

Tri Annual Report of the
Directorate General of
Health Services 1984-85.



R
L 15.2r NS4
NS6
35968

L:5.2 N54 N56

CONTENTS

	PAGE
INTRODUCTION	iv—xiv
CHAPTER I POPULATION AND VITAL STATISTICS	1—6
CHAPTER II GENERAL EPIDEMIOLOGY	9—27
Smallpox	9
Plague	9
Cholera	10
Malaria	12
Dysente and Diarrhoea	15
Respiratory Diseases	16
Enteric Group of Fevers	16
Kalazar	17
Cerebro-spinal Fever	17
Typhus	18
Venereal Diseases	19
Leprosy	21
Blindness and Eye Diseases	25
Tuberculosis	26
CHAPTER III PROGRESSIVE HEALTH ACTIVITIES IN THE STATES—	
SALIENT FEATURES	31—59
Progressive Health activities	31
Sanitation, Water supply and conservancy	35
Rural medical relief	37
Health Units	40
Primary Health centres in National Extension Service Blocks	42
Medical Inspection of School Children	42
Industrial Social Health	46
Health of Prisoners	48
Fairs and Festivals	50
Nutrition—Welfare Foods	50
Adulteration of Food	53
Railway Health Services	55
Health Education	56
MEDICAL RELIEF	63—68
Hospitals and	63
Med	

5968

100—101

102

		PAGE
	Radium treatment	66
	Blood Transfusion Service	66
	Mental Hospitals and Psychiatric Problems	66
		71—75
CHAPTER V	FAMILY PLANNING	79—84
CHAPTER VI	MATERNITY AND CHILD WELFARE	87—93
CHAPTER VII	NURSING	87
	General conditions	88
	College of Nursing	88
	Indian Nursing Council	97—99
CHAPTER VIII	MEDICAL EDUCATION AND REGISTRATION	97
	Colleges, fellowships and study tours	97
	Medical Council of India	97
	Medical Registration	103—105
CHAPTER IX	DENTAL EDUCATION AND REGISTRATION	103—105
CHAPTER X	CENTRAL DRUGS STANDARD CONTROL ORGANISATION	109—115
	Drugs Control	109
	Quinine	114
	Medical Stores Depots	115
CHAPTER XI	MEDICO-LEGAL WORK AND THE SEROLOGIST DEPARTMENT	119
CHAPTER XII	PORT AND AIRPORT HEALTH ADMINISTRATION	123
CHAPTER XIII	MEDICAL RESEARCH	127—152
	Indian Council of Medical Research, New Delhi	127
	Indian Cancer Research Centre, Bombay	129
	Central Research Institute, Kasauli	130
	All India Institute of Hygiene & Public Health, Calcutta	132
	School of Tropical Medicine, Calcutta	136
	Malaria Institute of India, Delhi	139
	Central Drugs Laboratory, Calcutta	141
	Haffkine Institute, Bombay	142
	Nutrition Research Laboratory, Coonoor	143
	Pasteur Institute of Southern India, Coonoor	
	Drug Research Laboratory, Jammu Kashmir	
	King Institute of Preventive Medicine, Madras	
	Central Institute of Research in Systems of Medicine, Jamnagar	
	Research Centre, Poona	
	Research Centre, Poona	

CHAPTER XIV

	PAGE
INDIGENOUS SYSTEMS OF MEDICINES AND HOMEOPATHY	155—158

CHAPTER XV

VOLUNTARY ORGANISATIONS AND ASSOCIATIONS	161
Indian Red Cross Society	161
St. John Ambulance Association (India) and St. John Ambulance Brigade, (India)	162
Tuberculosis Association of India	162
Hind Kusht Nivaran Sangh	164
Mission to Lepers	164
Kasturba Gandhi National Memorial Trust	165
All India Blind Relief Society, New Delhi	166
All India Women's Conference	167
Bharat Sewak Samaj	167
Trained Nurses Association of India	168
Indian Medical Association	168
All India Medical Licentiates' Association	169
All India Dental Association	169
Gandhi Memorial Leprosy Foundation	170

CHAPTER XVI

WORLD HEALTH ORGANISATION	175—177
-----------------------------------	---------

APPENDICES

Table	Statistics on—	
1—9	Population and Vital Statistics	181—192
10—40	General Epidemiology	193—244
41—64	Progressive Health Activities in the State—Salient Features	245—281
65—77	Medical Relief	282—306
78	Family Planning	307
79—80	Maternity and Child Welfare	308—309
81—86	Nursing	310—321
87—90	Medical Education & Registration	322—330
91—92	Dental Education and Registration	331—332
93	Central Drugs Standard Control Organisation	333
94—95	Medico-Legal work and the Serologist Department	334—336
96—98	Port and Airport Health Administration	337—340
99	Health Survey Work in Community Project Blocks	341
100—101	Indigenous Systems of Medicines and Homeopathy	342—346
102	World Health Organisations	347

INTRODUCTION

A year less than a decade after Independence and the merging of the Princely States, the Government of India reorganised the States once again in November 1956. This reconstituted the States of Andhra, Assam, Bihar, Bombay, Jammu and Kashmir, Kerala, Madhya Pradesh, Madras, Mysore, Orissa, Punjab, Rajasthan, Uttar Pradesh and West Bengal and the Union Territories of Delhi, Himachal Pradesh, Manipur, Tripura and Andaman and Nicobar.

The period under review is that from the year 1954 to 1956. It has many favourable features, which have directly or indirectly contributed to an upsurge in medical and public health movement and expansion.

India's First and Second Five Year Plans have contributed not a little to it and the degree of contribution is described in the following chapters State-wise and in the Appendices, where the Tables speak for themselves.

The Report opens with an account of vital statistics. India's population increases each year by about 50 lakhs, its mid-year population for 1956 being 3873.3 lakhs. This increase has led to a density of 116 persons per kilometre in 1956 as compared to 113 in 1953. The shift of rural to urban population has also been observed to have increased to 18.4% of the total in the last five years, as estimated in 1955. The percentage of rural population is highest in Orissa, where it registered 96% and lowest in Delhi with 18%. Studies of age structure show that 45% of the population is in the reproductive period of life, *i.e.*, between the ages of 15 and 44 years. This is at par with that of Morocco, Guatemala and Japan and higher than that of France, U.K. and Sweden.

It has been stated from pre-Independence times and even today, that registration of births and deaths has not been accurately recorded for reasons more than one, hence, the need for various surveys to be carried out to obtain accurate and reliable data and the necessity of introducing new methods of control over registration of births and deaths, so as to reduce the degrees of omissions in such registration, as far as possible. It is presumed that persistent efforts in accurately recording data have resulted in slightly higher figures for 1956 than for 1955 or 1954. It has also been observed that the number of males born per 100 females is predominantly high and continues to be so. The reasons for this natural increase has not been forthcoming and could form a basis for scientific enquiry for the future.

Registration of deaths is more accurate than registration of births, but registration of the causes of death has much to be improved upon. Far few cases are attended by qualified medical personnel prior to death and hence deaths are still classified under three major causes, namely cholera, small-pox and plague and three groups of causes, namely, fevers, diarrhoea and dysentery and respiratory diseases and the rest being grouped together. Large municipal corporations, however, have compiled mortality statistics for a fairly large number of causes according to the International list of causes of deaths. Coming to the percentage of deaths above the

(iv)

age of 50, which is an important index of health and demographic condition of a nation, it has been observed that the index is low for India (27.4% in 1956) as compared to U.K. (88.4%). But the percentage of deaths among the age group up to 14 years was 50.3% for India and 4.13% for U.K. This high death rate in the young age group below 14 years calls for increased and sustained efforts to lower this mortality rate. Again among different age specific rates, the ratio of infant mortality is most significant. It has been estimated that the Infant Mortality rate was 115.9 and 108.0 for 1952 and 1956 respectively for India. The reduction is apparent, but more infant services are required for the country.

As compared to infant mortality rate, maternal mortality rate has definitely been reduced. Maternal and Child Welfare Centres are being established in the States by subsidy from the Centre and it is expected that in the Second Five Year Plan, there will be Maternity and Child Welfare Centres incorporated in the Primary Health Centres. To date, there are 3,126 Maternity and Child Welfare Centres.

Of the group of communicable diseases, cholera and small-pox still continue in some of the States in India. Plague has been controlled for no mortality was recorded for 1955 and low for 1956. Respiratory diseases are under control, which may be attributed to the National Tuberculosis Programmes, a high priority being given by the States and the Centre. To date 8,34,47,765 persons were tuberculin tested and 2,90,14,000 B.C.G. vaccinated. Similarly the figures under the group Fevers, which include malaria, are also on the decline. This can be attributed to the drive by the Centre and the States in the implementation of the National Malaria Control Programme. But statistics on diarrhoea and dysentery show an increase. The National Water Supply and Sanitation Programme was instituted in August-September 1954 and it is expected that much will be effected in the Second Five Year Plan to eradicate the insanitary conditions as far as possible, by the introduction of safe water supply and elimination of sewage and garbage on modern scientific lines.

Except for surveys conducted by Madras or by the V.D. Touring Teams in Himachal Pradesh or Mysore, the degree of incidence of V.D. has not been estimated on a country-wide basis. Few V.D. clinics were opened during the period and most of them were attached to hospitals. There were 14 V.D. clinics in Special Institutions with a bed strength of 50. The total number of beds for the country as a whole in 1956 was 818 as compared to 557 in 1954.

Anti V.D. Teams toured the States of Jammu and Kashmir, Punjab, Uttar Pradesh, and West Bengal. Specialists in V.D. were being appointed in the States and a V.D. Control Scheme was sanctioned under the Second Five Year Plan. More advanced States like Bombay, Madras, Orissa and West Bengal expended large sums of money each year on clinics and centres and on appointment of sanitary inspectors and V.D. social workers for case-finding and follow-up. In addition, the World Health Organisation has undertaken to supply a Serological Field Unit to the V.D. Department of the Sarojini Naidu Medical College, Agra.

Leprosy is a major health problem in most of the States, except in the Islands of Andaman and Nicobar, Ajmer, Bhopal, Coorg, Delhi, Kutch and Tripura. Sample surveys indicate a high incidence in Madhya Pradesh, West Bengal and Himachal Pradesh, but, the incidence has been grossly

estimated to be high in Andhra, Bihar, Bombay, Jammu and Kashmir, Madras, Orissa, Punjab, Uttar Pradesh, Madhya Bharat and Travancore-Cochin. Modern treatment is the silver lining to the dark clouds hovering over the long suffering humanity of lepers. Sulphones and sulphatrone and hand and foot surgery contribute largely in the fight against the disease. The Government of India in consultation with the Government of Madras have established the Central Leprosy Teaching and Research Institute at Tirumani. Chingleput in 1955 providing Rs. 28 lakhs for expansion in the Second Plan period and a budget allotment of Rs. 7 lakhs for 1956-57. Four Study and Treatment Centres and 37 Subsidiary Centres were established to date, under the Leprosy Control Programme with subsidy from the Central Government.

Blindness, total and partial in any country, is a handicap to the individual and this condition is fairly common in India. Trachoma is considered to be a major health problem.

The Adviser on Ophthalmology of the W.H.O. Regional Office for Europe had recommended as early as 1954 the establishment of a Pilot Project for the study of diseases of the Eye. The Project was inaugurated at Aligarh on the 18th October, 1956 at the Gandhi Eye Hospital and Institute of Ophthalmology. The scheme was estimated to cost Rs. 1.93 lakhs and to cover a period of two years.

Compulsory primary vaccination against small-pox, care of infants and toddlers by the Maternity and Child Welfare Centres and the holding of static eye camps or by mobile eye units were some of the measures adopted by State Governments, while cornea transplantation operations were done at Madras and Uttar Pradesh. The Gandhi Eye Hospital Trust, Aligarh established a Contact Lens Centre with Government subsidy.

As the epidemiology of the disease in India is not known, a scheme for the mass treatment of trachoma will be drawn up after the preliminary survey and study of the problem.

The country has been moving ahead in establishing various services for providing medical relief to people both in urban and rural areas. X-ray sets, which were 302 major and 456 minor in 1953 were increased to 435 major and 478 minor by 1956. This increase is insignificant for it is less than 6% of the total number of hospitals and dispensaries having this facility in 1953 and 6.1% in 1956. The Government of India will place indents for X-ray and laboratory equipments for 60 tuberculosis clinics for the country in the first instance. The State Governments have been progressively increasing the number of hospitals and dispensaries, upgrading institutions by improving the standard of equipment and appointing highly qualified technical personnel. Certain upgraded dispensaries were converted into Primary Health Centres.

Similarly facilities for radium treatment continue to remain inadequate. The total quantity available in 1956 is 15,792.75 mgs and 34 Needles of varied strengths to the quantity available in 1953 of 11,403.05 mg.

Blood transfusion service is also making satisfactory progress. Blood Banks and Blood Transfusion Units are being established. But certain States as Pepsu, Saurashtra, Bhopal, Coorg, Himachal Pradesh, Kutch, Manipur, Tripura and the Andaman and Nicobar Islands are still to deve-

lop blood transfusion service. Lack of Blood Banks is no indication of the lack of blood transfusion service for that particular State, for, such facilities are provided at all Government hospitals.

The question of rehabilitation of displaced persons is continuing, though it is not as acute, as it was in previous years. General hospitals and dispensaries render medical aid in general, while certain States as Punjab, Jammu and Kashmir, Orissa, West Bengal, Bhopal, Manipur and Tripura have special institutions for their care and comfort.

Progress in the field of mental health and psychiatric problems has been very limited to date. Except for the 34 Mental Hospitals, which function largely as custodian agencies, the facilities for treatment are few. The Insulin shock Treatment Therapy and the Corosol Convulsive Therapy are practised in certain institutions. Occupational Therapy has been restricted. Desiring to have a model Centre for treatment of mental disorders, the management of the Hospital for Mental Diseases, Ranchi was taken over by the Government of India in June, 1954 and a provision of Rs. 8.25 lakhs made in the Second Plan for the development of the hospital. A similar provision has been made for the establishment of a Home for the Incurable Mental patients at Ranchi.

A number of Health Units have been in operation in rural areas. They were primarily intended to propagate information on matters concerning public health and to act as testing field centres of public health problems and as demonstration centres. The Units at Bombay, West Bengal, Hyderabad, Saurashtra, Travancore-Cochin and Delhi have produced good results. Besides functioning as training grounds for medical and other personnel, their future activities reflect closely the general conditions of the country with regard to birth rates, death rates, infant mortality rates and other data of importance.

It is the intention of the Government of India to promote the establishment of Primary Health Centres, each Centre to serve a population between 60 to 65 thousand. Rs. 50 lakhs were provided in the revised First Five Year Plan, but State Governments could only establish 65 Centres, towards which the Centre paid a grant of Rs. 20,08,940. These Centres were conducted in the National Extension Service Blocks.

