



## Study of Trends And Pattern of Public Expenditure on Health in Haryana State

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**Abstract :** This paper covers the analysis of the secondary data collected related to the public health expenditures, and the public health status of Haryana state for the period 2001 to 2019. The data has been analysed using regression analysis, trend analysis, and the descriptive analysis. Thus, there is a need to conduct localised studies into public healthcare expenditure. Particularly in areas where there is high population with low literacy rate or other development indicators, there is an urgent need to conduct research regarding what is the impact of the public expenditure in the field of healthcare services for the public. There is also a need to assess the changing patterns in the public expenditure on health in India, and discover whether the availability of health facilities in India matches the amount of expense incurred by the taxpayers in the state. Results are shown in detail in graphical and tabulation form for easy understanding of the readers.

**Key Words :** Public Health Services, Expenditure.

**Introduction :** For this purpose, researcher has taken the variables namely; “medical & public health, family welfare, sanitation, and water supply, revenue expenditures, capital expenditures, per capital health expenditures, and health expenditures as a percentage of GDP of the Haryana state. Data has been analysed using trend analysis and results shown using graphical method, which is easy to understand and interpret.

India has long been an advocate of providing public the access to primary healthcare services through the aid of government sponsorship of these services. India is a participant to the Alma Ata declaration of 1978 and was committed to attaining the goal of —Health for All by the year 2000. For the achievement of this objective, the WHO has set up a minimal target of at least 5 percent of national income to be spent on public healthcare development out of the total national budget. There is thus a need to look at the way public health expenditure is carried and its direct impact on the public health services. There has been a plethora of research in the field of analysis of public health expenditure at the national and international level. These



researchers have provided a framework of reference for the current study to find effective ways of examination and analysis of available data on public expenditure. However, health is not always a subject of national interest alone. In countries like India, where there is a federal structure of legislature and policy-making, health is a state subject. This means that the purview of expenditure related to healthcare sector is the responsibility of the state government. This raises the need for in-depth look into the health expenditure made by state governments.

### Objectives Of The Study

The objective of the paper is to assess the trends and growth rate of public healthcare spending in Haryana.

### Methodology And Database

The paper is based on Secondary Data covered the time period from 2002-03 to 2016-17. 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.

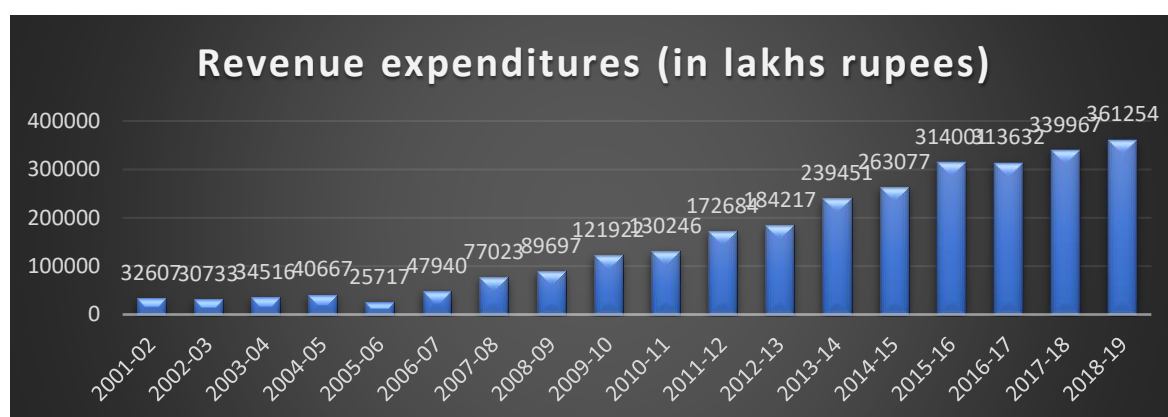


(Source: Economic Survey reports of Haryana 2001-02 to 2018-19)

