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# An Analysis of Health Care Sector of Haryana State: An Economic Perspective

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### **Keywords**

### **ABSTRACT**

Health, Haryana, Infrastructure, healthcare, medical services

Health is perceived as a fundamental requirement of human life. A country can't succeed without the healthy citizens of its country. Health care expenditure represents a major use of our nation's resources and has been growing rapidly. The Indian Health Care System is presently facing several challenges. For attaining the goal of Health for All, India requires not only logical pulling of existing Strategies in education and training of medical services and health personal, but also a fundamental restructuring of health services infrastructure. Health of the people must be remains the primary concern. Government of Haryana is committed to provide quality health care to all its citizens. Haryana's healthcare sector is a vital part of the state's infrastructure and progress. The Haryana government has made many efforts to improve healthcare services and infrastructure to ensure that all citizens have access to highquality healthcare.

### Introduction

Introductions Haryana carved out of the Punjab, basically on linguistic basis on 1 Nov. 1966. Its total area is less than 1.4 percent (44,212) of India's land area. Chandigarh is the joint capital of Haryana and Punjab. Ranked 21st in terms of area. Over the previous decades, Haryana has gained tremendous progress not only in agriculture, industry but also in other areas. With the overall development, the availability and utilization of healthcare facilities have also increased over the plan periods. We knew health is a State subject. So it is committed to provide quality health services to residents of state. Haryana has doing tremendous work in this field. Organization structure of health in Haryana is same as in other states. At state level, a Ministry of health is established which is headed by a Health Minister. All states have established directorates of health to administer public health, medical services and medical education. The directorate of health services is the overall in charge of all matters pertaining to health in the state.

Healthcare has become one of India's largest sectors, both in terms of revenue and employment.

Healthcare comprises hospitals, medical devices, clinical trials, outsourcing, telemedicine, medical

tourism, health insurance and medical equipment. The Indian healthcare sector is growing at a brisk pace due to its strengthening coverage, services, and increasing expenditure by public as well as private players.

India's healthcare delivery system is categorised into two major components - public and private. The government, i.e., the public healthcare system, comprises limited secondary and tertiary care institutions in key cities and focuses on providing basic healthcare facilities in the form of Primary Healthcare Centers (PHCs) in rural areas. The private sector provides the majority of secondary, tertiary, and quaternary care institutions with a major concentration in metros, tier-I, and tier-II cities.

India has a multi-payer universal health care model that is paid for by a combination of public and government regulated (through the Insurance Regulatory and Development Authority) private health insurances along with the element of almost entirely tax-funded public hospitals. The public hospital system is essentially free for all Indian residents except for small, often symbolic co-payments in some services. Economic Survey 2022-23 highlighted that the Central and State Governments' budgeted expenditure on the health sector reached 2.1% of GDP in FY23 and 2.2% in FY22, against 1.6% in FY21. India ranks 78th and has one of the lowest healthcare spending as a percent of GDP. It ranks 77th on the list of countries by total health expenditure per capita.

### **Review Of Literature**

It has been defined in Introduction that this paper talks about the inter district disparities; hence, those studies have been reviewed here which incorporated the aspect of disparities in health resources, infrastructure, facilities etc. Ghatak and Das (2012)concluded that health care system in the District of Birbhum of West Bengal was found far from the level of satisfaction, especially from the infrastructural point of view. Lack of this infrastructural facility, lead to inconsistency in the development of basic health care system as well as in overall development of the society. It was further seen that discrepancies existed both in spatial and temporal scale. Gupta (2012) examined the degree of health inequalities across Districts of urban Uttar Pradesh by applying the principal component analysis, and found the existence of wide regional disparities regarding health of urban population. The study concluded that the Western region of the State was the leading region in urban health; though its performance was poor regarding illness, and maternal and child health. Further, Eastern region. Sheet and Roy (2013) studied the regional disparities in health care infrastructure in nineteen blocks of BirbhumDistrict (West Bengal). They constructed the deprivation and development index for each block on the basis of eight indicators of health care infrastructure. It was concluded that the blocks of Sainthia, Bolpur-Santiniketan and Labpur were more developed with respect to health care infrastructure. On the other side, blocks including Nalhati-I, Suri-I, Mayureshwar-I and II were less developed. Hence, the need of adequate planning was stressed to equally develop health care infrastructure. Garg and Gupta (2015) attempted to examine the inter-district disparities in health infrastructure in Haryana with the help of ten indicators. Analysis confirmed the gaps in the availability of health facilities in various Districts of Haryana and highlighted that in most of the Districts, the ratios of health infrastructural indicators including doctors, nurses, beds, hospitals, Primary health centres, Community health centres, dispensary to population were insignificant and exploring wide imbalances. Finally, the deprivation as well as development indices of health infrastructure revealed the discrepancies in Districts with regard to health infrastructural development. Pandey (2017) examined the importance of AYUSH (abbreviation of Ayurveda, Yoga, Unani, Siddha and Homoeopathy) system of health care as a complementary of allopathic health care system, and found that India had highest number of practitioners as well as users of AYUSH health care. He concluded that the planned, meaningful and phased integration of AYUSH with modern medicines

has helped in meeting the challenges of shortage of health care professionals in allopathic health care and in strengthening the health care services in rural India. A Literature comprehension reveals that disparities in health infrastructure and resources have been studied at different levels; but, District-Wise analysis of any State has not been investigated yet. Accordingly, this paper fulfills this gaps; and likewise, next section depicts the objectives and methodology used in this paper.

### Objective of the study:

- 1. To analyze the health services of Haryana.
- 2. To find out the relative efficiencies of various government hospitals of Haryana.
- 3. To study the current status of health Infrastructure Development & various innovative health care schemes in Haryana.

**Methodology And Database:** The paper is based on Secondary Data. The secondary data are collected from various sources like RBI state finance: A Study of State Budget, Economic Survey of Haryana and Booklet of Haryana Economy. The paper uses simple statistical tools like percentage, AGR, CAGR and Index growth etc. Growth rate have been estimated with the help of CAGR, Annual Growth Rate and Index Growth formula.

Analytical tools: Annual Growth Rate (AGR) Annual growth rate is the change in the value of a measurement over the period of a year. The formula used to calculate AGR uses the previous year as a base. The study has used the following formula:

$$AGR = \frac{Final\ value - Initial\ value}{Initial\ value} \times 100$$

Compound Annual Growth Rate The study has used CAGR to find out the average growth rate of health expenditure over a multiple/variable period of time in Haryana from 2002-03 to 2016-17. For finding CAGR the following formula is used.

Index Growth Index growth is technique used to compare changes in value over time. The study has used to index growth rate to find the percentage increase of healthcare expenditure during 2002-03 to 2016-17. For this the study has used the following formula:

Index Growth = 
$$\frac{Current \, Year's \, Value}{Base \, Year's \, Value} \times 100$$

## Haryana with other states in india:

The fig. 1 crystal clear the public health expenditure as ratio to total public expenditure in 16 states of India between 2002-03 to 2016-17. Expenditure on health as ratio to total expenditure has increased from 3.3 percent in 2002-03 to 4.1 per cent in 2016-17 in Haryana. On the basis of GDP, the study has selected these above mentioned major 16 states to compare with Haryana to see the situation of health expenditure. Index growth has used to compare changes in value over time. In expansion of health expenditure after 2002-03 Gujarat has gotten first rank with 171.88 per cent, Chhattisgarh has second rank with 145.0 per cent, Haryana has 6th rank with 124.24 per cent and lowest rank in expansion of health expenditure has gotten Punjab with 77.14 per cent. But at present in 2016-17, the rank of Haryana in expenditure on health as ratio to total expenditure is 12th with 4.1 percent. It

represents that this is forcing people to spend more money from their own pockets to get health facilities. High out of pocket expenditure means that the government is shying away from its responsibility. During the study period, health expenditure has increased in Haryana, but another thing that draws the attention i.e.in 2016-17only Madhya Pradesh and Punjab have spent less expenditure on health while all other 12 states have spent more expenditure as compared to Haryana. So, it is very essential that Haryana will have to spend more on health care services because that level of expenditure is not enough for development of health sector.

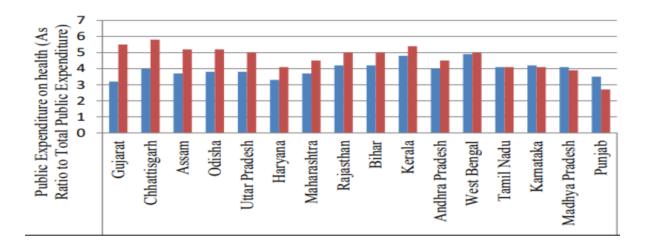


Fig. 1. Comparison of Public Healthcare Spending in Haryana with Major States of India

The Fig. 2 shows the trends and growth rate of health expenditure under revenue and capital account in Haryana from 2002-03 to 2016-17. The CAGR shows changes in the health expenditure over the period of study while the AGR shows changes in health expenditure on annual basis. During the study period Haryana witnessed an increase in total expenditure on health depicting positive compound annual growth rate that is 18.39 per cent, which is shown by figure 2. During the study period CAGR is also positive in all revenue, capital, total expenditure and per capita expenditure, that is the symbol of expenditure on health has increased. Since the CAGR of total health expenditure was more than the CAGR of Per capita government expenditure on health (PCGEH). The CAGR of total health expenditure under capital account is more than the CAGR of health expenditure under revenue account. During the study period, revenue expenditure (RE) in Haryana dominated in total government health expenditure, with more than 85 percent share in total expenditure while capital expenditure (CE) hardly accounted for 12-13 percent. Revenue expenditure is non-plan dominated expenditure on health and capital expenditure is plan dominated expenditure on health in Haryana (RBI State Finance: A study of budget). There is no Non-Plan capital expenditure; there is only Plan capital expenditure on health The AGR of PCGEH is negative in 2003-04 and 2007-08 and in remaining time it is positive. AGR of RE on health is more in 2003-04, 2005-06, 2008-09, 2010-11, 2012-13, 2014-15 than AGR of CE and in the remaining years the AGR of capital expenditure is more. The annual growth rate of revenue expenditure is negative in 2003-04 and 2006-07 and capital expenditure is in 2003-04, 2010-11, 2012-13 and 2014-15. The maximum annual growth rate of revenue expenditure is in 2007-08 and of capital expenditure in 2013-14.

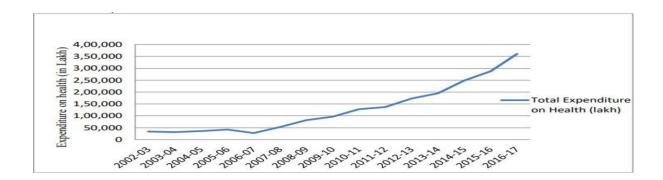
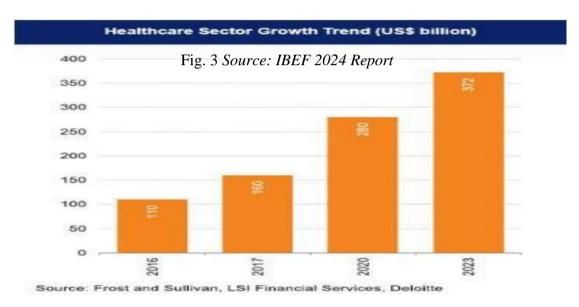


Fig. 2 Total Public Expenditure on Healthcare in Haryana

The Indian Healthcare industry continued its healthy growth in 2023 and reached a value of US\$ 372 billion driven by both the private sector and the government. As of 2024, the Indian healthcare sector is one of India's largest employers as it employs a total of 7.5 million people. Progress in telemedicine, virtual assistants, and data analytics is



Indian medical tourism market was valued at US\$ 7.69 billion in 2024 and is expected to reach US\$ 14.31 billion by 2029. According to India Tourism Statistics, around 634,561 foreign tourists came for medical treatment in India in 2023, which was nearly 6.87% of the total international tourists who visited the nation. With US\$ 5-6 billion size of medical value travel (MVT) and 500000 International patients annually, India is among the global leader destinations for international patients seeking advanced treatment.

As per information provided to the Lok Sabha by the Minister of Health & Family Welfare, Dr. Bharati Pravin Pawar, the doctor population ratio in the country is 1:854, assuming 80% availability of 12.68 lakh registered allopathic doctors and 5.65 lakh AYUSH doctors.



Fig. 4 Source: IBEF 2024 Report

The National Health Policy was endorsed by the Parliament of India in 1983 and updated in 2002, and then again updated in 2017. The recent four main updates in 2017 mention the need to focus on the growing burden of non-communicable diseases, the emergence of the robust healthcare industry, growing incidences of unsustainable expenditure due to healthcare costs, and rising economic growth enabling enhanced fiscal capacity. Furthermore, in the long-term, the policy aims to set up India's goal to reform its current system to achieve universal health care.

In practice however, the private healthcare sector is responsible for the majority of healthcare in India, and a lot of healthcare expenses are paid directly out of pocket by patients and their families, rather than through health insurance due to incomplete coverage.

Government health policy has thus far largely encouraged private-sector expansion in conjunction with well-designed but limited public health programmes.

Here are some aspects of Haryana's healthcare sector:

### Healthcare infrastructure?

The state has a large healthcare infrastructure that includes primary health centers, community health centers, district hospitals, medical colleges, and more.

#### **Health services**

The state provides health services through a network of hospitals, trauma centers, and other facilities.

**Health education**: The state has increased the number of MBBS seats in medical colleges to improve health education.

### **Health department**

The Haryana Health Department is responsible for the health needs of all citizens, including infants, children, adolescents, mothers, the elderly, and trauma victims.

### Health resource center

The Haryana State Health Resource Center (HSHRC) works to improve operational efficiency

through automation, real-time reporting, and other methods.

### **Health initiatives**

The state has launched several initiatives and schemes to make healthcare more affordable and accessible.

#### Health outcomes

The state's infant mortality rate (IMR) has decreased from 41 per 1,000 live births in 2013 to 28 per 1,000 live births in 2020.

The state of Haryana had a combined count of 20 allopathic medical establishments, comprising both publicly-funded and privately-owned institutions. These establishments offer medical instruction and preparation to learners, in addition to providing healthcare amenities to the community.

Conclusion: Haryana health scenario in terms of infrastructure, expenditure and found that infrastructure play a major role in terms of efficiency of health services. Rural infrastructure was less as compare to urban in terms of hospitals, dispensaries, but greater than urban in terms of PHCs and Sub-Centers and other infrastructure like medical staff, nurses had been continuously increasing over the years. Despite this, there was shortfall of labour room, laboratory facility and cold chain facility, low availability of test facilities etc. Study found that those district where infrastructure level was good performed poorly in efficiency levels and those who are poor in infrastructure level, performed better in efficiency levels. In terms of expenditure of Haryana related to health. It was found that expenditure of health has been continuously increasing over the years but the efficiency levels has not been increased. The budget which was allocated for health services had not been efficiently utilized over the years. So health services suffered due to this.

#### **References:**

- ❖ Bajpai N, Dholakia HR. Scaling of Primary of Health Services in Rural India, 2005.
- ❖ The Earth Institute of at Columbia University, CGSD Working Paper no. 29.
- Arun, J. V and Kumar, D. Trends and Pattern of Health Expenditure in India||. Language in India, http://www.languageinindia.com/april2013/aruntren ds.pdf, ISSN 1930-2940, Vol. 13:4, April 2013.
- Booklet of Haryana Economy. Various Issues, Department of Economic and Statistical Analysis, Government of Haryana.
- ❖ Balarajan Y, Subramanian SV. Health Care and Equity in India, 2011, 377.
- ❖ Bhan N, Madhira P. Health needs, access to healthcare, and perceptions of ageing in an urbanizing community in India: a qualitative study. BMC Geriatrics. 2017;17:156.
- ❖ Bhatnagar N, Aggarwal KA. Inequity in dental care utilization: what gets delivered gets known evidence from Chandigarh and Haryana. International Journal of Community Medicine and Health. 2014;1(1):44.
- ❖ Brijesh C Purohit. Healthcare sector efficiency in Gujarat (India): an exploratory study using data envelopment analysis, 2016.
- ❖ Ghuman BS, Akshat Mehta. Health Care Services in India: Problems and Prospects, 2009.
- ❖ Charnes A, Cooper C, Ve Rhodes E. Measuring the Efficiency Of Decision Making Units. European Journal of Operational Research. 1978;2:429-444.
- Chen Y, Liang L, Zhu J. Equivalence in two-stage DEA approaches. European Journal of Operational Research. 2009;193:600-604.
- ❖ Chen Y, Zhu J. Measuring information technologys indirect impact on firm's performance. Information Technology and Management Journal. 2004;5(1-2):9-22.

- ❖ Cooper WW, Seiford ML, Tone K. Data Envelopment Analysis. Second Edition. Springer Science, 2007.
- ❖ Varatharajan D. Improving the Efficiency of Public Health Care Units in Tamil Nadu, 1999.
- ❖ Deepa Sankar, Vinish Kathuria. Health System Performance in Rural India: Efficiency Estimates across States, 2000.
- ❖ Economic Survey of Haryana. Department of Economic and Statistical Analysis. Publication No.1179, 2011- 2017.