Population has been reported to be increasing rapidly. Such increase, if not checked, will retard economic progress and limit seriously the rate of expansion of social service in the country. The answer to the problem is planned parenthood and as such, the Family Planning Programme was born. An accurate picture of the factors contributing to the rapid population increase and the evolution of suitable techniques of family planning making such procedures integral parts of the services of hospitals and public health form the basis of the programme. In the first stage of planning, efforts were primarily directed to the building up of public opinion in favour of family planning by subsidies to State Governments and other agencies, training and research and the setting up of a Central Organisation with education of the masses. Grant-in-aid amounting to Rs. 6.28 lakhs were sanctioned for 132 clinics in 1955-56, which were in addition to the 73 clinics sanctioned in 1954-55. Thus 205 clinics were sanctioned during the First Plan period. A special officer was appointed in September, 1956 in the Directorate General of Health Services and the first meeting of the Family

Planning Board was held on 27th October, 1956. 20 Medical Biological and Demographic Research Schemes were started and 13 of these schemes were being continued during 1956-57. Rs. 3 lakhs were sanctioned by the Government of India for the construction of the building for a Contraceptive Testing Centre at the Indian Cancer Research Centre, Bombay. A Demographic Teaching and Research Centre is to be developed into a Regional Centre in collaboration with Shri Dorabji Tata Trust, Bombay. Short term Training Courses in Family Planning are being conducted for Doctors, Health Visitors and Social Workers, while Family Planning Officers were being appointed at State Headquarters in the State's Directorates of Health Services.

A review of Maternity and Child Welfare Services reveal satisfactory progress on the side of expansion. The Services continued under the State M.C.H. Programmes and State Urban and Districts Health Organisations; under Community Development and National Extension Services and under Central assistance to States. By 1954, 15 out of the 23 States had established Maternity and Child Welfare Bureaux at their Directorates of Health. The 'B' States and some of the 'C' States did not have M.C.H. Bureaux. As regards health services for mothers, institutional beds in urban areas were more than the prescribed standard of one maternity bed for 100 births and provided for 60% of the births in cities. There were 18,956 maternity beds in 1955 as against 15,000 in 1954. They provided services to approximately 10% of the total births. It was estimated that the existing maternity services in the urban and rural areas covered 25% of the births and that 20% of the total births received skilled care.

Children form the major group of the vulnerable groups of population and demand the highest priority in any programme of health and care. Yet no State has been able to fulfil the 3 aspects of care of the child, namely, medical inspection, treatment facilities and follow up of cases. Efforts are being made to organise medical inspection of school children in various States. Many procedures have to be followed to make the service responsible and efficient.

To combat malnutrition, ameliorative measures were undertaken both by the Centre and the States and consisted of school feeding schemes, distribution of protective foods and community feeding programmes with UNICEF milk.

To study the palatability and acceptability of food yeast as a supplement to Indian diet, large-scale consumer trials were conducted in 1955 in four selected States of Bihar, Madras, Uttar Pradesh and West Bengal with food yeast received from U.S.A. Results were promising in that there was a decided improvement in the vitamin B complex deficiency system.

Small-scale consumer trials of fish flours were also conducted. The smell was objected to by certain groups. Here again improvement in general health was observed.

Food like water is a primary necessity of life. Scarcity of the essential articles of food and the high cost of living result in articles being adulterated. The Prevention of Food Adulteration Act 1954 was, therefore, enacted by the Parliament.

(viii)

Food Inspectors were appointed and samples of foods were examined. Adulteration was observed chiefly in milk products, ghee, edible oils, flours and other food stuffs. Action was taken against adulteration by the State Governments by prosecutions, fines and punishments.

Nursing in India has been undergoing radical changes to cope with the needs of the people of the country. The Indian Nursing Council had recommended to the State Nursing Councils that Public Health Nursing be integrated in the Basic Course in Nursing and Midwifery. This was accepted by all State Nursing Councils. Further, the syllabii for the courses in Tuberculosis Nursing and Ophthalmic Nursing were approved by the Council. The Council also recognised the Himachal Pradesh Government Examination Board, Madras Nurses and Midwives' Council Examination Board and the Examination Board of the Nurses Auxiliary of C.M.A.I. (South India Branch) as authorities for granting qualifications for the course of Auxiliary-Nurse-Midwives. Further the All India Institute of Mental Health, Bangalore was recognised as the authority for granting qualifications in psychiatric nursing, and the Public Health Department, Madras State for Public Health Nurses. The B.Sc. (Hons.) in Nursing and the Post-Certificate Course in Teaching and Nursing Education continued as in previous years at the Nursing College, New Delhi. Child Guidance Clinics started 5 years ago progressed in cooperation with the Psychiatric Departments of the Safdarjang and Irwin Hospitals, New Delhi. The expenditure on the College of Nursing, New Delhi was Rs. 3,35,000 during 1955-56 and Rs. 3,56,443 in 1956-57. The College receives grants from the Government of India. New Training Schools were being opened in nearly all the States, so as to increase the Nursing Personnel of the country. Nursing Superintendents were also being appointed to supervise the nursing services. The Central Government Subsidy Scheme for the training of Auxiliary-Nurse-Midwives was going ahead in the States of Bombay, Madras, Madhya Pradesh, Delhi, Himachal Pradesh, Manipur, Tripura and Vindhya Pradesh.

With about 1% of Indian labour population to be looked after, the Employee's (State) Insurance Scheme has made rapid progress. It has covered 11.52 lakhs of employees, which is more than half of the insurable population in the country. It has been accepted in the States of Andhra, Bombay, Kerala, Madhya Pradesh, Madras, Punjab, Rajasthan, Uttar Pradesh, West Bengal and Delhi.

Fairs and festivals formed at one time the foci of infection from which radiated the epidemics of cholera and small-pox. These foci have been eliminated by mass vaccination, provision of safe water supplies and prompt disposal of waste and sewage by the Health Authorities. This progress is gratifying to note, since fairs and festivals varied from 1 to 10,000 in a State.

Railway Health Services maintain a standard of efficiency in looking to the needs of the railway staff and sanitation at railway stations and railway colonies. Where medical facilities are not available at hospitals, dispensaries, etc. arrangements are made with local Government hospitals for treatment and reimbursement of cost of treatment. Regular checks on the sale of foods at stations and colonies and analysis of water and disinfection of water supplies are carried out by the railway medical staff.

(ix)

Drugs Act and Drugs Rules were in operation in all Part 'A' and Part 'C' States and in Part 'B' States of Pepsu, Saurashtra and Travancore-Cochin up to 31st October, 1956, but, with the Re-organisation of States, the Act was extended to all parts of India. The provisions of the Act became operative in all the States except Mysore and Rajasthan, where necessary machinery is being set up for the enforcement of legislation.

Legislation was introduced to effect certain amendments in the Drugs Act of 1940 by the coming into force of the Drugs Amendment Act of 1955 the same year. The Act allowed for the enhancement of powers of Drugs Inspectors, defined the term 'Manufacture' and provided for uniformity of the rules in all States. The provisions that all patent and proprietary medicines will have to be marked with their composition on the labels of the containers became effective from September 1956. The Drugs and Magic Remedies (Objectionable) Advertisements Act of 1954 was enacted to counteract the increasing danger to public health consequent on people taking an indiscriminate course to self-medication with drugs, remedies, etc. It came into force on 1st April, 1956. The Customs and the Postal Authorities control the import and export of objectionable advertisements.

In view of the statutory status of the Central Drugs Laboratory, Calcutta, it was considered to set up a separate inspection Unit at the Medical Stores Depot, Calcutta to undertake trade testing performed by the Central Drugs Laboratory on behalf of Medical Stores Depots. These Depots continued to receive medical and other stores for distribution in India on behalf of International Organisations. The Technical Committee appointed by the Government of India in 1956 recommended the installation of machinery and equipment for laboratories and factories for modernising the Medical Stores factories at Bombay and Madras.

The ports of Bombay, Calcutta, Madras and Cochin continued to be the only recognised ports of entry, *via* the sea for import of drugs into the country, the port of Bombay accounting for more than half of the value of the drugs imported. Samples from imported consignments were examined to ensure whether they fulfilled the requirements of the Drugs Act. Biological drugs stored in godowns of importers were also subject to stringent quality check under Rule 26 of the Drugs Rules. A check was maintained in respect of essential drugs imported into the country. Action was taken in cases when provisions of the Drugs Act and Drugs Rules in so far as imported drugs were contravened, either by correction of the defects, warnings, prosecutions with fines and in case of serious contraventions, total destruction of the drugs or re-export to the country of origin.

Streptomycin and penicillin imported in 1956 was twice that imported during 1954-55. The increase in imports of carbasone, anti-leprosy drugs, caffeine and procaine hydrochloride and ephedrine hydrochloride was noteworthy.

The Indian Pharmacopoeia was published in 1955. Work is in progress to keep it up to date for later publications.

The number of cases examined by the Serologists of the Centre and the States are increasing year by year. Number of exhibits analysed in 1954

(x)

was 27,054 while that in 1955 was 39,984, an increase of about 45% over 1954.

To fulfil India's obligation with W.H.O., the Indian Port Health Rules, 1938 were revised to conform with the International Sanitary Regulations and brought into force on 27th February, 1956 as the Indian Port Health Rules, 1955. With the promulgation of the above rules, unprotected persons arriving in India from yellow fever infected areas within 9 days were isolated for the requisite periods. A departure was made by introducing the certificate of Medical Inspection for sea vessels leaving for foreign ports on the discontinuance of the Bill of Health. It was reported that there was no quarantinable disease on board the Pilgrim ships during the period under review.

International air traffic was similarly subjected to the Indian Aircraft Public Health Rules, 1954, which came into effect on the 17th October, 1955 with certain reservations. The Government of India provided emergency landing grounds for International aircraft due to bad weather or otherwise at the Airports of Bhuj, Poona, Ahmedabad, Gaya, Begumpet and Lucknow.

The scheme for the pre-entry Medical Examination of Seamen, which was introduced at Bombay and Calcutta in 1950 was extended to the other major ports. Facilities for treatment of seamen to free laboratory and other tests were allowed by the Government under special sanction to those undergoing medical examination by doctors appointed by the Government.

Medical Education is fast being stepped up to meet the lack of trained personnel to man the many medical services. The 33 Medical Colleges of 1933 have been increased to 44 by 1956 and more are to be established in the very near future. Medical Departments were upgraded for training teachers and research workers in medicine and surgery providing post-graduate courses for students. Research Institutions were being newly built or expanded or taken over by the Government of India as the All India Institute of Medical Sciences, New Delhi, the Tata Memorial Hospital, Bombay and the Central Leprosy Teaching and Research Institute, Chingleput.

The Government of New Zealand assistance under the Colombo Plan for establishing the All India Institute of Medical Sciences, to the extent of one million pounds, was a magnificent gesture of one country to another. This Institute is to comprise of a Medical College, a Dental College, a Nursing College, a Post-Graduate Teaching Centre, a 650-bedded hospital and Urban and Rural Organisations to provide field centres for work. The All India Institute of Medical Sciences Act 1956 (25 of 1956), which was passed by the Parliament in May, 1956 came into effect from 15th November, 1956 from which date, the Institute became an autonomous body.

The Medical Council of India prescribed standard requirement for a Medical College of 100 students and made recommendations for recognising Degrees of Colleges. Concessions were granted to Licentiates for joining the Condensed M.B.B.S. Courses were further extended for a period of 5 years beyond April, 1956.

Fellowships and Study Tours for higher training abroad were continued through the good offices and assistance from W.H.O., T.C.M., Colombo

(xi)

Plan and Rockefeller Foundation. Contributions by Ford Foundation were in the setting up of the Orientation Training Course at Singur (Calcutta) and the Research-cum-Action Programme in Environmental Sanitation at the Najafgarh Health Unit, Delhi.

The seven Dental Colleges in India award the B.D.S. Degree instead of L.D.Sc. Diploma. Due to the few Dental Colleges the number of Dentists and consequently Dental Clinics are also few. Hence the Government of India provided Rs. 150 lakhs for the establishment of new Dental Colleges and for the expansion of the existing ones. An additional sum of Rs. 151 lakhs was also made for the Second Plan for the establishment of 250 Dental Clinics. Dental Clinics are usually attached to State hospitals and these hospitals offer various types of facilities for dental treatment. Research Projects approved by the Indian Council of Medical Research were started in 1956. The Dentists Amendment Act XII of 1955 to the Dentists Act of 1948 was passed by the Parliament in 1956.

It is recognised by Health Authorities that to effect progress in Health Education willing cooperation of the people is essential. The decision of the Government of India to include in the First Five Year Plan the establishment of the Central Health Education Bureau in the Directorate General of Health Services and the recommendation of setting up similar Bureaux in Health Directorates of the various States was welcomed. The Central Health Education Bureau was sanctioned by the Union Ministry of Health in October, 1955 and its first officer appointed in November, 1956. The scheme would be continued in the Second Five Year Plan at a total cost of Rs. 17.75 lakhs.

Research Institutions are now conducting their activities under congenial conditions as funds, staff and equipment are available to them through the joint endeavour of the Indian Council of Medical Research, the Government of India and International Bodies.

The Council supported 167 research schemes in 1956 as against 115 in 1955 and 116 in 1954, with a corresponding increase in expenditure from Rs. 16,29,103 in 1954 to Rs. 33,00,000 in 1956, showing an increase of 100% over 1954. The projects covered are :—

1. Improvement of environmental sanitation and control of communicable diseases;
2. Development of indigenous drug resources;
3. Improvement of nutritional status of the people; and
4. Furtherance of research in medical colleges, particularly in clinical research.

The Drugs Research Laboratory, Jammu and Kashmir has compiled a list of herbarium sheets and analysed finished pharmaceutical preparations and medicinal plants. Emmenagogue action on guineapigs with alcoholic extracts of plants were being carried out. Investigation on the effect of B.C.G. in lepromatous cases were being continued at the Central Leprosy Teaching and Research Institute, Chingleput.

By tissue culture screening, the enteric viruses isolated from the Jamshedpur fever cases and Hepatitis cases of Delhi against serums anti-biotics were identified as Coxsackie B4 and one as polio virus type 5. Polio virus is common in India.

(xii)

The noticeable fall in plague and cholera was reflected in the low demand for vaccines by States from the Haffkine Institute, Bombay, which manufactures vaccines, sera, anti-toxin, sulpha drugs, vitamin tablets and parenteral solutions on a large-scale. Cholera research has been accelerated due to the discovery of a suitable laboratory animal by the Institute for introducing experimental animal infection. The supply of anti-snake venom serum by the Institute has increased simultaneously by the introduction of the snake farm. The Central Research Institute, Kasauli continues to manufacture vaccines, sera and toxoids on a large-scale. Another major public health manufacturing Teaching and Research Centre is the King Institute of Preventive Medicine, Guindy, Madras.

