

# THE TREND AND GROWTH PATTERN OF HEALTH EXPENDITURE IN KARNATAKA: An Empirical Analysis

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**Abstract:** This focus of the paper is to give a more comprehensive picture on health spending in the State of Karnataka for the period of ten years 1999-2000 to 2008-09. The analysis shows that health spending is still low in the state (less than 1%) and there is an increased dependence on the central government for improving health spending. The analysis also reveals that the state spends more than 85% of funds on recurring expenditures, of which program costs and expenditure on human resource make up around 80% of the total. The rest is in the form of transfers, whose point of expenditure is not fully known. The per capita expenditures of the state is only Rs 225 (USD 4.5 approximately), and if other departments spending on health were included, it would increase to Rs 390 (USD 6.8 approximately). The NRHM spending of the Union Government, pushes these expenditure to Rs 468 (USD 9 approximately). The second part of the analysis looks at how health care spending by programs takes place across different levels. The analysis reveals that public health and primary care spending are taken up largely by the local levels of government, but they are severely constrained for funds. The analysis is supported by the fact that close to 99% of the funds to local governments are for salaries alone. At the state government level, secondary and tertiary care becomes focus areas for investments. The analysis found that the central government plays an important role in funding primary and public health within the state, while the state's role is present but minimal. The paper also assesses the programme wise expenditure of the state with and without the union funds by comparing programmes with the same objectives.

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## I. INTRODUCTION

Public Health is one of the efforts organized by society to protect, promote and restore people's health. It is the combination of services, skills and beliefs that are directed to the maintenance and improvement of the health of all people through collective action. Health has been amongst the priority items on the International Development agenda with initiatives such as the Millennium Development Goals (MDG) that have inculcated a sense of urgency among nations to achieve minimum standards of health and development of their people. The health care system in India has seen significant developments during the last 60 years. However, India still lags behind significantly on important health indicators when it compared internationally. In India, it has not been possible to achieve full equalization in health because the extent of transfers and the degree of redistribution requires for this purpose are too large relative to available transferable resources. It has also been noted that the existence of wide disparities in access to quality health services in the states. There are also large inter-state disparities in state level per capita expenditure on health. These disparities translate into large differences in the health outcomes in the states. It is important therefore not only to improve the average levels of provision of health services across the states, but also reduce disparities between states.

Prioritizing list of area where intervention is needed in health sector is seen in the objectives framed for the National Rural Health Mission (NRHM) - reduction in child and maternal mortality, universal access to public for food and nutrition, sanitation and hygiene and universal access to public health care services with emphasis on services addressing women's and children's health and universal immunization, prevention and control of communicable and non-communicable diseases

including locally endemic diseases, access to integrated comprehensive primary health care (PHC), population stabilization, gender and demographic balance, revitalize local health traditions and mainstream AYUSH and promotion of healthy life styles. These objectives are consistent with the national health policy objectives of the National Health Policy 2002 and the National Population Policy 2000. To achieve the above said objectives the budgetary support to the health sector must flow primarily to the core areas and to ensure efficiency of resource utilization, an implementation framework and system for monitoring needs to be put in place.

## II. METHODOLOGY

The following methodology describes in detail the step by step process undertaken for the analysis of health sector for the years 1999-2000 to 2008-2009.

Heads on Medical Education were included as a separate item in the analysis. In Karnataka the Medical colleges have hospitals attached with them and faculty teaching at these colleges work as doctors at these hospitals. Hence it is difficult to distinguish how much of allocation is split between the colleges and the hospitals. The medical expenditures from other departments was also considered: Medical Expenditures / reimbursements/facilities to government officials – All departments, hospital and police Dispensaries expenditure by the Department of Police, medical related work in the Public Works Department, engineering related works of Public Health in the Water supply and Sanitation Department, Insurance coverage by various departments, expenditures related to scholarships, stipends by various departments for medical/nursing students, expenditure related to child welfare by the Department of Social Security and Welfare, nutrition Related expenditures by the Department of nutrition and other departments.

After careful examination, the whole data set was classified into public health, primary care, secondary care, tertiary care, block grants (health), block grants (nutrition), medical education and other expenditure like administrative expenditure, research related to medical care, publicity and awareness and miscellaneous expenditure. This kind of classification would helps us to analyse the strategy wise break up and priorities of the Centre, State and districts and assess the performance of these bodies in terms of its policy objectives.

## III. ANALYSIS OF COMPOSITION OF HEALTH EXPENDITURE AT THE STATE LEVEL

This section of the paper deals with the expenditure by the state government and the contribution from the NRHM funds. Before proceed with the programme level objectives, it is important to analyse the overall picture of health spending in the state.

**Table 1: Total health expenditure at different levels of governance in nominal terms**

Health Expenditures (in Rs. Lakhs)	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
Health Spending by DoH&FW	97651	100532	108670	100412	99582	104416	115116	135331	183610	207723
Health Spending by all Departments	111452	120612	128359	121106	150649	141673	149159	176461	240261	273077
NRHM spending	NA <sup>1</sup>	NA	NA	NA	NA	NA	17769	22469	36658	55212