The expenditures of Haryana government related to the “Medical & public health, family welfare, sanitation, and water supply (MPFWS), has increased over the years from 2001 to 2019. These expenses were 352.76 crores in 2001, which has increased upto 2903.63 crores in last two decades. The highest amount was 2931.23 crores over the “Medical & public health, family welfare, sanitation, and water supply” related expenditures, in the year 2016-17, which got reduced in 2017-18, and after that it again started rising. Researcher has avoided the data

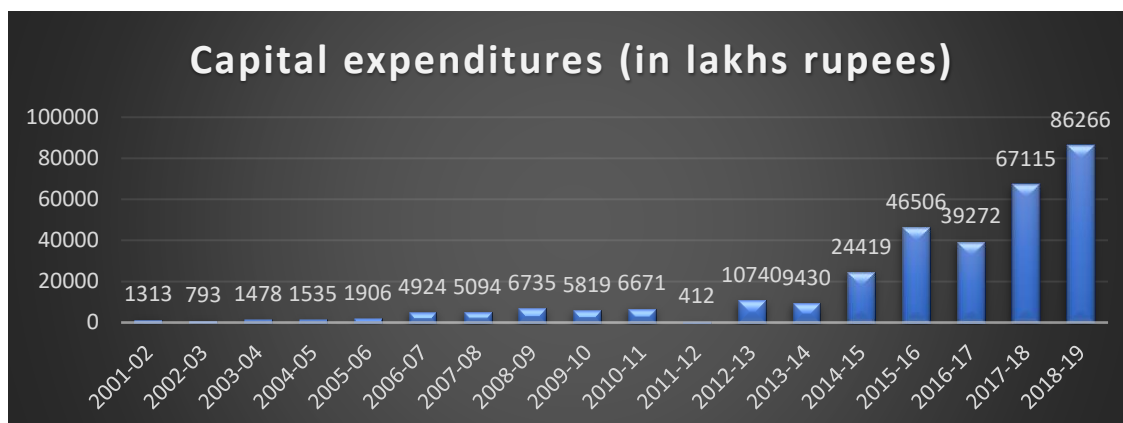


after 2019, which may give skewed results due to higher expenditures on health during Covid-period. Overall, the Haryana government has increased its total spending on the “Medical & public health, family welfare, sanitation, and water supply” related expenditures. Higher the expenses over the Medical & public health, family welfare, sanitation, and water supply, higher will be the growth rate of the state economy. All the expenditures help in development of the public health services in the state and leads to reduction in the health expenditures of the general public, higher savings by the general public, overall development of the state.



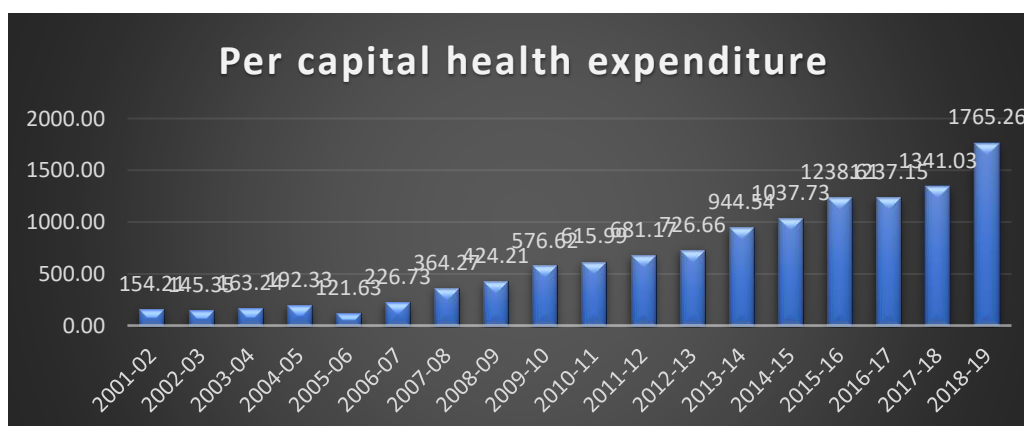
(Source: Economic Survey reports of Haryana 2001-02 to 2018-19)

The revenue expenditures of the government include the expenses related to the normal functioning of the various health department of the government, and services provided by this department. These expenses do not cover any expenses which can result into any asset creation. The revenue expenditures of Haryana government related to the public health, has increased over the years from 2001 to 2019. These expenses were 32607 lakhs in 2001, which has increased up to 361254 lakhs in last two decades. The highest amount was 361254 lakhs over revenue expenditures of Haryana government related to the public health, in the year 2018-19, which has shown continuous increasing trend throughout the data period, except few variations. Overall, the Haryana government has increased its total spending on the revenue expenditures over public health. Higher the expenses over the public health, higher will be the growth rate of the state economy.



(Source: Economic Survey reports of Haryana 2001-02 to 2018-19)

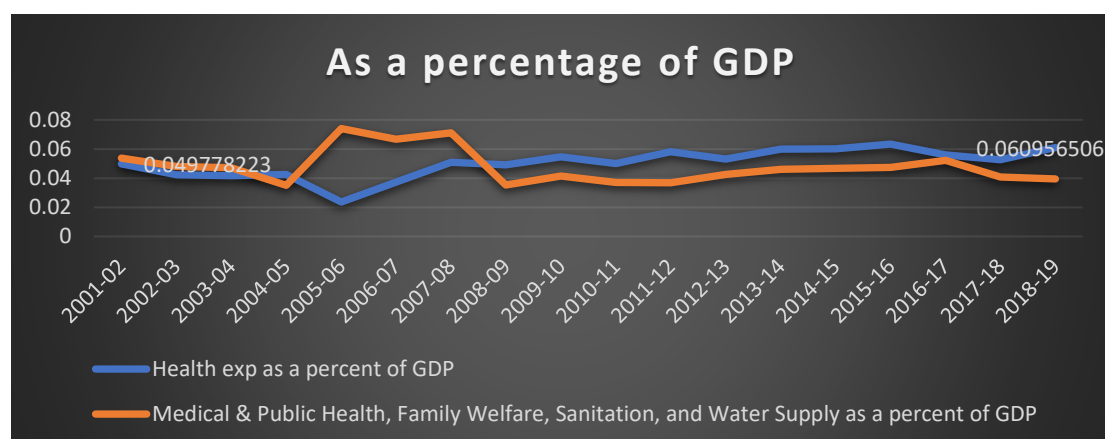
The capital expenditures of the government include the expenses related to the asset formation, and developing new technological infrastructure for the public health. These expenses cover all the expenses which can result into any asset creation such as; construction of hospitals, buying medical equipment, formation of medical labs, research & development related facilities etc. The capital expenditures of Haryana government related to the public health, has increased over the years from 2001 to 2019. These expenses were 1313 lakhs in 2001, which has increased up to 86266 lakhs in last two decades. The highest amount was 86266 lakhs over capital expenditures of Haryana government related to the public health, in the year 2018-19, which has shown tremendous increase throughout the data period, except few variations. Overall, the Haryana government has increased its total spending on the capital expenditures over public health. Higher the expenses over the public health, better will be the medical facilities, availability of better public health infrastructure development, which will lead to the higher growth rate of the state economy.



(Source: Economic Survey reports of Haryana 2001-02 to 2018-19)



The per capital health expenditures of the government include the expenses on public health as per the population, which is calculated as total expenditures of public health divided by the total population in the state. This variable shows that on an average, how much government has spent over the public health as per the population of the state. The per capital health expenditures of Haryana government related, has increased over the years from 2001 to 2019. These expenses were 154.21 in 2001, which has increased up to 1765.26 in last two decades. The highest amount was 1765.26 per capital health expenditures of Haryana government related, in the year 2018-19, which has shown tremendous increase throughout the data period, except few variations. Overall, the Haryana government has increased its total spending on the public health. Higher the expenses over the public health, better will be the medical facilities, availability of better public health infrastructure development, which will lead to the higher growth rate of the state economy.



(Source: Economic Survey reports of Haryana 2001-02 to 2018-19)

The public health expenditures of the government as a percentage of state GDP shows that how much government has spent over public health, in comparison to the state GDP over a financial year, which is calculated as total expenditures over “Medical & public health, family welfare, sanitation, and water supply”, divided by the state GDP. This variable shows that on an average, how much government has spent over the public health as per the state GDP. The public health expenditures of the government as a percentage of Haryana GDP, has increased over the years from 2001 to 2019. This ratio was 0.04 in the year 2001, which has increased up to 0.06 in last two decades. The highest ratio was 0.063 for public health expenditures of the government as a percentage of state GDP, in the year 2015-16, which has shown mis trend throughout the data



period, except for the 2005-06 with a sudden drop up to 0.02 percent only. Overall, the public health expenditures of the government as a percentage of state GDP has increased.

**Conclusion :** Descriptive analysis of the variables related to the public health expenditures of the Haryana government showed that, on an average government has spent 1332.11 crore rupees in last two decades over the “Medical, public health, family welfare, sanitation, and water supply”; “17801.56 lakh rupees over capital expenditures related to the public health, 156630.61 lakh rupees over revenue expenditures related to the public health, and 664.26 rupees was the average per capital health expenditure. While, the average ratio of 0.05 was recorded for the public health expenditures as a percent of state GDP and same for the Medical, public health, family welfare, sanitation, and water supply as a percent of state GDP.

|                    | <i>Medical &amp; Public Health, Family Welfare, Sanitation, and Water Supply (Amount in crore rupees)</i> | <i>Per capital health expenditure</i> | <i>Revenue expenditures (in lakhs rupees)</i> | <i>Capital expenditures (in lakhs rupees)</i> | <i>Health exp as a percent of GDP</i> | <i>Medical &amp; Public Health, Family Welfare, Sanitation, and Water Supply as a percent of GDP</i> |
|--------------------|---|---------------------------------------|---|---|---------------------------------------|--|
| CAGR               | 0.12  | 0.15                                  | 0.14  | 0.26  | 0.01                                  | -0.02  |
| Mean               | 1332.11   | 664.26                                | 156630.61                                     | 17801.56                                      | 0.05                                  | 0.05   |
| Standard Error     | 211.86  | 117.12                                | 28317.10                                      | 5977.19                                       | 0.00                                  | 0.00   |
| Median             | 1021.89   | 596.30                                | 126084.00                                     | 6245.00                                       | 0.05                                  | 0.05   |
| Standard Deviation | 898.86  | 496.88                                | 120139.27                                     | 25359.07                                      | 0.01                                  | 0.01   |
| Sample Variance    | 807951.63   | 246893.38                             | 14433444044.02                                | 643082421.44                                  | 0.00                                  | 0.00   |
| Kurtosis           | -0.93   | -0.44                                 | -1.33   | 2.34  | 1.66                                  | 0.53   |
| Skewness           | 0.66  | 0.71                                  | 0.48  | 1.78  | -1.14                                 | 1.16   |
| Range              | 2595.24   | 1643.64                               | 335537.00                                     | 85854.00                                      | 0.04                                  | 0.04   |
| Minimum            | 335.99  | 121.63                                | 25717.00                                      | 412.00  | 0.02                                  | 0.04   |
| Maximum            | 2931.23   | 1765.26                               | 361254.00                                     | 86266.00                                      | 0.06                                  | 0.07   |
| Sum                | 23977.92  | 11956.71                              | 2819351.00                                    | 320428.00                                     | 0.91                                  | 0.86   |
| Count              | 18.00   | 18.00                                 | 18.00   | 18.00   | 18.00                                 | 18.00  |
| Largest (1)        | 2931.23   | 1765.26                               | 361254.00                                     | 86266.00                                      | 0.06                                  | 0.07   |
| Smallest (1)       | 335.99  | 121.63                                | 25717.00                                      | 412.00  | 0.02                                  | 0.04   |

Compounded growth rate of all the six parameters of the public health expenditures were found to be positive, except for the Medical, public health, family welfare, sanitation, and water supply as a percent of state GDP, which was found to be negative. Hence, Medical, public health, family welfare, sanitation, and water supply as a percent of state GDP, was found to be declining over the two decades.





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