

## Chapter 16

### HEALTH

Improvement in health status of the population has been one of the major thrust areas in social development programmes of the country. This was to be achieved through improving the access to and utilization of Health, Family Welfare and Nutrition Services with special focus on under-served and under-privileged segments of population. The states fund infrastructure for delivering health care services; the Centre provides funds through Centrally Sponsored Programmes for combating major public health problems. Technological improvement and increased access to health care have resulted in steep fall in mortality but disease burden due to communicable diseases, non-communicable diseases and nutritional problems continue to be high. In spite of the fact that norms for creation of infrastructure and manpower are similar throughout the country, there are substantial variations between States and districts within a state in availability and utilisation of health care services and health indices of the population. The Special Action Plan for Health envisages improvement of the health services to meet the increasing health care needs of the population.

#### **Current problems faced by the health care services include:**

Persistent gaps in manpower and infrastructure especially at the primary health care level.

Sub-optimal functioning of the infrastructure; poor referral services.

Plethora of hospitals in Government, voluntary and private sector; they do not have appropriate manpower, diagnostic and therapeutic services and drugs; Massive inter-state/ inter district hiatus in performance as assessed by health and demographic indices; availability and utilisation of services are poorest in the most needy states/districts.

Sub optimal inter-sectoral coordination

Increasing dual disease burden of communicable and non-communicable diseases because of ongoing demographic, lifestyle and environmental transitions,

Technological advances which widen the spectrum of possible interventions

Increasing awareness and expectations of the population regarding health care services

Escalating costs of health care, ever widening gaps between what is possible and what the individual or the country can afford.

## **Health Care Infrastructure And Manpower.**

### **Primary Health Care Services**

2. The primary health care infrastructure provides the first level of contact between the population and health care providers. Realising the importance of the primary health care infrastructure in delivery of health services, States, Centre and several agencies simultaneously started creating primary health care infrastructure and manpower. This has resulted in substantial duplication of the infrastructure and manpower.

3. The primary health care infrastructure created include:

Subcentres 134094 with 127384 ANMs in position

Primary Health Centres (PHCs) 22991 with 24648 doctors

Community Health Centres (CHCs) 2712 with 3624 specialists

(Source : RHS bulletin December, 1997).

Sub-divisional/Taluk hospitals

The Department of Family Welfare supports personnel in 5435 rural family welfare centres, 871 urban health posts, 1083 urban family welfare centres, 550 district post partum-centres and 1012 sub-district post-partum centres.

Under the Department of Indian Systems of Medicine & Homoeopathy (ISM&H) there are 22,104 dispensaries, 2862 hospitals and 300 medical colleges;

(Source : Indian Systems of Medicine and Homoeopathy in India, 1998. Dept. of ISM&H, Ministry of Health & Family Welfare, New Delhi).

Municipalities provide urban health services.

Central Government Health Services (CGHS) provides health care for central Government employees.

Railways , Defence and similar large Ministries/Departments have their own hospitals and dispensaries to cater to health care needs of their staff.

Public Sector Undertakings (PSUs) and large industries have their own medical infrastructure.

Employees State Insurance (ESI) provides hospital and dispensary-based health care to employees

All hospitals - primary, secondary or tertiary care -- also provide primary health care services to rural and urban population.

There are the voluntary organizations and the private sector which are providing health care

4. It is important to take into account all these institutions and manpower before estimating the gaps. It is possible to achieve substantial improvement in coverage and quality of health services by appropriately restructuring the existing infrastructure making them responsible for health care for the population in a defined geographic area. Substantial proportion of the manpower problems can be sorted out by reorientation and re-deployment of existing manpower. While there are several districts which have institutions well above their required norms, it is a matter of concern that many of the districts with poor health indices do not have adequate health infrastructure and here the need for the health services is very great. The Ninth

Five Year Plan emphasised on the need to address the inequitable distribution of existing institutions and manpower as well as poor functional status due to mismatch between personnel and infrastructure, the need for orientation and skill upgradation of personnel and lack of appropriate functional referral system.

### **Progress and suggestions:**

#### **Rural Primary Health Care Services**

5. A vast infrastructure for primary health care has been created but it is all functioning sub-optimally. The factors responsible for this condition at the rural institutions are:

- Inappropriate location, poor access and poor maintenance;
- Gaps in critical manpower;
- Mismatch between personnel and equipment;
- Lack of essential drugs/diagnostics and poor referral linkages;

#### **Ongoing initiatives to improve access to Primary Health Care include:**

Strengthening/ relocating Sub-centres/ PHCs;

Merger, restructuring, re-locating of hospitals/dispensaries in rural areas and integrating them with existing infrastructure;

Re-structuring existing block level PHC, Taluk, Sub-divisional hospitals ( states like Himachal Pradesh have undertaken this);

Utilising funds from Basic Minimum Services (BMS), Additional Central Assistance for BMS and Externally Aided Project (EAP) to fill critical gaps in manpower and facilities;

District level walk-in interviews for appointment of doctors of required qualifications for filling the gaps in PHC (States like M.P and Gujarat have reported limited success).

Use of mobile health clinics - Orissa, Delhi - expensive and perhaps not sustainable;

Appointment of doctors/specialists on part-time basis; and

Adoption of PHC by NGO/Voluntary organisation/industry.