The Pasteur Institute of South India, Coonoor, cooperated with the V.D., Serology and Laboratory Section of the W.H.O. in its programme of Inter-Laboratory Evolution of serological methods. This has been of great value in assessing the relative sensitivity and specificity of the various tests and techniques, as well as the usefulness of freeze-dried sera for reference purposes. Various studies on neuro-pathology, contraceptives, Mammary Tumour Inciter (M.T.I.), oral cancer, radio-active isotopes in biological research were continued to be conducted by the Indian Cancer Research Institute, Bombay.

Chemical composition of fruits and vegetables obtained locally are analysed for moisture, fats, protein, mineral matter and vitamins by the Nutrition Research Laboratory, Coonoor, where fundamental and applied aspects of problems of human nutrition are investigated.

The Central Drugs Laboratory, Poona is the National Laboratory for distributing the International Biological Standards to Institutions in India. It continues to receive International standards from the National Institute for Medical Research, Mill Hill, London. It conducted research on *rauwolfia serpentina*, *datura*, *buchu*, vitamins and anti-biotics and made toxicological studies on antimony preparations.

Another institute of importance is the school of Tropical Medicine, Calcutta, which conducted research in indigenous drugs, pharmacology, protozoology, helminthology and filariasis. Other studies were on dermatology and mycology, leprosy and influenza.

The Malaria Institute of India, besides conducting researches on malaria at Delhi and at its South India Branch, Coonoor, conducted routine instructional courses for manning the National Malaria Control Programme. It conducted studies and experiments on filariasis at Delhi, Mangalore, Travancore-Cochin and Orissa, for the National Filaria Control Programme which came into operation in 1954-55.

The Government of India established the Central Institute of Research in Indigenous systems of Medicine in association with the Gulab Kunwarba Ayurvedic Society in Jamnagar in 1953. It has a 50-bedded hospital and an O.P.D. A standard has been prepared by the Institute laying down the fundamental equivalents in weights and measures used in Ayurveda in the metric and in the English systems. In addition to the Ayurvedic and Modern Sections, a new unit (Siddha) was started during 1956-57. The budget provision of Rs. 4.00 lakhs for 1956-57 was paid in full as grant-in-aid to the Institute.

(xiii)

Coming to the voluntary organisations, they are to be commended for their selfless services to the people in times of stress as in famines, cyclones, disasters, as well as in times of peace. The Tuberculosis Association of India developed the Domiciliary Service Scheme during the year 1956 and utilised the Seals Sale collections for tuberculosis schemes in various States.

The Hind Kusht Nivaran Sangh with its 13 branches in the States extended its activities in leprosy research to Calcutta, Bombay, Chingleput and Vellore. It made constructive contribution towards rehabilitation of healed cases of leprosy by equipping a house in Vellore, for those who seek physiotherapy and surgical treatment.

The progress achieved by the Gandhi Memorial Leprosy Foundation was in overcoming some of the practical difficulties in the working and expenditure, control units, control clinics, surveys, research and training of personnel in leprosy.

The work of the Mission to Lepers has steadily progressed with its opening of the Wellesley Bailey Children Sanatorium at Faizabad and another, the Schieffelin Leprosy Research Sanatorium at Karigiri in 1954. A move was made in 1956 in the direction of giving more medical relief to rural areas and work of restorative and surgery centres at six different places.

Floods and disasters in India are a recurring feature leading to great loss and suffering to humans. The Indian Red Cross Society rendered considerable relief in the affected areas of Uttar Pradesh, Bihar, Assam, Punjab, Delhi, Jammu and Kashmir, Rajasthan, Tripura and West Bengal. Further general relief was given to the under-nourished mothers and children with clothes, multi-vitamin tablets, antibiotics and sulpha drugs. The Society presented milk, medicines, vitamins, protective and processed foods to 396 hospitals, and dispensaries, maternity and child welfare centres, schools and orphanages and social welfare institutions in 1956 as against 230 in 1954.

The Mobile Eye Hospital, Lajpatnagar and the Eye Relief Camps and Mobile Units of the All India Blind Relief Society continued to give relief as in previous years.

The period 1954 to 1956 has been one of steady improvement and actual achievement in fields of public health and medicine including research. It is now required to increase the tempo of work at all levels and promote coordination and evaluation of schemes undertaken and achieve the targets set up in the fields of medical education and public health.

(xiv)

CHAPTER I

POPULATION AND VITAL STATISTICS 1954—1956

The Census of 1st March, 1951 enumerated 3,569 lakhs of persons as against 3,128 lakhs in 1941 in the Indian Union. There was thus, a net increase of 14.7% during the decade 1941—50. When considering the estimated mid-year populations for the years 1953, 1954, 1955 and 1956, it has been estimated that there is a yearly increase of about 50 lakhs of persons. The density in different parts of the country vary from 1,035 (644 per kilo-metre) persons per square mile in Kerala to 72 (45 per kilo-metre) in Manipur. The density per kilo-metre for India in 1956 is 116 persons as against 113 in 1953. From a study of Table I (Appendix) on Population—Density of certain countries, it will be observed that the increase in density per kilo-metre between the years 1953 and 1956 is 12 (China), 9 (Netherlands), 7 (Ceylon), 6 (Japan) and between 1 and 3 for India, U.K., U.S.A., Canada and Europe.

At the time of 1951 Census, 2,950 lakhs of people were reported to be living in rural areas, and 619 lakhs *i.e.* 17.3% in cities and towns. It has been estimated that in 1955 the urban population had increased to 18.4% of the total in the last five years. The percentage of urban population in different states for the years 1955 and 1956 is as follows :—

Name of the State	Percentage of urban population	
	1955	1956
Andhra Pradesh	16	17
Assam	5	5
Bihar	7	7
Bombay	33	28
Kerala	—	13
Madhya Pradesh	14	12
Madras	23	24
Mysore	26	23
Orissa	4	4
Punjab	19	19
Rajasthan	18	18
Uttar Pradesh	14	14
West Bengal	24	24
Delhi	84	82
Himachal Pradesh	42	4
Manipur	—	0.5
Tripura	8	7
Andaman & Nicobar Islands	—	26

Thus the percentage of rural population is highest in Orissa (96%) and lowest in Delhi (18%) for 1956.

The urban population in the country is spread over a number of small and medium sized towns and a few large cities. There were 85 cities with populations more than 1 lakh in 1956 as against 73 in 1951.

A characteristic feature of the population can be judged from its age structure. Of the total persons enumerated at the time of the Census, 13.5% were infants and young children under the age group of 5 years and 24.8% were boys and girls between the ages of 5 and 14. Young men and women between the ages of 15 and 24 and between 25 and 34 formed 17.4% and 15.6% of the population respectively. The middle-aged men and women of the age group 35 to 54 were 20.4% and elderly persons beyond the critical age of 55 accounted for 8.3% of the total number. Hence 45% of the population is in the reproductive period of life.

The percentage of elderly persons is much larger in U.K than in India. An analysis of accompanying Table shows a higher percentage of women in the reproductive age group 15 to 44 years in countries as India, Ceylon, Japan, Phillipines and Morocco and a lower percentage in the more advanced countries as Sweden, U.K. and U.S.A.

Countries	Year	Total number of women in the age group 15—44	Proportion of women in the 15—44 age group.
Morocco	1952 Census	17,22,250	45.92
Canada	1955 Estimate	33,12,000	43.07
Guatemala	1950 Census	6,24,971	35.28
U.S.A.	1954 Estimate	3,46,70,000	42.43
Ceylon	1953 „	17,93,000	46.45
Japan	1954 „	2,07,54,000	46.21
Taiwan	1953 „	17,80,547	44.05
Phillipines	1953 „	50,23,320	47.81
France	1954 Census	8,59,092	38.55
England and Wales	1954 Estimate	92,36,000	40.12
Sweden	1953 „	14,87,938	41.35
India	1951 Census	—	45.69

It is a recognised fact that registration of births and deaths is an important item in population statistics. If registration is complete and accurate it can serve as a reliable source of informaton on changes in population. The present position regarding registration system in different States in India is summarised in Appendix Tables Nos. 2 & 3.

Registration is broadly divided into four categories on the basis of available registration agencies. They are :—

- (i) The Municipal Health Authorities, who are registrars in urban areas, reporting being done by their staff.

- (ii) The subordinate police official who is the registrar in rural areas, reporting being entrusted to the Village chowkidar or watchman.

These two groups constitute the major reporting agencies in the country, while the other two categories are:—

- (iii) Village panchayats who are responsible for registration in rural areas, and
- (iv) Where registration is done by the village Headman in rural areas, the reports are submitted to the Tehsildar instead of Civil Surgeon.

Registration when properly maintained and checked gives an approximate picture of the situation in the change in population as in the States of Assam, Bihar, Bombay, Madhya Pradesh, Madras, Orissa, Punjab, Uttar Pradesh, West Bengal, Mysore and Delhi, and it is deficient in the States of Jammu & Kashmir, Rajasthan, Manipur and Tripura. Registration is incomplete in remaining States. Officials on routine visits to areas under their charge try to detect omissions in registration of births and deaths and bring them to the notice of the Registration Authorities concerned.

The percentage of omissions of births and deaths for the three years 1954 to 1956, indicate the degree of accuracy and completion of registration in the following statement :—

Name of the State	Percentage of omission in					
	1954		1955		1956	
	Births	Deaths	Births	Deaths	Births	Deaths
Andhra	5.5	2.8	—	—	—	—
Assam	34.1	40.5	—	—	—	—
Bombay	1.1	0.4	0.5	0.1	—	—
Madras	—	—	3.4	1.8	4.3	2.1
Punjab	0.8	0.7	0.6	0.6	—	—
Travancore Cochin ..	—	—	8.9	6.7	—	—
Uttar Pradesh ..	—	—	1.0	1.2	1.1	2.1
Himachal Pradesh ..	—	—	14.4	3.8	17.0	5.3

The Health Authorities of the various State Government are fully conscious of these deficiencies and make continuous efforts to improve the situation.

Registered Birth rates are given in Table No. 4.

The completeness of registration varies from State to State and no attempt is made to calculate an All India Birth Rate relating to the total registered births in the country to the total population.

An important feature of birth rate is the regular seasonal variation. In each State birth rate shows a definite minimum and definite maximum during

the course of the year. Yet another aspect of birth statistics is the distribution of total births in two sexes. The sex ratio, *i.e.* the number of males per 100 females born is shown in the following table :—

Name of the State	No. of males per 100 females born.		
	1954	1955	1956
Andhra	106	107	107
Assam	+	107	106
Bhopal	+	+	+
Bihar	+	+	+
Bombay	+	107	108
Coorg	117	+	+
Delhi	110	111	109
Jammu & Kashmir	+	+	+
Kerala	+	107	107
Madhya Bharat	+	+	+
Madhya Pradesh	108	+	+
Madras	106	106	106
Mysore	+	104	104
Orissa	108	+	106
Pepsu	+	+	+
Punjab	114	113	114
Rajasthan	+	121	119
Uttar Pradesh	120	118	121
West Bengal	108	108	109
Himachal Pradesh	+	113	112
Manipur	+	+	125
Tripura	+	104	120
Andaman & Nicobar Islands	+	99	+

+ Not available.

Thus, the number of births per 100 females born is predominantly high and continues to be so. The reason for this natural increase has not been given to this day and could form a basis for scientific enquiry for the future. Among the Major States this ratio was the highest in Uttar Pradesh and lowest in Mysore in 1956, as it was in 1953.

Cause of death is a vital piece of data recorded in respect of each death at the time of registration. Few cases are attended by qualified doctors

prior to death and consequently no elaborate classification of mortality data relating to the cause of death is possible. Deaths are generally classified under the three major causes, namely, cholera, small pox and plague and three groups of causes, namely, fevers, diarrhoea-dysentery and respiratory diseases. The rest is grouped together, though some of the larger municipal corporations compile mortality statistics for a fairly large number of causes. The percentage of deaths for cholera, diarrhoea and dysentery and the group of respiratory diseases is higher in 1956 than in 1954. As comparative figures for smallpox, plague, fever are not available, no comments are made. It is expected that with our National Health Programme on Malaria, Tuberculosis, Filaria, Water and Sanitation, a better health standard will evolve and the diseases controlled and eradicated. (Table No. 5).

Percentage of deaths above the age of 50 is an important index of health and demographic conditions of a nation as will be observed from the table below for 1953 and 1956.

Country	Percentage of Deaths	
	1953	1956
India	27.3	27.4
England & Wales	86.2	88.4
Canada	72.9	74.8
Japan	60.3	63.8
Israel	61.7	59.7
Argentina	55.6	56.4
Yugoslavia	49.9	51.1
Ceylon	33.0	35.4
Malaya	28.0	28.5
Mexico	26.7	27.5
Thailand	28.1	26.3
Egypt	19.6	22.7
Guatemala	19.4	20.2

However, Table No. 6 indicated that the percentage of deaths among the age group up to 14 years was 50.23% in India, 17.32% for Japan, 49.77% for Ceylon for the year 1955. U.K. had only 4.13% for 1956, while U.S.A. recorded 9.33% for 1954. This high death rate in the young age group below 14 called for increase in training facilities and establishment of Health Centres for the care of infants and children in India.

This index is low for India. (Appendix table 7) details the registered death rates in different States. It showed a downward trend except for the States of Punjab and Kerala. It may be observed that the death rate for the various States is slightly higher in urban than in rural areas for the period 1955 and in 1956. (Table 7).

CHAPTER II

GENERAL EPIDEMIOLOGY

Smallpox—1954—1956

Smallpox is the most prevalent of the three major diseases and responsible for 0.925%, 0.84% and 0.53% of deaths in the country, during the years 1954, 1955 and 1956, respectively.

It has been observed that the disease was prevalent throughout the year in almost all the States, its maximum incidence being in the summer months except for the States of Madras, Punjab, Kerala, Uttar Pradesh, Andhra and Manipur. (Table No. 10).

The prevailing conditions in the different States are further shown by the number of districts affected, cases notified and case fatality rate etc., in the same table.

Smallpox was epidemic in some of the districts of Madhya Pradesh, West Bengal, Coorg, Vindhya Pradesh, Himachal Pradesh, endemic in Punjab, Uttar Pradesh, Madhya Bharat, Tripura, and sporadic in the other States. The immunisations carried out reveal one aspect of the work done by the health authorities. Primary Vaccination figures in each State for each of the periods show that besides the protection of children, there are still others who have been protected for the first time and may include beside children, adults as well. The need for more intensive vaccination drives by Government and local bodies become all the more obvious and hence important. (Table No. 11 & 12). The number of deaths is still comparatively high for the age groups under one year and between 1 and 10 years. That this should still be present calls for renewed and intensified efforts to bring about a more complete registration of births and deaths and immunisation. (Table No. 13).

Plague—1954—1956

The incidence of plague has reduced with the introduction and use of DDT as the insecticide. States which were free of plague during the period under review were :—

Period					States
1954, 1955 & 1956	..	..	..	..	Bombay, Himachal Pradesh, Punjab, Rajasthan, Tripura and West Bengal.●
1954 & 1955	..	..	..	..	Bihar, Bhopal, Coorg, Hyderabad, Madhya Bharat and Kutch.
1954	..	..	..	..	Vindhya Pradesh.
1955	..	..	..	..	Assam, Madhya Pradesh, Madras and Pepsu.
1956	..	..	..	..	Andaman & Nicobar Islands, Manipur and Rajasthan.

