National Disease Control Programs - Recent Trends in Financing

Ravi Duggal Sunil Nandraj

Selected diseases have at different points of time received special attention and separate allocation of resources. In the past small pox was one such disease which had a separate budget and staff to tackle the problem on a war footing. In the past many such programs were of a vertical nature having their own budgets and staff. Malaria and leprosy programs, apart from small pox were the main vertical programs. While the war against small pox was successful, that against malaria reached a certain success in the mid-60s but after that malaria has come back with a vengeance and continues to be a major program (but without its vertical structure). Leprosy continues to be a vertical program and in recent years has shown good results. The tuberculosis and the blindness control programs have had no such luck and have always received a step-motherly treatment under public health care.

Disease Programs on an average during this decade have received 10 percent of the State's health care budget and the trend is a declining onel. In per capita terms at the national level today a measly amount of Rs.8 per person is being spent on these programs. If one looks at the disease profile of the country then this expenditure itself is very low to fight these diseases. (Of course, it must be noted that three-fourth of health care is sought in the private sector hence the actual per capita value would be four times.) If we break down the expenditure by various diseases we find that between 80 per cent and 95 per cent is spent on just four programs malaria, leprosy, in tuberculosis and blindness. Further, of the total disease program expenditure 50 per cent to 60 per cent is spent on the malaria program alone, followed by about 20 per cent on leprosy. Tuberculosis and blindness control get under five per cent.

The prevalence of malaria is very high right across the length and breadth of the country, with only Kerala and Goa being exceptions. The NFHS study in 1992-93 gives a 3 month incidence rate of 3324 per 100,000 population, which means about 105 million new cases every year. The rural areas recorded an incidence of nearly twice that of urban areas. While most states show a fairly high share of expenditure for the malaria program from the total disease program budget, it must be noted that most of it goes to salaries of staff who may not be doing any work related to malaria. For historical reasons most multipurpose workers (MPWs) get their salary from the malaria department because they were erstwhile malaria workers and today are MPWs who may be doing very little malaria related work. Hence, what actually is spent to treat or control malaria may be a very small amount of the national malaria budget of about Rs.5000 million which initself may be quite adequate to fight malaria under a comprehensive health program.

According to the 1981 census India had 4.2 million active leprosy cases. The NFHS survey a decade later in 1992-93 recorded a prevalence rate four times less than the 1981 census making for a caseload of 1.2 million cases. While one may argue that the NFHS may have made an undercount there is no doubt that the leprosy program has had a major impact, and this perhaps due to three reasons - reasonably sufficient allocation of funds, better management of the program albeit through a vertical structure, and treatment largely being availed in the public sector.

The tuberculosis control program is perhaps the worst performer and the main reason is very poor allocation of funds in the public system. Further, since tuberculosis begins symptomatically with cough and fever it is treated mainly in the private sector which exploits patients with irrational therapy comprising of cough syrups, tonics and broad spectrum antibiotics. Today there are about 14 million estimated active cases of TB in the country and the state pays very little attention to it. An evaluation team of GOI-WHO-SIDA found that the drugs available in the public system were sufficient to treat only one-third of the patients who actually were receiving care within the public system - this means that the average patient would get only one-third of the treatment required and hence would return with a relapse

With nine million blind persons and 45 million with severe visual impairment this is a very serious scenario. The present focus is on cataract surgery and vitamin A deficiency. The care of the

completely blind is under the social welfare department. The resources available for handling cataract and vitamin A deficiency cases is very meagre and needs to be enhanced substantially.

Of the budgets allocated for various programs salaries take away 70 per cent to 90 per cent of the resources leaving very little behind for other inputs like drugs, equipments, travel etc. While one recognises that the health sector is clearly a labour intensive one where human resource is the most valuable input, it cannot be denied that without adequate drugs, diagnostics etc, the human resource has little value. Thus if in the present situation 80 per cent of the resource, and increasingly so, goes for paying salaries then the health workforce cannot be effective with the meagre resources left over to treat patients, and for preventive and promotive care. If for instance we look at the teaching hospital or other large city hospitals we find that salaries account for about 40 per cent of the budget and thus these hospitals perform more effectively than their rural counterparts like rural hospitals and primary health centres. It must be emphasised here that percentages have been used in the data only as a proxy tool. A more realistic analysis would include using morbidity data to determine the financial requirements or costs needed to deal with it. Unfortunately at the present moment such data is difficult to come by, though we have made a brief attempt in Table 4, but its limitations are explained in the table itself.