#### **Important Steps:**

- Construction activity is taken up only when it is absolutely necessary.
- High priority is accorded to filling the reported large gap in the vital CHC/First Referral Unit (FRU) by redesignation and strengthening, providing appropriate equipment and consumables and drugs required.
- Retraining and skill upgradation of male workers in vertical programmes and their redeployment as male multi-purpose workers.
- Correct mismatches between infrastructure/equipment and manpower to make institutions fully functional

## **Urban Primary Health Care Services**

6. Nearly 30% of India's population lives in urban areas. There is either non-availability or substantial under utilisation of available primary care facilities along with an over-crowding at secondary and tertiary care centres. Nagar Palikas, State Govts., Central Ministries and EAPs provide funding for building upgradation and restructuring urban primary health care infrastructure and establishing effective linkages.

7. The Planning Commission has provided Additional Central Assistance to:

Punjab for development of urban primary health care centres and establishing of linkages with secondary and tertiary hospitals in Amritsar City;.

Strengthen existing dispensaries in under-served East Delhi and establish referral linkages with secondary care institutions in the region;

Reorganisation of urban primary and secondary health care infrastructure and building up referral linkages at Nasik.

8. The progress in these and similar initiatives by State Governments is being monitored.

## **Tribal Health**

9. The tribal population is not a homogeneous one. In North Eastern States, the tribals have high literacy levels; they access available health facilities and their health and demographic indices are better than the national level though the region is endemic for malaria. On the other hand, the Onges in Andaman and Nicobar remain a primitive tribe with very little access either to education or to health care. Differential area-specific strategies are therefore being developed for each of the tribal areas to improve access to and utilisation of health services.

## **Ninth Plan Strategies to Improve Health Care in Tribal Areas:**

Ensuring availability of adequate infrastructure and personnel.

Area specific Reproductive Child Health (RCH) programmes.

100% Central Plan funds for National Anti Malaria Programme.

Focus on effective implementation of the Health & Family Welfare (FW) programmes.

Close monitoring under Tribal Sub-plan, early detection of problems in implementation of all on-going programmes and midcourse correction.

## **Progress and Suggestions:**

### **Successful Experiments in Improving primary health care to Tribals**

- Andhra Pradesh - Committed, Govt. persons running health facilities in tribal areas
- Orissa – ACA for mobile health units with fixed tour schedule. Problem - Expensive, difficult to replicate
- Karnataka, Maharashtra- NGOs `adopting' and running PHCs in Tribal areas - Success is mainly due to commitment of individuals and credibility of NGOs.

#### **Problems:**

Initiatives and commitment of key individuals are responsible for success. Difficult to replicate in a vast system.

## **Secondary Health Care**

### **Priorities in the Ninth Plan include efforts to :**

Strengthen FRU (CHC/Sub-Divisional Hospital) to take care of the referrals from PHC/Sub Centres (SCs).

Strengthen district hospitals so that they can effectively take care of referrals from the entire districts.

Strengthen referral system and rationalise care at each level to:

Enable patients to get care near their residence

Ensure optimal utilisation of facilities at PHCs/CHCs.

Reduce overcrowding at district and tertiary care levels.

Provide adequate diagnostics, consumables and drugs

Strengthen emergency services and management of high risk cases.

### **Progress & Suggestions:**

10. In addition to funds from State Plan, several States have been seeking External Assistance to build up FRU/District hospitals. So far six States have initiated such projects with external assistance from World Bank.

11. States have reported :

Progress in construction works, procurement of equipment, increased availability of ambulances, drugs.

Improvement in services following training to improve skills in clinical management, attitudes and behaviour of health care providers.

Reduction in vacancies and mismatches in health personnel/infrastructure.

Improvement in Hospital Waste Management,

Disease surveillance and response systems have been initiated.

12. All these six States have attempted introduction of user charges for diagnostics and therapeutics from people above the poverty line. Initial problems have been sorted out. Some States are still unable to ensure retention of collected charges in the same institutions. This problem has to be speedily resolved. Referral system needs further strengthening. All states are also simultaneously strengthening primary health care infrastructure so that the referral linkages between primary and secondary care become operational. These measures need to be closely monitored.

### **Tertiary Health Care:**

13. Along with an emphasis on enhancing the outreach and quality of primary health care services and strengthening the linkages with secondary care institutions, there is a need to optimise the facilities available in the tertiary care centres. At this level, there is an ever-widening gap between what is possible and what is affordable, for the individual or for the country.

#### **Tertiary Health Care**

##### **Problems:**

- Growing demand for complex, costly diagnostic & therapeutic modalities
- Lack of skilled manpower, equipment & consumables to meet the demand
- Overcrowding

##### **Ninth Plan priorities**

- Provide funds for capacity building
- Levy user charges for people above poverty line
- Explore alternative modalities to meet the growing cost of care

### **Ongoing Activities**

14. Several states (e.g. Rajasthan, UP) are trying out innovative schemes to give greater autonomy to these institutions, allowing them to generate resources and utilise them effectively. Some states e.g. Rajasthan and Kerala have been levying user charges and attempting to utilise the funds to improve hospital services. On an experimental basis, an attempt is being made to improve quality of services in tertiary hospitals under a Citizen's Charter for Central Government Hospitals in Delhi. The Charter aims to provide access without discrimination in those Delhi hospitals and put in place a redressal mechanism for public grievance.