The disease was endemic in certain regions of Andhra, Madhya Pradesh, Madras, and Mysore.

Deaths were reported from Andhra, Madras, Uttar Pradesh and Mysore during 1954 and 1956 and from Assam and Kerala in 1956 for the first time. During 1955 deaths due to plague were also reported from the State of Andhra (9) Uttar Pradesh (56) and Mysore (123). There has been a steady and continuous improvement in all States, but the slight rise in incidence at times is an indication that constant vigilance is to be exercised. The table in the Appendix indicates the degree of incidence of plague during 1954 and 1956 (Table No. 14).

Cholera

Statistics of cases and deaths from cholera though not quite accurate and reliable are adequate for year to year comparisons for the same State. The disease is endemic in Assam, Bombay, Uttar Pradesh, West Bengal and Mysore and the infection is usually imported to neighbouring States. The geographical distribution of the disease and its seasonal occurrence appears to follow a set pattern.

Table No. 15 shows the number of districts affected, cases notified, number of deaths, case fatality ratio, total deaths expressed as percentage of deaths due to all causes, period of peak incidence and the total number of inoculations performed in different States.

A glance at the table would reveal that in Andhra Pradesh, Madras and Mysore the disease was at its highest in December and January. In most of the other States the maximum incidence occurred in summer months. Almost all the districts were affected in the States of Bombay, West Bengal and Mysore with a case fatality ratio varying between 30% and 50%. The States of Madhya Bharat, Pepsu, Saurashtra, Travancore-Cochin, Coorg, Rajasthan, Delhi, Manipur and Andaman and Nicobar Islands were free from the disease during the period. The Public Health authorities of the States affected by the disease took to mass inoculation as the most effective preventive measure besides disinfection of water supplies and anti-fly measures. Prompt control measures were taken to prevent the spread of the disease.

Andhra Pradesh : Districts of Srikakulam, East Godavari and West Godavari were severally affected by cholera from neighbouring States or in the wake of movement of labour. Prompt measures were taken to control the disease.

Assam : There were no severe out-breaks of cholera in the State of Assam, localised out-breaks were brought under control by prompt and timely action. The incidence was highest in the summer months.

Bihar : Patna, Gaya and Shahabad were the worst affected districts of the State, during the period under review. Practically no district was free from the disease. Fully equipped hospitals and cholera treatment centres were opened and temporary cholera regulations under Epidemic Diseases Act were enforced.

Bombay : There was a mild epidemic of cholera in the State in 1954 and 1955 followed by another of a severe type in 1956. The districts of Ahmedabad, Amreli, Banaskantha, Broach, Kaira, Mehsana, Panch Mahals, Sabarkantha, Dangs and Ratnagiri of old Bombay State and all the districts

of Saurashtra and Kutch and Nagpur and Akola districts of Vidarbha were completely free of the disease. But the disease prevailed in a severe form in the districts of Sholapur, West Khandesh, East Khandesh, Ahmednagar, Nasik and North Satara of Old Bombay State and all districts of Marathwada. The incidence was mild in the remaining districts.

Isolation and treatment of cholera patients was done. All measures were promptly instituted, including concurrent and terminal disinfection in the affected villages.

Madras : The incidence of cholera in the State was much lower in 1955 and 1956 than in 1954. Mortality due to cholera was the lowest in the decade 1947 to 1956. Protected water supply, mass inoculation and the provision of mobile epidemic control units had largely contributed towards this freedom from cholera. To prevent any out-break of cholera (and on account of the pearl Fishery Operations) as that which occurred in 1928, anticholera inoculations were given and anti-fly measures conducted in Tuticorin. A severe cyclone laid parts of Madras devastated and desolate in 1955. Special staff visited and surveyed the areas and rendered immediate medical and other relief measures. *No epidemic was reported due to the abnormal condition.*

Punjab : The State remained free from cholera in 1954 and 1955. A severe epidemic of cholera was anticipated in 1956 as a result of (1) the conditions arising out of heavy rains and un-precedented floods and (2) the gathering of pilgrims in large numbers for the sun Eclipse Fairs held at Kurukshetra in December. Due to the stringent preventive measures taken by the Health Department, there was no incidence of cholera in the erstwhile Punjab State but Kapurthala district in the erstwhile PEPSU State was infected with cholera where ten deaths were reported. The Provision of Epidemic Diseases Act read with section 3 and 5 of the General Provisions Ordinance 2,005 in respect of cholera was extended to Kapurthala district. Steps were taken to disinfect public water supplies and infected houses. Mass inoculations were done in the infected areas.

Uttar Pradesh : During the year under report 3,909 deaths due to cholera were recorded against 1,448 and 2,350 in 1955 and 1956 respectively. During the months of June to August the districts of Raizareli, Deoria, Sultanpur, Bareilly and Ghazipur were highly affected.

West Bengal : Cholera is endemic in West Bengal and the incidence was the highest in 1955 (3,962) affecting, all the 15 districts, the mortality being highest in June.

Madhya Pradesh : As compared to the epidemic in 1953, those occurring in the period under review were less severe. There were 17,786 deaths in 1953, but 888 and 485 in 1954 and 1955 respectively. Epidemic squads were organised and intense control measures adopted.

Mysore : The incidence of cholera was less in 1954 than in 1955 and though the disease affected the 20 taluks in 1955 and 1956, the incidence was for less in 1956. Bellary district reported 17 attacks and with 7 deaths in 1956, under report. Seven villages in Siruguppa taluk were affected. All the remaining districts of the erstwhile Mysore State were free from cholera. Among the new districts, cholera was prevalent in Bijapur, Belgaum, Gulbarga etc., even prior to the re-organization of the States. In Bijapur district alone 55 villages and two towns were affected with 371

attacks and 126 deaths. It was observed that the adjoining districts of Bombay and Andhra Pradesh were also having cholera epidemics for a long time. A total of 54 samples of stools from suspected cases of cholera were sent from the ten districts of the erstwhile State, for bacteriological examination and none of them were declared positive for cholera. The epidemics at Bijapur and Gulbarga districts were reported to be not typical of cholera. Preventive measures like anti-cholera inoculations were conducted.

Malaria—1954—1956

To distinguish malaria from other fevers is difficult. Due to lack of laboratory facilities and the easy availability of anti-malarial drugs, the symptoms are masked and malarial parasites disappear from the blood stream. An attempt has been made in the States of Andhra, Bombay, Madhya Pradesh, Madras, Punjab, Uttar Pradesh, West Bengal, Madhya Bharat, Mysore, Kerala, and Delhi to register malaria deaths separately, but it is not possible to assess as to how far, the statistics regarding malaria can be dependable. In some of the other States malaria mortality figures are available for certain municipalities or towns. For purposes of any possible estimates or inferences the figures available for the group of diseases designated as fevers, have to be relied on. (Table 16).

The National Malaria Control Programme was launched towards the end of 1954 and subsequently extended to more and more areas. In some States, anti-malaria measures had been in operation before this Scheme was launched. (Table No. 17).

Spleen and Parasite indices and hospital admissions showed statistically in 1955 the degree of malaria infestation before and after the start of the Malaria Control Programme. There was a definite reduction.

The heavy loss of man days each year among the peasant and labour population due to malaria alone was averted through the National Malaria Control Programme. It was estimated for Bombay State alone that there was a definite benefit when the incidence was reduced by two million cases in 1955 and 1.3 million in 1954. A brief account of the situation regarding Malaria Mortality and anti-malaria work done in different States is given below :—

Andhra : Malaria is a major health problem in the State. No district was free of the diseases as reported in 1954 and 1955. The agency and sub-agency tracts were chiefly endemic or hyperendemic for malaria. The Rayolseema districts in general and the Tungabhadra Project area in particular were subject to outbreaks of malaria epidemics. The problem ranged from Coastals malaria to hill and foothill malaria in Nellore district. Due to anti-malaria control measures, the endemic area of Araku Valley in Visakhapatnam District became almost free of the disease. In 1955, 19 old anti-malaria schemes and 115 new and expanded schemes covered a total area of 11,470 sq. miles and 5,062 villages, protecting 2.2 million of people. The Visakhapatnam Regional Malaria Organisation conducted malaria surveys in 49 places in 1955 while Bellary Regional Malaria Organisation surveyed 144 villages of Alur and Adoni Taluks, Jayanti Colonies of Adovaran, and Pallipat Panchayat in Chittoor district.

Assam : The spleen rate and parasite rates for 1956 were 19.9% and 4.1% respectively in sprayed areas. The control Units covered an area of 10.16 sq. miles and protected 4.42 million people.

Bihar : During 1954 three districts were free of malaria while the degree of endemicity varied in other districts, the highest incidence being in September. About 17 million people were covered by the 17 anti-malaria units during 1955. The parasite and spleen rates were 10.8% and 17.4% respectively.

Bombay : Every district in Bombay had the benefit of two seasons of Malaria Control in 1954. The total population living in the 26,000 malarious villages was 200 lakhs. Fresh transmission has been eliminated in the districts, as reported by the State. Steps were now being taken to give effect to the change in the objective of the National Malaria Control Programme from control to complete eradication of the disease by extending D.D.T. spraying operations to non-malarious areas during 1956. In Vidarbha, there were five National Malaria Control Programme units. There were 3½ National Malaria Control Programme units in Saurashtra and Kutch. Free distribution of quinine substitute was carried out in rural areas. The whole stock of quinine sulphate tablets with the Public Health Department was transferred to the Haffkine Institute, Parel, Bombay in March 1956 for reprocessing and subsequent distribution.

Madhya Pradesh : All districts of Madhya Pradesh were known to be malarious. A population of 78,27,148 was spread out in the highly endemic areas of 52,686 sq. miles made up of 17 districts. 17 anti-malaria units functioned. There was a significant reduction in the incidence of malaria.

Madras : The figures of mortality from malaria in Madras for the year 1956 were 1,603 as against 1,829 in 1955 and 1,981 in 1954, showing a decline, during the period. However more deaths were recorded in rural areas than in urban areas. The work has been intensified in the few areas where endemicity still prevailed. In-door residual spraying with D.D.T. in a total dosage of 200 mgs. deposit of D.D.T. per square foot applied usually in two rounds of spraying during the malaria transmission season was the sheet anchor of malaria control. While D.D.T. indoor spraying and the administration of drugs were the usual methods adopted in most areas, these methods were supplemented by anti-larval measures in urban areas and in engineering project camps. The scheme for free distribution of quinine was in force in 6,558 villages. This scheme was implemented partly through the district health staff and partly through the anti-malaria staff and social workers. The results of the Malaria Control Programme can be assessed from the working in one Region, e.g. Salem (North) district, extending over the northern Taluks of Hosur, Dharmapuri and Krishangiri.

	1950	1956
Overall spleen rate	27.6%	9.8%
Overall parasite rate	9.9%	2.4%
Total number of fever cases treated with anti-malarial	+	14,057

Districts of South Kanara, North Malabar, North Arcot, Chingleput, Madurai and Kollegal Taluk in Coimbatore district remained free of the disease.

Punjab : The Malaria Control Programme undertaken by the Anti-Malaria Organization was part of the continuation and extension of the National Malaria Control Programme. About 4.3 million of people were covered in 1954, with 7 control units in operation. One of the outstanding achievements of the State Malaria Organization had been the remarkable absence of flies and mosquitoes during the Solar Eclipse Fair held at Kurukshetra. Anti-fly and anti-mosquito measures were vigorously applied in this fair as well as in Shaheed Nagar at Amritsar in connection with the Congress Session held there with remarkable success at both places.

Uttar Pradesh : About 2/3rd of the population of the State lived in highly endemic malarious districts whereas 1/3rd of the population lived in areas of low endemicity. The anti-malaria units under National Malaria Control Programme continued to function in the State, in addition to the two special Malaria Control Schemes and five State Malaria Control scheme in five districts. A malaria survey of Baberu, Naraini and Sadar Tehsils of Banda district, Chakla and tehsil of Banaras district and Allahabad municipality was conducted in 1955 by the Malaria Branch. Survey of Ganjar area of Sitapur district was done by District Medical Officer of Health also in 1955. The anti-malaria measures in rural areas comprised of residual spraying of D.D.T.

West Bengal : Malaria was a notifiable disease in the city of Calcutta only. The incidence of malaria was highest during the month of August according to hospital figures of the areas covered by National Malaria Control Programme but the number of deaths was reported to be high during the month of January. It was gratifying to note that the number of deaths from malaria was gradually reduced as would be evident from a comparative study of the mortality figures of the year 1955. In 1955, 14,810 deaths were recorded, while about 10,848 deaths were recorded in 1956.

Hyderabad : During 1954 all but three districts of Hyderabad State were malarious, in which lived 5 to 6 million people.

Madhya Bharat : Malaria was reported endemic in all districts of Madhya Bharat, 4 control units operated under the National Malaria Control Programme during the year 1954.

Mysore : In 1954, an economic survey sample showed that for every rupee spent on malaria control, there was a saving of Rs. 93 per head per year. Thus a great loss of man hours could be averted. No district was free of malaria in 1955.

More villages of Bidadi Hubli of Ramanagaram Taluk reported an outbreak of malaria during the month of October, 1956. These villages were not included for spraying under the National Malaria Control Programme and so D.D.T. spraying was immediately ordered for these villages and the outbreak brought under control. Anti-malaria drugs were distributed. Six National Malaria Control Programme units were working and after the re-organisation of the State 6.6 more units under National Malaria Control Programme were added. In the re-organised Mysore State, the residual insecticidal spraying with D.D.T. was done twice during the year under report and total cumulative population of 12.6 million in 25,116 villages and 107 towns were protected against malaria.

Rajasthan : All the districts of the State were affected by malaria.

Bhopal : The entire population of 8,50,000 of Bhopal resided in a malarious area and with one anti-malaria unit functioning during 1954 the effectiveness of the control measure was observed by a spleen rate of 16.68% in D.D.T. sprayed areas as against 38.55% of the unprotected areas of the State. The highest incidence was in October.

Coorg : About 3% of the people of Coorg were reported to be living in malarious regions. April and May were the months of highest incidence. One anti-malaria unit was working in the State during the year 1954.

Himachal Pradesh : All districts were affected with malaria. The population affected by the disease was about 7,53,352 with the incidence highest in September. 3/4 unit in respect of the supply of D.D.T. was operating during 1956.

Kutch : The prevalence of malaria was of a sporadic nature and no district was free of it. About 1/5th of the population were under constant threat of malaria (1954).

Manipur : Incidence of malaria was highest in the month of June, 1956. About 1.5 lakh homes were sprayed with D.D.T. by the single units operating in the State.

Tripura : Malaria was endemic in the State of Tripura and the incidence was highest in July.

Vindhya Pradesh : August to October was the malaria season in Vindhya Pradesh and no district was free of the disease in 1954.

