022. usedsecondary data in this paper for discussed Health infrastructures and evaluate role of Health facilities and problems in Health sector in India by secondary source.

Keywords: MSMEs, Health Care, Infrastructures, Inadequate Structures etc.

Introduction

Micro, Small, and Medium Enterprises (MSME) constitute a huge and developing industry. It is one of the fundamental individuals to the nation's Gross Domestic Product (GDP), and MSMEs are the gear of inclusive boom with the aid of using increasing their sphere of have an impact on throughout a number of monetary sectors, together with the fitness care industry. The authorities have taken steps to useful resource MSMEs in generating and production much less high priced scientific elements at some stage in the epidemic. India has the second-maximum populace within side the world, and a nation's stage of scientific infrastructure is intently associated with its charge of monetary development. The revised MSMEs Act encourages nearby production, promotes country wide self-sufficiency, will increase the funding cap, introduces new turnover standards, and does away with the department among the producing and provider sectors. It offers room for the inclusion of personal MSME multi-strong point hospitals, nursing homes, and diagnostic facilities to construct ok fitness infrastructure to serve the bulk of the populace.

Take care of the country's public health infrastructure in urban and rural areas, as well as the medical education system to train medical professionals. The government has established large-scale drug and medical equipment manufacturing zones as well as production-linked incentives to promote

pharmaceutical production for the benefit of the community. These products include medical equipment, drugs, surgical instruments and diagnostics.

The National Health Policy, Ayushman Bharat PM-JAY, NitiAayog's budget and health infrastructure have all seen increased funding and enhanced healthcare. The top 20 medical device markets are heavily impacted by the medical device sector. MSMEs account for 6.11% of manufacturing GDP, 24.63% of services GDP and 45% of total exports. According to the Medical Tourism Index (MIT) 2020-21, medical technology in India is expected to reach US\$ 50 billion by 2025 and currently ranks 10th. Among 46 countries, India's healthcare market is expected to reach US\$ 372 billion by 2022. India is also among the top 12 countries in biotechnology, grants 100% under automatic route and is the country with the largest supply of generic drugs.

Objective of Study

- To study the status of Health facilities in India
- To evaluate the role of MSME in the healthcare sector
- To analyse problems in the health infrastructure in India
- To suggestions to improve the condition of health infrastructure

Methodology

This study on healthcare infrastructure in India is mainly based on secondary data. Relevant data collected from certain sources such as academic journals, MSMEs annual Reports, official website of ministry of MSME, publications of ministry of Health, Indian Economic statistics and relevant research paper are used.

Health Infrastructure in India

They promote public health and have both tangible and intangible components. It is a crucial indication for comprehending a nation's welfare system and health care policy. A country's health outcomes can be greatly improved by its health infrastructure. When governments decide to invest in health, India represents the highest priority

because, first, it has one of the largest populations in the world with widespread poverty, and second, it has a subtropical environment that promotes the emergence of diseases. As a result, the health sector needs to receive more attention.

Physical infrastructure, health and welfare of all sections of society are essential to boost production. Doctors, nurses, hospitals, ambulances, hospital beds, various equipment and medicines form the health infrastructure. Primary health care centers provide them, secondary care is provided at district hospitals and tertiary care is provided by specialist hospitals such as AIIMS New Delhi, Chandigarh Postgraduate Institute of Medical Education and Research, Pondicherry, National Institute of Mental Health and Neurosciences in Bangalore and All India Institute of Public Health and Hygiene in Kolkata. A three-tier system of primary health care facilities, comprising secondary centers (SCs), and primary health centres (PHCs) and community health centers (CHCs) is used in rural areas.