### **Development Of Human Resources For Health**

#### **Health professionals - production and utilisation**

15. Every year over 16,000 doctors graduate in the Modern System and over 11000 graduate in ISM&H. Two-thirds of the medical graduates under the modern system go in for post graduate training. Majority of the practitioners of both modern system and ISM&H are working in private/ voluntary sector.

16. With facilities available for training of medical graduates outstripping the need, the Medical Council Act was amended in 1993 to stipulate Central Government permission for any person to establish a medical college and to provide that no medical college would open a new or a higher course of study or training including a post graduate course of study or training or expand its admission capacity in any course of study and training. Even so, medical colleges are opened and existing under-graduate and post-graduate colleges continue to increase their seat capacities with permission from the Central Government.

17. There are continuing vacancies in primary, secondary and tertiary care institutions at the level of general doctors as well as of specialists both in Central and State institutions. In order to ensure that vacancies of doctors in primary health care institutions are filled, several states are trying to make service in PHCs a prerequisite for post graduate admission. Some states are also experimenting with appointment of doctors on contractual basis. As a long-term measure, the vacancies are sought to be filled by creating new medical teaching institutions and increasing the existing admission capacity. However, it would appear, the vacancies are not getting filled because of poor service conditions rather than lack of professionals being produced. Majority of the graduates and post graduates from the Modern System and ISM&H practice in private/voluntary sector.

#### **Para-professional Production & Utilisation:**

18. There was a major gap in para-professional production in the eighties. Facilities were created for training of male and female multipurpose workers, and currently there are adequate number of ANMs though there is still a dearth of male workers. However, there are several para professionals employed in various vertical programmes who are functioning as male unipurpose workers. The Ninth Plan has recommended adequate retraining, redeployment and integration of these workers into the existing primary health care institutions.

19. Para-professionals are trained in three categories of training institutions: existing Government institutions, private institutions and as a part of the 10+2 vocational training. The requirement of para-professionals has to be assessed in each district and appropriate training taken up preferably as a part of 10+2 Vocational Training Course. Utilisation of these vocational courses as a major mode of training para-professionals would enable districts to respond to the changing needs while enhancing career prospects for the para-professionals themselves.

#### **Health manpower position at district level**

20. Currently there is no mechanism for obtaining and analysing information on health care infrastructure and manpower (including private and voluntary sectors) in the district. In order to create such a data base, a Standing Technical Advisory Committee has been set up under the Chairmanship of Director General of Health Services. The Central Bureau of Health Intelligence has been entrusted with the task

of compiling the data on rural and urban primary, secondary and tertiary health care infrastructure and manpower in private, voluntary, industrial, governmental and other sectors.

### **Continuing medical education**

21. Medical technologies are rapidly evolving; therefore, continuing education to update the knowledge and skills is essential for medical and paramedical personnel. Ninth Plan advocates an integrated comprehensive in-service training programme for Health and Family Welfare. The programme is yet to be fully operationalised. For Govt., private and voluntary sector personnel there are ongoing training programmes conducted by National Academy of Medical Sciences, ICMR and professional associations. In addition, the Ninth Plan has proposed an increasing use of 'distance learning' by utilizing information technology (IT) tools currently available. Planning Commission has provided Additional Central Assistance to University of Health Sciences in Andhra Pradesh, Karnataka, Punjab and Tamil Nadu to accelerate IT upgradation efforts and networking between pre-service and in-service institutions for medical and para-medical personnel. The progress is being monitored.

### **New Initiatives In Ninth Plan**

- Horizontal integration of vertical programmes
- Disease Surveillance and Response mechanism with focus on rapid recognition, report & response at district level
- Development of Integrated Non-Communicable Disease Control programme to be implemented through existing health care system.
- Health Impact Assessment as a part of environmental impact assessment in developmental projects.
- Appropriate management systems for emergency, disaster, accident and trauma care at all levels of health care.
- Improvement of Health Management Information System (HMIS) and supply logistics.

### **Progress and Suggestions :**

#### **Horizontal Integration of Vertical Programmes:**

22. At the Central level attempts are being made to integrate the activities related to:

- Training, IEC in all CSS
- STD/RTI prevention and management under RCH and AIDS control Programme
- HIV/TB Control Programme Coordination

At state level:

The Central Council of Health and Family Welfare has endorsed formation of composite Health and Family Welfare Societies at state and district level. States like



Orissa and Himachal Pradesh have formed one Health and Family Welfare Society at state and district level to implement all health and family welfare programmes.

### **Disease Surveillance and Response**

- A pilot project on development of a model disease surveillance system has been initiated in 20 districts. Development of disease surveillance system is also one of the components of the on-going Secondary Health Systems Project in many states.
- Specific on-going communicable disease control programmes e.g., National Anti Malaria Programme (NAMP) have a component of disease surveillance.
- Surveillance for polio is being intensified under the Family Welfare Programme.

All these have to be integrated into a single cohesive system for monitoring and responding to emerging health problems at district level.

### **Hospital Waste Management**

Planning Commission provided ACA to National Capital Territory (NCT) of Delhi for a pilot project in hospital waste management which could be replicated in other States if found feasible.

