

**NISHA.T.A. “HOUSEHOLD HEALTH EXPENDITURE IN
KERALA: AN ECONOMIC ANALYSIS” THESIS RESEARCH AND
POST GRADUATE DEPARTMENT OF ECONOMICS,ST.THOMAS
COLLEGE,THRISSUR, UNIVERSITY OF CALICUT.**

CHAPTER 3

EXPENDITURE ON HEALTH IN INDIA: AN EMPIRICAL INVESTIGATION

- 3.1. Introduction
- 3.2. Global Public Expenditure on Health
- 3.3. Global Household Expenditure on Health
- 3.4. Expenditure on Health in India
 - 3.4.1. Public Expenditure on Health in India
 - 3.4.1.1. Public Expenditure on Health and Expenditure on Social Sector
 - 3.4.1.2. Five Year Plans and Public expenditure on Health
 - 3.4.2. Household Expenditure on Health in India
- 3.5. Health Financing Schemes in India

3.1. Introduction

The foremost goal of a health system is to enhance health of the population in an equitable and efficient manner. For this goal, policies should be designed to ensure people's access and use of good quality health services when needed, without suffering from financial hardship. When households pay directly out of their pockets for the services they use, they are at greater risk of financial hardship (Joe and Mishra, 2009; Ravi, 2016). The need to pay high out-of-pockets expenditure creates a financial barrier to accessing health services, with a probable greater impact on the poor (Ghosh, 2010; Leone et al. 2013). Low public spending on health certainly contributes to this situation. This situation affects the poorest segment of society in particular, preventing many from accessing services due to financial barriers or leading to impoverishment. Health is generally viewed as a fundamental human right, and access to health care should not be determined merely by income or wealth (WHO, 2017).

3.2. Global Public Expenditure on Health

The spending on health care may be of public expenditure as well as private expenditure which measure a country's final consumption of health care goods and services plus capital investments in health care infrastructure. The public and private expenditure of different countries follow different path at different level of economic development. The distribution of global expenditure on health is highly unequal and health sector continues to expend faster than growth of the economy. The reports of WHO 2019, pointed out that global public expenditure on health grew at an annual

growth of 4.3 percent between 2000 and 2017. Public expenditure on health constituted about 60 percent of global spending on health during 2017. The global public expenditure on health grew faster than other sources of health expenditure. There exist enormous variations in spending on health among countries of similar income. The report of WHO 2019, pointed out that in low income countries expenditure on health grew at an annual growth rate of 7.8 percent, middle income countries grew at annual growth rate of more than 6 percent and high income countries grew at annual growth rate of 3.5 percent between 2000 and 2017.

Table 3.1
Public Expenditure on Health in the World

Countries	General Govt. Health Expenditure as percentage of Current Health Expenditure		Countries	General Govt. Health Expenditure as percentage of Current Health Expenditure	
	2000	2017		2000	2017
Qatar	60	81	China	22	57
UK	82	79	South Africa	37	54
Turkey	62	78	Malaysia	40	52
Germany	78	78	Mexico	45	52
France	79	77	Iran	38	51
New Zealand	74	75	US	44	50
Italy	73	74	Indonesia	29	48
Canada	73	74	Sri Lanka	54	43
Argentina	55	72	Brazil	42	42
Austria	74	72	Egypt	35	33
UAE	69	72	Pakistan	35	32
Maldives	33	71	Switzerland	28	30
Australia	68	69	India	21	27

Source: World Health Organization, Global Health Expenditure Database, 2020

Global public expenditure on health out of total global expenditure on health increased from 56 percent in 2000 to 60 percent in 2017 (Table 3.1). The global health expenditure on health in real terms grew with an annual growth rate of 3.9 percent while the economy grew with an annual growth rate of 3.0 percent between 2000 and 2017. Average expenditure on health was only US\$ 41 for a person in low income countries and US\$ 2937 for a person in high income countries during 2017. Hence it is undoubtedly said that distribution of global expenditure on health is highly unequal (WHO, 2019).

Table 3.1 shows the public expenditure on health among various countries during 2000 and 2017. The share of general government (both centre and state) expenditure on health out of current health expenditure on health varies differently among different countries for the period 2000 and 2017. Government expenditure on health is high in case of UK, France, and Germany and less in the case of India and

China during 2000. In 2017 the government expenditure on health is high in the case of Qatar, UK, and Germany. Rich countries spend more on health care but there exist large variation among countries with similar income. The share of government expenditure on health in India increased from 21 percent to 27 percent whereas the share of China increased from 22 percent to 57 percent in 2017. When compared to other countries the share of government spending on health care is low in India during 2017. Higher share of government in total spending on health tend to go with lower catastrophic spending on health care for countries making the health financing transition (WHO, 2019).

Table 3.2

Public Expenditure on Health as Percentage of GDP

Countries	General Govt. Health Expenditure as percentage of GDP		Countries	General Govt. Health Expenditure as percentage of GDP	
	2000	2017		2000	2017
Germany	8	9	South Africa	3	4
France	8	9	Maldives	3	6
Austria	7	8	Sri Lanka	2	2
Canada	6	8	Mexico	2	3
New Zealand	6	7	Iran	2	4
U.S	6	9	Egypt	2	2
Italy	6	7	UAE	2	2
Netherlands	5	7	Qatar	1	2
Australia	5	6	Malaysia	1	2
U.K	5	8	Pakistan	1	1
Argentina	5	7	China	1	3
Brazil	3	4	India	1	1

Source: World Health Organization, Global Health Expenditure Database, 2020

Public expenditure on health can be easily analyzed with the support of GDP. Government expenditure on health as a percentage of GDP differs from country to country for different time periods. Between 2000 and 2017 global expenditure on health in real terms increased by an Annual Growth Rate (AGR) of 3.9 percent while global GDP increased by 3 percent. The health sector continues to expand faster than the rest of the economy (WHO, 2019). Spending on health is increasing faster than that of GDP. Germany, France, Austria and U.S pay out more for the health sector from GDP. The share of GDP for health sector by the government is meager in the case of India and Pakistan and it hang around 1 percent of GDP. As per World Health Organization report in 2020 there is marginal change in the share of GDP to the health sector in the case of India during 2000 and 2017. Health is given low priority during the resource allocation process of the government and government's failure is private

sector's success (Varatharajan, 2004). It would be admirable to increase the share of GDP to the health sector.