Table 1 List of Number of Doctors and Medical Institution during 2021

Doctors	Number
Number of Doctors	1.27 millions
Number of Medical Institution	558

Source: India brand equity foundation

As per Table 1 of the India Brand Equity Fund report, which illustrates the healthy expansion of healthcare infrastructure, there are approximately 1.27 million doctors worldwide and 558 medical colleges providing healthcare services. The Ayushman Bharat Healthcare Infrastructure Mission was launched by the Government of India to improve the country's healthcare infrastructure from the village to the block level. It will also create employment for doctors, paramedics, laboratory technicians and pharmacists, meet the public healthcare infrastructure needs in urban and rural areas, and encourage investment in healthcare centres in rural and urban areas. Community and non-profit organizations play a vital role in ensuring good access to healthcare services, participation in the primary healthcare system and raising health awareness to bridge the access gap between rural and urban areas.

Table 2 Health Facilities in India

Component	Numbers
No. of Population	1,100 million
Total No. of Hospital Beds	1,899,228
Private Sectors Hospitals	1,185,242
Public Sectors Hospitals	713,986
ICU Beds in Private Sectors	59,262
ICU Beds in Public Sectors	35,699
No. of Allopathic Doctors	1,154,686

Source: Health Annual report 2021-2022

Table 2 lists the various government health programs that provide hospital and intensive care unit beds for both the public and private sectors. There are 1899228 hospital beds available, including ICU beds, for every 1100 people in the population.

Figure 1 Growth Trend of India’s Healthcare Sector (USD)



Source: NITI Aayog Report 2021

According to the India Brand, Equity Foundation report December 2021, the Healthcare marketplace in India is predicted to attain US\$372 billion through the quilt of 2022, pushed through growing income, higher fitness awareness, way of life sicknesses and growing get right of entry to Insurance. The Government is likewise making plans to elevate manpower through ensuring there’s the provision of a big pool of well- educated clinical specialist’s with inside the country. Depicted under is a chart displaying how India is at a bonus factor at present Despite a steady rise in the amount of healthcare infrastructure throughout the course of the plan period (Figure 1), progress has not been adequate due to a lack of facilities for the existing population. The credibility of the public sector’s health delivery system has also been weakened by subpar maintenance and upkeep as well as significant absenteeism among the workforce in rural areas.

Role of MSMEs in the Health Sector in India

Adoption of technology, innovation and healthcare entrepreneurship by SMEs can have a significant impact on India’s demand for quality healthcare in the areas of electronic medical records, hospital information systems, medical devices, billing and payroll. Additionally, adoption of artificial intelligence (AI) or machine learning, mobile technology, the Internet of Things and robotics can help doctors deliver quality care at affordable prices. By developing digital health products and services such as telemedicine, pathology labs, COVID-19 testing kits, health insurance, oxygen concentrators and oxygen cylinders to improve the quality of life of the workforce, entrepreneurs are the drivers of change and economic development. A two or three person startup with an original idea that aims to be scalable, profitable, and useful to society was established. According to the Indian Express, there are roughly 3225 startups in the health technology sector. The pandemic has given rise to numerous potentials and innovations for digital wellness health, according to the World Health Organization (2009). Artificial intelligence (AI) and machine learning have made significant advances in diabetes treatment, ophthalmology, identifying diabetic retinopathy, blood sugar monitoring, and Ayurvedic medicines that will improve the quality of life of the masses. In India, the term health technology can be broadly classified into six sub-sectors: telemedicine, online pharmacy, fitness and wellness, healthcare IT and analytics, home healthcare, and personal health management. These sub-sectors use technology to meet the needs and transform the healthcare environment. Indian startups valued at \$1 billion or more in the B2B supply chain space are called unicorns. Researchers and doctors are using technologies like artificial intelligence (AI), augmented reality (AR), virtual reality (VR), robotics, and 3D printing to accurately understand the symptoms of patients. The application of insurance technology in the healthcare industry empowers patients, generates a need for jobs locally, and significantly boosts the primary market and healthcare sectors of the nation. SME startups are quite successful at generating money, and they also significantly aid the healthcare industry in developing a thriving environment.