Several States are incorporating the Hospital Waste Management as a part of their Health Systems Project.

### **Environment and Health**

A number of cities have taken steps to reduce air pollution and water pollution. Delhi has promoted use of lead free petrol and utilization of CNG for vehicles. Efforts are under way to re-locate polluting industries away from the main city and improve waste management practices.

Projects for prevention of water contamination, water quality monitoring are receiving increasing attention.

### **Health Sector Reforms**

#### **Ninth Plan Policy:**

1. Commitment to provide essential primary health care, emergency life savings services, services under National Disease Control programmes and National Family Welfare programmes free of cost to all, based on the need for care irrespective of their ability to pay.
2. Different states will evolve, implement, evaluate strategies for cost recovery for secondary, tertiary as well as super specialty care from people above poverty line and at the same time they will provide a mechanism for improving access to these services for people below poverty line. Based on the experience of these efforts future course of action will be charted out.

23. As a part of economic reforms, health sector reforms are perhaps inevitable. However, due care should be taken to ensure that the reforms do not shut out vulnerable groups access to health care nor result in deterioration of health status in poorer segments of the population.

24. In the last few decades there have been major advances in health care related technologies but many of them are very expensive. Some of the data from the developed countries suggest that widespread use of these would inevitably result in cost escalation but benefits in terms of improvement in the quality of life or increased longevity may not be commensurate with the cost. However, there is growing public awareness about the availability of these technologies and population tries to access these facilities.

25. So far the health sector has been targeting interventions at persons who are ill and need care, those who are at risk of becoming ill and those who are vulnerable and require specific protective measure. Services are being provided to all without any user charges irrespective of their ability to pay. This policy may be difficult to sustain in the future. There is an urgent need to evolve appropriate policy guidelines for funding of health care services to different segments of population. There has been an increase in the per capita income over the last two decades and therefore it might be time to try out levying user charges for diagnostic and therapeutic services from people above the poverty line; if found feasible this would enable the public sector health care institutions to improve their services.

26. Health insurance for individuals, families and for groups have been in vogue in many developed countries for several decades. While they do offer mechanism for meeting hospitalization costs for major ailments, there has been growing concern even in the developed countries that the system results in unacceptable escalation of health care cost without commensurate improvement in health care. Cost effective methods for meeting health care expenses need to be evolved. In addition, there is a need to promote healthy lifestyles and empower people to remain healthy. The Ninth Plan envisages a novel approach to promote healthy life style. The Plan suggests that the premium for health insurance may be adjusted on the basis of health status of the persons and age of the persons at the time of entry into health insurance; a yearly 'no claim' bonus could be given to those who have remained healthy and claimed no reimbursement of medical expenses. This could serve as an economic incentive for remaining healthy and adapting healthy life styles.

## **Control Of Communicable Diseases**

27. At the time of Independence communicable diseases were a major cause of morbidity and mortality in the country. Efforts were therefore initially directed towards their prevention and control. Effective therapy for infections and vaccines to prevent infection caused a steep fall in crude death rate (from 25.1 in 1951 to 8.9 in 1996). However, the morbidity due to communicable diseases continues to be high. Deteriorating urban and rural sanitation, poor liquid and solid waste management and overcrowding have escalated the prevalence of common communicable diseases.

The re-emergence of diseases like Kala Azar has added to the burden. Control of communicable diseases is becoming more difficult because of emergence of drug-resistant pathogens and development of insecticide-resistant vectors.

**Strategies to improve performance of Disease Control Programmes during Ninth Plan:**

Rectify identified defects in design and delivery  
Fill critical gaps in infrastructure and manpower  
Make service delivery responsive to user needs  
Ensure skill upgradation, supplies, and referral services  
Improve community awareness, participation and effective utilisation of available services

**National Anti Malaria Programme (NAMP)**

28. During the Ninth Plan NAMP is being implemented through a modified plan of operations, assisted by the World Bank and has the following components :

Early diagnosis and prompt treatment  
Selective vector control & personal protection  
Prediction , early detection & effective response to out breaks  
IEC

**Control activities will be intensified in areas with:**

Annual Parasite Incidence (API) of > 2 in the last three years  
Plasmodium Falciparum (PF) rate of > 30%  
Reported deaths due to malaria  
25% of the population is tribal

**Targets for 2002**

Annual Blood Examination Rate (ABER) of over 10%  
API <0.5%  
25% reduction in morbidity and mortality due to malaria

**Progress and Suggestion :**

29 The progress under NAMP is given in Table I. There has not been any substantial improvement over the last three years; utilisation of funds has been sub-optimal. The Programme was reviewed by the Government of India and World Bank in Feb.99. Progress has been slow in some interventions like introduction of medicated mosquito net and application of GIS for planning operation. It was recommended that Operational Research on vector control and selection of specific agencies by NAMP are to be taken up quickly.