3.3. Global Household Expenditure on Health

Private expenditure on health includes out-of-pocket expenditure and voluntary prepayment on health insurance of the households. Out-of-pocket expenditures are the payments made directly by individuals at the point of service where the entire cost of the health good or service is not covered under any financial protection scheme. There exist variations among countries on health spending. The public expenditure on health is more in the case of Qatar and U.K and less in the case of India and Pakistan. In India, 73 percent of health spending consists of private expenditure. Major share of health spending is done by the individual himself (Ladusingh and Pandey, 2013; Sinha et al., 2016). Household spending on health is the major component in the private expenditure on health. Private expenditure on health consists of individual out-of-pocket spending and voluntary prepayment. The out-of-pocket spending on health care creates inequality in the distribution of income (Flores et al., 2008; Garg and Karan, 2009 and Joe and Mishra, 2009).

Table 3.3
Out-of-Pocket Spending on Health in the World

Countries	Out-of-pocket spending as percentage of current health expenditure		Countries	Out-of-pocket spending as percentage of current health expenditure	
	2000	2017		2000	2017
South Africa	15	8	Maldives	63	21
France	7	9	Italy	26	23
Qatar	30	9	Brazil	37	27
US	15	11	Switzerland	34	29
Netherlands	11	11	Malaysia	41	34
Germany	12	13	Indonesia	44	35
Canada	17	14	China	60	36
New Zealand	15	14	Mexico	52	41
Argentina	29	15	Iran	60	42
UK	12	16	Sri Lanka	40	50
Turkey	29	17	Nepal	56	58
Australia	21	18	Egypt	62	60
Austria	18	19	Pakistan	62	60
UAE	22	19	India	72	62

Source: World Health Organization, Global Health Expenditure Database, 2020

It is clear from the Table 3.3 that out-of-pocket spending on health care varies from country to country. Both the increasing and decreasing trend can be visible in the case of out-of-pocket spending between countries. The out-of-pocket spending is low in the case of South Africa and France and high in India and Pakistan during

2017. The out-of-pocket spending is high in India during 2000 (72 percent of current health expenditure) compared to 2017 (WHO, 2019).

The high out-of-pocket expenses means high burden of individuals for health care. The high out of pocket medical expenses pushed the people into impoverishment and aggravated the problem of inequality (Ladusingh and Pandey, 2013). Low out-of-pocket expenditure means low spending by the individual and high dependence on government spending and voluntary prepayments. Between 2000 and 2017 the rate of increasing in out-of-pocket expenditure per-capita globally is slower than that of government expenditure on health (WHO, 2019). Out-of-pocket expenditure continues a major component of health expenditure in India (Berman et al., 2010; Ghosh, 2010). There is an encouraging trend of reduction in out-pocket expenditure from 72 percent in 2000 to 62 percent in 2017. Hence it is indispensable to analyse the trend and pattern of public and private expenditure on health in India.

3.4. Expenditure on Health in India

The existence of federal health care policy, fragmentation of health care spending between government and households, severe information asymmetry between the providers and patients, multiple levels of care in the public sector (Sub-Centers, PHCs, Community Health Centers, Hospitals, District Hospital, Medical Colleges and Super Speciality Tertiary Centers) and in the private sector (corporate hospitals, stand alone hospitals, nursing homes, clinics, informal providers and chemist) are some of the peculiarities of Indian health care system (NITI Aayog, 2019).

Total health expenditure in India by source is classified into two main heads: public and private. The public health spending is supply driven whereas the private health spending is demand driven. There are external sources of funding apart from these internal sources. First we analyse the public expenditure on health in India.

3.4.1. Public Expenditure on Health in India

In order to achieve its full development potential, India has to ensure a better health status of its citizens. The Government is committed to provide healthcare to the people of India through various national health programs, state specific health schemes and programs, centres of excellence, public hospitals (District Hospitals, Sub District Hospitals, Community Health Centres, etc.), speciality and super speciality hospitals, ambulatory healthcare centres, outreach camps, imparting medical and

paramedical education, conducting research and development activities, and so on. These health programs and activities are governed by Ministry of Health and Family Welfare (MoHFW), other Union Ministries (Ministry of Labour and Employment, Ministry of Minority Affairs, etc.), Department of Health and Family Welfare (DoHFW) in different States and Union Territories, Urban and Rural Local Bodies, Employee State Insurance Corporation (ESIC) and (National Health System Resource Centre, 2016).

Table 3.4

Revenue Expenditure for Medical and Public Health & Family Welfare in India

Year	Medical and Public Health (₹Lakh)	Percentage Change	Family Welfare (₹Lakh)	Percentage Change
1995-96	664565	0.0	163927	0.0
1996-97	765952	15.3	155379	-5.2
1997-98	871614	13.8	172984	11.3
1998-99	1051142	20.6	185758	7.4
1999-00	1180463	12.3	210208	13.2
2000-01	1262728	7.0	233916	11.3
2001-02	1294287	2.5	246639	5.4
2002-03	1344334	3.9	237474	-3.7
2003-04	1412107	5.0	247339	4.2
2000-05	1523050	7.9	252985	2.3
2005-06	1754214	15.2	276340	9.2
2006-07	1916177	9.2	304328	10.1
2007-08	2189479	14.3	355701	16.9
2008-09	2616080	19.5	448789	26.2
2009-10	3261150	24.7	568966	26.8
2010-11	3812821	16.9	676545	18.9
2011-12	4394524	15.3	758373	12.1
2012-13	5064095	15.2	952604	25.6
2013-14	5638914	11.4	1013976	6.4
2014-15	7059539	25.2	1511025	49.0
2015-16	8100890	14.8	1646190	8.9
2016-17	9345750	15.4	1801400	9.4
2017-18	11219360	20.0	2052840	14.0
2018-19	13668150	21.8	2522620	22.9
2019-20	14620390	7.0	2803080	11.1
CAGR		13.16		12.02

Source: State Finances: A Study of Budgets, 2020, RBI

In India, the public expenditure on health is allocated under three heads such as medical expenditure, public health expenditure and family welfare expenditure. Medical & Public Health under the Department of Health deals with healthcare, including awareness campaigns, immunization campaigns, preventive medicine and public health. The department of Family Welfare is responsible for aspects relating to family welfare, especially relating to reproductive health, maternal health, paediatrics,

information, education and communication; cooperation with NGOs and international aid groups; and rural health services.