Digital Technology

Digital generation can construct strong reachable and low-cost fitness take care of Indian citizens. The fitness care zone is one of the developing sectors of the financial system and has massive investor call for from each international in addition to home buyers and 100% FDI coverage and Atmanirbhar Bharat Abhiyaan, Make in India incentive aid. SMEs and MSMEs are crucial individuals to India's financial system and social development. The Digital transformation and E-trade Services as modified the outlook of a hospital, pharmaceutical production vacation spot for SMEs and MSMEs fitness care sectors in enhancing nice of fitness care with the aid of retail and wholesale exchange MSMEs in supplying clinical gadgets to each rural and concrete area. SMEs and MSMEs are boosting the monetary increase via way of means of supplying surgical and non-surgical gadgets together with syringes, needles, bandages, diagnostic imaging, Dental products, listening to aids, pacemakers, Blood stress monitors, wheelchairs, telemedicine and different fitness care sectors products. The desk 6 highlights and covers the listing of fitness tech startups in India.

Table 3 List of MSME Startups in India

MSME Startups	Healthcare Service
Niramai Analytix	Cancer Screening Portable and Other Health Products
Qure.ai	Radiology images, Chest X-Rays
Healthify Me	Fitness, Nutrition
Pharm Easy	Phamatles
Sig Tuple Technologies	Blood Sample, Urine, Retinal image
Niramai	Brest Cancer
Purple Does	Healthcare Data Securities
Euor Health	Teleclinics
Docplexus	Network of Doctors
Artelus	Diabetic, Retinopathy Screening
Tricug	Insta ECG, Insta Echo
Netmeds	Pharmacy
Plum	Health Insurance
Happy Reliable Surgeries	3D Model CT/MRI

Source: medicalstartups.org

Table 4 Indian Health Care Market Size

Year	2017	2020	2021	2027
CAGR	91.1	125.6	125.5	275.5 (Exception)

Source: Business Standard, 2022

There is top notch boom with inside the marketplace length of the Indian fitness care sector. In 2017 it's far 91.1% however in 2020 it's far growing to 125.6% because of using virtual generation and additionally FDI policy, numerous MSMEs and SMEs startups. As in step with the National Health Accounts and PWC analysis, the Indian Health care marketplace Size is anticipated boom in 2027 is 275.5% Compound Annual Growth rate (CAGR) is 14%, as compared with the 2021 financial year.

Problems in the Health Infrastructure in India

Following are the some of the reasons for the poor growth of health infrastructure in India.

Limited Financial Resource

Poor funding allocations have frequently proven to be a significant barrier to the implementation of health programs. Over the years, the nation has made relatively little public health infrastructure investment. Although India invests 5.1% of its GDP in health, 82% of all health care spending - which includes practically all private out-of-pocket spending - comes from the private sector In addition, most state governments are having trouble expanding their public facilities to meet the expanding health care needs of their populations due to declining budgetary support and financial constraints. As a result, the informal sector of the public health system only partially meets the needs of the poor in rural and urban areas. Insufficient funding is now a major factor in the underdevelopment of infrastructure facilities.

Inadequate Structures

Lack of facilities for health centers is another issue that the health industry must deal with. Numerous health centers operate in constrained-space facilities, whether they are owned or rented by the government. Approximately 49.7% of sub-centers, 78.0% of PHCs, and 91.5% of CHCs are housed in government facilities in rural areas. The

remaining offices are either housed in rented or free-to-rent Panchayat/Voluntary Society structures.

Insufficient Physical Infrastructures

India's healthcare facilities face many challenges in their functioning. These include inadequate funding for medicines, diagnostic instruments, laboratory equipment, urinals, toilets, bathrooms, ambulances, telephones, fax machines, etc., all of which are in a very poor condition, which sadly reflects on the well-functioning health system. The lack of health centers and the general deterioration of the physical infrastructure is another problem. The lack of hospitals and medical professionals is another indicator of the poor state of health infrastructure in India.

Inadequate Preparation for Persons and Resources

The lack of staff planning in the majority of hospitals leads to underutilization of resources. The hospital's administrators must make sure that the existing staff in the various departments is assigned in a way that takes into account their workload and complies with established standards. To help administrators efficiently manage hospitals, periodic assessments of how they operate are required.