Andaman and Nicobar Islands : Only the tribal areas i.e., West Coast of Andamans (Jarva Areas) and little Andaman were presumed to be free from malaria. June was the month in which the highest incidence of malaria occurred. Two anti-malaria Units and 15 regional Units operated in the State.

Anti-Malaria drug distribution and the number of tons DDT used in the States is shown in Table No. 18.

Dysentery and Diarrhoea—1954—1956

The prevailing practice since long has been to group together all returns of deaths attributed to Dysentery and Diarrhoea; since differentiation between the two would be difficult for non-medical personnel. The Table in Appendix 10 shows the percentage of total deaths due to these two diseases and death rates per mille during the year 1954—1956.

It will be observed from the table that this percentage is as high as 9.9 in case of Mysore State and as low as 3.1 for Punjab. These diseases account for a large percentage of deaths in the States of Assam, Himachal Pradesh, Mysore, West Bengal, Madras and Manipur. In other States these diseases rank low as a cause of mortality. Death rate due to these diseases in the States is generally declining though the decline is very slow and not maintained in all cases. During the year 1956, this downward tendency has not been maintained by Assam, Bombay, Madras, Mysore, Punjab, Uttar Pradesh, West Bengal, Manipur and Delhi. These two diseases being bowel diseases, supply of wholesome food and pure drinking water is a pre-requisite for their control.

Respiratory Diseases—1954—1956.

This group of diseases includes tuberculosis, pneumonia and bronchitis. Diagnostic facilities are not yet available to produce correct statistics. Tuberculosis is being dealt with on a national scale, but information on pneumonia and bronchitis is too meagre to serve any useful purpose.

The percentage of deaths reported (Table No. 20) by State Governments as due to respiratory diseases account for a substantial percentage of mortality in the country and a large number of the deaths are being ascribed to tuberculosis. Upto December 1955, the BCG teams had Tuberculin tested 6,64,67,000 and BCG vaccinated 2,26,25,000 and by December 1956 more progress was observed since there were a total of 8,34,00,000 Tuberculin tested and 2,90,00,000 BCG vaccinated. BCG vaccine was given highest priority by the Government of India in its fight against tuberculosis. BCG vaccine was produced at the BCG Vaccine Laboratory, Guindy, for India and the South-East Asia Region. To overcome the difficulties of the present vaccine a dry freeze vaccine plant will be soon established at Guindy. Other schemes have been initiated as the Tuberculosis Demonstration and Training Centres at New Delhi (1951), Patna (1952), Trivandrum (1954), and at Madras. Yet other centres are to be established at Nagpur, Agra, Hyderabad and Amritsar. There are schemes for upgrading/establishment of Tuberculosis clinics; the isolation and treatment of advanced cases of Tuberculosis; the aftercare and rehabilitation centres for tuberculosis cases and for the conduction of research. They are Tuberculosis Survey of India, Tuberculosis Chemotherapy Research at the Research Centre, Madras (1956), BCG Assessment Programme and the Tuberculosis Control and Research Programme at Madanapalle.

Enteric Group of fevers—1954—1956

The enteric group of fevers is the next group which is commonly prevalent in urban areas. Where cases are reported, immunisation and disinfection are immediately carried out and measures taken to control the spread. The number of deaths is high in the States of Bombay, Punjab, Uttar Pradesh and West Bengal.

State	Year	Cases	Deaths	Immunisation	Remarks
Andhra	1954	+	588	+	
	1956	+	+	+	
Assam	1954	+	79	+	
	1956	+	79	+	
Bombay	1954	+	3,871	+	
	1956	+	4,665	+	
Madhya Pradesh	1954	+	79	+	
	1955*	+	314	+	
Madras	1955*	+	916	+	
	1956	+	698	+	
Punjab	1954	+	2,560	+	
	1956	+	3,835	+	
Uttar Pradesh	1955*	+	11,042	+	
	1956	+	9,674	+	
West Bengal	1954	+	2,579	+	
	1956	+	2,539	+	

State	Year	Cases	Deaths	Immunisation	Remarks
Travancore-Cochin	1954	4,114	+	+	
Kerala	1956	536	+	+	
Manipur	1956	324	+	+	
Madhya Bharat	1954	4,114	30		
Bhopal	1954	477	39	400	
Andaman & Nicobar Islands	1956	61	+	+	

NOTE :— + Not available.

*1955 figures substituted for lack of information for that particular year.

The National Water Supply and Sanitation Programme is being implemented in these States to improve the environmental sanitation.

Kalazar—1954—1956

Kalazar is a major health problem for the regions comprising the States of Assam, West Bengal, Bihar, Uttar Pradesh and Tripura. Cases are also reported from the States of Bombay, Madhya Pradesh and Rajasthan, but are not of much significance. The States vitally concerned are meeting the menace by insecticides (used for the National Malaria Control Programme), isolation and treatment by pentavalent antimony compounds.

State	Number of deaths			Remarks
	1954	1955	1956	
Andhra	1	+	+	
Assam	328	353	244	
Bombay	3	2	+	
West Bengal	908	673	541	
Punjab	+	+	+	
Uttar Pradesh	1,784	1,018	825	
Madhya Pradesh	36	219	+	
Madras	+	+	22	
Madhya Bharat	+			
Bhopal	+			
Rajasthan	(5 attack cases)	4	81	
Tripura	+	605	630	

NOTE :—Nil.

+ Not available.

Cerebro-spinal Fever—1954—1956

The incidence of cerebro-spinal fever has been low and cases have been reported from urban areas. The actual incidence of the disease is difficult to state.

The reporting done by State Governments is tabled as follows :—

Cerebro-spinal Fever Deaths

State	1954	1955	1956
Andhra	28	+	+
Assam	18	40	47
Bihar	+	+	+
Bombay	97	180	318
Madhya Pradesh	7	59	+
Madras	+	+	+
Punjab	2	3	5
Uttar Pradesh	738	346	397
West Bengal	260	299	139
	1,150	927	916

NOTE : + Not available.

The number of deaths were the highest in 1954 and the slight downward trend may be noted during the period under review. The modern use of sulfa-diazine (Sulphonamides) has reduced the mortality of this highly fatal and dreaded disease.

Typhus—1954—1956

Typhus is a notifiable disease under the international conventions. Information reported is scanty, and is given below for information.

1954		1955		1956	
State	Reported number of deaths	State	Reported number of deaths	State	Reported number of deaths
Assam	47	Assam	76	Himachal Pradesh	358
Madhya Pradesh	664	Madhya Pradesh	659		
West Bengal	2	Uttar Pradesh	3,759	Uttar Pradesh	4,143
Uttar Pradesh	4,463				

The following States notified that no attack case was recorded, while information from the remaining States is lacking.

1954	1955	1956	
Bombay	Himachal Pradesh	Bombay	Manipur
Madhya Pradesh	Tripura	Madras	Tripura
Rajasthan	Bombay	Mysore	Punjab
	Punjab	West Bengal	Andaman & Nicobar Islands.
	Coorg		

REPORT ON VENEREAL DISEASES

FOR 1954, 1955 & 1956

The degree of incidence of Venereal Diseases in India has not been estimated on a countrywide scale; surveys were carried out by Madras in 1956 (2—3% population reported) during the Medical Exhibition at the Government Stanley Hospital, Madras, or by the V.D. Touring Teams in Himachal Pradesh, which have estimated the disease at 30% in 1953 and 21% in 1956 in the hill regions, and by Mysore, which estimated 6% of the population to be infected in 1954 and 1.5% in 1956. But the incidence of Venereal Diseases in India is high, when considered from hospital and dispensary records as shown by the States of Uttar Pradesh (Jaunsar Bewar), the hill regions of Pepsu, Manipur, Punjab (Simla and Kangra regions) Jammu and Kashmir, (Ramnagar, Baschli, Riasi, Ramban Tehsil) and in such other States as Andhra, Orissa, Bombay and West Bengal (table Nos. 21 and 22). The high incidence in the States of Bombay, and West Bengal is supposed to be due to the maritime floating population and in the tobacco producing centre of Guntur where the temporary labour of women employed in the work are economically independent and sexually promiscuous.

It may be observed that due attention was not directed towards this social health problem, because of the more pressing nature of other problems during the First Five Year Plan. Hence very few new V.D clinics were opened during the period under report, as may be observed from the returns of Vindhya Pradesh (one each at Chhatarpur, Saina, Shahdol, and Detia), Himachal Pradesh (Bilaspur) and Mysore (3 clinics). Clinics attached to hospitals were opened at Rajasthan (in Jaipur, Jodhpur and Bikaner), Hyderabad (Secunderabad), Andhra, Mysore (Mangalore), Madhya Bharat (Lashkar and Indore), Madhya Pradesh (Raipur and Bilaspur), West Bengal (Cooch Bihar and West Dinajpur) and Madras (Guntur and Madurai) Table No. 23 and 24. In addition to the clinics there are anti-V.D. Teams touring certain States as Jammu and Kashmir, West Bengal (Madarihut and Siliguri). Most of the State hospitals have well-equipped laboratories for carrying out the serological and other tests. World Health Organisation has undertaken to supply a Serological Field Unit to

the V. D. Department of the Sarojini Naidu Medical College, Agra. Specialists in Venereal Diseases are appointed in the States of Rajasthan, Hyderabad, Mysore, Andhra, Delhi, Jammu and Kashmir, Madhya Pradesh, West Bengal and Madras. A Venereal Diseases Control Scheme has been sanctioned under the Second Five Year Plan for Port Blair and will come into effect in early 1957.

The more advanced States like Bombay, Madras, West Bengal and Orissa spend large sums each year not only for the establishment of clinics and centres, but, also to appoint staff as Health Visitors and V.D. Social Workers, so that case-finding and follow-up could be affected, leading to a decrease in the spread of infection and hence eventual control of V.D. (Table No. 25).

A V.D. Training and Demonstration Centre was established at Safdar-jang Hospital, New Delhi, 1954. Besides providing up-to-date facilities for the diagnosis and treatment of venereal diseases, the centre started imparting training to venereal diseases workers both medical and para-medical since 1956, through 3 month refresher courses. Similar training facilities, besides one year diploma course in venereology are also available at the Institute of Venereology, Government General Hospital, Madras.

The Hindustan Anti-biotics Ltd., established at Pimpri, Poona, 1954 is expected to meet the entire requirement of Penicillin (PAM) used in the treatment of Venereal Diseases.

An Antigen Production Unit was set up in Calcutta in 1954. This unit is meeting the entire demand of cardiolipin antigen used in the blood test for Syphilis.

The Government of India ratified in 1954, the Brussels Agreement (1924) concerning facilities to Merchant Seamen for treatment of Venereal Diseases.

The Suppression of Immoral Traffic Law Act passed in 1956, is expected to have a beneficial effect on checking the spread of Venereal diseases through prostitution.

A Scheme was included in the Second Five Year Plan, for the control of Venereal Diseases at a cost of Rs. 58.67 lakhs to the Central Government and Rs. 84.28 lakhs to the States. This Scheme envisages :—

1. The creation of a Central V.D. Organisation in the Directorate General of Health Services with an Adviser in Venereal Diseases, to co-ordinate the V.D. Control activities.
2. The creation of a V.D. Control Section in each State with an Assistant Director of Health Services as incharge.
3. The establishment of 8 V.D. Clinics with Laboratories in the Headquarters of the different States and 75 V.D. Clinics at the District Headquarters of the different States.
4. Free supply of Penicillin (PAM) and Cardiolipin antigen to these V.D. Clinics.

The Central Government would meet 50% of the recurring expenditure and 75% of the non-recurring expenditure of these clinics, besides sharing 50% of the training expenditure.

Leprosy

Leprosy is a major health problem in most of the States in India except Kutch, Ajmer, Delhi, Tripura, Andaman and the Nicobar, Bhopal and Coorg. Sample surveys reveal a high incidence in Madhya Pradesh (0.38 to 1.04% in the highly endemic areas), Himachal Pradesh (0.3 to 1.5% in the hilly regions), West Bengal (varying from 0.5% to 3% in Bankura, Burdwan, Birbhum and Midnapore); while it is grossly estimated to be high in Andhra Pradesh, Madhya Bharat, Punjab (hill areas), Bombay, Madras, Orissa, Bihar, Travancore-Cochin, Uttar Pradesh and Jammu and Kashmir.

Treatment is given to leprosy cases at all Government Hospitals and dispensaries, and in case of some States mass treatment campaign and domiciliary treatment is conducted with sulphones, sulphatone, etc.

The Government of India launched a Leprosy Control Scheme in the remaining two years of the First Five Year Plan, at an estimated cost of 30 lakhs for the establishment of 40 Pilot Project Centres in various States. It was proposed to establish two types of centres, viz., Subsidiary Centres and Study and Treatment Centres. The Subsidiary Centres provided for survey of population (about 50,000 to 60,000 in each Centre), detection of early cases and mass treatment with sulphones. The Study and Treatment Centres, in addition to the above measures carry out detailed epidemiological survey and scientific assessment of the results of sulphone therapy. During the First Five Year Plan 4 Study and Treatment Centres and 29 Subsidiary Centres were established in various States (Table 26). The expenditure incurred on this scheme during first plan, statewise is shown in Table No. 27. This scheme will be continued in the Second Five Year Plan.

The Government of India working in conjunction with the Government of Madras, took over the existing Lady Willingdon Leprosy Sanatorium, Chingleput and the Silver Jubilee Children's clinic, Saidapet and established a Central Leprosy Teaching and Research Institute at Tirumani, Chingleput in January 1955. A provision of Rs. 11.50 lakhs was made for this institute during 1955-56 and Rs. 7 lakhs during 1956-57 by the Central Government.

A brief State-wise account of prevalence, facilities available, control and treatment of leprosy follows :— (Tables No. 28 and 29).

Ajmer, Andaman and Nicobar Islands, Bhopal, Coorg, Delhi and Tripura—Leprosy is not a health problem. Those cases that are detected are treated at the Government Hospitals and dispensaries. The cases are mostly of imported labour.

Andhra : Leprosy is highly endemic in the districts of Srikakulam, Visakhapatnam, East Godavary, West Godavary and Chittoor, and endemic in Krishna, Guntur, Nellore, Cuddapah and Kurnool. It was assessed that there were at least 75,000 cases. The State Government had sanctioned a survey, but lack of staff hampered its start in 1955. The gross incidence is considered to be about 5 per 1000 of the population in Telengana Region of the State. Leprosy treatment centres were attached to district and taluk hospitals and 'injectors' were appointed to treat cases by injections and oral treatment. A State Leprosy Officer was appointed in 1956. Two leprosaria, for Srikakulam and Guntur districts; six leprosy

Homes at Vizianagaram, Tanuku, Koduru, Ramachandrapuram, Guntur, and Nellore are proposed to be established. A private leprosy Colony was opened in 1956 at Nellore. Three leprosy Subsidiary Centres at Narayanpet, Tirupati and Ramachandrapuram were established by the end of 1956.