<sup>1</sup> NA since NRHM started in the year 2005-2006

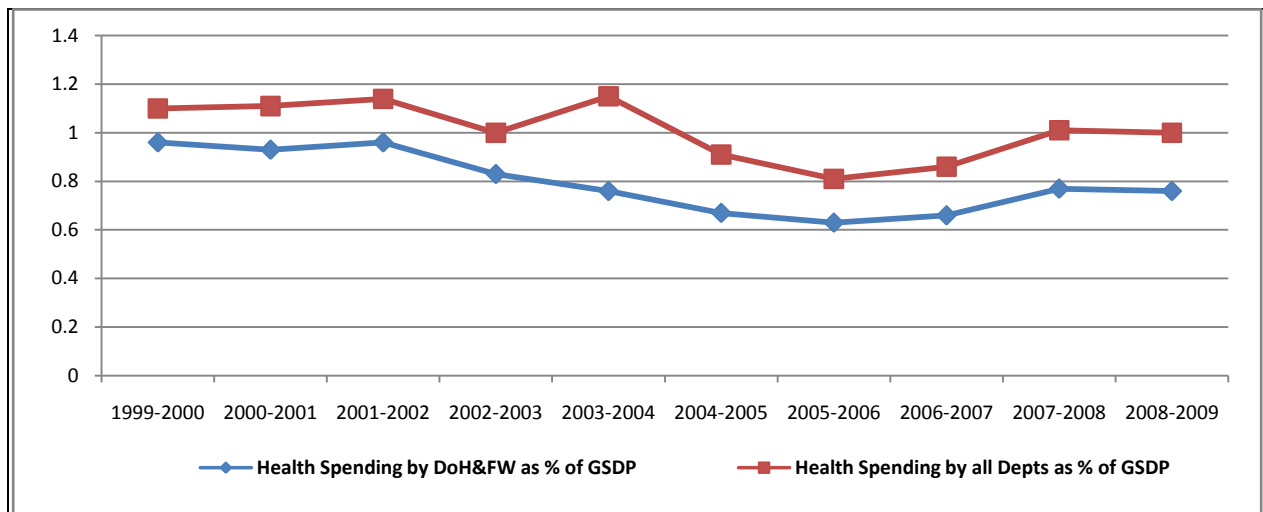
The expenditure on health by the DoH&FW over the years increased with a compounded annual growth rate of 7.84% in nominal terms and 3.56% in real terms. When all the departments spending on health were taken into consideration, the same figures stood at 9.38% and 5.03% respectively. The NRHM showed a Compound Annual Growth Rate (CAGR) of 32.77% in nominal terms and 27.94% in real terms. This was a large increase as compared to the growth rate in expenditure at the state level. The paper noted that although the CAGR in terms of absolute expenditures were increasing, the same was not the case when taken as a percentage of the state Gross State Domestic Product (GSDP). To analyze the GSDP let us look into the expenditure on health as percentage of GSDP.

**Spending on Health as a percentage of GSDP:**

The table below shows the expenditure on health as percentage of Gross Domestic Product (GSDP):

**Table 2: Spending on health in the State as a percentage of GSDP**

Overview of Health Spending (in %)	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
Health Spending by DoH&FW as % of GSDP	0.96	0.93	0.96	0.83	0.76	0.67	0.63	0.66	0.77	0.76
Health Spending by all Departments as % of GSDP	1.1	1.11	1.14	1	1.15	0.91	0.81	0.86	1.01	1



**Figure 1: Spending on health in the State as a percentage of the GSDP**

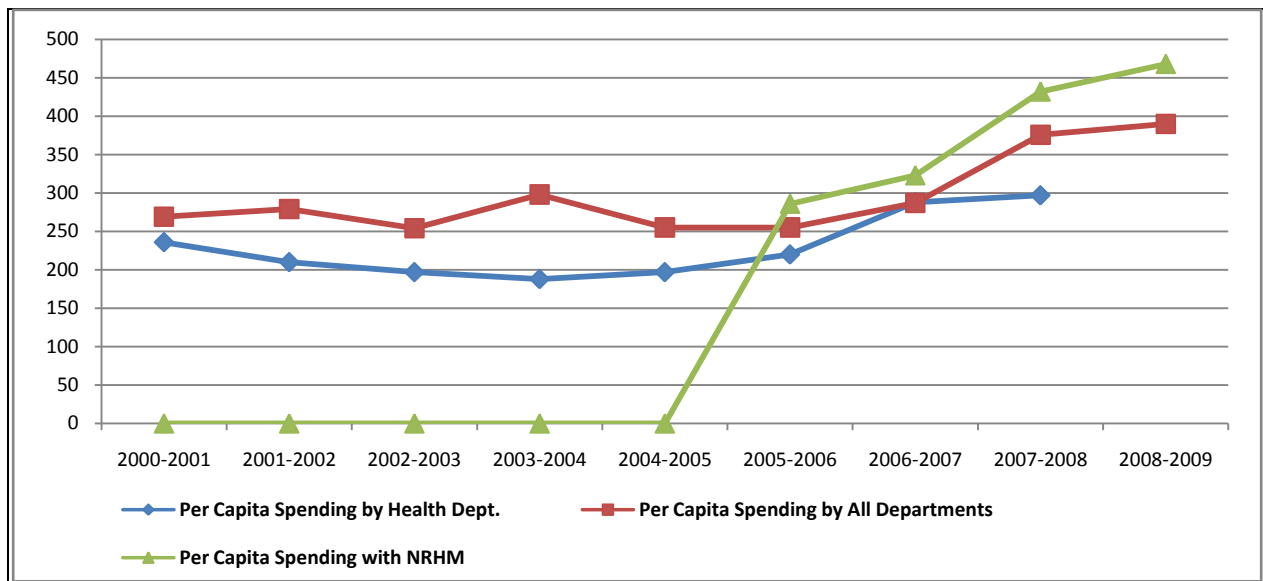
The graph above has two series which shows the degree to which expenditure on health changes due to the contribution by other departments. It can be seen that over the years, the expenditure on health as a percentage of the GSDP has reduced and has a negative compounded annual growth rate of -0.91% in real terms. Considering the spending by the health department, this figure is obviously lower at -2.3% in real terms. This is due to the fact that the state GSDP showed a positive growth rate and the health expenditure in the state was unable to meet the growing GSDP i.e. the government was unable to return to the state, as much as it gained from the economic activities of the state.

One feature that can be observed from the graph above is that, except for the year 2003-04, the expenditure by the health department and other departments follow a very similar pattern. This gives us an insight and raises the question as to whether there are actually any linkages that exist between the spending patterns of other departments in the state as compared to the spending pattern of the state health department.