TABLE - I

NATIONAL ANTI MALARIA PROGRAMME								
YEAR	B.S.E. (in Million)	POSITIVE CASES	P.F. CASES	A.P.I (IN 1000)	ABER%	S.P.R%	S.F.R%	NO.OF DEATHS
1996	91.54	3.04	1.18	3.48	10.49	3.32	1.29	1010@
1997	89.45	2.66	1.01	3.01	10.11	2.97	1.13	879
1998 *	86.26	2.15	0.93	2.37	9.51	2.49	1.08	658
1998 **	49.83	0.91	0.38			1.84	0.76	221
1999 **	47.95	0.88	0.39			1.84	0.81	373

:Provisional, \*\*:- comparative data for 1999 with corresponding period of 1998, as per reports received from states upto 25<sup>th</sup> Oct., 1999.  
@ :- Out of 1010 deaths, 926 are confirmed and 84 suspected deaths. This does not include 1794 fever related deaths from Haryana.

## FINANCIAL SCENARIO

Rs. Lakhs

YEAR	OUTLAY	EXPD./RE
8TH PLAN	42500.00	59106.55
1996-97	14500.00	14366.76
9TH PLAN	100000.00	
1997-98	19000.00	14352.00
1998-99	29700.00	16393.97
1999-2000	25000.00	

Source : Annual Report 1999-2000, Ministry of Health and Family Welfare

**Kala Azar:**

30. Kala-azar is endemic in 36 districts in Bihar and 10 districts in West Bengal (population 75 million). Periodic outbreaks of Kala-azar with high morbidity and mortality continue to occur in these States. Over 90% of the reported cases and over 95% of the reported deaths are from Bihar. Over two-thirds of the cases in Bihar are reported from 7 districts.

**Progress and suggestions:**

31. There has been a decline in both Kala-azar cases and deaths in spite of inadequacy of the insecticidal spray operations and poor outreach of diagnostic services.

Year	Cases	Deaths
1996	27049	687
1997	17429	255
1998 (Prov.)	13342	217

It is important to ensure timely insecticidal spray, early detection and prompt treatment of Kala -azar patients

**Revised National Tuberculosis Programme (RNTCP)**

32. The National Tuberculosis Control Programme was initiated in 1962 as a Centrally Sponsored Scheme. The programme was aimed at early case detection in symptomatic patients reporting to the health system through sputum microscopy and X-ray and effective domiciliary treatment with standard chemotherapy. The Short

Course Chemotherapy was initiated in 1983 and expanded in a phased manner. The Ninth Plan envisaged:

- RNTCP will be implemented in 102 districts
- NTCP will be strengthened in 203 SCC districts
- Strengthening of standard regime in remaining non- Short Course Chemotherapy (SCC) districts
- Strengthening of Central institutions, State TB Cells & State TB training Institutions

### Targets up to 2002

- Enhance case detection to at least 70% of estimated incidence.
- Achieve at least 85% cure rate among smear positive cases in 102 RNTCP districts and 60% cure rate in SCC districts.
- Reduce proportion of smear negative detected to 50% or less of the total cases.
- Ensure that the number of TB suspects tested for smear positives is not less than 2.5% of OPD in Primary Health Institutions (PHI) and no. of smear tested is at least 3 per suspected patient.

### Progress and Suggestion

33. The performance under the Tuberculosis Programme is shown in Table II.

TABLE - II						
NATIONAL TUBERCULOSIS CONTROL PROGRAMME						
YEAR	Sputum Exam.		Sputum Positive		Total New Cases	
	TAR.	ACH.	TAR.	ACH.	TAR.	ACH.
1997-98	14189175	4518068	472980	351921	1277026	1309665
1998-99	14189175	3893213	472980	321920	1277026	1249446
1999-2000	4823930*		482390			
* :- No. of patients (3 smears/ patients)						
FINANCIAL SCENARIO						
YEAR	OUTLAY		EXPD.			
8TH PLAN	8500.00		19442.00			
1996-97	6500.00		4180.00			
9TH PLAN	45000.00					
1997-98	9000.00		3205.00			
1998-99	12500.00		7211.00			
1999-2000	10500.00		10500.00		Expected	
Source : Annual Report 1999-2000, Ministry of Health and Family Welfare						

34. Review of the RNTCP has shown that in spite of the delays in initiation of project in the project area:

- More than 25,000 health staff were trained
- Uninterrupted drug supply has been ensured

Population of more than 120 million in 16 States/UTs covered  
Half of the patients were sputum positive compared with less than one in 4 earlier.  
More than 1,00,000 patients put on treatment, nearly half of them in the past 12 months.

The performance indicators including sputum conversion & cure/completion rate are showing steady improvement.

35. In the pilot phase, the project was being implemented by committed workers and patients were closely monitored. As the programme expands to cover the larger population and is implemented by the health service staff there is a need to improve close monitoring and supervision at all levels to ensure continued good performance. There are reports of problems faced by the patients and the staff in adhering to the Directly Observed Treatment Short-Course (DOTS) regimen. The World Bank loan was under suspension since May, 1998 because of procurement-related problems. These need to be expeditiously sorted out.

### **National Leprosy Eradication Programme:**

36. The National Leprosy Eradication Programme (NLEP) was launched as a 100% Centre-funded programme in 1983 with the goal of arresting disease transmission and bringing down its prevalence to 1/10000 by the year 2000. With MDT there has been a sharp reduction in the prevalence of leprosy from 57/10000 in 1981 to 5.8/10000 in 1995.