Assam : Leprosy is fairly prevalent among the hilly regions. There are 43 leprosy clinics, but no leprosy hospital and the work is conducted by a Special Officer of Public Health Department. OPD Clinics were opened at Sarupathar and another in the Community Project area in 1954 by the State Government. The Auguri Leprosy Treatment Centre was opened by S. S. Mission in 1955.

Bihar : Leprosy is a major health problem of the State. Working on the basis of the sample survey of 1931, leprosy was found to be high in Santhal, Manbhum and Singhbhum districts. There are 9 leprosy asylums and 77 leprosy clinics with four BCG teams operating as a preventive measure. Mission to Lepers conduct four leprosy asylums. One clinic was opened by the Government in 1954, and eight Leprosy Subsidiary Centres were started in 1955 at Hura, Gobindpore, Chakardharpur, Manoharpur, Gomaharia, Sitamarhi, Mairwa and Barney. Provincialisation of two asylums and two clinics are being conducted.

Bombay : It was estimated that there were 90,000 cases in the State, which is high. The endemic areas are East Khandesh and North Satara. The State Government gives special facilities to all lepers and grants lands for the rehabilitation of cured cases. One Subsidiary Centre was established at Vairag in 1954, besides three clinics at Pimpalgam, Nandgaon and Vadaner in Nasik district. To conduct a survey, a Special Leprosy officer was appointed by the State Government in 1955.

Himachal Pradesh : Leprosy is considered to be high in the districts of Chamba and Mahasu, the incidence varying between 3 to 15 per 1,000 of the hill population. The State has a leprosy asylum at Saraul with 3 clinics and 12 Centres and another asylum in Mandi District. The State also pays to the Sabathu Leprosy Home and Hospital, Pepsu, for treatment of its cases each year. A clinic was opened at Bhalei in 1954 and others at Snowdon, Mandi, Chamba, Bilaspur and Sirmur during 1955. A Leprosy Subsidiary Unit was opened in 1956 at Mashabura in Mahasu district and a Leprosy Control OPD centre at Sarahan.

Hyderabad : It is estimated that there are 5 cases per 1,000 of the population. The State Government has two centres at Narayanpet and Osmanabad and gives grants towards a Municipal Leprosy Home and Leprosy hospital. It has a Special Leprosy Officer attached to the office of the Director of Medical and Health Services and started the Leprosy Control Unit in May 1954 at Wadhona and made grants to the Leprosy Investigation and Treatment Centre at Zahirabad and the Home for the Disabled at Secunderabad. Four Leprosy clinics were opened in 1954 and 12 in 1955, besides two Subsidiary Centres at Narayanpet and Osmanabad on 1st March, 1955.

Jammu and Kashmir : Leprosy is prevalent and the State Government has three leprosy asylums at Srinagar, Jammu and Poonch.

Madras : The problem of leprosy in the State is no less acute than in Madhya Pradesh and the other States. The highly endemic areas are in Tirukalikundram and South Arcot, the other endemic areas being Salem, Chingleput, and Madurai. The Bharat Sewak Samaj opened a Leprosy Clinic at Tanjore in 1954, and the State opened the Leprosy Treatment and Study Centre at Tirukoilur in 1954 and closed three leprosy institutions. The Belgian Leprosy Centre was started in July 1955 at Polambakkam. This centre in 1956 covered 748 villages covering 14,556 cases by the use of Mobile Units. Three leprosy sub-centres were opened in 1956 at Vridhachalam, Ponnani and Paramankurichi and four clinics in the project blocks of Nilakottai, Madurai, Melur and Palamedu. Reconstruction Surgery of Dr. Paul Brand is very much in demand in the State.

Madhya Bharat : A survey is being carried out. Leprosy is prevalent in all districts. There are 3 leprosy homes at Indore, Ujjain and Raigarh and another run by the Mission at Dhar. Six leprosy clinics were opened in 1954 at Gwalior, Shivpuri, Guna, Rajgarh, Dewas and Barwani and in 1955 at Bhind, Ratlam, Ujjain, Mandsaur and Dhar.

Madhya Pradesh : The incidence is one of the highest in India and a major health problem. Surveys reveal 0.38% to 1.04% in the highly endemic areas, namely, the east and south western areas, which include the districts of Raipur, Durg, Bilaspur, Raigarh, Surguja, Bastar, Balaghat, Nagpur, Chanda, Bhandara, Wardha, Akola, Amravati, Yeotmal, Khandwa and Buldana. 21 special clinics and 75 clinics attached to hospitals four isolation colonies and four Homes and Hospitals have been provided by the State Government and private agencies to combat this disease. Assistant Health Officers trained in combating leprosy are placed in charge of populations between 60,000 and 70,000. A Treatment-cum-Survey Centre was established at Raipur in August 1954 and two Subsidiary Centres at Champa and Mul in 1955.

Manipur : Survey work in the Project areas reveals that leprosy is higher in the south and south-eastern areas than in the north. The State Government has provided an asylum at Imphal and a Hospital at Tamenglong and another hospital is conducted by the American Baptist Mission at Kangpokpi. Segregation of cases of children and birth control have been introduced by the Government since 1955. In 1956 the Leper Colony at Chingmeirong was converted into a leprosy Hospital under the Leprosy Control Scheme (Subsidiary Centre).

Mysore : The Hind Kusht Nivaran Sangh carries out leprosy work in the State. Leprosy is prevalent in Mysore, Mandya, Bangalore, Kolar and Tumkur districts, besides south Kanara, Gulbarga, Raichur, Bijapur, Belgaum and Dharwar. A Central Leprosorium was opened in 1956 at Bangalore with a Senior Leprologist and two leprosy hospitals at Bijapur and another by the Mission to Lepers in Belgaum.

Orissa : The endemicity of leprosy is mainly confined to the coastal strips of Ganjan, Puri, Cuttack, Balasore, Dhankanal, and in the districts of Keonjhar, Sambalpur, Mayurbhanj and Kalahandi. Sample surveys conducted in 1954 reveal that 1,693 cases were detected from 1,563 villages covering a population of 1,92,200. It is estimated that there are about 2 lakh leprosy cases, of which, 50,000 were in the infective stage. Faced with a health problem of such magnitude the State Government has

laid out a rural network of 116 clinics and colonies and 217 OPD clinics attached to hospitals and dispensaries and increased the same to 349 by 1955. The Hind Kusht Nivaran Sangh has also raised the number of its rural clinics from 52 in 1954 to 64 in 1955. It conducts 6 colonies and also the Home and Hospital, taken over by the Government from the Mission to Lepers. The Mission to Lepers has the management of the Home at Baripada and a Leprosy Settlement at Hatigarh. The National Leprosy Pilot Project (Subsidiary Centre) was established in 1954 at Khurda, and three more Centres were added in 1955. 21 rural leprosy clinics were opened in 1954 and 14 closed for lack of attendance. Isolation of infective vagrants organised in 1955 as an experimental measure was continued in 1956, as it was found to work satisfactorily.

PEPSU : The disease is fairly prevalent in the hills and anti-leprosy work is conducted by the Mission to Lepers with grant from the State Government to the Sabathu Leprosy Home and Hospital.

Punjab : The incidence of the disease is more endemic in the hills of Kangra and on a lesser rate in all the other areas of the State. Mission to Lepers, with Government grants, conducts three leprosy Homes at Palampur, Taran Taran, and Ambala city. The management of the clinics at Hoshiarpur and Ludhiana have been taken over by the Municipalities concerned. Two clinics were opened at Banjar and Hamirpur in Kangra district.

Rajasthan : Though the disease is not prevalent in the State it has two Leper asylums at Jaipur and Jodhpur (Government maintained) and exercises the Jaipur Lepers Act No. XXV to pauper lepers, who are segregated in the asylums.

Saurashtra : No survey has been carried out to find the incidence in the State and the only facilities are the asylum at Adhewada, a clinic at Junagadh and an OPD Centre at Porbander. One private hospital was opened in 1955 at Savedi.

Travancore-Cochin : As in Orissa the disease is endemic along the coastal strip with an estimated one lakh of cases. The State has yet to organise its activities against leprosy. It has appointed a Leprosy Officer. It has a hospital and two treatment centres and aids the Gandhi Memorial Leprosy Foundation to run the control centre. Two centres were opened by the Government in 1954 at Kayamkulam and Haripada, a subsidiary Centre at Ponnani and a sub-centre at Edapal (OPD only) in 1956.

Uttar Pradesh : Though no survey has been carried out it is estimated that 2 to 2.3 lakhs of leprosy cases are to be found in the State, more so in the northern and eastern districts with the highest incidence in the pilgrim centres as Banaras, Hardwar, Faizabad and Allahabad. Mass treatment is carried out by the Treatment-cum-Study Centre and Mobile Units and by the 18 leprosy institutions at Gorakhpur and Bahraich. One Treatment-cum-Study Centre was established in 1954, a Subsidiary Centre in 1955, and Leprosy asylums at Gorakhpur, Moradabad, Bahraich and Kehri. A State Leprosy Hospital is under construction during 1956. Foreign Mission Centres continue to work at Allahabad, Almora, Chandag and Raizabad.

Vindhya Pradesh : Special clinics were opened in 1954-55 at Datia, Sidhi, Shahdol and Satna to treat leprosy cases.

West Bengal : The State is confronted with a major health problem in its drive against leprosy. Sample surveys in 1954 showed about 2 lakhs cases with about a modest estimate of 50,000 infective, while those surveyed in 1955, place the number of lepers as 3,42,000 and 3,56,000 for 1956, including the cases in Purulia district transferred by Bihar on 1st November, 1956. The incidence varies from 0.5% to 2.3% in various districts. High endemicity is observed in the dry laterite tracts west of the river Bhagirathi where the incidence fluctuates between 1.5% and 3% in Bankura, Midnapore, Birbhum and Burdwan; 1% to 1.4% in the districts of Nadia, Malda, West Dinajpur, Jalpaiguri, Darjeeling and Murshidabad and 0.5% to 0.9% in the districts of the 24 Parganas, Hooghly and Howrah. There were 99/OPD clinics, some run by State, some with the help of grants and others by private organisations. These have been stepped up to 127 in 1956. One Study and Treatment Centre was opened in 1955 at Bankura and clinics at Kharagpur and Rohini.

'LEPROSY WEEK' was organised by the State Governments in the month of April, so as to make the people conscious that leprosy is not such a disease that holds no hope, but, with concerted effort, the disease could be overcome with the help of modern drugs and treatment methods. With domiciliary treatment and the establishment of Treatment and Study Centres and Subsidiary Centres with help from the Government of India in the First and Second Plans, much can be done to fight this disease at all levels.

Diseases of the Eye

Trachoma constitutes a major health problem in eye diseases and is the principal cause of total and partial blindness in many parts of India, especially in the northern regions. Statistics concerning its prevalence are not available. The epidemiology of the disease in India is also not known. A scheme for the mass control of trachoma will be drawn up after a preliminary survey and study of the problem. The Ophthalmology Adviser at the W.H.O. Regional Office for Europe studied the problem in 1954 and recommended the establishment of a pilot project. This Project was inaugurated at Aligarh on the 18th October 1956 at the Gandhi Eye Hospital and Institute of Ophthalmology. The Scheme will be implemented over a period of two years and at an estimated cost of Rs. 1.93 lakhs. The W.H.O. will provide a Trachomologist, I Comberg Slit Lamp and two fellowships of 6 months during 1958. The W.H.O. Trachomologist arrived in India. The work has started in two C.D. Blocks in Aligarh District. Preliminary epidemiological survey, ophthalmic, bacteriological and socio-economic investigations, assessment of the role of flies in the spread of trachoma and intermittent treatment with acromycin are in progress.

Treatment of diseases of the eye including surgery of the eye is carried out in the district hospitals and tehsil hospitals, dispensaries taking care of the minor ailments. But special Eye Hospitals are very few. Certain States have introduced compulsory primary vaccination (against blindness due to smallpox), examination of school children, welfare of infants and toddlers in the Maternity and Child Welfare Centres and Eye Camps held at periodic intervals to give relief and succour to the people who are unable

to avail themselves of hospital facilities. Similarly travelling eye clinics provide further facilities for treatment in the rural areas. Private organisations and societies rendered very valuable assistance through Eye Relief Camps, Travelling Dispensaries and private hospitals and dispensaries. (Table No. 30, 31, 32 and 33).

States which held Eye Relief Camps during the period 1954-55-56 were Andhra, Assam, Ajmer, Bihar, Bombay, Madras, Madhya Bharat, Madhya Pradesh, Himachal Pradesh, Jammu and Kashmir, Mysore, Orissa, Punjab, Rajasthan and Saurashtra. These camps were either State run completely or State-aided or conducted by private organisations. States having blind schools are Ajmer, Andhra, Assam, Bihar, Bombay, Coorg, Hyderabad, Kutch, Kerala, Madras, Madhya Pradesh, Mysore, Punjab, Saurashtra and West Bengal.

The larger States like Bombay, Hyderabad, Jammu and Kashmir, Madras, Madhya Pradesh, Mysore, Tripura, Uttar Pradesh and West Bengal have Mobile Eye Units to conduct eye relief.

Cornea transplantation operations are being made both in the States of Madras and Uttar Pradesh. In addition, the Gandhi Eye Hospital Trust Aligarh has established a contact-lens Centre at the Hospital at Aligarh with Government grant. Expenditure incurred on Eye institutions in the States is higher in Uttar Pradesh during the period under review (*Vide* Table No. 34).

Tuberculosis

Tuberculosis is a major health problem in India. In an under-developed country, where health education is so meagre, the disease presents a formidable problem.

The Central and State Governments in collaboration with private organisations are implementing schemes to fight the menace of tuberculosis. They consist of:—

1. Mass vaccination and preparation of B.C.G. Vaccine:—B.C.G. vaccine is being manufactured at Guindy, Madras. To improve the quality of and overcome the difficulties presented by a liquid vaccine a plant is to be installed, at a cost of Rs. 3,00,000 lakhs, to produce dry freeze vaccine.

The figures of the mass B.C.G. Vaccination Campaign are tabulated below:—

Period	No. of teams	Tuberculin tested	BCG vaccinated
December 1955	131	6,64,67,000	2,26,25,000
December 1956	131	8,34,00,000	2,90,00,000

Tables No. 35 and 36 show the provisional figures for 1954 and 1956, State-wise (Progressive Totals).

To subsidize State Governments in their B.C.G. Programmes, the Government of India had also provided Rs. 9.5 lakhs for 1956-57. It was to help in the appointment of officers to key posts, allowances to staff, and grant of fellowships.

2. The Government of India allocated Rs. 30 lakhs for 1956-57 as subsidy to State Governments to establish or upgrade 60 T.B. clinics. This was to be given in the form of X-ray and laboratory equipment.

3. Another subsidy by the Government of India was in the form of X-ray and laboratory equipment for establishing Tuberculosis Training and Demonstration Centres, the provision being Rs. 5 lakhs for 1956-57. 3 such centres had been established at New Delhi (1951), Patna (1952) and Trivandrum (1954). Two other Centres at Nagpur and Agra are in the process of receiving equipment.