*Spending on Health as a percentage of total expenditure:*

**Table 3: Spending on health as a percentage of total expenditure**

Overview of Health Spending (in %)	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
Health Spending by DoH&FW as % of Total Expenditure	5.46	5.11	4.79	3.56	2.87	2.92	3.29	3.07	3.82	3.43
Health Spending by all Depts as % of Total Expenditure	6.23	6.13	5.66	4.3	4.35	3.97	4.26	4	4.99	4.51
Health Spending with NRHM as a % of Total Expenditure	NA	NA	NA	NA	NA	NA	4.77	4.51	5.76	5.43



**Figure 2: Spending on health as a percentage of the total expenditure**

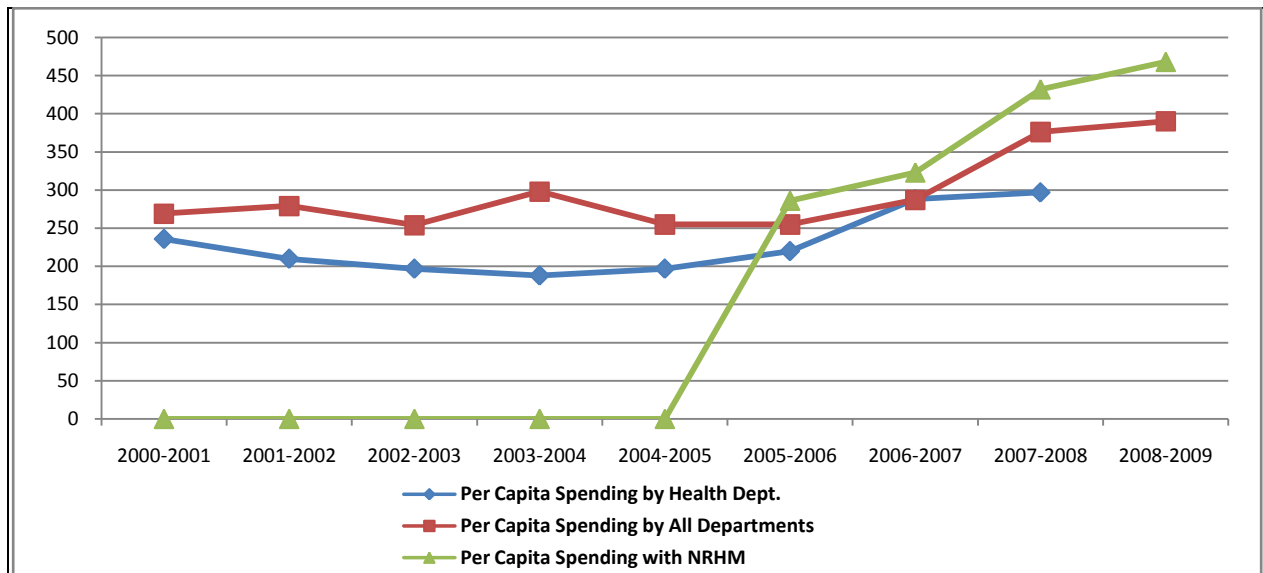
In 2008-09, the health department accounted 3.5% of the spending in the state. If one were to include the health spending by other departments and the NRHM, health spending was more close to 5.5% of the total expenditures. Later on in this section, we will see how most of this expenditure is incurred on the human resources. From the information above we can see that over the years the expenditure on health as a percentage of the total expenditure has reduced with a negative compounded annual growth rate of -3.17% in real terms. With the contribution of NRHM funds, the same figure stands at 3.26% which

implies that the NRHM funds are contributing growth of state spending on health. It is important to note the contribution of the NRHM funds to the whole health funding in the state. There seems to be evidence of the Central Funds becoming an important contributor to health funding, and the state having a high dependence on the Center for health funding.

*Per capita expenditure on health:*

**Table 4: Per capita expenditure on health**

Per Capita Spending (In Rs.)	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
Per Capita Spending by Health Dept.	225	236	210	197	188	197	220	288	297
Per Capita Spending by All Departments	269	279	254	298	255	255	287	376	390
Per Capita Spending with NRHM	NA	NA	NA	NA	NA	286	323	432	468



**Figure 3: Per capita expenditure on health**

The table above gives an insight into the spending on health per person per year in the state. The per capita expenditure on health benefits by the DoH&FW was Rs. 225 in 2000-2001 and had increased only to Rs. 297 in 2008 -2009 in real terms with a compounded annual growth rate was 4.19% over the period of ten years. As per the National Health Accounts 2004-2005, national average per capita spending on health was Rs.242 as compared to the state average which was slightly better at Rs.255. The out of pocket per capita expenditure was Rs.597<sup>2</sup> which was almost more than double of the per capita public expenditure. This is a clear indication that although the government was doing its bit towards health, it may not be sufficient to meet the requirements of average health spending by the public.

<sup>2</sup> As per the NHA 2005-2006

If all the departments spending on health were to be considered, the per capita spending on health increases to Rs 390 per year. Including the NRHM funds in the state health spending, the per capita spending on health increases to around Rs.468 in 2008-2009. The NRHM contributed about 17% of the per capita expenditure and the other departments of the state government contributed 35% of the total health spending of the state. This implied that the department of health and family welfare accounted for only 48% of the total health spending.

#### IV. SOURCE OF HEALTH SPENDING

From the tables above, it has been established that the centre’s program the NRHM, plays an important role in the total health expenditures of the state. It will also be useful to see what exactly the role of the centre is in the health spending of the state.

