National Disease Control Program Expenditures

Ravi Duggal and 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-sixties 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% of the State's health care budget and the trend is a declining one. In percapita 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. (Ofcourse, it must be noted that three-fourth of health care is sought in the private sector hence the actual percapita value would be four times.) The decline in expenditure on these programs is mainly in Assam, Bihar, Himachal, Karnataka, MF, Orissa, Punjab, Rajasthan, and Tamil Nadu.

If we break down the expenditure by various diseases we find that between 80% and 95% is spent on just four programs malaria, leprosy, tuberculosis and blindness. Further, of the total disease program expenditure 50% to 60% is spent on the malaria program alone, followed by about 20% on leprosy. Tuberculosis and blindness control gets under five percent.

Malaria

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.

Leprosy

According to the 1981 cer.sus 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

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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.

Tuberculosis

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 onethird of the treatment required and hence would return with a relapse

Blindness

With 9 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 meager and needs to be enhanced substantially.

The Salary Syndrome

Of the budgets allocated for various programs salaries take away 70% to 90% of the resources leaving very little behind for other inputs like drugs, ecuipments, travel etc... While one recognizes 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% of the resource, and increasingly so, goes for paying salaries then the health workforge cannot be effective with the meager 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% of the budget and thus these hospitals perform more effectively than their rural counterparts like rural hospitals and primary health centres. It must be emphasized 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.

The data in the tables below have been extracted from the CEHAT database which was put together for the national research program 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.

Year	Malaria	тв	Leprosy	Blindness	AIDS	All Diseases	Total Health (Rs millions)
· · · · · · · · · · · · · · · · · · ·	••••	• • • • • • •	•••••		• • • • • •	•••••	• • • • • • • • • • • • • • • •
Andhra Pradesh							
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			2.00			11.07	0003.52
1990 - 1991	5.36	1 46	3 66	17	00	11 20	1550 21
1991 - 1992	5 73	1 67	4 33	27	.00	10 99	1565 00
Punjab	5115	1.0.	1.55	• 2 7	.00	10.90	1303.99
1990 - 1991	8 4 3	1 72	14	1.0	00	11 00	1765 76
1994 - 1995	5 67	2 31	19	- 10	.00	4 00	2212 75
Bajasthan	5.07	2. JI	• 1 9	. 50	.40	0.90	2312.75
1990 - 1991	6 66	2 56	40	26	00	0 65	2555 20
1997 - 1995	5 74	2.00	.40	.20	.00	0.00	2555.20
Tamil Nadu	5.74	4.23	.50		. 14	0,10	4556.96
1992 - 1993		1 20	2 64	20	0.4	4 02	4004 00
1992 - 1993 1994 - 1995		1.50	3.54	. 20	.04	4.83	4894.22
Urtar Pradech		1.57	3.03	.20	.02	0.20	5982.57
1060 - 1001	7 01	2 07	2 45	E 1	0.0	15 05	5006 00
1990 = 1991 1994 = 1995	7.04	2 16	2.45	. 31	.00	17.85	3820.32
Nest Bongal	/.11	2.10	1.95	. 34	.14	17.35	8003.05
1000 - 1001	6 90	2 74	2 42	22	0.0	12 20	2056 12
1990 - 1991	0.03	3.74	2.43	.23	.00	13.20	3256.13
1994 - 1995	4.2/	3.07	1.63	. 23	.15	9.18	5397.64
Arunachal Prades	in o co						
1990 - 1991	2.60	2.24	.86	.33	.00	19.14	144.86
1994 - 1995	4.5/	2.40	.68	.21	.00	11.73	278.07
GGa							
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
Mizoram							
1990 - 1991	4.07	2.56	2.01	.57	.00	*	152.10
1994 - 1995	3.92	2.84	1.69	.83	.05	11.83	198.63
Himachal Pradesh	1						
1990 - 1991	4.84	.96	1.37	. 57	.00	10.12	651.42
1994 - 1995	4.17	.96	1.22	.47	.72	11.24	1274.81

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TABLE 1 : EXPENDITURE ON SELECTED DISEASE PROGRAMS

(as percentages to Total Health)

Table 1 .nt.

Manipur							
1989 - 1.90	4.81	2.25	3.37	.74	.00		165.10
1991 - 1.92	2.72	2.29	3.03	.73	.00	18.38	216.53
Megnalay.							
1990 - 1.91	8.71	.25	2.03	. 59	.00	15.02	212.45
1994 - 1.95	6.00	.36	2.00	1.02	59	4.04	367.38
Nagalanc							
1991 - 1 92	7.63	3.95	2.64	1.27	.00	16.16	203.80
1994 - 1 95	6.52	3.56	2.38	.36	3.24	16.62	310.82
Sikkim							
1990 - 1 ->1	4.90	1,12	1.12	. 57	.00	9.80	70.80
1994 - 1 95	3.16	.41	1.44	. 69	.00	8.66	145.80
Tripura							
1990 - 1 91	11.24	.65	2.56	.91	.00	15.47	259.86
1994 - 1.95	4.86	.81	2.31	1.77	1.53 .	9.42	368.26

Notes :* Dat	a breakup i	not availa	ble; 199	4-95 dat	a are budge	t estimates	

Sources : Respective State government, Demand for Grants, 1993 - 94 and 1994 - 95.

TABLE 2 : EXPENDITURE ON SALARIES FOR DISEASE PROGRAMS

						bessessez		*********	
YEAR	MAL	MALARIA		TUBERCULUSOIS		LEPROSY		BLINDNESS	
	as %	Actuals	as %	Actuals	as %	Actuals	as %	Actuals	
Andhra Fradesh									
1990 - 1991	80.00	336.46	82.53	41.85	85.22	153.69	10.21	7.05	
1994 - 1995	93.29	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 - 193	95.25	191.25	2.90	10.34	99.54	130.74	38.66	4.63	
1994995	86.88	301.39	3.24	10.49	104.70	161.19	34.34	4.63	
Gujarat									
1990 - 191	5.90	113.95	57.38	61.47	68.54	44.22	62.75	21.02	
1994 495	3.80	256.03	41.70	105.85	67.63	57.67	79.57	28.10	
Haryana									
1990 - 991	81.14	98.41	60.75	16.61	58.11	.74	11.76	2.21	
1994	77.95	161.51	39.60	60.83	77.27	. 66	.00	10.54	
Karnata									
1990 - 991	.00	91.97	66.92	48.82	35.60	22.67	.00	7.85	
1994995	24.06	166.27	48.26	96.65	10.50	48.48	.00	23.80	
Kerala									
1990 - 1991	92.05	31.95	51.96	17.90	97.69	22.04	89.24	4.46	
1994 - 1995	90.80	65.86	53.59	37.90	96.67	57.37	70.80	16.92	
Madhya Pradesh									
1990 - 1991	79.81	190.22	35.36	10.04	83.83	62.72	66.29	18.66	
1994 - 1995	66.18	328.04	73.61	106.56	86.50	85.95	61.13	39.46	
Maharashtra									
1990 - 1991	68.25	372.50	49.66	121.84	80.87	130.39	.00	4.43	
1994 - 1995	76.40	448.81	48.48	168.50	78.59	194.07	.00	5.04	
Orissa									
1990 - 1991	82.74	83.14	69.37	22.72	85.53	56.88	92.83	2.79	
1991 - 1992	84.05	89.68	72.72	26.21	86.88	67.75	32.70	4.22	
Punjab									
1990 - 1991	68.28	148.98	79.32	30.41	91.13	2.48	52.94	3.23	
1994 - 1995	83.45	131.15	65.38	53.50	87.05	4.48	55.77	8.75	

Table 2 Cont.

Rajasthan									
1990 - 1991	71,46 •	170.37	67.49	65.61	88.96	10.24	33.53	6.77	
1994 - 1995	71.41	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	72.48	457.20	86.11	179.33	77.41	143.09	62.14	30.16	
1994 - 1995	75.09	569.33	59.15	172.87	80.34	154.19	50.92	27.20	
West Bengal									
1989 - 1990	96.31	147.75	77.01	96.05	87.97	63.36	92.53	4.82	
1994 - 1995	94.72	230.59	72.52	165.56	91.81	87.87	81.29	12.56	
Arunachal Prad	esh								
1990 - 1991	93.39	3.78	88.62	3.25	92.80	1.25	.00	.49	
1994 - 1995	78.52	12.71	68.97	6.67	89.95	1.89	.00	. 59	
Goa									
1990 - 1991	78.88	2.32	82.61	6.44	82.78	3.95	92.86	.84	
1994 - 1995	85.93	2.70	86.42	8.10	87.20	5.00	93.10	1.16	
Mizoram									
1990 - 1991	95.00	6.20	88.46	3.90	90.20	3.06	90.80	.87	
1994 - 1995	99.36	7.78	93.27	5.65	97.61	3.35	95.76	1.65	
Himachal Prade	sh								
1990 - 1991	83.96	31.54	32.59	6.29	86.58	8.94	.00	3.77	
1994 - 1995	82.95	53.20	35,46	12.21	83.89	15.52	.00	5.94	
Manipur	2								
1991 - 1992	.00	5.89	.00	4.96	.00	6.56	.00	1.57	
Meghalaya									
1990 - 1991	.00-	18.61	.00	.54	.00	4.34	.00	1.27	
1994 - 1995	86.11	22.03	66.41	1.31	148.03	7.35	72.73	3.74	
Nagaland									
1990 - 1991	74.98	16.27	75.36	7.71	114.73	5.16	.00	.61	
1994 - 1995	88.70	20.27	82.17	11.05	123.00	7.39	.00	1.11	
Sikkim									
1990 - 1991	91.35	3.47	62.50	.80	.00	.80	.00	.41	
1994 - 1995	96.30	4.60	71.67	.60	.00	2.10	.00	1.00	
Tripura									
1990 - 1991	56.33	29.22	23.67	1.69	77.66	6.67	45.15	2.37	
1994 - 1995	45.17	17.91	19.46	2.98	76.35	8.50	46.92	6.50	
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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.

STATE	MALARIA	TUBE	RCULOSI	(S	LEPROSY	BLIND	NESS
ANDHRA PRADESH	7776		407		118	59	84
ASSAM	10828		638		36	11	.06
BIHAR	5712		595		123	* 27	49
GUJARAT	12912		308		29	32	66
HARYANA	3732		327		14	8	24
CAMMU & KASHMIR*	3412		245		18	8	69
KARNATAKA	1828		136		132	4 9	00
KERALA	448		586		18	14	04
MADHYA PRADESH	18912	T	435		136	38	31
MAHARASHTRA	14968		293		72	35	34
ORISSA	20592		555		96	31	61
PUNJAB	10184		238		28	8	63
RAJASTHAN	20412		724		128	46	61
TAMIL NADU	2304		703		209	8	36
UTTAR PRADESH	29580		560		222	31	.01
WEST BENGAL	2712		357		47	9	14
ARUNACHAL PRADESH	16852		938	1	110	10)12
GOA	972		179		16	27	14
MIZORAM	18544		311		33	15	24
HIMMACHAL PRADESH	4564		242		56	13	884
MANIPUR	6564		941		199	14	42
MEGHALAYA	22892		321		17	7	59
NAGALAND	11112		491		153	13	373
SIKKIM	NA		NA		NA		NA
TRIPURA	10476		289		0	14	130
INDIA	13296	,	467		120	30	01

TABLE 3 PREVALENCE OF SELECTED DISEASES 1992 - 1993 (Our 100.000 population)

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)

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TABLE 4 ; NUMALLYE EARENDITOVE THOUSAND FOR GROE LOSE 100

(in rupees)

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.

STATE I	MALARIA	TUBERCULOSI	S LEPROSY	BLINDNESS
ANDHRA PRADESH		196	2445	 3
ASSAM	29	52	2449	24
BTHAR	37	19	1175	21
GUJARAT	29	587	4693	18
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 PRADESH	15	158	891	8
WEST BENGAL	109	448	2484	25
ARUNACHAL PRADE	SH 43	658	2431	280
GOA	212	3426	24070	47 :
MIZORAM	52	1985	12444	136
HIMMACHAL PRADE	SH 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
	o-setessi			

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) Expendiate data : Respective state government Demand for Grants,

Expendiate data : Respective state government bemand for Grants, 1994 - 95