Revenue expenditure in India for Medical and Public Health and Family Welfare from 1995-96 to 2019-20 is presented in Table 3.4. In 1995-96 revenue expenditure was ₹664565 lakh and ₹163927 lakh for Medical and Public Health and Family Welfare respectively. The revenue expenditure escalated to ₹14620390 lakh and ₹2803080 lakh for Medical and Public health and Family Welfare respectively during 2019-20. It is found that the Compound Annual Growth Rate (CAGR) was more in the case of revenue expenditure for Medical and Public Health (13.16 percent) than Family Welfare (12.02 percent). The percentage change in revenue expenditure was high during 2014-15 for both Medical and Public Health and Family Welfare. The percentage change in revenue expenditure was low during 2001-02 for Medical and Public Health. During 1996-97 and 2002-03 the percentage change in revenue expenditure for Family Welfare becomes negative. Generally revenue expenditure for Medical and Public Health is higher than Family Welfare.

Government intervention to health sector is common fact in the worldwide. Governments not only spend money on health but also they use different intervention forms such as regulations and public provisions to intervene health care system of the country. The government has influence on health sector by altering the amount of public money on health care or changing its social welfare system or regulating private health sector. Government can improve the social welfare of their citizens via to change in composition and direction of public expenditure. It is necessary to examine the total allocation to the health sector from the income of the country.

Capital Expenditure for Medical and Public Health and Family Welfare in India from 1995-96 to 2019-20 is presented in Table 3.5. In 1995-96, capital expenditure for Medical and Public health was ₹30195 lakh and for Family Welfare capital expenditure was ₹3507 lakh and in 2019-20 the expenditure was ₹2188710 lakh and ₹53760 lakh for Medical and Public health and Family Welfare respectively. When considering capital account the CAGR was 18.68 percent and 11.53 percent for Medical and Public Health and Family Welfare respectively. During 2000-01 and 2017-18 the annual growth rate in revenue expenditure for Medical and Public health becomes negative. The annual growth rate in revenue expenditure for Family Welfare shows a lowest negative rate during 2010-11. Generally in India capital expenditure for Medical and Public Health is higher than Family Welfare during 1995-96 to 2019-

20. Preventive and curative health care services are come under Medical and Public Health.

Table 3.5

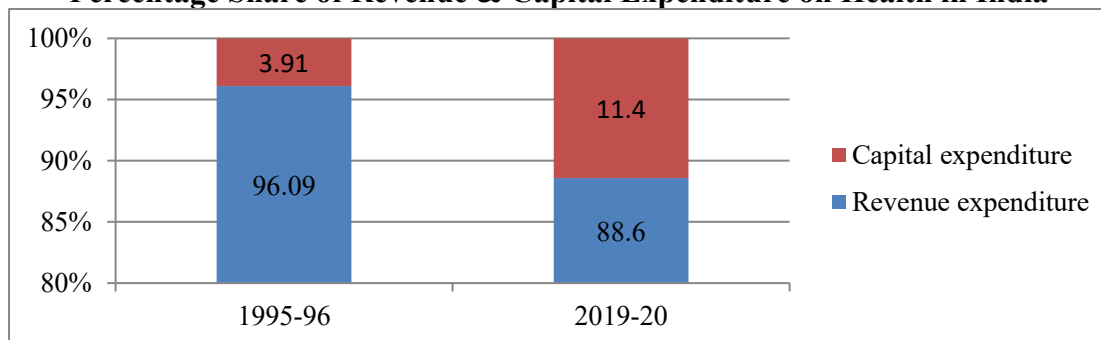
Capital Expenditure for Medical and Public Health & Family Welfare in India

Year	Medical and Public Health(₹Lakh)	Annual Growth Rate	Family Welfare(₹Lakh)	Annual Growth Rate
1995-96	30195	0.00	3507	0.00
1996-97	32987	8.46	3759	6.70
1997-98	45111	26.88	6508	42.24
1998-99	48187	6.38	4476	-45.40
1999-00	66871	27.94	2663	-68.08
2000-01	60413	-10.69	4188	36.41
2001-02	60452	0.06	3410	-22.82
2002-03	62292	2.95	1031	-230.75
2003-04	91699	32.07	1841	44.00
2000-05	100808	9.04	319	-477.12
2005-06	172200	41.46	368	13.32
2006-07	313482	45.07	3485	89.44
2007-08	341541	8.22	4049	13.93
2008-09	363190	5.96	7258	44.21
2009-10	392872	7.56	10521	31.01
2010-11	423687	7.27	878	-1098.29
2011-12	500676	15.38	7334	88.03
2012-13	607302	17.56	6099	-20.25
2013-14	762347	20.34	25161	75.76
2014-15	1051506	27.50	31360	19.77
2015-16	1232570	14.69	28070	-11.72
2016-17	1359020	9.30	12740	-120.33
2017-18	1327400	-2.38	38660	67.05
2018-19	1921190	30.91	59390	34.90
2019-20	2188710	12.22	53760	-10.47
CAGR		18.68		11.53

Source: State Finances: A Study of Budgets, 2020, RBI

Revenue expenditure on health is recurring in nature which is for the normal functioning of the government in the health sector.

Figure 3.1
Percentage Share of Revenue & Capital Expenditure on Health in India



Source: State Finances: A Study of Budgets, 2020, RBI.

Capital expenditure on health adds to the capital stock in the health sector and non-recurring in nature

It is clear from the Figure 3.1 that the share of revenue expenditure on health in India decreased from 96.09 percent during 1995-96 to 88.6 percent during 2019-20 and the share of capital expenditure on health increased from 3.91 percent during 1995-96 to 11.4 percent during 2019-20. It is clear from the Table 3.6 (a) that the revenue expenditure on health is greater than the capital expenditure in its money terms. When considering the CAGR, it is more in the case of capital expenditure (18.28 percent) than revenue expenditure (12.25 percent) for the period 1995-96 to 2019-20.

Table 3.6 (a)
Revenue & Capital Expenditure on Health in India (₹ Lakh)

Year	Revenue Expenditure on Health	Percentage Change	Capital Expenditure on Health	Percentage Change
1995-96	828492	0.0	33702	0.0
1996-97	921331	11.21	36746	9.03
1997-98	1044598	13.38	51619	40.48
1998-99	1236900	18.41	52663	2.02
1999-00	1390671	12.43	69534	32.04
2000-01	1496644	7.62	64601	-7.09
2001-02	1540926	2.96	63862	-1.14
2002-03	1581808	2.65	63323	-0.84
2003-04	1659446	4.91	93540	47.72
2000-05	1776035	7.03	101127	8.11
2005-06	2030554	14.33	172568	70.64
2006-07	2220505	9.35	316967	83.68
2007-08	2545180	14.62	345590	9.03
2008-09	3064869	20.42	370448	7.19
2009-10	3830116	24.97	403393	8.89
2010-11	4489366	17.21	424565	5.25
2011-12	5152897	14.78	508010	19.65
2012-13	6016699	16.76	613401	20.75
2013-14	6652890	10.57	787508	28.38
2014-15	8570564	28.82	1082866	37.51
2015-16	9747080	13.73	1260640	16.42
2016-17	11147150	14.36	1371760	8.81
2017-18	13272200	19.06	1366060	-0.42
2018-19	16190770	21.99	1980580	44.98
2019-20	17423470	7.61	2242470	13.22
CAGR		12.95		18.28

Source: State Finances: A Study of Budgets, RBI, Various Years

Revenue expenditure on health expanded from ₹828492 lakh to ₹17423470 lakh and capital expenditure from ₹33702 lakh to ₹2242470 lakh for the period 1995-96 to 2019-20. Percentage change in revenue expenditure on health is always positive from 1995-96 to 2019-20 which shows the increasing nature of public expenditure on

health in India. It is evident from Table 3.6 (a) that the percentage change in capital expenditure on health shows a negative trend.