Table 5: Source of funding for the state

Source of funding with NRHM (in %)	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
Centre	4.29	1.74	3.16	2.86	3.62	4.72	12.47	12.01	14.41	18.11
Sharing	7.91	9.56	11.23	12.44	10.67	11.37	8.64	7.02	7.3	7.49
State	87.8	88.7	85.61	84.7	85.71	83.92	78.89	80.97	78.29	74.39

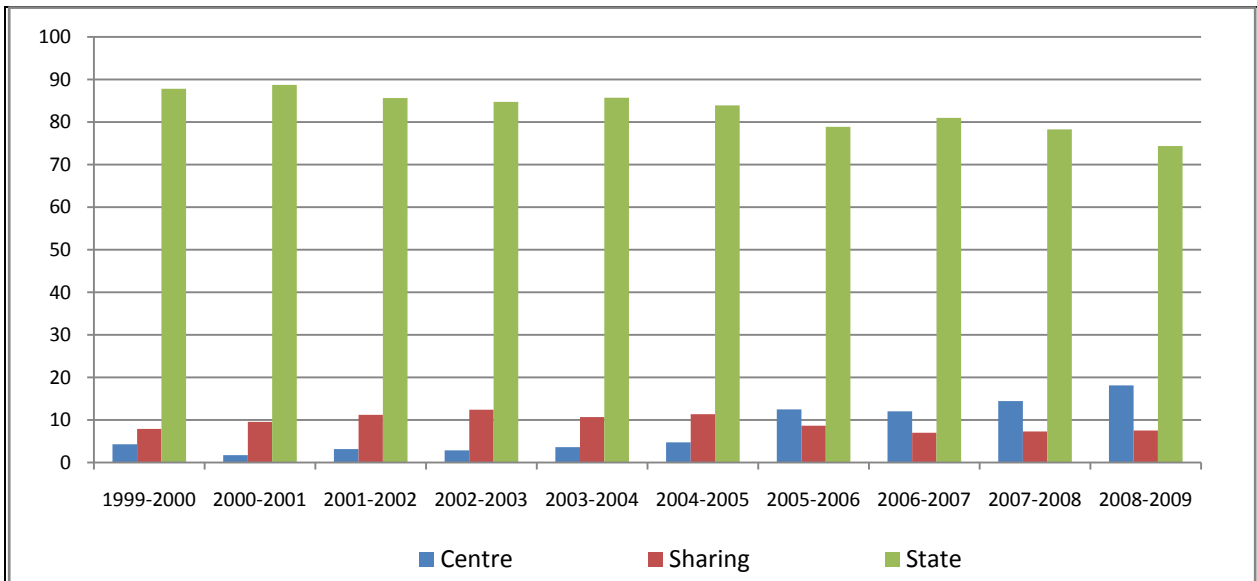


Figure 4: Source of funding for the state

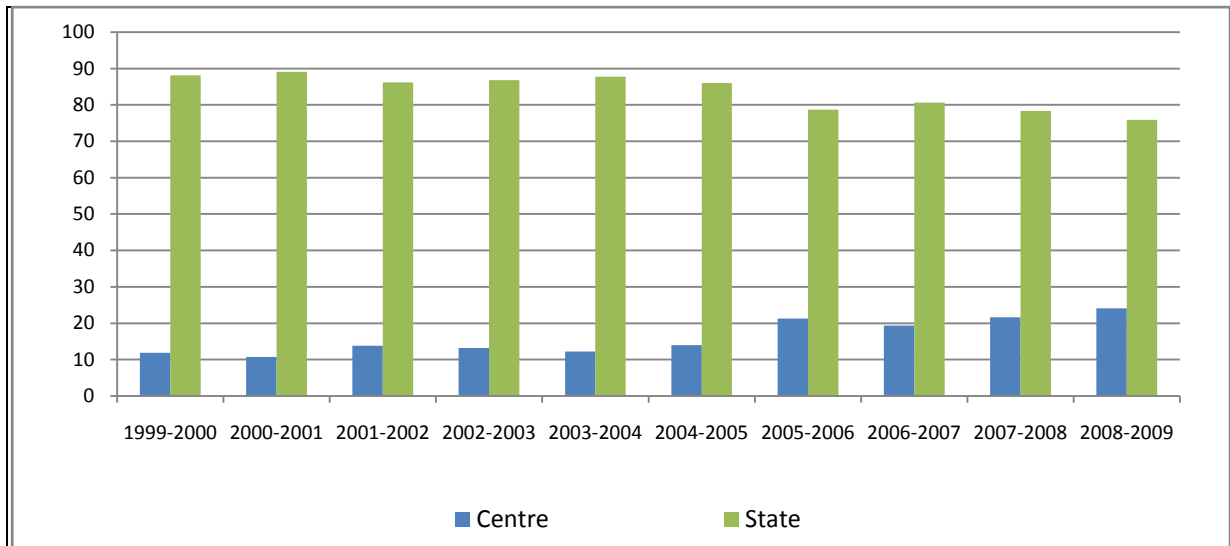
The table above shows the distribution of the funds coming from the Centre, shared schemes, and the state towards health. In the year 1999-2000, out of the contribution coming from the state, KHSDP formed an important part of the state budgets. Its contribution over the years has reduced even in nominal terms. After the year 2005-2006 with the launch of the NRHM, the Centre took a keen interest in improving the primary and public health conditions especially in the rural areas contributing about almost one fifth of the total health spending at the state level. In real terms, the compounded annual growth rate of the

contribution from the state was just 6% whereas the contribution of the Centre is almost close to 20%, out of which 93% is contributed by the NRHM.

At the state level, if one were to look at the major reason behind the growth of expenditures, there was an 18% rise in the expenditures in the year 2006-2007 due to the construction of new medical colleges and the launch of the Yeshasvini<sup>3</sup> Scheme. There was also a 30% rise in the spending on health in the year 2007-2008 from the previous year; this was due to huge amounts of expenditure incurred in the construction of new medical colleges and hospitals. All these numbers could suggest that the state government’s strategy is to spend on schemes introduced in a particular year or which is still falls under the plan expenditure. To get an aggregated picture of central and state spending for different programmes Table 6 illuminates as follows:

**Table 6: Source of funding inclusive of shared schemes:**

Source of funding with NRHM (in %)	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
Centre	11.87	10.75	13.8	13.22	12.2	13.95	21.25	19.35	21.63	24.12
State	88.1	89.12	86.19	86.78	87.8	86.05	78.75	80.65	78.35	75.86



**Figure 5: Source of funding inclusive of shared schemes:**

This graph reflects that the Centre’s contribution has increased from 12% to 24% of the total health expenditure over the decade. Thus, the evidence of an increasing importance of the central government’s role in health spending in the state is better elucidated in this graph. The sharing unknown indicated in the graph reflects the amount for which there is no clear understanding of the source of funds, whether centre or state.

<sup>3</sup> Yeshasvini Health Insurance Scheme is for rural farmers and peasants in Karnataka. The scheme, in its second year of operation covered 2.2 million farmers and peasants who pay an annual premium of Rupees 60 (\$1.50) for comprehensive coverage of all surgical procedures and outpatient care.

### V. HEALTH SPENDING BY DIFFERENT STRATEGIES

This section of the paper tries to analyse health spending based on the type of care and the money invested in the same. The National Health Policy of 2002 states its main objectives as the need for improving the basic health care in the country and addressing deficiencies in the public health sector which is the focal point of the policy. The State Health Policy of 2004 which had tried to align itself on the lines of the national health policy talks about building the existing institutional capacities of the public, voluntary and private health sectors and focuses on strengthening the primary health care strategy. The National Rural Health Mission talks about achieving the above objectives in the rural areas. Keeping in mind the above objectives the analysis presents a 3 case scenario – **expenditures by strategy in 1999-2000, before the National Health Policy, expenditure in 2005-06, after the National and state health Policy were constituted and before the NRHM, 2008-09, the current year in which actual budget information were obtained from the government.**

Table 7: Strategy wise health spending

Strategy wise health spending (in %)	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
Block Grants (Health)	23.81	22.85	21.88	22.45	19.22	21.18	22.85	20.61	18.29	16.38
Block Grants (Nutrition)	7.37	7.67	7.17	6.64	6.89	7.35	8.24	10.64	8.96	7.79
KHSDP	10.95	8.89	9.09	6.61	3.32	1.13	0.97	0.96	1.58	2.9
Medical Education	11.98	12.1	14.4	15.79	12.33	9.43	17.45	17.22	16.9	15.52
Others	9.6	9.24	9.17	9.17	8.56	17.23	11.54	9.99	9.26	10.29
Primary Care	15.8	12.89	14.61	13.43	10.12	12.15	16.78	18.85	18.08	20.7
Public Health	5.25	10.72	10.88	12.41	29.31	20.34	11.09	9.8	12.38	14.09
Secondary	13.57	13.65	11	11.48	8.33	10.91	8.38	9.23	10.89	9.76
Tertiary Care	1.68	1.99	1.8	2.03	1.91	0.27	2.69	2.69	3.66	2.55

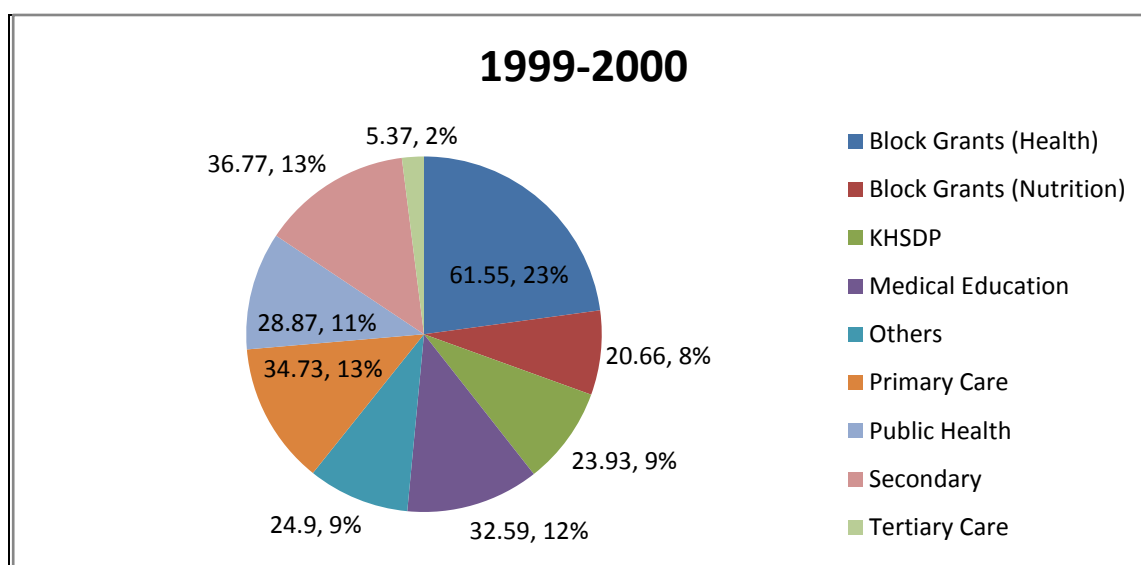
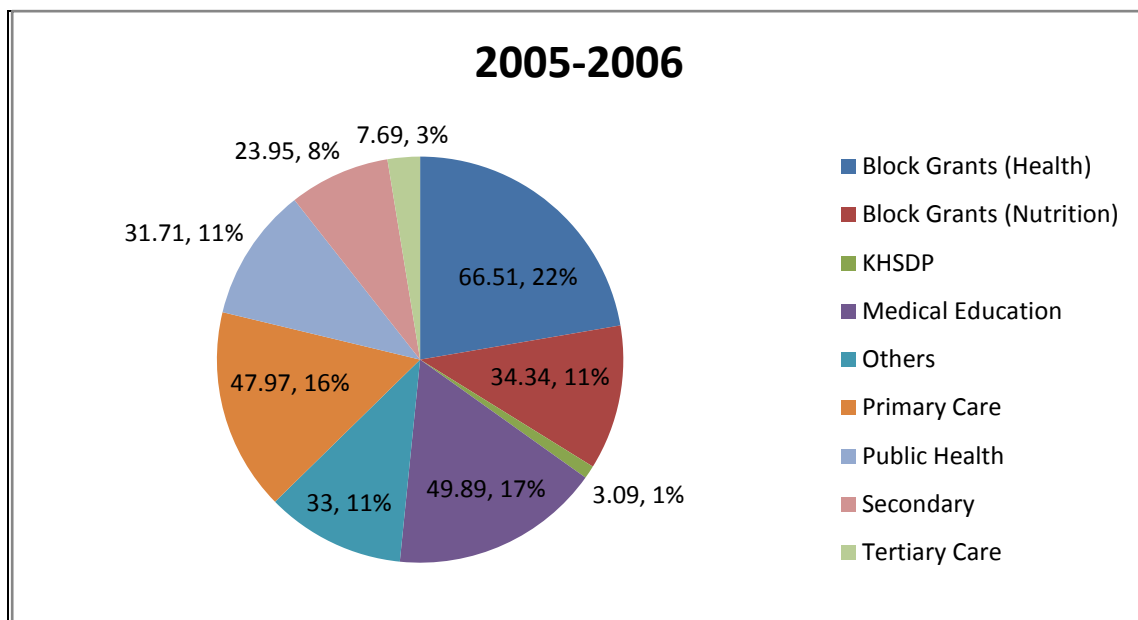


Figure 6: Strategy wise health spending in 1999-2000



In the year 1999-2000 much before the formulation of the National Health Policy of 2002, primary health care was just about 16% and public health was a meagre 5% of the total health spending. Spending on public and primary health is important because these are preventative and curative measures to avoid hospitalization. Both public and primary health put together makes up about just 21% of the total health expenditures. There was a large focus on block grants which form about almost one fourth of the total health expenditure. From a study conducted by Centre for Budget and Policy Studies (Vyasulu et al. 2007), it was found that these block grants were made largely towards spending on salaries at the district and levels below. This meant that most of the block grants (90%) were made to cater to the expenditure on human resources. KHS DP which focused on largely on capital infrastructure development for primary care formed about one tenth of the total health expenditure. With the announcement of the State Health Policy in 2004 and the National Rural Health Mission in 2005 which mainly focused on primary care strategy, the picture did not change much if we take the year 2005-2006 into consideration.

Figure 7: Strategy wise health spending in 2005-2006



Block grants constituted one fourth of the total health expenditures and public health spending increased to about 11% of the total health expenditure. Spending on primary care was still about 10%. Public and primary health together stood at just 21% of the total health expenditure. This was not aligned with the mission plan of the state health policy which prescribed 55% spending on primary health. It was also found that of the total expenditure at the Zilla Panchayat level, public health expenditure was about 33% whereas primary care was about 48%. Assuming all of this came from the block grants, public and primary health together form 21% of the total health expenditure which makes it about 41% expenditure on public and primary health which is still very much below the objective of achieving 55% spending on primary health care<sup>4</sup>.

During 2008-2009, the spending on primary and public health was just 34% of the total health expenditure, and taking into consideration 79% of the block grants as going into primary and public care the figure stands at about 45%. This is still 10% lower than the state health policy objective. The block grants is almost 20% of the total health expenditure and medical education accounted for almost 20% of the health expenditure considering the fact that new medical colleges were taken to be constructed.

<sup>4</sup> National Health Policy 2002

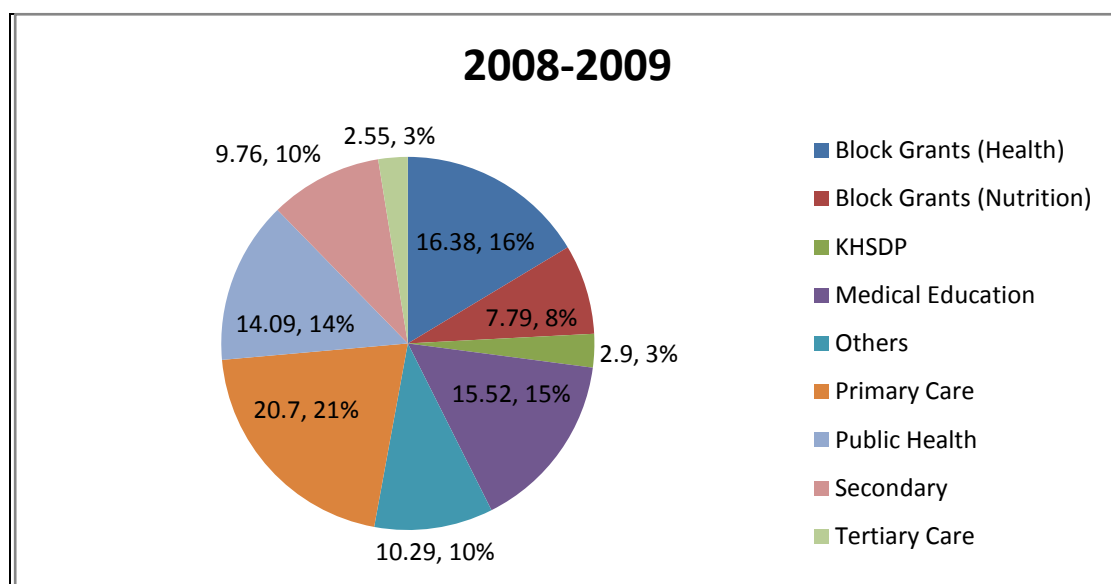


Figure 8: Strategy wise health spending in 2008-2009

**Per capita spending on health programmes:**

The table below shows the per capita spending on different programmes. The picture is not very different as compared to the previous programme although this gives us an absolute picture of the spending per person in the state. A meagre amount of Rs. 97 is spent towards primary care whereas public health accounted for only Rs. 66 in the year 2008-2009.

Table 8: Per Capita Spending on Different Programmes (In Rs.)

Per Capita Spending on Different Programmes (in Rs)	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
Block Grants (Health)	61.55	61.11	57	57.22	53.98	65.33	66.51	79.11	76.69
Block Grants (Nutrition)	20.66	20.03	16.85	20.53	18.73	23.56	34.34	38.76	36.48
KHSDP	23.93	25.37	16.77	9.9	2.88	2.76	3.09	6.82	13.58
Medical Education	32.59	40.21	40.08	36.71	24.04	49.89	49.89	73.07	72.66
Others	24.9	25.6	23.27	25.49	43.92	33	33	40.02	48.17
Primary Care	34.73	40.8	34.1	30.1	30.96	47.97	47.97	78.17	96.91
Public Health	28.87	30.39	31.51	87.29	51.83	31.71	31.71	53.55	65.97
Secondary	36.77	30.73	29.13	24.8	27.79	23.95	23.95	47.1	45.7
Tertiary Care	5.37	5.02	5.15	5.7	0.69	7.69	7.69	15.85	11.93

**Programme wise health spending:**

The programme wise break up of expenditure highlights the specific purposes for which the expenditures are incurred. The table given below gives a detailed breakup of the expenditures incurred under public, primary and other types of care.

**Table 9: Programme wise health spending**

Program wise spending (in%)	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
<b>Block Grants (Health)</b>	23.81	22.85	21.88	22.45	19.22	21.18	25.58	23.2	21.01	19.67
<b>Hospitals</b>	13.54	13.64	10.57	11.05	8.26	10.61	8.67	9.91	12.08	11.55
<b>Medical Education</b>	11.98	12.1	14.4	15.79	12.33	9.43	19.53	19.38	19.41	18.64
<b>KHSDP</b>	10.95	8.89	9.09	6.61	3.32	1.13	1.08	1.08	1.81	3.48
<b>Block Grants (Nutrition)</b>	7.37	7.67	7.17	6.64	6.89	7.35	9.22	11.98	10.3	9.36
<b>Population Control Programme</b>	6.08	2.91	4.7	2.25	1.33	1.42	1.05	0.16	0.13	0.13
<b>Drugs</b>	4.58	4.12	4.18	4.68	4.27	2.99	3.32	3.59	2.72	2.82
<b>Health Centres</b>	4.15	5.21	5.99	7	5.47	6.79	5.8	8.55	7.83	8.17
<b>ICDS</b>	4.05	5.42	5.91	8.44	7.93	8.95	9.27	7.45	8.13	8.63
<b>National/State diseases control programmes</b>	3.86	2.97	2.28	2.49	2.3	3.08	1.9	1.89	1.34	1.18
<b>Miscellaneous</b>	3.29	2.76	2.31	1.28	0.81	7.15	0.52	1.27	1.83	3.69
<b>Super Speciality Hospitals</b>	1.68	1.99	1.8	2.03	1.61	0.02	2.27	1.91	3.17	1.38
<b>Administration</b>	1.5	1.62	1.89	2.29	2.55	5.86	5.9	4.98	4.27	4.46
<b>Sanatoriums</b>	1.26	1.36	1.33	1.36	0.71	0.47	0.47	0.41	0.37	0.14
<b>Mother &amp; Child Health</b>	1.2	2.7	3.73	3.3	3.68	3.52	1	0.33	0.23	0.21
<b>Training</b>	0.42	0.38	0.28	0.29	0.28	0.35	0.29	0.34	0.25	0.24
<b>Research</b>	0.13	0.13	0.1	0.1	0.07	0.05	0.01	0.18	0	0.03
<b>Publicity and Awareness</b>	0.08	0.12	0.06	0.02	0	0.03	0.34	0	0	0
<b>Welfare of old and disabled</b>	0.04	0.06	0.04	0.04	0.03	0.03	0	0	0	0
<b>Secondary Insurance</b>	0.02	0	0	0.03	0.01	0.03	0.41	0.03	0.01	0.02

<b>Reimbursement of Medical Expenses</b>	0.01	0.49	0.62	0.8	0.87	1.15	1.19	1.1	0.98	0.63
<b>Ambulatory Care</b>	0.01	0.01	0.43	0.4	0.06	0.27	0.29	0.45	0.42	0.16
<b>Food and Nutrition</b>	0.01	2.59	1.23	0.67	1.62	1.64	0	0	0	0
<b>Natural Calamities</b>	0	0	0	0	16.08	6.23	1.14	0.68	2.65	3.73
<b>Disease Surveillance Units</b>	0	0	0	0	0	0	0	0.02	0.02	0.02
<b>Tertiary Insurance</b>	0	0	0	0	0.3	0.25	0.74	1.12	1.04	1.68

From the table given above it can be observed that block grants for health and nutrition, hospitals and medical education form most part of the expenditures throughout the ten year period. ICDS and health centres received considerable focus with almost 10% each of the total health expenditure. There was a rise in expenditure on health centres from about 4% in 1999-2000 to about 8% in 2008-2009. This was largely due to the primary health care strategy that was adopted by the Central and the State Government. Expenditure on drugs reduced over the years from about 5% in 1999-2000 to about 3% in 2008-2009. Although there are a large number of national level disease control programmes, they form only between 2-3% of the total expenditure. Health insurance in Karnataka is in poor state with insurance for secondary and tertiary care accounting for only about 3% of the total expenditure.

## VI. ANALYSIS OF NRHM FUNDS

NRHM has made a significant difference in the health expenditure at the state level and with its objective of achieving expenditure of 2-3% of the GDP on health it can be expected that it will continue its operations if full force close to achieving the millennium development goals. Given below is the table of NRHM funds and the amount spent under each program since the beginning of its operations in 2005-2006.

**Table 10: Programme wise expenditure under NRHM**

<b>Programs (Actuals) in Rs. Lakhs</b>	<b>2005-2006</b>	<b>2006-2007</b>	<b>2007-2008</b>	<b>2008-2009</b>
<b>Reproductive Child Health (Immunization)</b>	123	377	409	453
<b>RCH Flexipool</b>	1325	3811	6540	9417
<b>PPI<sup>5</sup></b>	463	1064	631	842
<b>NRHM Flexipool</b>	0	393	3775	12923
<b>Infrastructure Maintenance</b>	8153	7823	14139	16472
<b>NVBDCP<sup>6</sup></b>	413	449	328	566
<b>NLEP<sup>7</sup></b>	63	117	65	71
<b>RNTCP<sup>8</sup></b>	1219	1056	45	765

<sup>5</sup> Pulse Polio Immunization

<sup>6</sup> National Vector Borne Disease Control Programme

<sup>7</sup> National Leprosy Eradication Programme

<sup>8</sup> Revised National TB Control Programme

<b>NIDDCP<sup>9</sup></b>	11	5	9	12
<b>NPCB<sup>10</sup></b>	577	605	536	895
<b>IDSP<sup>11</sup></b>	68	189	116	102
<b>Funds released for selection/training of ASHA</b>	0	0	0	640
<b>Sub-Centres</b>	784	6	734	676
<b>Community Health Centres</b>	0	0	0	0
<b>Primary Health Centres</b>	0	389	151	0
<b>Upgradation of CHCs</b>	1561	3200	1023	0
<b>IDHAP</b>	260	0	0	0
<b>Drug Procurement</b>	2100	0	0	0
<b>Health Mela</b>	0	207	0	0
<b>RKS<sup>12</sup> Corpus Funds</b>	0	309	864	370
<b>Village Health &amp; Sanitation Committee</b>	0	0	1804	1661
<b>Grand Total</b>	17120	20000	31169	45865

*Strategy wise expenditure of the NRHM funds:*

The strategy wise expenditure of the NRHM funds is as given below:

**Table 10: Strategy wise expenditure of the NRHM funds**

Strategy wise Expenditure (in %)	2005-2006	2006-2007	2007-2008	2008-2009
<b>Public Health</b>	8	20	21	22
<b>Primary Care</b>	78	77	71	74
<b>Secondary</b>	0	1	3	1
<b>Others</b>	14	1	5	4

The main strategy wise spending of the NRHM followed in Karnataka has been primary health followed by public health for the four years since its inception. Primary care almost formed three fourths of the total expenditure over the four year period.

*Programme wise expenditure of the NRHM funds:*

<sup>9</sup> National Iodine Deficiency Disorders Control Programme

<sup>10</sup> National Programme for Control Blindness

<sup>11</sup> Integrated Disease Surveillance Programme

<sup>12</sup> Rogi Kalyan Samiti

**Table 11: Programme wise expenditure of the NRHM funds**

Program wise Expenditure (in %)	2005-2006	2006-2007	2007-2008	gctr
<b>Administration</b>	1.52	0	5.46	3.62
<b>National/State diseases control programmes</b>	16.04	15.87	6.13	6.87
<b>Disease</b>	0.4	0.91	0.35	0.22
<b>Drugs</b>	12.27	0	0	0
<b>Health Centres</b>	61.32	58.69	53.02	37.39
<b>Hospitals</b>	0	1.49	2.61	0.81
<b>NRHM Flexipool</b>	0	1.89	11.42	28.18
<b>Publicity and Awareness</b>	0	1	0	0
<b>Reproductive Child Health</b>	8.46	20.16	21.02	21.52
<b>Training</b>	0	0	0	1.4

From the table above, it is clear that spending on health centres is of highest priority of the NRHM although it's spending reduced in 2008-2009. This was followed by the spending on RCH programme which received almost one fifth of the total expenditure at the state level.

## VII. CONCLUSION AND POLICY IMPLICATIONS

It is clear from the above analysis that the Centre plays a vital role in terms of the expenditure on health. In terms of the responsibilities that has been take up by the different constitutional bodies, any kind of expenditure relating to secondary and tertiary care has been taken up by the state with the district and lower levels of governance playing a minimal role. It is investigated that the Primary care has been given utmost importance. Large amounts of funds being devolved to the rural areas and PRIs is for the construction and up gradation of health centres. In public health, a large amount of money has been going into the overall development of children with schemes like the ICDS and the mid day meal programmes by the government to improve health and nutrition conditions. Although the role at the state and the central government is clearly defined in terms of its expenditures, there seems to be no clear objective at the district and lower levels in terms of the responsibilities handled at this level. The expenditure happens as and when the PRIs receive the funds. This can also be observed by the fact that most of the expenditures taking place at district and lower levels is in the form of salaries of the human resources working at these levels. The authorities should consider harnessing the following for the progress of the health sector:

- It is interesting to note the importance attached to human resources at that level. It is a pity that although the government has done everything possible in terms of its spending to meet the necessities at the human resources at these rural levels, there is still a high amount of absenteeism.
- Government health facilities, especially at the district and periphery levels, have been severely restricted in terms of delivery quality care, on account of lack of access to funds at the facility level that can be used at the discretion of the facility in-charge/doctor, as per the local needs. Some states have created hospital level societies which are registered under Societies Act, but the fund generation was mainly based on user charges collected or donations received.

- The areas of concern for the elderly pertain to meeting health care needs, keeping pensions in tune with inflation and cost of living and setting regulatory standards for old age homes ensuring there are enough old age homes which are well equipped to meet the increasing needs of housing for the elderly. Although the Senior Citizen Act had been passed at the Centre in 2007, tribunals had received only 50 cases approximately since 2009 and the implementation of the same has been reportedly slow.
- Govt. support/subsidies alone are not enough to cater to the healthcare needs of this large segment of the population. There is a need to use medical technology to address the gap between demand and supply of healthcare services in India. Innovative products and business models are needed to make healthcare affordable and accessible to a larger percentage of the country.
- Increase research budget in public health across all national funding agencies. Investments should be made in centres of excellence, health sciences universities and independent research organizations.

The above conditionalities have to be designed to help state to manage the related expenditure in a timely manner and with quality. The budgetary support to the health sector must flow primarily to the core areas and in parallel and proportionate to it, investment must be made in the support structures, so that investment in the core areas fructifies in desired outputs and outcomes and also to address a historical deficit and gross imbalance between districts.

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