Note

1 The data in the tables has been extracted from the CEHAT database which was put together for the national research programme on Strategies and Financing for Human Development and this is available presently as a monograph titled Financing of Disease Control Programmes in India by the present authors.

Table 1: Expenditure On Selected Disease Programs (Selected States)

Year	Malaria	TB	Leprosy	Blindness	AIDS	All Disease	Total Health
	(As perce					
Andhra Pradesh		_					(Rs millions)
1990 - 1991	10.11	1.25	4.62	.21	.00	16.11	3325.10
1994 - 1995	9.82	1.42	4.97	.28	.48	18.79	5043.53
Assam							
1990 - 1991	7.36	1.42	1.48	.75	.00	17.29	941.22
1994 - 1995	3.90	.97	1.32	.80	.00	7.26	1883.92
Bihar							
1992 - 1993	4.96	.27	3.39	.12	.00	9.18	3856.38
1994 - 1995	5.41	.19	2.89	.08	.00	10.34	5574.54
Gujarat							
1990 - 1991	4.59	2.48	1.78	.84	.00	10.89	2478.16
1994 - 1995	7.12	2.95	1.60	.78	.41	13.76	3593.73
Haryana							
1990 - 1991	10.72	1.81	.08	.24	.00	12.30	917.60
1994 - 1995	11.57	4.36	.05	.75	.50	15.33	1396.29
Karnataka							
1990 - 1991	3.40	1.80	.84	.29	.00	4.70	2698.20
1994 - 1995	3.27	1.90	.95	.47	.69	5.58	5077.72
Kerala							
1990 - 1991	1.43	.80	.99	.20	.00	3.96	2224.32
1994 - 1995	1.75	1.01	1.53	.45	.05	5.98	3759.77
Madhya Pradesh							
1990 - 1991	7.18	.37	2.36	.70	.00	11.02	2647.20
1994 - 1995	7.12	2.31	1.86	.86	.60	8.84	4609.97
Maharashtra							
1990 - 1991	8.58	2.80	3.00	.10	.07	14.34	4341.15
1994 - 1995	6.60	2.48	2.85	.07	.41	11.87	6803.92

Orissa							
1990 - 1991	5.36	1.46	3.66	.17	.00	11.29	1550.21
1991 - 1992	5.73	1.67	4.33	.27	.00	10.98	1565.99
Punjab							
1990 - 1991	8.43	1.72	.14	.18	.00	11.88	1765.76
1994 - 1995	5.67	2.31	.19	.38	.48	6.90	2312.75
Rajasthan							
1990 - 1991	6.66	2.56	.40	.26	.00	8.65	2555.20
1994 - 1995	5.74	2.23	.36	.44	.14	8.18	4556.96
Tamil Nadu							
1992 - 1993	*	1.38	3.54	.28	.04	4.83	4894.22
1994 - 1995	*	1.57	3.63	.26	.02	6.20	5982.37
Uttar Pradesh							
1990 - 1991	7.84	3.07	2.45	.51	.00	15.85	5826.32
1994 - 1995	7.11	2.16	1.93	.34	.14	17.35	8003.05
West Bengal							
1990 - 1991	6.89	3.74	2.43	.23	.00	13.20	3256.13
1994 - 1995	4.27	3.07	1.63	.23	.15	9.18	5397.64
Arunachal Pradesh							
1990 - 1991	2.60	2.24	.86	.33	.00	19.14	144.86
1994 - 1995	4.57	2.40	.68	.21	.00	11.73	278.07
Goa							
1990 - 1991	.99	2.77	1.70	.36	.00	5.51	232.15
1994 - 1995	.77	2.31	1.43	.33	.29	5.13	350.86

Notes:* Data breakup not available; 1994-95 data are budget estimates **Sources**: Respective State government, Demand for Grants, 1993 - 94 and 1994 - 95.