### **Strategies and targets for NLEP during the Ninth Plan**

Intensifying case detection and MDT coverage in high prevalence States and areas difficult to access

- Strengthening laboratory services in PHC/CHC,
- Establishing surveillance system for monitoring time trends
- Preparing for initiating horizontal integration of leprosy programme into primary health care system
- Providing greater emphasis on disability prevention and treatment
- Implementing Modified Leprosy Elimination Campaign
- Ensuring rehabilitation of cured patients.

### **Target for Ninth Plan**

- Reduce prevalence of leprosy to 1/10000.

37. While the endemic states of Andhra, Tamil Nadu and Maharashtra have shown a steep decline in leprosy, the prevalence in states like Bihar-10.6, Orissa-12.35, West Bengal 7.9 and M.P. 6.7 continues to be high. Earlier 50% of cases were in Andhra Pradesh and Tamil Nadu. Now over 50% of the cases requiring treatment are in UP, MP, Bihar and West Bengal.

**Progress and suggestion:**

38. Performance under NLEP in the Eighth Plan and first two years of the Ninth Plan is shown in Table III.

TABLE - III						
NATIONAL LEPROSY ERADICATION PROGRAMME						
	CASE DETECTION		CASE TREATMENT		CASE DISCHARGE	
YEAR	TAR.	ACH.	TAR.	ACH.	TAR.	ACH.
1996-97	218240	461082	218240	455362	474200	485644
1997-98	323640	524411	323640	522309	431615	549975
1998-99	323640	751018	323640	746486	652400	714779
1999-2000	286365		286365		611666	
FINANCIAL SCENARIO			Rs. Lakhs			
YEAR	OUTLAY	EXPD./RE				
1996-97	7400.00	6533.00				
9TH PLAN	30100.00					
1997-98	7900.00	7828.00				
1998-99	7900.00	7818.00				
1999-2000	8500.00					

39. The Department has initiated steps for a phased integration of the vertical programme in the general health services by training and reorientation of Health Care personnel in detection, management of leprosy cases, making MDT available at all health facilities, strengthening of disability and ulcer care, strengthening of monitoring and supervision.

40. During 1997-98 the duration of treatment of MDT was reduced from 24 months to 12 months for multibacillary patients and from 12 months to 6 months for paucibacillary patients; single dose Rifampicin, Ofloxacin and Minocycline (ROM) treatment for single lesion patients was also introduced. 29 NGO centres were recognized for reimbursement facility for reconstructive surgery and appropriate footwear; 210 District Leprosy Societies were provided fund for conducting disability/ulcer care training.

**Modified Leprosy Elimination Campaign:**

41. A Modified Leprosy Elimination Campaign aimed at detection of unidentified cases of leprosy in the community was taken up first in Tamil Nadu in 1997 and

then implemented during 1997-98 in Maharashtra, Orissa, Gujarat, Jammu Division of J&K and Daman & Diu. The programme was extended to all the districts during 1998-99. During the six day campaign 4.6 lakh cases were detected and put on treatment.

NEW CASES DETECTED BY MLEC AND PR BEFORE AND AFTER MLEC							
POPULATION IN LAKHS		NO. OF SUSPECTED CASES	NO. OF CONFIRMED CASES	NO. OF SINGLE LESION	PR BEFORE MLEC	PR AFTER MLEC	% INCREASE IN PR
ENUMERATED	EXAMINED						
8209.67	6448.71	2858267	454290	53115	4.75	10.02	110.95

42. It is important carefully to train the health manpower in existing primary health care system in prevention and early detection and management and rehabilitation of leprosy patients. Some of the evaluation studies indicate that during NLEC there was both over-diagnosis and under-diagnosis in some districts because the detection was done by persons newly trained without much experience. However this campaign provided a mechanism for involving the entire health services and had paved the way to a progressive integration of leprosy care within the health service infrastructure. Careful supervision and monitoring of progress in the performance of the programme and process of integration are essential to achieve the Ninth Plan goal.

#### **National AIDS Control Programme (Phase-II)**

43. India has the distinction of initiating a National Searosurveillance to define the magnitude and dimension of HIV infection in the silent phase of the HIV epidemic long before AIDS cases were reported. Based on the data from ICMR studies, the country drew up the National AIDS Control Programme Phase I which has been implemented with assistance from World Bank. In spite of the numerous shortcomings in implementation, it is noteworthy that WHO estimates that as of 1997 India had relatively low prevalence of HIV infection (2.6/1000) (Table IV).



TABLE – IV		
AIDS AND HIV INFECTIONS IN SEARO COUNTRIES AS OF 1st JULY 1997		
COUNTRY	ESTIMATED HIV INFECTIONS	RATE PER 1,00,000 POPULATION*
BANGLADESH	<20,000	<16
BHUTAN	75	12
DPR KOREA	<100	<1
INDIA	2500000	262
INDONESIA	95000	47
MALDIVES	60	23
MYANMAR	350000	737
NEPAL	5000	22
SRI LANKA	6000	32
THAILAND	800000	1345
TOTAL	>3750000	>258
Source :- WHO SEARO – 1997		

44. But, because of the size of its population, India is expected within the next decade to have nearly 10 million HIV infected people; the number of AIDS cases will also show a steep increase. It is therefore imperative that the country gears up to provide necessary preventive, diagnostic, curative and rehabilitative care to tackle this problem.