It is clear from the Table 3.6 (b) that the percentage change in expenditure on health (total of revenue and capital expenditure on health) from 1995-96 to 2019-20 varies differently and it is highest during 2014-15 and lowest during 2002-03. Percentage change in expenditure on health (total of revenue and capital expenditure on health) shows a diminishing trend after 1999-2000 especially during 2002-03. Total of revenue and capital expenditure on health shows a CAGR of 13.32 percent during the period from 1995-96 to 2019-20. Expenditure on health (total of revenue and capital expenditure on health) in India increased from ₹862194 lakh during 1995-96 to ₹19665940 lakh during 2019-20.

Table 3.6 (b)
Revenue & Capital Expenditure on Health in India (₹ Lakh)

Year	Total of Revenue and Capital Expenditure on Health	Percentage Change	Year	Total of Revenue and Capital Expenditure on Health	Percentage Change
1995-96	862194	0.0	2008-09	3435317	18.84
1996-97	958077	11.12	2009-10	4233509	23.23
1997-98	1096217	14.42	2010-11	4913931	16.07
1998-99	1289563	17.64	2011-12	5660907	15.20
1999-20	1460205	13.23	2012-13	6630100	17.12
2000-01	1561245	6.92	2013-14	7440398	12.22
2001-02	1604788	2.79	2014-15	9653430	29.74
2002-03	1645131	2.51	2015-16	11007720	14.03
2003-04	1752986	6.56	2016-17	12518910	13.73
2004-05	1877162	7.08	2017-18	14638260	16.93
2005-06	2203122	17.36	2018-19	18171350	24.14
2006-07	2537472	15.18	2019-20	19665940	8.22
2007-08	2890770	13.92	CAGR		13.32

Sources: 1. State Finances: A Study of Budgets, RBI, Various Years
2. Economic Survey, Various Years

Public expenditure on health (both central and state governments) in India is presented in Table 3.7. Public expenditure on health in India increased from ₹19710.68 crores during 1999-2000 to ₹263158.30 crores during 2019-20 with a CAGR of 13.13 percent. The central government expenditure escalated from ₹5108.63 crores to ₹66498.88 crores and the state government expenditure from ₹19710.68 crores to ₹263158.30 crores for the period 1999-2000 to 2019-20.

The growth rate of centre and state governments expenditure on health in India from 1995-96 to 2019-20 is presented in Table 3.7. The AGR in expenditure on health from 1999-2000 to 2019-20 by central government was maximum (26.36 percent) during 2017-18 and minimum (3.14 percent) during 2012-13. The AGR in state government expenditure on health was maximum (22.92 percent) during 2014-15 and minimum (2.45 percent) during 2002-03.

Table 3.7

Public Expenditure on Health in India (₹ crores)

Year	Central Government	Annual Growth Rate	State Governments	Annual Growth Rate	Total Public Expenditure on Health	Annual Growth Rate
1999-2000	5108.63	0.0	14602.05	0.0	19710.68	0.0
2000-01	5405.15	5.49	15612.45	6.47	21017.60	6.22
2001-02	6122.02	11.71	16047.88	2.71	22169.90	5.20
2002-03	6652.49	7.97	16451.31	2.45	23103.80	4.04
2003-04	7470.08	10.94	17529.86	6.15	24999.94	7.58
2004-05	8679.29	13.93	18771.62	6.62	27450.91	8.93
2005-06	10039.83	13.55	22031.22	14.80	32071.05	14.41
2006-07	11757.74	14.61	25374.72	13.18	37132.46	13.63
2007-08	14974.34	21.48	28907.70	12.22	43882.04	15.38
2008-09	18476.00	18.95	34353.17	15.85	52829.17	16.94
2009-10	21680.00	14.78	42335.09	18.85	64015.09	17.47
2010-11	25055.00	13.47	49139.31	13.85	74194.31	13.72
2011-12	28353.06	11.63	56609.07	13.20	84962.13	12.67
2012-13	29272.56	3.14	66301.00	14.62	95573.56	11.10
2013-14	30847.31	5.10	74403.98	10.89	105251.30	9.19
2014-15	31965.00	3.50	96534.30	22.92	128499.30	18.09
2015-16	35189.53	9.16	110077.20	12.30	145266.70	11.54
2016-17	40241.24	12.55	125189.10	12.07	165430.30	12.19
2017-18	54644.87	26.36	146382.60	14.48	201027.50	17.71
2018-19	57738.00	5.36	181713.50	19.44	239451.50	16.05
2019-20	66498.88	13.17	196659.40	7.60	263158.30	9.01
CAGR		12.99		13.18		13.13

Sources: 1. State Finances: A Study of Budgets, Reserve Bank of India, various years

2. Budget document, Government of India, various years

The spending on healthcare can be shared by both the central and state governments. The share of Centre and State in total expenditure on health was an average of 29.2 percent and 70.8 percent respectively during the period from 1999-2000 to 2019-20. The share of Centre in total expenditure on health was highest (35 percent) during 2008-09 and lowest (24.1 percent) during 2018-19. The spending of

the central government to the health sector would be an area of concern (Choudhury and Nath, 2012).

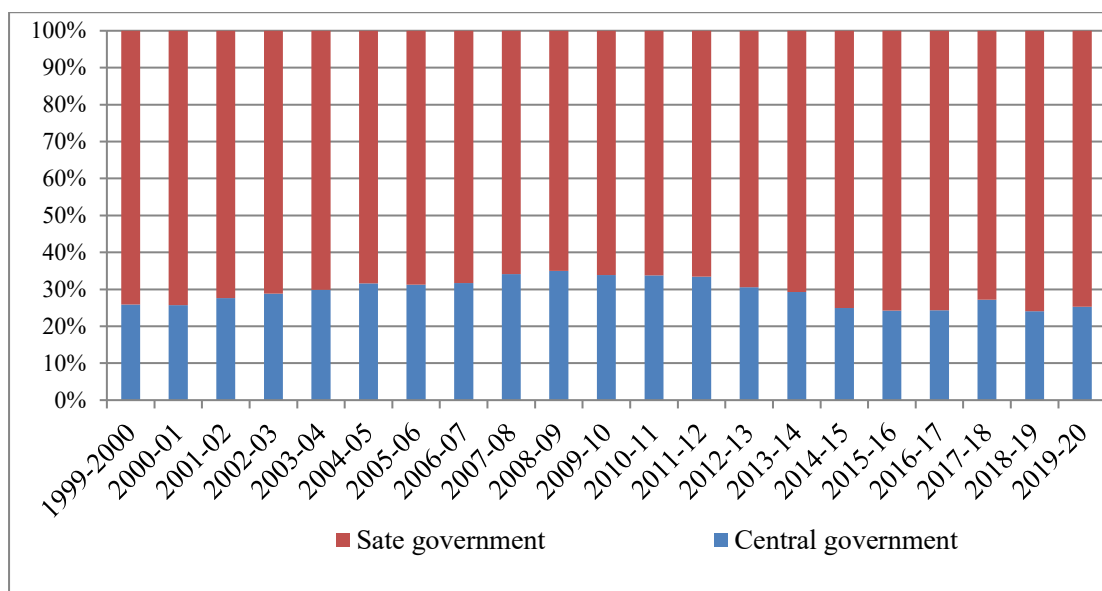
Table 3.8
Centre-State Share of Public Expenditure on Health in India

Year	Central Government	State Governments	Year	Central Government	State Governments
1999-2000	25.9	74.1	2010-11	33.8	66.2
2000-01	25.7	74.3	2011-12	33.4	66.6
2001-02	27.6	72.4	2012-13	30.6	69.4
2002-03	28.8	71.2	2013-14	29.3	70.7
2003-04	29.9	70.1	2014-15	24.9	75.1
2004-05	31.6	68.4	2015-16	24.2	75.8
2005-06	31.3	68.7	2016-17	24.3	75.7
2006-07	31.7	68.3	2017-18	27.2	72.8
2007-08	34.1	65.9	2018-19	24.1	75.9
2008-09	35.0	65.0	2019-20	25.3	74.7
2009-10	33.9	66.1	Mean	29.2	70.8

Source: Computed from the Table 3.7

The variations in health expenditure would be due to the differences in regional and health care demand across different states in India.

Figure 3.2
Centre-State Share of Public Expenditure on Health in India



Sources: 1. State Finances: A Study of Budgets, Reserve Bank of India, various years
2. Budget document, Government of India, various years

The budgetary allocation to the health sector in India is less than the required level and declining allocation to the health sector would have detrimental effect on public health delivery (Bhat and Jain, 2004; Varatharajan, 2004). Per-capita public

expenditure on health in India is presented in Table 3.9. It is the average public expenditure per person in a country. It is the average government spending per person for health. Per-capita public expenditure on health in India increased from ₹197 in 1999-2000 to ₹1962 in 2019-20 with a CAGR of 11.57 percent.

Table 3.9

Per-capita Public Expenditure on Health in India

Year	Per-capita Public Expenditure on Health(₹)	Annual Growth Rate	Year	Per-capita Public Expenditure on Health(₹)	Annual Growth Rate
1999-2000	197	0.0	2010-11	626	12.62
2000-01	206	4.37	2011-12	696	10.06
2001-02	213	3.29	2012-13	774	10.08
2002-03	219	2.74	2013-14	841	7.97
2003-04	233	6.01	2014-15	1014	17.06
2004-05	252	7.54	2015-16	1132	10.42
2005-06	290	13.10	2016-17	1274	11.15
2006-07	331	12.39	2017-18	1530	16.73
2007-08	386	14.25	2018-19	1804	15.19
2008-09	458	15.72	2019-20	1962	8.05
2009-10	547	16.27	CAGR		11.57

Source: Computed from the Table 3.7

The annual growth rate in per-capita public expenditure on health shows that there exist variations in growth rate from 2.74 percent in 2002-03 to 17.06 percent in 2014-15 (Table 3.9). The growth rate in per-capita public expenditure on health is positive during the period from 1999-2000 to 2019-20. The budgetary allocation to the health sector in India is low compared to the required level. The poor people would force to use private health care facilities due to the low level of spending of the government in the health sector (Varatharajan, 2004).

3.4.1.1. Public Expenditure on Health and Expenditure on Social Sector

Expenditure on social sector has a profound impact on the quality of the human capital. Improvement in social sector increases the productivity of the economy. Social sector expenditure includes education, healthcare, housing, water supply and sanitation, nutrition, social security and labour welfare by the general government. From the Table 3.10 it is clear the trend of social sector expenditure of general government in India from 2008-09 to 2019-20. Here the expenditure on social services can be sub-divided into education, health and others. The social sector expenditure in India increased from ₹3.80 lakh crore in 2008-09 to ₹60.72 lakh crore

in 2019-20. The expenditure on health out of social sector expenditure increased from ₹0.74 lakh crore during 2008-09 to ₹3.24 lakh crore during 2019-20. The expenditure on education out of social sector expenditure increased from ₹1.62 lakh crore during 2008-09 to ₹6.43 lakh crore during 2019-20. The expenditure on others out of social sector expenditure increased from ₹1.44 lakh crore during 2008-09 to ₹6.12 lakh crore during 2019-20.

Table 3.10

Health Expenditure and Social Sector Expenditure in India (in ₹ lakh crore)

Year	Total Budgetary Expenditure (1)	Expenditure on Social Services (2)=(3)+(4)+(5)	Expenditure on Education (3)	Expenditure on Health (4)	Expenditure on Others (5)
2008-09	15.99	3.80	1.62	0.74	1.44
2009-10	18.52	4.46	1.97	0.88	1.61
2010-11	21.45	5.29	2.44	1.00	1.84
2011-12	24.21	5.80	2.77	1.10	1.93
2012-13	26.95	6.58	3.13	1.26	2.2
2013-14	30.00	7.46	3.48	1.39	2.59
2014-15	32.85	7.68	3.54	1.49	2.65
2015-16	37.61	9.16	3.92	1.75	3.48
2016-17	42.66	10.41	4.35	2.13	3.93
2017-18	45.66	11.40	4.83	2.43	4.13
2018-19	55.17	14.47	5.81	2.92	5.74
2019-20	60.72	15.79	6.43	3.24	6.12

Source: Economic Survey 2019-20, Government of India

The increase in social sector expenditure by the government provides social welfare. The expenditure on education is also in an increasing path. There is a close relation between education and health (Barro, 1996; Cutler and Muney, 2006). Poor health leads to low level of schooling. Health reduces the depreciation rate of human capital. This interconnection has a positive impact on total factor productivity. The growth in social sector expenditure enhances the human capital formation substantially (Alvi and Ahmed, 2014).

3.4.1.2. Five Year Plans and Public Expenditure on Health

For achieving growth, equity, self-reliance and modernization the government allocation through five year plans is significant. Health is an important area of development process. The plan allocation to the health sector in India for different plan period is presented in Table 3.11. Total plan investment outlay increased from ₹1960 in first plan to ₹2156571 in eleventh plan. Out of the total plan investment outlay the total health investment increased from ₹65.3 to ₹140135 for the same time period. Percentage of plan allocation to health sector out of total plan investment

outlay is lowest in the third plan (2.9 percent) and highest in the eleventh plan (6.5 percent). Percentage share of allocation to the health sector was same (3.1 percent) for 2nd, 5th, 6th and 7th five year plans.

Table 3.11

Five Year Plan Outlay for Health Sector in India (in ₹Crores)

Plan	Plan Period	Total plan investment outlay	Total health investment	Percentage of total health investment out of total plan investment outlay
1	1951-56	1960.0	65.3	3.4
2	1956-61	4672.0	145.8	3.1
3	1961-66	8576.5	250.8	2.9
4	1969-74	15778.8	613.5	3.9
5	1974-79	39426.2	1252.6	3.1
6	1980-85	109291.7	3412.2	3.1
7	1985-90	218729.6	6809.4	3.1
8	1992-97	434100.0	14102.2	3.2
9	1997-02	859200.0	35204.9	4.1
10	2002-07	1484131.3	58920.3	4.0
11	2007-12	2156571.0	140135.0	6.5

Source: National Health Profile, GoI, Various Years

Share of allocation to the health sector out of total investment is 4.0 percent during 10th plan and it increased to 6.5 percent in 11th five year plan. Plan allocation to the health sector is a welcoming trend.

3.4.2. Household Expenditure on Health in India

Private health expenditure includes out-of-pocket expenditure incurred by households for availing health care services, health expenditure through insurance mechanism and expenditure by corporate bodies on their employees and families. Household out-of-pocket payment is that expenditure paid by the household or individuals at point of receiving healthcare services. These are net of reimbursements of any nature and include all expenditures on inpatient care, outpatient care, child birth, antenatal care, postnatal care, family planning devices, therapeutic appliances, expenditure on patient's transportation, immunization, over the counter drugs and other medical expenditures (National Health System Resource Centre, 2019).

Household health expenditures are the expenditures incurred by households on health care and includes out-of-pocket expenditures and prepayments. The fund flows directly and indirectly from households to providers of health care services and goods. Generally, the indirect flow of funds occurs where there is an involvement of insurers

who then pay providers for services. In this study the private final consumption expenditure on health estimates of National Account Statistics (NAS) by Central Statistical Organisation (CSO) is treated as the household expenditure on health in India.

Table 3.12
Household Expenditure on Health in India

Year	Household Expenditure on Health in India (₹Crores)	Annual Growth Rate	Year	Household Expenditure on Health in India (₹Crores)	Annual Growth Rate
1985-86	5671	0.0	2003-04	82889	5.65
1986-87	5968	4.98	2004-05	95560	13.26
1987-88	6601	9.59	2005-06	105244	9.20
1988-89	8095	18.46	2006-07	115900	9.19
1989-90	8495	4.71	2007-08	127648	9.20
1990-91	9207	7.73	2008-09	140595	9.21
1991-92	10064	8.52	2009-10	154872	9.22
1992-93	10998	8.49	2010-11	170624	9.23
1993-94	12242	10.16	2011-12	181334	5.91
1994-95	17452	29.85	2012-13	214348	15.40
1995-96	20624	15.38	2013-14	248829	13.86
1996-97	23391	11.83	2014-15	300261	17.13
1997-98	28752	18.65	2015-16	349659	14.13
1998-99	40960	29.80	2016-17	410905	14.91
1999-20	52844	22.49	2017-18	459484	10.57
2000-01	62436	15.36	2018-19	537043	14.44
2001-02	73760	15.35	CAGR		14.32
2002-03	78209	5.69			

Source: National Account Statistics, MOSPI. Various years

It is clear from the Table 3.12 that the household expenditure on health in India increased from ₹5671 crores in 1985-86 to ₹537043 crores in 2018-19 with a CAGR of 14.32 percent. The AGR in household expenditure on health shows a wave like movement with an underneath of 4.71 percent in 1989-90 and a beneath of 29.85 percent in 1994-95. The AGR in household expenditure on health was more or less same for the period from 2005-06 to 2010-11.

Per-capita household expenditure on health in India is presented in Table 3.13. Per-capita household expenditure on health is the average household expenditure per person in a country which can be used to estimate the financial hardship of the individual. It is the average household spending per person for health. Household expenditure on health includes the out-of-pocket payment and voluntary prepayment. Per-capita household expenditure on health includes both the out-of-pocket payment and voluntary prepayment. The per-capita household expenditure on health in India

increased from ₹75 in 1985-86 to ₹4047 in 2018-19 with a CAGR of 12.45 percent. The AGR in per-capita household expenditure on health hit the highest point (28.65 percent) during 1994-95 and dip the lowest point (1.94 percent) during 1989-90. The AGR in per-capita expenditure on health shows high variations especially after 1994-95 and 2011-12.