Lack of Efficient Transportation Options

The absence of efficient transportation options between villages and hospitals is another issue with the health infrastructure. According to the data, only 73.9% of villages have good access to health facilities via roadways nearly 20% of rural households traveled more than 10 kilometers for treatment, according to the NCAER. Patients traveled more than 10 kilometers in cases of rural disease in Meghalaya (54.56%) and Orissa (33.47%). According to studies, in Andhra Pradesh, where the villagers are dispersed extensively, about 75% of PHCs are situated in agency areas.

Suggestion to Improve the Condition of Health Infrastructure

There is a well-organized health policy in India. Effective implementation, monitoring, and assessment are required to advance the general

well-being and economic prosperity of the populace. The following recommendations are offered to strengthen the state of the healthcare system:

Constructing New infrastructure and improving current infrastructure

There is a need to make high-quality healthcare services more accessible and available to a wider population. Long-term provision of high-quality services to a greater population and wider area will require the development of new infrastructure (hospitals and critical hospital equipment). The present healthcare institutions can be reorganized and rationalized in the short term to boost outreach and service delivery. Along with building new infrastructure, it's important to upgrade current healthcare facilities with the necessary equipment, such as beds, labs, ambulances, phones, and medications.

Emphasis Again on Spending by Governments

The development of health infrastructure and facilities requires the deployment of a sizable portion of the available resources. Healthcare for the underprivileged, as well as public health initiatives and illness prevention, should be covered by government spending. Increased investment in preventive treatments and better services in rural regions should take precedence over the existing focus on curative, advanced, and urban services. According to the equity idea, government spending on healthcare services should be expanded and distributed across areas.

Filling Empty Vacancies

Vacant positions should be filled with qualified candidates. Simple medical graduates should be hired if a state finds it difficult to fill open specialized jobs in hospitals so that the populace receives at least the bare minimum of services. To ensure that services are available to the public, it is necessary to provide convenient and standardized residential housing for at least the core staff as a retention incentive. To improve overall efficiency, the imbalance between infrastructure facilities and available labor should be eliminated.

Utilization of Technology

Health care can now be delivered at lower costs thanks to technological advances. A comprehensive plan for the use of information technology in the delivery, guidance, management and training of health services needs to be developed and implemented. For health workers and medical staff, emphasis must be placed on regular training.

Encouraging NGO Activity

Committed and reputable NGO's may participate in the development of primary healthcare systems by transferring a portion of infrastructure facilities, such as SC or PHC, along with buildings, funds, and staff to VO/NGO's with comparatively more management freedom after determining their credibility. Through suitable tax breaks and other healthy incentives, private sector and non-profit initiatives in the health care industry can be supported.

Development in an Environment that is appropriate for Workforce and Hospitals

To ensure that hospitals can deliver top-notch care, appropriate buildings must be constructed immediately. To improve the morale and productivity of the workers working there, residences for the staff should also be built in addition to hospital buildings. When opening a new health center, attention should be paid to choosing a location that is convenient for the majority of residents in the block.

Proper Supply of Healthcare Equipment and Drugs

To ensure the timely and adequate supply of supplies to health centers, measures might be taken. They must keep a sufficient supply of medicines on hand. The health centers should be given enough equipment, such as x-ray and laboratory facilities, oxygen cylinders, operating tables, indoor beds, surgical instruments, etc., to effectively carry out their curative responsibilities.

Conclusion

Healthcare is the largest sector of the Indian economy and contributes to the country's GDP. Public health is the main factor that we must take care of, only then can the country progress. Therefore,

advanced technology, innovation, healthcare infrastructure, healthcare entrepreneurs and start-ups can provide medical equipment, healthcare products and services at reasonable prices, helping to improve the quality of treatment, infrastructure and provide world-class healthcare facilities, both in urban and rural areas. The Government of India has taken many initiatives in this area, such as the Niti Aayog Aayushman Bharat National Health Policy, to boost the development of the country.

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