Table 2 : Expenditure On Salaries For Disease Programs (selected States)

YEAR	MALARIA		TUBERCULUSOIS		LEPROSY		BLINDNESS	
	As per Cent	Actuals	As per Cent	Actuals	As per Cent	Actuals	As per Cent	Actual s
Andhra Pradesh								
1990 - 1991	80.0	336.46	82.53	41.85	85.22	153.69	10.21	7.05
1994 - 1995	93.2 9	495.42	81.91	71.58	88.88	250.64	8.43	14.36
Assam								
1990 - 1991	.00	69.32	16.60	13.43	.00	14.02	.00	7.10
1994 - 1995	9.55	73.51	56.59	18.20	56.64	24.91	.00	15.06
Bihar								
1992 - 1993	95.2 5	191.25	2.90	10.34	99.54	130.74	38.66	4.63
1994 - 1995	86.8 8	301.39	3.24	10.49	104.70	161.19	34.34	4.63
Gujarat								
1990 - 1991	5.90	113.95	57.38	61.47	68.54	44.22	62.75	21.02
1994 - 1995	3.80	256.03	41.70	105.85	67.63	57.67	79.57	28.10
Haryana								
1990 - 1991	81.1	98.41	60.75	16.61	58.11	.74	11.76	2.21
1994 - 1995	77.9 5	161.51	39.60	60.83	77.27	.66	.00	10.54
Karnataka								
1990 - 1991	.00	91.97	66.92	48.82	35.60	22.67	.00	7.85
1994 - 1995	24.0	166.27	48.26	96.65	10.50	48.48	.00	23.80

	6							
Kerala								
1990 - 1991	92.0 5	31.95	51.96	17.90	97.69	22.04	89.24	4.46
1994 - 1995	90.8	65.86	53.59	37.90	96.67	57.37	70.80	16.92
Madhya Pradesh								
1990 - 1991	79.8 1	190.22	35.36	10.04	83.83	62.72	66.29	18.66
1994 - 1995	66.1 8	328.04	73.61	106.56	86.50	85.95	61.13	39.46
Maharashtra								
1990 - 1991	68.2 5	372.50	49.66	121.84	80.87	130.39	.00	4.43
1994 - 1995	76.4 0	448.81	48.48	168.50	78.59	194.07	.00	5.04
Orissa								
1990 - 1991	82.7 4	83.14	69.37	22.72	85.53	56.88	92.83	2.79
1991 - 1992	84.0 5	89.68	72.72	26.21	86.88	67.75	32.70	4.22
Punjab								
1990 - 1991	68.2 8	148.98	79.32	30.41	91.13	2.48	52.94	3.23
1994 - 1995	83.4 5	131.15	65.38	53.50	87.05	4.48	55.77	8.75
Rajasthan								
1990 - 1991	71.4 6	170.37	67.49	65.61	88.96	10.24	33.53	6.77
1994 - 1995	71.4 1	261.60	62.84	101.57	92.04	16.59	17.98	19.85
Tamil Nadu								
1992 - 1993	*	.00	55.52	67.53	92.93	173.10	78.92	13.66
1994 - 1995	*	.00	52.20	94.00	93.32	217.01	85.02	15.75
Uttar Pradesh								
1990 - 1991	72.4 8	457.20	86.11	179.33	77.41	143.09	62.14	30.16
1994 - 1995	75.0 9	569.33	59.15	172.87	80.34	154.19	50.92	27.20
West Bengal								
1989 - 1990	96.3 1	147.75	77.01	96.05	87.97	63.36	92.53	4.82
1994 - 1995	94.7 2	230.59	72.52	165.56	91.81	87.87	81.29	12.56
Arunachal Pradesh								
1990 - 1991	93.3	3.78	88.62	3.25	92.80	1.25	.00	.49
1994 - 1995	78.5 2	12.71	68.97	6.67	89.95	1.89	.00	.59
Goa								
1990 - 1991	78.8 8	2.32	82.61	6.44	82.78	3.95	92.86	.84
1994 - 1995	85.9 3	2.70	86.42	8.10	87.20	5.00	93.10	1.16

Notes: * Data not avaiable; Actuals are in Rs millions spent on each disease program. **Sources**: Respective state government, Demand for Grants, 1993 - 94 and 1994 - 95.

TABLE 3 PREVALENCE OF SELECTED DISEASES 1992 - 1993 (per 100,000 population)

STATE	MALARIA	TUBERCULOSIS	LEPROSY	BLINDNESS
ANDHRA	7776	407	118	5984
PRADESH				
ASSAM	10828	638	36	1106
BIHAR	5712	595	123	2749
GUJARAT	12912	308	29	3266
HARYANA	3732	327	14	824
JAMMU &	3412	245	18	869
KASHMIR*				
KARNATAKA	1828	136	132	4900
KERALA	448	586	18	1404
MADHYA	18912	435	136	3831
PRADESH				
MAHARASHTR	14968	293	72	3534
A				
ORISSA	20592	555	96	3161
PUNJAB	10184	238	28	863
RAJASTHAN	20412	724	128	4661
TAMIL NADU	2304	703	209	836
UTTAR	29580	560	222	3101
PRADESH				
WEST BENGAL	2712	357	47	914
ARUNACHAL	16852	938	110	1012
PRADESH				
GOA	972	179	16	2714
MIZORAM	18544	311	33	1524
HIMMACHAL	4564	242	56	1384
PRADESH				
MANIPUR	6564	941	199	1442
MEGHALAYA	22892	321	17	759
NAGALAND	11112	491	153	1373
SIKKIM	NA	NA	NA	NA
TRIPURA	10476	289	0	1430
INDIA	13296	467	120	3001

Notes: 1) * = Refers only to Jammu region.

2) Malaria data is incidence of cases. The NFHS data was for 3 months, we multiplied it by 4 to arrive at the annual figure. For other diseases it is point prevalence.

Source: National Family Health Survey 1992-93: All India, International Institute for Population Sciences,

Bombay, August 1995 (Pg. 205, Tables 8.2)

TABLE 4: NORMATIVE EXPENDITURE INCURRED PER CASE 1992 - 1993

The per case expenditure is a normative figure because it is well known that a) actual utilisation of these government programs is only by one fourth to one third of the population and b) the establishment costs (salaries etc.) takes away about three fourth of this expenditure. Therefore, the real expenditure per actual case is much higher, but this data helps us look at allocations in terms of disease prevalence across diseases.

(in Rupees) STATE MALARI **TUBERCULOSIS LEPROSY BLIND NESS** Α ANDHRA 77 186 2445 3 PRADESH 29 52 ASSAM 2448 24 37 **BIHAR** 19 1175 2 29 587 18 **GUJARAT** 4693 **HARYANA** 210 567 189 43

JAMMU & KASHMIR*	NA	NA	NA	NA
KARNATAKA	157	1001	427	5
KERALA	274	96	5875	12
MADHYA PRADESH	14	214	811	9
MAHARASHTRA	33	529	3002	2
ORISSA	13	146	2185	4
PUNJAB	76	567	390	22
RAJASTHAN	22	207	281	6
TAMIL NADU	NA	167	1438	28
UTTAR	15	158	891	8
PRADESH				
WEST BENGAL	109	448	2484	25
ARUNACHAL PRADESH	43	658	2431	280
GOA	212	3426	24070	47
MIZORAM	52	1985	12444	136
HIMMACHAL PRADESH	186	593	3628	49
MANIPUR	46	270	1690	56
MEGHALAYA	42	733	19265	139
NAGALAND	116	1386	2919	68
SIKKIM	NA	NA	NA	NA
TRIPURA	33	124	NA	59
INDIA	NA	NA	NA	NA

Notes: 1) * = Refers only to Jammu region. 2) The expenditure figures for Orissa and Manipur refer to year 1991-92

Source: Prevalence data: National Family Health Survey 1992-93 : All India, International Institute for Population Sciences, Bombay, August 1995 (Pg. 205, Tables 8.2)

Expendiute data: Respective state government Demand for Grants, 1994 – 95

RJH (New Series) Vol.II:1 1996