**Progress and suggestions:**

45. National AIDS Control Programme (NACP Phase II), a Centrally Sponsored Scheme was initiated in October 1999 and is funded by World Bank, DFID and USAID. The project has the following five components: -

- Reducing HIV transmission among poor and marginalised section of the community at the highest risk of infection by targeted intervention, STD control and condom promotion;
- Reducing the spread of HIV among the general population by reducing blood borne transmission and promotion of IEC, voluntary testing and counselling;
- Developing capacity for community –based, low- cost care for people living with AIDS;

- Strengthening implementation capacity at the National, States and Municipal Corporation levels through the establishment of organisational arrangements and increasing timely access to reliable information; and
- Forging inter-sectoral linkages between public, private and voluntary sectors.

46. The performance under NACP is given in Table V.

TABLE - V						
YEAR	No Screened (000)	SERO POSITIVE (000)	Sero-Positivity Rate (per 1000)	AIDS CASES	TOTAL NO. OF GOVT. BLOOD BANKS	HIV TESTING FACILITIES
1996-97	2816	225	8	2528	715	154
1997-98	3034	564	19	3551	715	154
1998-99	3413	824	24	6693	715	154
31st May 1999	3481	85666	25	7450	715	154
FINANCIAL SCENARIO						
		Rs. Lakhs				
YEAR	OUTLAY	EXPD./RE				
8TH PLAN	28000.00	27538.00				
1996-97	14100.00	11537.00				
9TH PLAN	76000.00					
1997-98	10000.00	12100.00				
1998-99	11100.00	11100.00				
1999-2000	14000.00					

47. It is important to achieve a paradigm shift in the National AIDS Control Programme:

- From raising awareness to changing behaviour
- Decentralised area-specific need assessment, planning, implementation and monitoring of intervention programmes
- IEC strategy to reach the unreached through emphasis on inter personal communication
- Participation of PRI and people themselves in the AIDS prevention and control programme
- Changing the emphasis from condom promotion to reinforcement of traditional ethos of mutually faithful monogamous relationships
- Improving utilisation of STD services in the governmental sector
- Emphasis on low cost strategies for prevention, counseling and care of HIV infected persons

It is imperative to build up:

- epidemiological data on time trends in the disease,
- details of specific interventions based on epidemiological data
- mechanisms for estimating requirements, unit costs, total costs,
- process and impact indicators to monitor the progress in interventions

- baseline figures and target to be achieved by the end of the project.

## National Programme for Control of Blindness

### Programme Priorities during Ninth Plan are :

To improve the quality of cataract surgery, clear the backlog of cataract cases  
 To improve quality of care by skill upgradation of eye care personnel  
 To improve service delivery through NGO and public sector collaboration  
 Increase coverage of eye care delivery among underprivileged population.

### Targets for the period 1997-2002

17.5 million cataract operations; 100,000 corneal implants

### Progress and suggestions:

48. The performance under National Blindness Control Programme (NBCP) in first two years of Ninth Plan is shown in Table VI.

TABLE – VI					
NATIONAL BLINDNESS CONTROL PROGRAMME					
	1997-1998		1998-1999		1999-2000
Unit	Target	Achievement	Target	Achievement	Target
1	2	3	4	5	6
Cataract Operations (lakhs)	30.00	30.30	33.00	33.00	35.00
% IOL implantation	20.00	22.00	25.00	NA	30.00
FINANCIAL SCENARIO					
Rs. Lakhs					
YEAR	OUTLAY	EXPD./RE			
8TH PLAN	10000.00	19297.00			
1996-97	7500.00	5858.00			
9TH PLAN	44800.00				
1997-98	7000.00	5834.00			
1998-99	7500.00	7274.00			
1999-2000	8500.00	5816.00*			
Source : Department of Health			*:- Finally allocated		

49. A significant number of cataract operations are performed on unilateral cataract blind persons and on second eye of bilaterally blind persons. To clear the backlog of cataracts surgery has to be done at a rate of well over 400 operations per

100,000 population. However, only 3 states (Tamil Nadu, Andhra Pradesh and Maharashtra) have reached that level. An analysis of service data reports indicate that both in medical colleges and in district hospitals the cataract operations done per bed or operation per surgery days were far below the expected levels in most of the states. This under-utilisation of existing facilities needs to be corrected. In order to improve the quality of services and the follow-up, the programme has shifted from the camp approach to increased use of fixed facilities except in under- served areas.

### **Mid Term Evaluation:**

50. A mid term evaluation of World Bank-assisted project carried out in 7 project states during 97-98 has revealed :

- an increase in the number of cataract operations performed in all those States.
- the performance is far less than desired level in Orissa and Rajasthan.
- Overall, 8.15 million operations (74%) have been performed against the Project target of 11.03 million operation

51. Revised National Blindness Control Programme (RNBCP) was drawn up for 1998-2002 to cover the entire country and will focus both on prevention of avoidable blindness and restoration of vision in those who have been already visually disabled irrespective of their capacity to pay. Over the years there has been a steady increase in patients who go for Intra Ocular Lens (IOL) implantation. At a tertiary care level where skilled surgeon and adequate post-operative care is available, use of IOL may be preferred but extending IOL services at or below district level with no such facility may have adverse consequences. Loss of vision after IOL implantation have been reported from different parts of the country. There is a need to document sequelae of IOL / Extra Capsular Cataract Extraction (ECCE) in tertiary, secondary, district and below district level and in camps. The programme has to define long term strategy and goals for eye care and has to provide for a close co-ordination between, Government, voluntary and private sector eye care providers.

