

## **An Impact of Health Expenditure on Indian Economic Growth**

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### **Abstract**

Human capital plays a significant role in sustainable economic growth. Human capital highly enhanced by health, education, training, migration and other investments. In this, health positively contributes the growth of economy. Initially growth economist gave high priority to education on economic growth. But in recent times, studies started focusing the relationship between health status and economic growth. Healthier individual might influence the economy such as they might productive at work, less absence in work, they may spend more for their education, and they may save more for their future. All these strengthen the economic growth. Entire study based on secondary data. The study covers only public health expenditure. Present study analyses the trends in health expenditure in India. This study also identifies the relation between health expenditure and economic growth. This paper highlights significance of health expenditure on economic growth.

**Key words:** Economic growth, human capital, health expenditure, post economic reforms, etc.

### **1. Introduction**

India is a fastest growing economy in the world and it is expected to be one of the top three economic powers of the world over next 10-15 years. India positioned third largest start-up in the world. India's GDP is expected to reach US\$6 trillion by financial year 2027 and achieve upper-middle income status on the back of digitalization, globalization, favorable demographics and reforms. Total expenditure for 2019-20 is budgeted at Rs.2, 784, 200 crore and increase of 13.30 per cent from 2018-19. Present Government announced totally Rs.96, 136.27 crore on health care. In that Rs.90, 689.86 crore allotted for the Department of Health and Family Welfare and Rs. 3,374.65 crore for the

Department of Health Research and Rs.2, 254.76 crore for the Ministry of AYUSH. On the whole, 16.65 per cent increase in health care sector in the present Budget. This paper gives answer for whether increasing in health expenditure is supporting economic growth or not?

## 2. Literature review

Shailender K Hooda (2015) examined the degree to which this disparity in health expenditure is explained by income and other socio-economic and demographic factors. There is high inter-state deviation in public expenditure on health across states of India. The state income has a positive relation with the health expenditure and other factors influence the health expenditure to grow. Findings show that the responsiveness of health spending is sensitive to change in per capita income of the state. The fiscal capacity and participation of people in politics of a particular state and health policy reforms initiated in 2005 play a major role in influencing the government health expenditure. The demographic factors, however, are less likely to influence the spending on health.

Buckley and Cuff (2012) presented the model of a mixed system of public and private finance. It investigated behavioural reactions to change in the public sector allocation and the supply of health care resources, and the size of the public health care budget on the following outcomes: the number of individuals who purchase private insurance, the possibility of health treatment in the public system for those without private insurance, the health status of individuals left untreated, and the incomes of individuals who receive treatment. The findings are consistent with the expectations of the theoretical model, although individuals constantly reveal greater willingness to pay for private insurance.

Mohindra, et al. (2012) emphasised on the call for a health equity lens. The main objective is to suggest on an agenda for the next generation of public health research in India. It was found that how to integrate equity-oriented strategies into the public health research agenda and propose some key research questions that require urgent attention from their respective disciplines. India, despite its emergence as a middle income, India continue to face an enormous disease of poverty which in turn contribute to health disparities and it's a time to call for a deeper research suggestion on health issue.

Gopalakrishna and Jayaprakash Rao (2012) represent the chain between the economic growth and human development and the results shows there are widening inter-regional disparities in human development. This paper reveals is a positive relationship between public expenditure and human development. The influence of public expenditure on human development is higher than that of economic growth. The empirical evidence has resulted that the higher public expenditure on health and education that leads to higher human development

Jehani (2012) reported that the size of the Indian healthcare delivery market as Rs.2.6 lakh crore in 2011-12 which is likely to double to Rs.4.7 lakh crore in 2016-17. Further, he listed the major reasons for the enormous prospective of the healthcare market in the long-term, such as a shift in demographics and a higher purchasing power.

Duggal (2012) reproduced the discussion organised by the People's Health Movement in July, 2012 in Cape Town, South Africa. The discussion includes the political and economic of health, comprehensive primary health care, social determinants of health, and mobilising for health, etc. It also emphasized on the issue of creating of public budget to make adequate budgetary guarantees for health care.

Gayathri (2011) assessed the health budget and expenditure at the national and state level and analysed the healthcare financing trends in Karnataka using the indicators developed for the purpose that is gross state development product, revenue expenditure, capital expenditure, per capita real expenditure, etc. The researcher has compared Karnataka state with Tamilnadu and Kerala in terms of its share in total expenditure, social services expenditure and the GSDP, which showed that both the states are ahead of Karnataka in terms of all the indicators. Further, there is a lessening share for health care services until 2005-06 in Karnataka because of the fiscal pressure that has been experienced by the government both at the central and state levels.

Rama Baru, et al. (2010) examined the health status of India and inequities in health and access to health services. India, has enjoyed speeded economic growth, but has performed poorly in human development indicators and health outcomes. According to this research, Inequities have been largely responsible for

the widening differentials in health outcomes: historical inequities, socio-economic inequities and inequities in provision and access to health services and the various factors that influence are health, availability, accessibility and affordability of health services. Through healthcare financing and provisioning arrangements can reduce or perpetuating existing inequities and shape the pattern of health service.

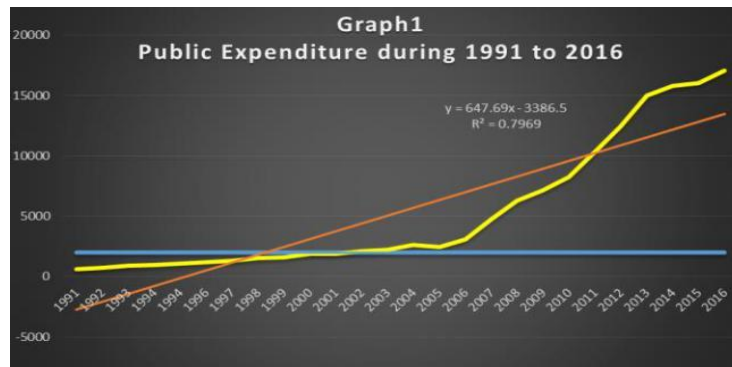
Arokiasamy, et al. (2011) reproduced the discussion of family welfare programme in India and assessed the relationship between the expenditure and performance. The objective of this paper is to assess the performance of the family welfare programmes and the trends in expenditure. Overall, the progress in key programme indicators is found to be disproportionate with rising expenditure.

Chakraborty (2010) has observed the public health expenditure in India. The main objective of this paper is to analyse the size, distribution, trends, composition and rate of growth of union and state health expenditure during the period of 2001-2002 to 2008-2009.

**3. Analysis and interpretations**

This paper aims to know the trend of public expenditure and health expenditure during post-economic reform regime in India. The present study adopted a casual research design based on the quantitative method of approach which explains how the health expenditure impacts on economic growth.

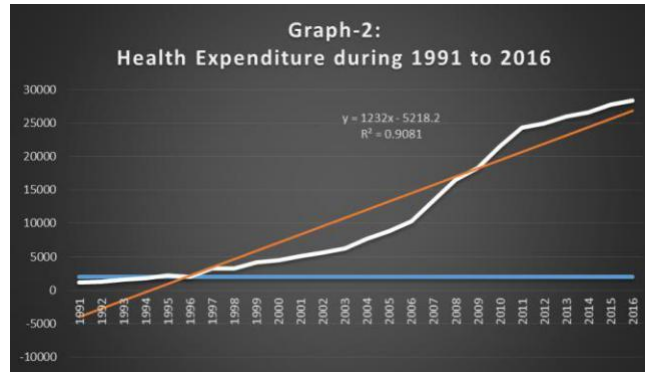
**3.1. Growth of public expenditure**



**Figure 1: Public Expenditure during Post-economic Reform Period**

Figure 1 depicts the nature of growth of public expenditure during post economic reform period.

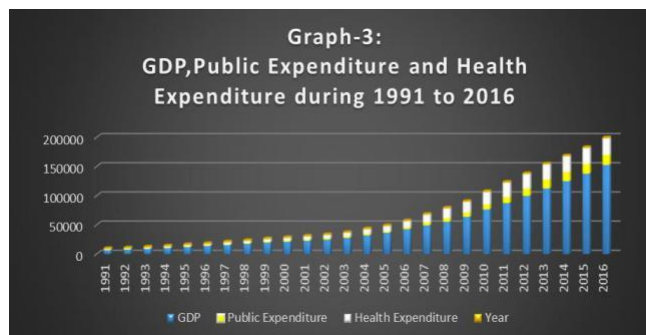
**3.2. Growth of health expenditure**



**Figure 2: Trend of Health Expenditure during Post-economic Reform Period**

Figure 2 explains trend of health expenditure during the post-economic reform period.

**3.3. Contribution of public and health expenditure on GDP**



**Figure 3: Contribution of Public and Health Expenditure on GDP**

Figure 3 explains the contribution of public and health expenditure on GDP. It is clearly understood that contribution of public expenditure on GDP is more than health expenditure over the study period.

**3.4. Impact of health and gross domestic product: ADF test**

The test is used to understand the impact of health expenditure on economic growth during post-economic reform period.

**Table 1**

***Impact of Health and Gross Domestic Product***

<b>First difference variable</b>	<b>P value without constant difference</b>	<b>With constant and trend difference</b>
0.01552	0.1203	0.4002
0.9912	0.9855	1.117e

Table 2 reveals that health expenditure showed stationarity when p-value is calculated without constant at first difference of variable. Whereas total GDP showed stationarity when p-value is calculated with constant and trend at first difference of variable.

**Table 2**

***Multi variant – Vector Auto regression***

<b>Null hypothesis</b>	<b>Probability</b>	<b>Observation</b>	<b>DF</b>
Total GDP does not Granger cause Health expenditure	0.0065	24	20
Health Expenditure Does not Grange cause Total GD	0.0007	24	20

Table 2 shows that both null hypotheses are rejected, which means that total gross domestic product causes health expenditure and vice versa. Both the variables are dependent on each other.

**4. Conclusion**

The study has shown that the health expenditure is one of the vital tools to boost the GDP and to enhance the economic development. Thus, the Indian health care expenditure should increased and enhance quality in health care services, preventative health system should be taken into account. Reforms in the health sector will have to be addressed as the need for increasing public spending on healthcare with focus on preventative healthcare, ensure greater access to healthcare for the poor, and significantly improve the productivity of government

spending. Human is one of the most important source of capital factors in nation building and economic growth and if the health condition is not in place, it adversely affects the development but the government spending on health is not sufficient when compared to other developing countries. Government expenditure on preventive care measure should strengthen to improve the health status of the human capital in India. Government must also take quick resolution steps in order to tackle the scenario as the condition is depleting day by day. Therefore, it is clearly stated that government spending on health care must improve the human capital and to enhance the standard of living of the nation.

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