Table 3.13
Per-capita Household Expenditure on Health in India

Year	Per-capita Household Expenditure on Health in India(₹)	Annual Growth Rate	Year	Per-capita Household Expenditure on Health in India(₹)	Annual Growth Rate
1985-86	75	0.0	2003-04	773	4.14
1986-87	77	2.60	2004-05	878	11.96
1987-88	84	8.33	2005-06	952	7.77
1988-89	101	16.83	2006-07	1033	7.84
1989-90	103	1.94	2007-08	1122	7.93
1990-91	110	6.36	2008-09	1218	7.88
1991-92	118	6.78	2009-10	1324	8.01
1992-93	126	6.35	2010-11	1439	7.99
1993-94	137	8.03	2011-12	1486	3.16
1994-95	192	28.65	2012-13	1736	14.40
1995-96	222	13.51	2013-14	1989	12.72
1996-97	247	10.12	2014-15	2370	16.08
1997-98	298	17.11	2015-16	2725	13.03
1998-99	417	28.54	2016-17	3163	13.85
1999-20	528	21.02	2017-18	3497	9.55
2000-01	613	13.87	2018-19	4047	13.59
2001-02	709	13.54	CAGR	12.45	
2002-03	741	4.32			

Source: National Account Statistics, MOSPI, Various years

Percentage share of household expenditure in total expenditure on health is presented in Table 3.14. Both the public and household expenditure on health constitutes the total health expenditure in a country. The public-household share in total expenditure on health differs from country to country and time to time. The percentage share of household expenditure on health in total expenditure on health (both public and household) decreased from 72.8 percent in 1999-2000 to 69.2 percent in 2018-19 in India. The total expenditure on health (both public and household) in India increased from ₹72554.6 crores during 1999-2000 to ₹776494.5 crores during 2018-19 with a CAGR of 12.58 percent. The AGR in total expenditure on health was far above the ground during 2014-15 with 17.42 percent and near to the ground during 2002-03 with 5.31 percent.

The household spending on health increases the financial hardship of the individuals (Ladusingh and Pandey, 2013; Mohanty and Srivastava, 2013). It is essential to examine the share and magnitude of out-of-pocket payment and voluntary prepayment in household expenditure on health. Household expenditure on health in India includes out-of-pocket payment and health insurance expenditures.

Table 3.14
Total Expenditure on Health in India

Year	Total Expenditure on Health (Public+ Household) (₹Crores)	Annual Growth Rate	Percentage Share Household Health Expenditure in Total Health Expenditure
1999-2000	72554.6	0.0	72.8
2000-01	83453.6	13.06	74.8
2001-02	95929.9	13.01	76.9
2002-03	101312.8	5.31	77.2
2003-04	107888.9	6.10	76.8
2004-05	123010.9	12.29	77.7
2005-06	137315.1	10.42	76.6
2006-07	153032.5	10.27	75.7
2007-08	171530.0	10.78	74.4
2008-09	193424.2	11.32	72.7
2009-10	218887.1	11.63	70.8
2010-11	244818.3	10.59	69.7
2011-12	266296.1	8.07	68.1
2012-13	309921.6	14.08	69.2
2013-14	354080.3	12.47	70.3
2014-15	428760.3	17.42	70.0
2015-16	494925.7	13.37	70.6
2016-17	576335.3	14.13	71.3
2017-18	660511.5	12.74	69.6
2018-19	776494.5	14.94	69.2
CAGR		12.58	

Computed from Table 3.7 and Table 3.12

The trend of household expenditure on Health in India from 1995 to 2014 is clear from the Tables 3.15 (a) and (b). Out-of-pocket expenditure as a percentage of household expenditure on health decreased from 91.36 percent in 1995 to 89.21 percent in 2014. Household expenditure constitutes 67.0 percent of total expenditure on health in 1995 and it falls to 62.0 percent in 2014. It is clear from the Tables 3.15(a) and 3.15(b) that the out-of-pocket expenditure has a diminishing trend in India. But major share of expenditure on health in India is spent by the households. Higher household health expenditure leads higher burden of the households especially the poor and marginalised sections of the society. The disease pattern, age

composition, reproductive and child health care and cost variations in health services are some of the factors contribute to high out-of-pocket spending in India (Joe, 2015; Sinha et al., 2016).

Table 3.15 (a)

Trend of Household Expenditure on Health in India

Year	Household expenditure as % of total expenditure on health	Year	Household expenditure as % of total expenditure on health
1995	67.45	2005	65.90
1996	67.51	2006	65.75
1997	68.71	2007	65.25
1998	68.23	2008	64.39
1999	65.46	2009	63.33
2000	67.86	2010	63.37
2001	70.26	2011	64.43
2002	70.50	2012	64.88
2003	70.61	2013	63.81
2004	67.85	2014	62.42

Source: World Health Statistics 2017, WHO

Health expenditure related impoverishment is reasonably high in India. In India, major share of expenditure on health is spent by the households.

Table 3.15 (b)

Trend of Household Expenditure on Health in India

Year	Out-of pocket expenditure as % of household expenditure on health	Year	Out-of pocket expenditure as % of household expenditure on health
1995	91.36	2005	89.65
1996	91.03	2006	89.03
1997	91.92	2007	88.20
1998	91.84	2008	87.96
1999	91.02	2009	87.84
2000	91.81	2010	86.96
2001	92.41	2011	88.43
2002	91.92	2012	88.85
2003	91.61	2013	89.14
2004	89.55	2014	89.21

Source: World Health Statistics 2017, WHO

In this context it is useful to analyse the health financing schemes in India. Household expenditure on health in India is one of the highest in the world.

3.5. Health Financing Schemes in India

The health financing schemes in India is carried out by Central and State governments and local bodies. Health care financing is a method of accumulating resources which ensure equitable and quality health coverage to the population. A major share of the private health expenditure is borne by the households (NHSRC, 2019). It is a method of accumulating resources to meet the expected and unexpected

expenditure on health. It is a relief to the people to take prepayment on healthcare in the situation of mounting household expenses on healthcare. Every year a large number of households fall below the poverty line because of high household expenses on health care. The Indian households spend a shockingly large proportion of their income on medical care. These medical expenses are a significant reason why households fall into the debt trap.

Table 3.16
Health Expenditures by Healthcare Financing Schemes (%) in India

Financing Scheme	2013-14	2014-15	2015-16
Union Government schemes (Non-Employee)	4.70	5.10	6.70
Union Government schemes (Employee)	1.90	1.90	2.63
State Government schemes (Non-Employee)	10.50	11.20	10.18
State Government schemes (Employee)	0.40	0.48	0.73
Urban local bodies schemes	0.90	0.90	1.41
Rural local bodies schemes	0.70	0.70	0.86
Social health insurance schemes	2.90	2.70	3.08
Employer-based insurance	1.90	2.00	2.73
Government-based voluntary insurance	1.10	1.00	1.43
Other primary coverage schemes	1.70	1.90	2.33
Community-based insurance	0.02	0.02	0.01
Non-Profit Institutions Serving Households (NPISH)	1.60	1.90	1.67
Resident Foreign Agencies Schemes	0.18	0.30	0.28
Enterprises financing schemes	2.40	2.90	2.75
All Household out-of-pocket payment	69.10	67.00	63.21
Total	100	100	100

Source: National Health System Resource Centre, National Health Accounts Estimates for India, MoHFW, various years

Percentage share of health expenditures in India by healthcare financing schemes during 2013-14, 2014-15 and 2015-16 is presented in Table 3.16. The household out-of-pocket payment is a major factor in the financing schemes in India. State government and Union government schemes to non-employee occupy the first and second position among financing schemes by the government. State government financing schemes have also given due emphasis to providers of primary care who provide a wide range of outpatient care services. Prevention of diseases also seems to be seeking the attention of States. The State governments financing schemes are given to ASHAs, Multipurpose Health Workers, Community Health Workers who actively engage in prevention and control of communicable and non-communicable diseases, provide collective preventive programs and campaigns that benefit large sections of the population.

In India less than 10 percent of the population is covered by formal contributory health insurance and around 60 percent are covered by comprehensive

health insurance. The main state and national level multiple contributory risk schemes are:

1. National level contributory quasi-public single insurers (CGHS, ESIS, Railway health system, armed forces and others)
2. National level commercial health insurance schemes under general insurer schemes
3. National Health Mission- a large supply side fully subsidised national scheme co-financed by the union and states
4. State level contributory and non-contributory schemes
5. Rashtriya Swasthya Bima Yojana (RSBY), Pradhan Mantri Jan Arogya Yojana (PM-JAY) – a national demand side subsidised insurance scheme.

Table 3.17

Current Health Expenditure (₹ million) by Financing Schemes in India

Year	Government schemes and compulsory contributory health care financing schemes	Voluntary health care payment schemes	Household out-of-pocket payment	Current health expenditure	
	1	2	3	(1+2+3)	Percent change
2000	198355	50263	629954	878571	-
2001	207572	52465	744208	1004245	14.3
2002	215738	70610	789097	1075445	7.1
2003	225643	77052	836316	1139011	5.9
2004	251910	101157	930003	1283070	12.6
2005	296567	79400	1024249	1400216	9.1
2006	335112	97964	1127955	1561030	11.5
2007	384354	127587	1242288	1754230	12.4
2008	456287	154210	1368290	1978786	12.8
2009	569655	180878	1507236	2257769	14.1
2010	650254	236509	1660293	2547057	12.8
2011	794726	276618	1764768	2836112	11.3
2012	897700	327259	2085753	3310712	16.7
2013	931099	371527	2909317	4211943	27.2
2014	1033854	454758	3024248	4512860	7.1
2015	1226728	472417	3202115	4901260	8.6
2016	1370899	531656	3603645	5523724	12.7

Note: Rest of the world financing schemes (non-resident) includes ₹17523 million included in the year 2016
Source: Global Health Expenditure Database, WHO

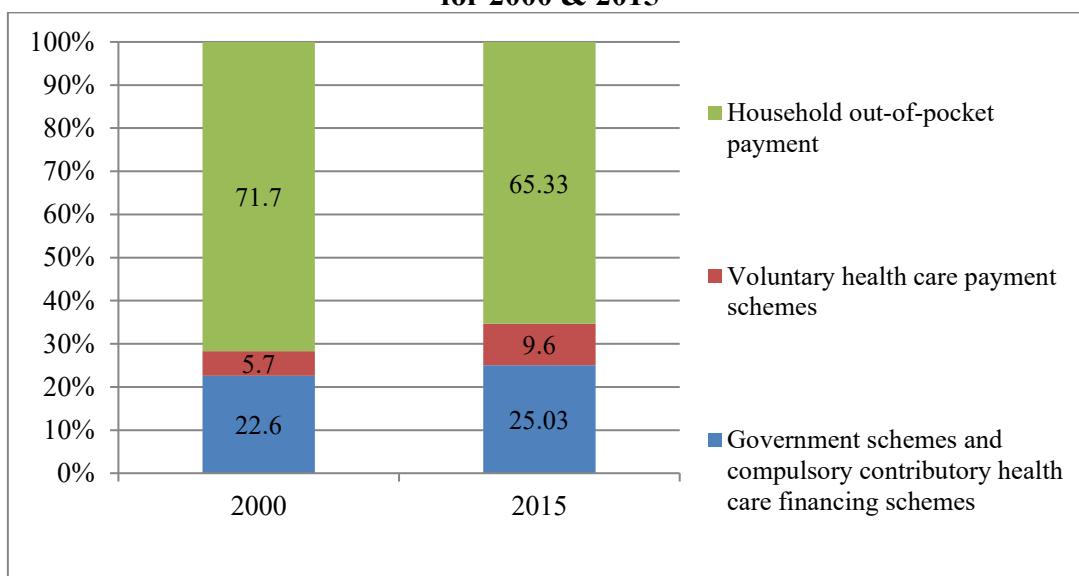
The Indian health insurance market is characterized by fragmented, low level risk pooling and shallow benefit packages. Utilising the growing capacities and capabilities of commercial health insurance and related Third Party Administrators (TPAs) is a very guaranteeing short and medium term strategy to grow and develop risk pooling in India (NITI Aayog, 2019).

As per the WHO estimates healthcare financing schemes consists of government healthcare schemes, compulsory and voluntary healthcare payment,

household out-of-pocket payment and the financing schemes by the rest of the world. The trend of healthcare financing schemes from 2000 to 2016 is presented in the Table 3.17. The current health expenditure increased sharply from 2012 to 2013 and the percent increase is lowest in the year 2003. From 2000 to 2016 the percent increase in current health expenditure ranges between 5.9 percent and 27.2 percent. More than 65 percent of the current health expenditure is carried by the household through out-of-pocket payment.

Figure 3.3

Percentage Share of Current Health Expenditure by Financing Schemes in India for 2000 & 2015



Source: Global Health Expenditure Database, WHO

The percentage share of current health expenditure in India for 2000 and 2015 is shown in the Figure 3.3. Among the financing schemes share of household payment to the current health expenditure diminishes from 71.7 percent in 2000 to 65.33 percent in 2015. The contribution of government schemes and compulsory contributory health care financing schemes to the current health expenditure shows a marginal increase from 22.6 percent to 25.03 percent and voluntary health care payment schemes also shows an increasing share from 5.7 percent to 9.6 percent to the current health expenditure for the same period.

This chapter deals with the health expenditure in India. It throws light on the global spending on health; and the relative position of India with regards to spending on health. The public expenditure on health related to GDP, general government expenditure, revenue and capital account, social sector expenditure and five year plan allocation visualises the clear picture of health spending in India. Public expenditure

on health in India shows an increasing trend. Private expenditure on health is crucial in the analysis of health expenditure in India which accounts more than 65 percent of health spending. Moreover the government policy towards health sector is crucial in the health expenditure analysis. The next chapter analyses the disparity of health expenditure in India.