### **Integrated Non-communicable Disease Control Programme**

52. Growing numbers of aged population, urbanisation, increasing pollution, changing lifestyles, increasing longevity, change from traditional diets, sedentary life style and increase in the stress of day to day living have led to an increase in lifestyle related disorders and non-communicable diseases. It is essential that preventive, promotive, curative and rehabilitative services for NCD are made available throughout the country at primary, secondary and tertiary care levels so as to reduce the morbidity and mortality associated with NCD.

### **Progress and suggestions:**

- Central sector programme provides funds for strengthening facilities for Cancer Control, setting up distinct models for replication under national mental health project and for pilot projects on Diabetes control.
- Some states e.g. Kerala are making efforts to implement an integrated non-communicable disease control programme at primary and secondary care level with emphasis on prevention of Non-Communicable Disease (NCD), early diagnosis, management and building up of a referral system.
- Tertiary care centres are being strengthened to improve treatment facilities for management of complications.

53. An increase in NCD prevalence is anticipated over the next few decades, which is due at least in parts to changing lifestyles. Therefore, it is imperative that health education for primary and secondary prevention as well as early diagnosis and prompt treatment of NCD receive the attention it deserves.

## **Research**

54. Indian Council for Medical Research is the nodal organisation for bio-medical research in the country. The process for modernization of several ICMR Institutes, upgradation of skills of scientific and technical personnel in modern biology and epidemiology, development of linkages and networking for bio-informatics as well as epidemiological activities has been initiated during the Ninth Plan period. These efforts would be expanded. Steps are being taken to strengthen and develop country's research and development (R&D) facilities. ICMR is establishing a Microbial Containment Complex to do studies on new as well as re-emerging infections under maximal bio-safety conditions,

55. Development and spread of multi-drug-resistant infections poses a threat to controlling communicable diseases. It is planned to set up laboratory-based monitoring network for research studies on new and re-emerging infections and antibiotic resistance monitoring in different regions of the country. These data will be of use for formulation of national treatment policies and prescription practices, identifying outbreaks of resistant infections and promoting research for new drug development. Operation Research (OR) studies for development and implementation of site-specific disease control, RCH strategies are being initiated. Sentinel sero- and behavioural surveillance for STDs including HIV is planned to generate data for targeting interventions, evaluation of impact of interventions, advocacy and planning.

56. Some of the priority areas for research in non-communicable diseases are community based intervention programmes for control of Rheumatic fever and Rheumatic heart diseases, OR studies for prevention and control of mild essential hypertension and coronary heart disease at community level, assessment of unmet treatment needs of the mentally ill in rural areas, identification, management and prevention of occupational health hazards and health problems due to environmental deterioration.

## **Outlay : State sector**

57. The Outlay and expenditure in first three years of the Ninth Plan are shown in Table VII.

58. State Governments are required to take several critical steps to improve functional status and efficiency of the existing health care infrastructure and manpower. These measures are:

- Restructuring of the health care infrastructure,
- Redeployment of manpower and skill development,
- Development of a referral network,
- Improvement in the health management information system, and ,
- Development of disease surveillance and response at district level.

The centrally sponsored disease control programmes and the family welfare programme provide funds for additional manpower and equipment; these have to be appropriately utilised to fill critical gaps. The ongoing and the proposed EAPs are additional sources for resources. Health is one of the priority sector for which funds are provided in the central budget under the head Additional Central Assistance (ACA) for basic minimum services. The States will also be able to utilise these funds for meeting essential requirements for energizing urban and rural health care.

## **Centre**

59. Health is one of the sectors identified under the Special Action Plan. In addition to the funds available from Domestic Budgetary Support, several centrally sponsored disease control programmes are receiving funds from EAPs. The following are such sponsored programmes which have received funding from the World Bank:

- National Leprosy Eradication Programmes
- National Programme for Control of Blindness
- Revised National Tuberculosis Control Programme
- National Malaria Eradication Programme
- National AIDS Control programme – Phase II

60. These programmes provide diagnostics, drugs, equipment, training and capacity building for implementation, monitoring and mid-course correction in these disease control programmes. In addition, central sector institutions i.e. National Institute of Biologicals and Kalavati Saran Hospital have been receiving funds for strengthening and expansion from external agencies. Table VII provides outlay for Health sector during first three years of the Ninth Plan.

<b>Table VII</b>								
<b>APPROVED OUTLAY AND EXPENDITURE FOR HEALTH</b>								
								Rs. in Crores
Eighth Plan Outlay (1992-1997)	Ninth Plan Outlay (1997-2002)	1997-98 (B.E.)	1997-98 (Actual)	1998-99 (B.E.)	1998-99 (Actual)	1999-2000 (B.E.)	1999-2000 (R.E.)	2000-2001 (B.E.)
1712.00	5118.19	920.20	716.15	1145.20	814.34	1160.00	1010.00	1300.00