4. To provide institutional isolation for cases of tuberculosis the Government of India had sanctioned grants amounting to Rs. 5,23,125 to State Governments for the establishment of 737 isolation beds. The 1956-57 Central Budget provided Rs. 10 lakhs of which, a sum of Rs. 4,57,465 was sanctioned for 587 beds. The total number of available beds in 1956 was 17,274, an increase of 3,063 beds over those of 1954. (Table No. 37).

A sum of Rs. 2,16,468 was sanctioned to the Tuberculosis Association of India for the construction and equipping of an annexe to the Tuberculosis Hospital, Mehrauli, for a 52 bedded isolation ward.

5. Aftercare and rehabilitation is also needed to make T.B. patients useful citizens. A work Centre at New Delhi is to be opened in conjunction with the New Delhi Tuberculosis Centre. A sum of Rs. 3.7 lakhs had been budgetted for 1956-57.

6. No public health measure is well-founded unless it is based on surveys and statistics. A tuberculosis survey of India is being carried out by the Centres at Delhi, Madanapalle, Trivandrum, Patna, Madras, Calcutta and Hyderabad.

By the end of 1955, there were 143 Hospitals, 49 Sanatoria, 100 clinics and 14,571 beds, in the different States. (Table No. 38).

From hospital and dispensary statistics, (Table No. 39) one may judge a high incidence of tuberculosis in the States of Andhra, Bihar, Bombay, Madras, Uttar Pradesh, West Bengal, Rajasthan and Kerala.

The expenditure involved in control of tuberculosis State-wise was higher for 1956 than for 1954 in most of the States. (Table No. 40).

A Chemo-therapy Research Centre at Madras, begun in May, 1956 is progressing satisfactorily with World Health Organisation personnel assigned to the work. The B.C.G. assessment Programme is a long term programme and is progressing to schedule.

Progress has been maintained throughout the period under review.

CHAPTER III

PROGRESSIVE HEALTH ACTIVITIES IN THE STATES— SALIENT FEATURES

	PAGE
Progressive Health activities	31
Sanitation, water supply and conservancy	35
Rural medical relief	37
Health Units	40
Primary Health Centres in National Extension Service Blocks	42
Medical Inspection of School Children	42
Industrial Social Health	46
Health of Prisoners	48
Fairs and Festivals	50
Nutrition—Welfare Foods	50
Adulteration of Food	53
Railway Health Services	55
Health Education	56
Appendix Table Nos. 41—64	245—281

CHAPTER III

HEALTH ACTIVITIES IN THE STATES

Salient features—1954—1956

The salient features of the health activities in the various States are detailed State-wise.

Andhra : The Simbachalam Health Unit was established in 1953 to provide necessary field training facilities to the Sanitary Inspector Trainees taking the Inspectors Course at the Andhra Medical College, Visakhapatnam on the lines of Poonamallee Health Unit functioning in Madras. It was upgraded in the month of January of the year 1956 to a Rural Health Centre as part of the Department of Social and Preventive Medicine; 13 Primary Health Centres had been working since 1948, six in Kurnool district, six in Guntur district under postwar Reconstruction Scheme and one at Dendalur in West Godavari district under Firka Development Scheme to afford Medical and Public Health Services. A number of Maternity and Child Welfare Centres were functioning in the State. The anti-yaws campaign was started in 1954 and remained active throughout the year under report. It carried out Preliminary Survey of villages and detected yaws cases and yaws contacts. Town Planning Act, 1920 was in force in all the Municipalities and in about 60 Panchayats in the State. The Public Health Board for the State which ceased to exist on the dissolution of the Andhra Legislature in November, 1954, was reconstituted on 1st August, 1955. The Health Minister and the Director of Public Health were the President and Secretary of the Board respectively.

Assam : Government of Assam appointed a Superintendent, Public Health Engineering Organisation with one Executive Engineer on a purely temporary basis with necessary staff. Both the Medical and Public Health Departments continued to work under one Director of Health Services since 1-10-1953.

Bihar : The Interim Rural and Urban Public Health Re-organisation Scheme was completed during the year under report. Under this scheme all the districts of the State were provided each with one fully qualified and whole time District Medical Officer of Health and other health staff. All Municipalities with a population of 25,000 and over were provided with a Government Medical Officer of Health. The B.C.G. vaccination campaign was continued during the year under report. In order to break down the five yearly cycle of smallpox epidemic, Mass Vaccination Scheme was intensified to complete the re-vaccination. There was a proposal before the Government to open a New Medical College at Ranchi. Pending construction of the building, students for the Ranchi Medical College were admitted in the Medical College at Patna and Darbhanga in 1957.

Bombay : Due to the States Re-organization, the jurisdiction of the Public Health Department has extended to 42 districts. The Regional Officer, Medical and Public Health, Nagpur and Regional Medical Officer, Medical and Public Health, Aurangabad were incharge of public health administration of eight districts in Vidarbha and five districts of Marathwada respectively. The Regional Officer, Public Health, Rajkot was incharge of the Public Health Administration of five districts of Saurashtra and Kutch.

districts. The Assistant Directors of Public Health In-Charge of Registration in Old Bombay districts continued to function except in Belgaum, Dharwar, Bijapur and Kanara Government of Bombay sanctioned the establishment of a Public Health Institute at Poona to serve as a centre from which all preventive medical activities including organisation, administration, research, training and field programmes would radiate. The scheme of integration of curative and preventive medicines in the two districts, Poona and Baroda, started during 1955 was further augmented by increasing the number of Primary Health Units from 38 to 65 in Poona district and from 40 to 48 in Baroda district. Three more health units of the type of the Health Unit at Sirur had been established in the State, one each in Thana, Baroda and Ahmedabad districts.

Madhya Pradesh : The State Government sanctioned five more National Malaria Control Units. Three anti-yaws teams functioning during the last year were increased to five and the Plague Control Unit continued its work.

Tuberculosis is a major public health problem. B.C.G. vaccination campaign was started in the State under the auspices of International Tuberculosis in 1951 and six B.C.G. teams previously appointed continued during the year under report.

Madras : The curative and preventive care of Tuberculosis continued to be under the medical department. The first phase of the Mass B.C.G. Campaign which was confined to all districts headquarters including their areas up to five to six miles, was completed in September, 1955. Campaign in all municipalities and villages on a district-wise basis was taken up in October, 1955 and was continued during the year under report.

A Special Leprosy Survey was carried out by the District Health Officer, Madurai in Agarharapatty and its surrounding villages and a report thereon was sent to the Medical department for necessary action. All the detected cases were advised to take treatment in the clinics attached to medical institutions. During the year under report two more leprosy subsidiary centres one at Virdhachalam (South Arcot) and another at Paramankurichi (Tirunelveli district) were sanctioned under the Pilot Project Scheme of the Government of India.

A scheme for the control of yaws was launched in Avanashi taluk of Coimbatore district for a period of three months. The disease was widely prevalent among the socio-economically backward people.

Guinea worm surveys were conducted in the endemic areas and appropriate recommendations were made. In May, cyclops with natural infection were recorded in a village, in South Arcot district.

The number of maternity and child welfare centres increased five fold, the numbers of Health Visitors and Maternity Assistants four fold and the number of Women Medical Officers doubled since 1940. Provision of Maternal and Child Health Services was the responsibility of the local bodies. However, Government had recently established maternity services, especially in backward rural areas where there had been lack of these services. During 1956, the year under report, there were 978 Maternity and Child Welfare Centres, (including Maternity Homes) in the State against 761 in 1955. Several voluntary organizations, such as Social Welfare Extension Projects, Avvai Rural Medical Services, and Kasturba Gandhi Trust, Velacheri, continued to take interest in maternal and child health services.

The Public Health Board met only once in May. Several questions were discussed for the improvement of health conditions in the State.

Punjab : In order to provide more and better medical facilities, the scheme of opening Primary Health Units had been conceived which envisaged the improvement and expansion of existing dispensaries, preferably in Rural areas, by providing more staff, equipment and additional buildings. 3 Primary Health Centres were opened by upgrading the existing hospitals at Guhla, Gohana and Hamirpur in the National Extension Service Blocks in 1955.

Uttar Pradesh : State Health Board sanctioned allotments for special assistance to pilgrims centres, for urban and rural sanitation. The Board also gave administrative sanction to projects for water supply, drainage and other sanitary works presented by local bodies amounting to Rs. 1,99,85,600. The State Health Council had met once in 1956 and discussed many health problems such as the stricter enforcement of compulsory inoculation in melas and enforcement of Pure Food Act, etc.

West Bengal : An *Ad-hoc* Committee for environmental sanitation was formed in the State during the year 1956. The function of the *Ad-hoc* Committee related to the preparation, publication and execution of Projects for water supply, sewage or drainage by Municipal Committee of West Bengal. Domiciliary treatment scheme had been expanded for tuberculosis and the mass B.C.G. Vaccination Campaign intensified. Altogether 125 Leprosy Clinics, 3 Leprosy Homes, 4 Hospitals, one State Leprosy Colony, one State Vagrants Home and one Leprosy Settlement functioned during the period under report.

283 Health Centres containing 3,202 beds functioned in different parts of the State. In 1956, 306 Hospitals with 18,988 beds and 274 Dispensaries functioned for rendering medical aid in urban and rural areas. Having accepted the policy of unifying the Public Health Service in the State, the Government moved in the matter, re-organising the District Public Health staff employed under District Boards in 1954.

Hyderabad : Great emphasis was given to the rural medical relief during the year under report and two such units were established while 16 more were sanctioned. These units were to provide medical aid, maternity and child welfare service, health education, environmental hygiene and control of epidemics in rural areas. Each unit covered 25 to 30 villages. A Bureau for Environmental Hygiene was set up to advise with regard to Waterworks, sanitary engineering and on building designs of hospital. Hyderabad Leprosy Act was passed and brought into force during the year.

Madhya Bharat : The post of the Deputy Director incharge of Ayurvedic dispensary was upgraded to Joint Director Ayurveda during the year under report 1954. The Madhya Bharat 'Prohibition of Smoking' Act of 1954 and that of the 'Home Registration' Act, 1954 were placed in the statute book. The rules under the Indian Drugs Act, 1940 were also framed. Two tuberculosis clinics, 4 maternity homes, six leprosy clinics and six family planning centres were opened in the State during the year under report, besides the 7 maternity and child welfare centres and 27 subsidiary maternity and child welfare centres in the rural areas. Two mobile units in two districts of the State were started. The mass B.C.G. vaccination campaign was continued and about 3 lakhs of the population were tested.

Mysore : Health centres at Kamanagaram and Madhya and other Health Units remained functioning in the State during the year under report. It is proposed to convert all the dispensaries in the State into Primary Health Centres during the Second Plan period.

Rajasthan : The posts of 5 Assistant Directors of Medical and Health Services, who had one division each under them were abolished and three posts of Assistant Directors of Health each supervising two divisions were created with Public Health work assigned to them. Two other posts of Assistant Directors at headquarters were sanctioned.

World Health Organization day was celebrated on 7th April and Health Fortnight was celebrated in Block areas in October. About 7,000 children were selected for a long-term feeding programme. From a general survey report, all the sub-normal group of children were given treatment during 1956.

Bhopal : Some institutions were opened in 1954. (a) They were a fully equipped Tuberculosis Hospital of 132 beds (Bhopal city), three dispensaries and Maternity and Child Welfare Centre in rural areas, (b) An addition of 50 beds to the Hamidia Hospital in Bhopal City.

Himachal Pradesh : Additional Public Health Staff were added to the District Health Organization and measures were taken to train four laboratory technicians and five leprosy social workers in 1956. World Health Organisation on discontinuing its activities in 1951, the Himachal Pradesh Government subsequently strengthened and expanded the Venereal Diseases Control Organisation by opening one main Clinic at Simla and 3 sub-clinics at Nahan, Mandi, Bilaspur and Chamba in 1955. Three Venereal Diseases Units were opened in the remote parts of Himachal Pradesh where the incidence of venereal diseases was high, i.e., ranging between 20 per cent to 50 per cent. Domiciliary Tuberculosis service was introduced in each District Headquarters. Vaccination Act, 1889 was amended and made applicable to Himachal Pradesh.

Tripura :

New institutions established.

1954	1955	1956
(a) A 20 bedded hospital	(a) A 20 bedded hospital	(a) A 12-bed cholera Ward at V.M. Agartala.
(b) 14 dispensaries	(b) One Ward of 48 beds at V. M. Hospital, Agartala.	(b) F. P. Centre in V.M. Hospital, Agartala.
		(c) 4 Mobile Dispensaries put into circulated.

Andaman and Nicobar Islands: It is a small territory and all services are State run. The medical facilities were adequate with a *per capita* expenditure higher than in any other State.

Sanitation, Water Supply and Conservation—1954-56

The National Water Supply and Sanitation Programme was started during the first Five Year Plan period in August-September, 1954. Assistance was given by the Central Government in a form of loan for approved urban schemes to the extent of 100 per cent of the estimated cost and as grant-in-aid in the case of rural schemes to the extent of 50 per cent. In the first Five Year Plan period Rs. 829.465 lakhs were paid to State Governments for 193 approved urban schemes and Rs. 280.0675 lakhs for 133 approved rural schemes. Table Nos. 41, 42, 43.

Rural Areas :

Andhra : Only the villages covered by seven panchayats were having protected water supply. The usual sources of water supply were open masonry wells, special wells and tanks.

Following constructions and repairs were undertaken :—

Construction	1954	1955
Wells	1,221	
Bore Wells	30	123
Pumps	16	140
Bore hole latrines	1,582	487
Septic tanks	126	1,441
Other types of tanks	171	1,037
Soakage pits	54	—
Cess pools	46	—
Trench latrines	—	205
<i>Repairs</i>		
Pumps	—	27

The refuse was used for compost making.

Bombay : The Government of Bombay sanctioned Rs. 47 lakhs for improvement of village water supply in 1954 by the construction of new wells, repairs to existing wells and conversion of special wells into draw wells. The grant in 1955 was more than doubled that of 1954 and amounted to Rs. 92.5 lakhs. In 1956 the amount sanctioned was only Rs. 40 lakhs.

Madhya Pradesh : Of the 48,000 villages in the State in 1954, practically no village was provided with a safe water supply. Under the Government of India National Water Supply and Sanitation Programme about 200 tube wells estimated to cost Rs. 60 lakhs were sanctioned, of which 57 wells were completed and 360 partly completed. In 1955, the Government of India sanctioned 260 tube wells at an estimated cost of Rs. 80 lakhs. The work was started in the districts of Yeotmal, Chanda, Jabalpur and Chhindwara. 30 tube wells and 65 wells were constructed, while 365 were partly completed. A new Public Health Division for investigation into the water supply and drainage scheme was sanctioned by the Government in 1955.

3,290 and 7,684 private latrines were constructed in rural and urban areas respectively.

Madras : The campaign for the provision of sanitary conveniences in houses were continued during the period under review and the number constructed in rural and urban areas was 2,735 and 5,593 respectively. The National Water Supply and Sanitation Scheme was started in the districts of South Arcot and Tanjore during the First Plan period. It was implemented by the Board of Revenue and would benefit a population of about 5 lakhs.

Punjab : The efforts of the State Government were concentrated towards safeguarding water supply, paving and drainage of streets and general sanitation of villages. During 1954, 16,749 new manure pits were prepared and 43,341 old pits were reconditioned, while 6,483 pits were disinfected. Rs. 1,32,830 were sanctioned for 26 rural water supply and sanitation schemes and financed by Revenues. Many wells were re-cemented covered and fitted with hand pumps, while chlorination of all water sources was a routine measure. Under the National Water Supply and Sanitation Scheme, a sum of Rs. 219 lakhs was earmarked for the purpose.

Uttar Pradesh : Drinking water arrangements were made in 1,006 villages in Uttar Pradesh during 1955 through the Irrigation Department, but, there was no drainage scheme for rural areas.

West Bengal : Out of 35,063 villages, 17,345 were reported to have safe water supply by the use of tube wells. A sum of Rs. 20 lakhs was provided and 553 new tube wells were sunk, 134 masonry wells and 128 reinforced concrete ring wells were constructed, while 46,031 tube wells, 501 masonry wells and 20 reinforced ring wells were repaired. 26,799 villages had a safe water supply in 1956. 1,718 new tube wells were sunk and 548 were resunk, while 92 surface wells were constructed.

Rajasthan : 1,401 drinking water wells were constructed in block areas, but no scheme for rural drainage has yet been put into execution.

Coorg : 4 Rural Water Supply Schemes were sanctioned for the State of Coorg in 1954.

Himachal Pradesh : The State received its water from springs and bowlies, which were regularly disinfected. 17 schemes were sanctioned in 1954, 11 of which were completed.

Manipur : The water supply in villages was inadequate and unhygienic, the sources being tanks and rivers.

Tripura : 255 out of 3,000 and odd villages had safe water supply. There were tube wells in 194 villages, ring wells in another 40 villages and tanks in 15 villages. Tube wells were sunk under the National Scheme sanctioned by the Government of India at a cost of Rs. 19,100 during the year 1955, while 74 masonry wells, 135 tube wells and 6 wells were constructed in 1956, besides 57 resunk and 300 tube wells repaired.

Andaman and Nicobar Islands : Wells were maintained in the Islands, but, there was no scheme for drainage.

Urban Areas : { Of the 1,630 and 1,825 towns in urban areas in 1954 and 1955 respectively, 8.7% and 9.8% only had protected water supply. (Vide Table No. 44).

Andhra : There was an acute housing shortage for middle and lower income groups in all the urban areas of Andhra Pradesh. The low standard of living and over-crowding was the common feature. Of the 35 towns 14 had no protected water supply, while in other towns, the supply was inadequate.

Assam : Only 3 towns in the State had protected water supply.

Bombay : In 1956, 3 meetings of the Board of Health were held and proposals of water supply for 51 towns and villages, drainage for 17 towns and construction of *aqua privies* were recommended for Government grant-in-aid.

Madhya Pradesh : The Government of India sanctioned Rs. 65 lakhs under the National Water Supply and Sanitation Programme. The Khandwa water supply scheme was completed during 1955. The source of water supply was mostly from tube wells. An expenditure of Rs. 326.26 lakhs was incurred on water supply, drainage and sanitation by L.S.G.E.D. during 1955-56.

Uttar Pradesh : For the disposal of rubbish and night soil, 3 methods were in use in the State depending on available facilities. Blood from Slaughter Houses was converted into blood meal manure.

West Bengal : 3 new water works were started in 1956 and 25 tube wells were sunk. The State Government expended Rs. 39,19,164. The disposal of rubbish and night soil was done by trenching, composting and reclaiming of low land.

Rajasthan : 20 water supply schemes were sanctioned in 1956. The State Government was spending Rs. 37,65,636, for the works.

Himachal Pradesh : The State had no means for bacteriological examination of water. The drinking water sources were periodically disinfected.

Tripura : 13 tube wells were sunk in Agartala while tanks and wells were disinfected. The drainage arrangements by Agartala Municipality were far from adequate.

Rural Medical Relief—1954–1956

Medical relief in rural areas during the year has progressively improved due to the continued interest taken by State Governments in providing more hospitals and dispensaries, converting those Allopathic dispensaries in Ayurvedic and Unani, which could not be staffed; upgrading dispensaries into Primary Health Centres and increasing facilities to mother and child by providing more Maternity and Child Health Centres or by integration of such Centres with the Primary Health Centres. The tempo of progress in the three years can easily be studied from Tables Nos. 45, 65, 66, 67 and 68. The activities in this direction of some of the States are reviewed.

Assam : The Public Health Department has 3 Kala-azar Mobile Units and 10 anti-hookworm units, besides 7 other Travelling Dispensaries working in the rural areas.

Andaman & Nicobar Islands : The population in these 200 odd islands is small and scattered. All these areas with the exception of the head-

quarters at Port Blair, may be classified as rural. There are 4 hospitals, one each for the North, South, Middle Andamans and the Nicobar Islands. The 18 dispensaries are fairly well distributed to render medical relief. One Travelling Dispensary serves a radius of 25 miles from headquarters, while a Travelling-Floating Dispensary (a gift of the Australian Government), the motor vessel 'Indaus' works in the group of Nicobar Islands since April, 1956.

Bihar : Relief is generally given through hospitals and dispensaries, Malaria and Kala-azar Centres. The Government makes subsidies to District Boards for purchase of medicines, equal in amount to that collected by the Boards themselves. During floods special distribution Centres are set up with staff on epidemic duty.

Bhopal : During 1955, the State Government provided diets and indoor treatment for some of the dispensaries. It established 8 Primary Health Centres as integrated units consisting of sections as Hospitals, Maternity and Child Welfare, Mobile Dispensaries and health. It is proposed to open six more centres. One subsidiary dispensary was established in 1955 and the Government proposed to establish 83 more such dispensaries in 1956.

Bombay : In 1936, the Government introduced the scheme for subsidising practitioners in certain selected rural areas. This was subsequently extended to the Indigenous systems of Medicines. 333 Subsidiary Medical Practitioners' Centres were sanctioned under the Rural Medical Relief Scheme and as they proved a success, the Government sanctioned 142 additional Centres as a measure of Post-war Reconstruction. The cost was borne both by the Government and the District Medical Boards. 30 new Centres were opened in 1954.

Hyderabad : Grant-in-aid Dispensaries have been established in such rural places where medical relief of any kind is unavailable. 16 new Medical and Health Units based on the lines of that at Pattancheru were established, one in each district with four Mobile Medical Units and 4 flying squads to tackle epidemic diseases. They have been found to do very useful work. Medical boxes were also supplied to villages situated away from hospitals.

Madhya Pradesh : The State had decided to open 12 Allopathic and 148 Ayurvedic Dispensaries during the period 1954—1956. 3 Allopathic and 40 Ayurvedic Dispensaries were opened in 1954 and 5 Allopathic and 100 Ayurvedic in 1955. Travelling Dispensaries were increased from 39 in 1954 to 43 in 1955. 1 Research-cum-Study Centre was opened at Raipur and a Leprosy. Asylum constructed at Amaravati, known as Jagdamb Kushta Niwas. The Janapada Sabhas promoted and took action to improve the sanitary conditions in their areas. The Anti-Yaws Campaign aided by the UNICEF was being conducted from the village to village carrying out mass examinations and giving treatment. 5 teams were operating. A training centre for Health visitors and Dais was started recently.

Madras : The Scheme of medical relief in rural areas, by subsidising general practitioners and midwives (maternity assistance) was inaugurated in the State in 1925 with the bulk of the population benefiting from the Scheme. With the abolition of Medical Schools, the Scheme had not been found attractive enough for medical graduates. Hence the Government

had permitted the conversion of these Allopathic Dispensaries into Dispensaries catering to indigenous medicines. These were 408 in 1954 and 431 in 1955. A Mobile Van for Kala-azar is stationed at Ramanathapuram District and 2 Mobile Medical Units in the districts of Madurai and Nilgiri.

Orissa : There were 304, 78, and 3 institutions in 1954 and by 1955. There were additions of 13, 9 and nil to the Allopathic, Ayurvedic and Homeopathic institutions respectively. Leprosy is treated at the 115 Leprosy Clinics. The Government decided to participate in the inter-State Anti-Yaws Campaign sponsored by W.H.O. Two Anti-Yaws Units were sanctioned by the Government using its 2 Touring Dispensaries.

Punjab : The Medical relief in rural areas remained partly the function of local authorities and partly that of the Government. Government assistance varied over a wide range for different schemes of medical relief. It was provided through Health and Sub-Health Bureau in some districts. The Medical Officers in charge of rural dispensaries toured neighbouring areas within the radius of 5 miles. It was, however, found that the general standard of building equipment and budget provisions of local body institutions continued to remain below par. Besides the usual maintenance grants made by the Government, additional grants were paid to local bodies and Missionary Societies. In pursuance of the policy of provincialisation of the rural dispensaries, steps were being taken, each year, to make such provisions possible. It has been found that despite the subsidies paid to Medical Officers, which was increased gradually, it has not been possible to secure the services of suitable men, resulting in the running of dispensaries by dispensers. As there was no rural nursing service and with a view to provide medical aid including Maternity and Child Welfare benefits, the existing dispensaries have been converted into Health Centres in the National Extension Service Blocks, and the strength of the dais/nurse-dais raised correspondingly to partially meet the demand.

Due to the paucity of general practitioners to staff these S.M.P. Centres, the Government introduced First-Aid Centres in charge of Primary Teachers, who were paid a monthly sum of 2 rupees for the extra work undertaken by them.

The Government had also sanctioned the scheme for the appointment of 81 nurse-midwives in rural areas in 1954 and sanctioned grants to Districts Local Boards and Municipalities to improve diets and nursing facilities at the dispensaries.

Bombay : 5 Cottage Hospitals had been established in Bombay in 1943 and six more planned to be opened in the First Plan period of which only 5 have been established to date. Cottage Hospitals were intended to serve as a link between dispensaries and district headquarter hospitals. With a view to further increasing medical facilities in rural areas, the Government has sanctioned 120 sub-dispensaries for the backward areas replacing the Touring Medico-cum-Propaganda Units. These dispensaries will be served by trained social workers and supervised by Medical men. Due to financial stringency, this Scheme has been restricted to 31 dispensaries established in 1951.

The Medico-Surgical Units was converted into a Mobile Ophthalmic Unit for use in the northern region, while the second Unit operated in the

southern region. Besides the 5 Mobile Dispensaries sanctioned for North Satara, Ratanagiri, Mahad Taluka, South Satara and Kolhapur, 10 more Travelling Dispensaries were started in 1954.

Coorg : The State covers an area of 1,586 sq. miles and for lack of communications in certain parts, medical relief was not available. Hospital constructions have been started since 1956 at Sampaje, Shanthally, Chettalli, Cheyandane and Marenad.

Delhi : The Health Centres' allopathic dispensaries and the two Mobile Dispensaries continue to render medical relief in rural areas in the Refugee Townships of Kalkaji, Tilak Nagar and Malvia Nagar. The Eye Hospital at Kalkaji rendered very valuable service. The Health Centres at Najafgarh and Ujwa (opened in 1955), the upgrading of the dispensaries at Khanjhwala as Health Centres and the opening of the new Health Centre at Alipur, were additional facilities made towards rural medical relief. These 4 Health Centres were set up by 1956.

Himachal Pradesh : The State is served by Allopathic Dispensaries and Hospitals, Ayurvedic Dispensaries and Mobile Dispensaries. To reach places inaccessible to motor transport, the Key Village scheme was applied to 25 dispensaries. Thus, Medical Officers from these dispensaries toured within the radius of 5 miles of their headquarters, attending all types of cases. A scheme was under consideration to equip some of the institutions with portable X-Ray plants and laboratory facilities. Motorized dispensaries would be sent to the remaining districts. A Mule Mobile Unit started in 1954 served the Sirmur district. V. D. Clinics toured the interior at regular intervals.

West Bengal : The relief afforded by this State was by its 966 hospitals, 50 Maternity and Child Welfare Centres, 210 Mobile Medical Units, 25 Relief Camp Hospitals and its Travelling Eye Dispensaries.

Health Units—1954-56

A number of health units have been in operation in rural areas all over the country primarily intended to disseminate information on public health matters to the common man and as demonstration centres. They are also intended to test under field conditions the different facets of a public health problem.

A brief account of the activities of some of the units is summarised below :—

Poonamalle Health Unit (Madras)

The Poonamalle Health Unit was established in 1935 and re-organised and expanded in 1954 on the basis of the Bhore Committee recommendations. It comprises of 36 villages with the population of 61,523. It may be observed that the birth and death rates were higher in 1956 than in 1954. This did not reflect the unhealthy status of the areas, but, to the improvement of registration of births and deaths.

The Health Training Centre, Ramanagaram (Mysore)

The Health Training Centre, Ramanagaram (Mysore), comprises an area of 113 square miles with 68 main villages and 66 hamlets covering a population of 80,000 of Ramanagaram and Channapatna taluqs. The

outbreak of any epidemic is reported by the Health Inspector of the Centre, though village headman is the legal reporting agent. The diagnosis is confirmed by the Assistant Medical Officer of Health after careful investigation. Measures were directed towards the improvement of environmental sanitation of the community by the Centre, which consisted of educating the community and seeking their cooperation in the introduction of hand-flush latrines, soakpits, windows, improvement of flooring, cattle sheds, housing conditions, repairs of roads, etc.

Rural Health Unit and Training Centre, Singur (West Bengal)

The Unit consists of 68 villages and has a population of 73,413. A Thana Health Centre with 50 bedded hospital and 2 Union Health Centres with 10 bedded hospitals began to operate from 1956. The Health Unit staff examined 2,554 students in 1956 as against 1,094 in 1955. 140 and 282 students were found defective during 1955 and 1956 respectively. The chief defects were those of, mal-nutrition, eyes, bad teeth, ear-nose-throat troubles and skin diseases. A study of the Septic Tank latrines for the safe disposal of human excreta had been initiated in 1956.

Najafgarh, Health Unit (Delhi)

Najafgarh Health Unit covers 74 villages and a population of 61,822. The Primary Health Centre opened in 1953 was doing good work in the 27 villages. A mobile dispensary also served 12 villages, where no facilities for medical care and treatment were available. The two institutions, namely, the Re-orientation Training Centre and the Research-cum-Action Centre at Najafgarh continued their activities of training doctors, sanitary inspectors, lady health visitors, midwives and dais, in connection with public health of community projects.

Health Units in Travancore-Cochin

7 units were functioning in the State of Travancore-Cochin by 1956. They consisted of the Medical College Health Unit, Ulloor and the Primary Health Units at Vizhinjam, Karungapally, Koothattukulam, