

PATTERN OF PUBLIC EXPENDITURE ON HEALTH IN ODISHA**Aliva Dipali Panda***M.Phil Scholar, K.M. Centre for P.G. Studies (Autonomous), Pondicherry.***Dr. M.Sangarradje***Associate Professor and Head, K.M. Centre for P.G. Studies (Autonomous), Pondicherry.***ABSTRACT**

The paper examines the pattern and growth of different components of public expenditure on health in Orissa for the period 1987-88 to 2004-05. It is observed from the analysis that the growth of public health expenditure and its components as percent to state GSDP, over time is not impressive. In the year 1987-88 the total public expenditure on health was 2.09 percent of state's GSDP. It declined to 1.71 percent in 2004-05. Medical and public health; and water supply and sanitation are emerged as two important components of health in Odisha. More emphasis needs to be given in increasing budgetary allocation of resources to health sector. Further health expenditure as percent to GSDP is much lower to two percent which should be increased at least to a level of three percent.

Key Words: *Health Expenditure, State Spending on Health, Pattern of Health Expenditure.*

1. INTRODUCTION

Studies like Gerdtham et al. (1991); Hitiris and Posnet(1992) , Barros (1998)and Bhat and Jain(2004) established a linkage between health and economic development. This linkage is sometimes a two –way: health contributes to economic advancement and on other side advancement of the economy also leads to better provision of health care and healthy people. Good health enables to create healthy work mass, increases their marginal contribution, potentially saves the loss of workdays (due to illness or other) and adequately contributes to strengthening of economy and society. But, good health of people closely depends on quality and adequate provision of health care facilities which in turn depend on the nature and quantum of financing of health in the society. Hence, the discussion on financing health assumes significance (Rout and Panda, 2007). Further, the role of government spending on health is highly significant in the context of a developing economy like India where still a large section of people remain below poverty line. In India health is in state subject and hence the analysis of public health expenditure of the state governments' attracts the interest of the researchers. Nearly 15.2 percent of public health expenditure comes from the state, whilst the central government with the share of around 5.2 percent tries to control, regulate, monitor, support and give guidelines to state governments in terms in allocation of resources towards the health sector under the ministry of health and family welfare (Bhat and Jain, 2004). The public health expenditure in Indian states is not considered to be adequate. Further considering the deterioration of state finances, increased non-developmental requirements, states are forced to spend a less proportion of their revenue income on health care services and other health related aspects. Hence, state expenditure on health needs to be examined.

In the above perspective, here we have exclusively tried to analyse pattern of public expenditure on health in a poor Indian State namely Odisha. The necessary data for the study for the period 1987-88 to 2004-05 are taken from secondary sources like Reserve Bank of India(RBI) Bulletins(various issues) and State Finances -A study of Budgets, RBI for different years. Comparable Gross State Domestic Product (GSDP) data at current prices are taken from Central Statistical Organisation. Simple percentage ratio method is used for analysis. The rest of the paper is structured as follows. Section II provides a conceptual framework of public expenditure on health. The pattern and growth of public expenditure on health in Odisha is analysed in section-III. The major findings and the conclusive remarks of the study are given in section IV.

2. CONCEPTUAL FRAMEWORK OF PUBLIC HEALTH EXPENDITURE

According to World Health Organisation health is defined as a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity (WHO, 1948). Similarly the government of India in

its first five year plan report (1951) defines health “as a positive state of wellbeing in which harmonious developments of mental and physical capacities of individuals lead to enjoyment of rich and full life. It implies adjustment of individual to his total environment-physical and social”. It is clear from the definitions that health does not only refer to medical cure of illness or public awareness about health, but it includes a number of factors that prevent diseases, promote physical health and efficiency.

Considering the scope of health, public health expenditure or government spending on health needs to be defined from a broader perspective. Though substantial research has been under taken towards health expenditure in India, there is no universally accepted definition of health expenditure. Most of the studies define public health expenditure as expenditure on medical and public health. But the expenditure on nutrition, water supply and sanitation, and family welfare have strong bearing on health with primary objective of improving and prevent the deterioration of health status of masses. Considering this we have tried to include all aspects of government spending for curative or preventive or promoting health care in defining our Public health expenditure. In India health is in state subject. In support to state expenditure on health, national government also provides financial grants for public health, health awareness, and for improving health infrastructure in poor states. Without considering the source of financing health we have included all possible components government spending on health being reflected in state budget. It includes both revenue and capital expenditure. In the present study the public health expenditure includes the expenditure of government on following accounts..

1. Medical and public health
2. Family welfare
3. Nutrition
4. Water supply and sanitation

3. PATTERN AND GROWTH OF PUBLIC HEALTH EXPENDITURE IN ODISHA

In this section we examine the pattern and growth of public expenditure on health in Odisha. As stated above the public expenditure on health includes expenditure on Medical and public health, Family welfare, Nutrition and water supply and sanitation. The main components of public health expenditure in Odisha are medical and public health and water supply and sanitation.

3.1 Growth of Health Expenditure over the Previous Year

The table 1 shows the trend and annual growth of health expenditure and its components over the previous year of Odisha, for the period 1987-88 to 2004-05. **The table- 1**

| Pattern and Annual growth of Public health Expenditure in Odisha# | | | | | |
|--|-----------------|--|----------------------------|------------------------|---|
| Year | Health* | (i) Medical & public health | (ii) Family welfare | (iii) Nutrition | (iv) Water supply and sanitation |
| 1988-89 | 7.243552 | 8.542885 | 9.62064 | -17.745 | 10.13523 |
| 1991-92 | 31.60361 | 25.01153 | 12.20236 | 16.14233 | 62.31226 |
| 1995-96 | 30.27196 | 5.228352 | 21.86124 | 300.0225 | 22.50181 |
| 1996-97 | 7.7784 | 9.511248 | -1.71117 | 3.6142 | 12.33202 |
| 1997-98 | 7.308601 | 10.20545 | 2.650179 | -26.8432 | 26.33888 |
| 1998-99 | 30.31715 | 31.27501 | 34.99621 | 9.821176 | 35.00248 |
| 1999-2000 | 0.693348 | 10.01304 | -9.17824 | -10.3732 | -4.60404 |
| 2000-01 | -1.24924 | 7.689234 | 0.090436 | -21.6956 | -9.03448 |
| 2001-02 | 1.869234 | 0.982079 | -17.3044 | -12.208 | 13.35047 |
| 2002-03 | 10.14949 | 9.823577 | 15.69144 | 65.09021 | -0.93064 |
| 2003-04 | 17.72118 | 21.30071 | 36.88597 | -7.28797 | 13.74316 |
| 2004-05 | 4.993652 | 4.815138 | -8.63924 | 55.41374 | -2.59855 |
| Average Growth | 11.66288 | 12.28382 | 9.597586 | 25.21087 | 11.62673 |
| # Growth over the previous year value | | | | | |

* Public expenditure on health = expenditure on (i) + (ii) + (iii) + (iv)

(-) negative figure

Sources: compiled by author (basic data-various issues of RBI bulletins and state finances-study of –a study of budgets, RBI).

The growth of Public health expenditure and expenditure growth of its components do not show any specific trend of increase or decrease over this period. Considering the previous year value as base, the annual growth of these components has no stability. It is the general tendency of the government to increase the expenditure at level over the previous year than considering the growth of expenditure in the past.

During this period on an average health expenditure in a particular year increases by 11.66 percent than its previous year value. The expenditure on nutrition shows higher average growth because its growth is highly volatile and does not show any trend. . The fluctuation in growth of these expenditure components can be attributed to multifarious factors like change in fiscal policy, change in government and political stability, growth in states revenue resources, public pressure and political manipulation.

3.2 Growth of Public Health Expenditure as Percent to GSDP

Table 2 shows the trend and growth of major components of public health expenditure of Odisha for the period 1987-88 to 2004-05. Here growth of health expenditure is considered as percentage of the state's GSDP. GSDP is used as proxy for the tax base and advancement of the state, hence the state needs to spend more on health care with the advancement of GSDP. Over this period the average growth of public health expenditure is 1.83 percent of GSDP. There is no much variation in the growth of Public health expenditure and its components over time. In the year 1987-88 the total public expenditure on health was 2.09 percent of state's GSDP. It has declined to 1.71 percent in 2004-05.

It is important to see the segregated component of the public health expenditure of the state. As percent to state GSDP the expenditure on various components of health instead of rising, it marginally declines and hovering around the average growth figure. Further the expenditure on family welfare as percent to GSDP has a declining trend. This indicates government is slowly diverting its expenditure from family welfare to other sectors with the advancement of the economy. As percent of GSDP state's spending on health care has not improved over time. Further Odisha is a poor state and its growth of GSDP itself is slow. When the Health spending-GSDP ratio remains around same over time, it seems government fails in emphasizing promotion of health care services in the state.

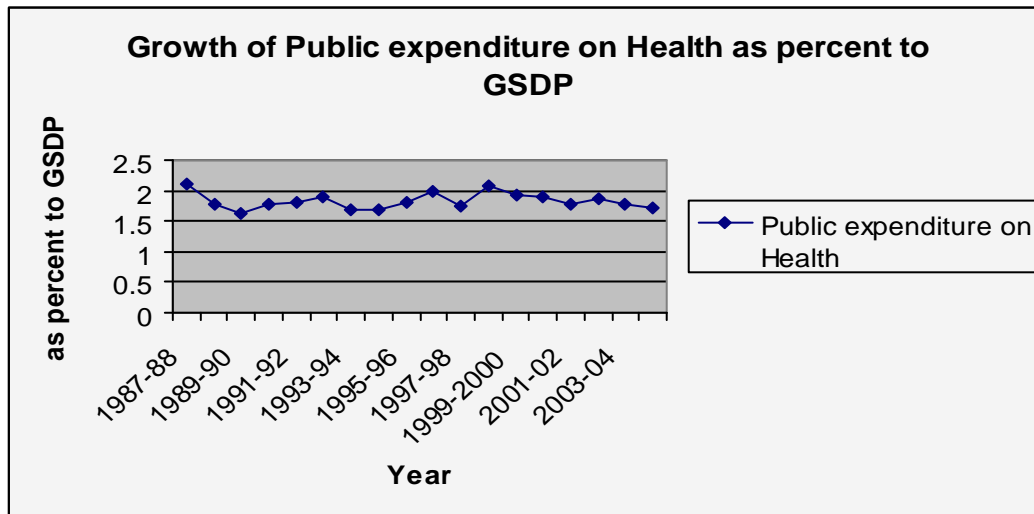
| Year | Public expenditure on Health | (i) Medical &public health | (ii)Family welfare | (iii)Nutrition | (iv)Water supply and sanitation |
|-----------------------|-------------------------------------|---------------------------------------|---------------------------|-----------------------|--|
| 1987-88 | 2.098841 | 0.997834 | 0.277713 | 0.155572 | 0.667723 |
| 1990-91 | 1.778905 | 0.96241 | 0.271196 | 0.111319 | 0.43398 |
| 1995-96 | 1.804707 | 0.752494 | 0.226129 | 0.33492 | 0.491165 |
| 1996-97 | 1.990087 | 0.843131 | 0.227401 | 0.355053 | 0.564501 |
| 1997-98 | 1.755891 | 0.763993 | 0.19193 | 0.21357 | 0.586398 |
| 1998-99 | 2.07302 | 0.908606 | 0.234731 | 0.212486 | 0.717198 |
| 1999-2000 | 1.918011 | 0.918474 | 0.195887 | 0.174991 | 0.62866 |
| 2000-01 | 1.889626 | 0.986786 | 0.195607 | 0.136705 | 0.570528 |
| 2001-02 | 1.777677 | 0.92024 | 0.149382 | 0.110834 | 0.597219 |
| 2002-03 | 1.876326 | 0.968434 | 0.165605 | 0.175335 | 0.566952 |
| 2003-04 | 1.78165 | 0.94753 | 0.182849 | 0.131119 | 0.520153 |
| 2004-05 | 1.714591 | 0.910315 | 0.153118 | 0.186779 | 0.464378 |
| Average growth | 1.830619 | 0.891066 | 0.215972 | 0.164652 | 0.558929 |

Sources: compiled by author (basic data-various issues of RBI bulletins and state finances-study of budgets, RBI, CSO)

This clearly shows the situation of the state in financing health care has not changed in the desired direction and there is a need to emphasize on all components of health more particularly medical and public health for quality and adequate provision of health care service in the state.

The growth of total public spending on health as percent of GSDP is exclusively shown in chart 2 for clarity. It indicates that it does not show much variation rather the public spending on health-GSDP ratio is around 1.8 percent of GSDP during this period.. But Since 1998-99 on wards this has been continuously declined which is matter of concern.

Chart -1



| year | Health | Medical &public health | Family welfare | Nutrition | Water supply and sanitation |
|----------------|-----------------|------------------------|-----------------|-----------------|-----------------------------|
| 1987-88 | 56.26756 | 26.75079 | 7.44517 | 4.170702 | 17.9009 |
| 1990-91 | 64.55042 | 34.92258 | 9.840783 | 4.039384 | 15.74767 |
| 1995-96 | 143.4962 | 59.8324 | 17.97997 | 26.6302 | 39.0536 |
| 1996-97 | 152.366 | 64.55223 | 17.41042 | 27.18378 | 43.2196 |
| 1997-98 | 161.174 | 70.1272 | 17.61738 | 19.60365 | 53.82573 |
| 1998-99 | 207.1586 | 90.79776 | 23.45683 | 21.23389 | 71.67014 |
| 1999-2000 | 205.8603 | 98.57981 | 21.02461 | 18.78176 | 67.47407 |
| 2000-01 | 200.7568 | 104.8377 | 20.78155 | 14.52379 | 60.61373 |
| 2001-02 | 202.0921 | 104.6159 | 16.98228 | 12.60001 | 67.89384 |
| 2002-03 | 219.68 | 113.3841 | 19.38902 | 20.5282 | 66.37864 |
| 2003-04 | 255.3585 | 135.8065 | 26.20717 | 18.79283 | 74.55192 |
| 2004-05 | 264.8364 | 140.6077 | 23.65071 | 28.85001 | 71.72798 |
| Average | 146.3942 | 71.77309 | 16.06251 | 13.83361 | 44.72505 |

Sources: compiled by author (basic data-various issues of RBI bulletins and state finances-study of budgets, RBI, CSO)

3.3 Growth of Public Health Expenditure in Per Capita Rupees

It is also important to analyse the growth of public spending on health and its various components in terms per capita rupees by giving due weightage to population growth. This is shown in table 3. The per capita public expenditure on health increases from rupees 56.26 in 1987-88 to rupees 264.83 in 2004-05 with a period average of 146.39 rupees. In per capita rupees while public spending on health as a whole and on its components shows a positive trend over period, but the growth is very negligible for spending on family welfare and nutrition. The government needs to emphasize on this.

3.4 Percentage Decomposition of Total Public Health Expenditure

The growth of spending on various components of health as percent to total public expenditure on health is shown in table- 4. This will help to identify the relative importance of intra-sectors among total spending on health. Among the four components of health identified in the study government gives highest priority to medical and public health in spending. Because these services are essential for large clinical treatment, emergency curative and mass public health programs. In 1987-88 out of total public spending on health, government spends 47.54 percent on medical and public health, 31.81 percent on water supply and sanitation, 13.2 percent on family welfare and remaining 7.4 per cent on nutrition. Relatively government is emphasizing on Medical and public health and water supply and sanitation. Over the years while the share of expenditure on medical and public health is slightly increasing, that of family welfare is decreasing. This indicates that there is a decreasing emphasis on spending on family welfare in the state.

| Year | Total Health | Medical & public health | Family welfare | Nutrition | Water supply and sanitation |
|-------------|---------------------|------------------------------------|-----------------------|------------------|------------------------------------|
| 1987-88 | 100 | 47.54212 | 13.23173 | 7.412268 | 31.81389 |
| 1990-91 | 100 | 54.10124 | 15.24511 | 6.25772 | 24.39593 |
| 1995-96 | 100 | 41.69616 | 12.52993 | 18.55813 | 27.21578 |
| 1996-97 | 100 | 42.36655 | 11.42671 | 17.8411 | 28.36564 |
| 1997-98 | 100 | 43.51026 | 10.93066 | 12.16304 | 33.39605 |
| 1998-99 | 100 | 43.83006 | 11.32313 | 10.25006 | 34.59674 |
| 1999-2000 | 100 | 47.88676 | 10.21305 | 9.123547 | 32.77664 |
| 2000-01 | 100 | 52.22126 | 10.3516 | 7.234519 | 30.19262 |
| 2001-02 | 100 | 51.76648 | 8.403241 | 6.234787 | 33.5955 |
| 2002-03 | 100 | 51.61331 | 8.826032 | 9.344595 | 30.21607 |
| 2003-04 | 100 | 53.1827 | 10.26289 | 7.359392 | 29.19501 |
| 2004-05 | 100 | 53.09228 | 8.930309 | 10.89352 | 27.08389 |

Sources: compiled by author (basic data-various issues of RBI bulletins and state finances-study of –a study of budgets, RBI)

3.5 Growth of Health Expenditure as Percent to State Revenue Receipt and Spending

Analysing the share of health expenditure in the state budget and its growth is important to understand how government is emphasising health sector and allocating resources accordingly. Growth of public expenditure on health as percent to state's revenue receipt, revenue expenditure and total expenditure is shown in table -5.

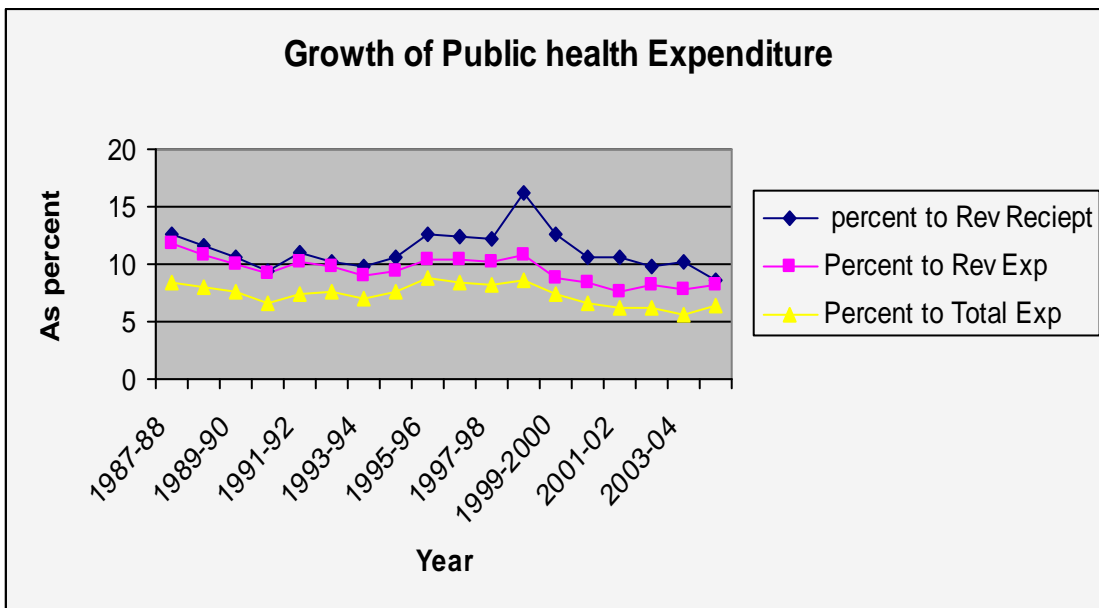
| year | Percent to Revenue Reciept | Percent to Rev Exp | Percent to Total Exp |
|-----------|----------------------------|--------------------|----------------------|
| 1987-88 | 12.53439296 | 11.86599886 | 8.394943707 |
| 1990-91 | 9.338117765 | 9.25469071 | 6.644074463 |
| 1995-96 | 12.57868074 | 10.4175082 | 8.797772664 |
| 1996-97 | 12.30441406 | 10.30740234 | 8.35859375 |
| 1997-98 | 12.2197066 | 10.22325838 | 8.257625759 |
| 1998-99 | 16.19531185 | 10.81665005 | 8.534770434 |
| 1999-2000 | 12.62119418 | 8.78079092 | 7.339452152 |
| 2000-01 | 10.62652383 | 8.307412106 | 6.639131734 |
| 2001-02 | 10.60086974 | 7.564207542 | 6.192949621 |
| 2002-03 | 9.752440519 | 8.21780626 | 6.203446095 |
| 2003-04 | 10.26284484 | 7.73776436 | 5.624622637 |
| 2004-05 | 8.583927488 | 8.22154635 | 6.40326581 |

Sources: compiled by author (basic data-various issues of RBI bulletins and state finances-study of –a study of budgets, RBI)

In the year 1987-88 the government spending on health was 12.53 percent of its revenue receipt. But it has declined to 8.58 percent in the year 2004-05. Similarly health spending as percent to revenue expenditure and total expenditure of the state also declined over time.

This is clearer from the chart-2. Health spending as percent to revenue receipt, revenue expenditure and total expenditure of the state is decreasing during the period of study. All three curves in the chart show declining trend. This indicates that instead of giving more emphasis to health sector, government is diverting resources and revenues to other sectors, leading the ratios to decline, with the advancement of economy and time.

Chart- 2



4. Major Findings and Conclusive Remarks

The main objective of the study was to examine the pattern of public expenditure on different components of health in a poor Indian state of Odisha.

The major findings that emerged from the analysis are,

1. It is observed from the analysis of pattern and growth of public health expenditure in Odisha that there is not much variation in the growth of Public health expenditure and its components over time during the study period 1987-88 to 2004-05. The growth of Public expenditure on health and its components over the previous year do not show any specific trend of increase or decrease over this period. During this period on an average health expenditure in a particular year increases by 11.66 percent than its previous year value.
2. As percent to state GSDP, the growth of public health expenditure and its components over time is not impressive. In the year 1987-88 the total public expenditure on health was 2.09 percent of state's GSDP. It declined to 1.71 percent in 2004-05.
3. Among the inter-se components of health expenditure, spending on medical and public health, and water supply and sanitation constitutes around 80 percent of total spending on health care. Hence, Medical and public health; and water supply and sanitation are emerged as two important components of health in Odisha.
4. Health spending as percent to revenue receipt, revenue expenditure and total expenditure of the state is decreasing during the period of study. The government spending on health as percent to revenue receipt in Odisha declined from 12.53 in 1987-88 to 8.58 in the year 2004-05. This indicates that the relative emphasis in budgetary allocation of resources for health sector in Odisha is declining and government is diverting resources and revenues to other sectors with the advancement of economy and time.

The above findings suggest that the situation of the state in financing health care has not changed in the desired direction and there is a need to emphasize on all components of health more particularly medical and public health for quality and adequate provision of health care service in the state. More emphasis should be given in increasing budgetary allocation of resources to health sector. Further health expenditure as percent to GSDP is much lower to two percent which should be increased at least to a level of three percent.

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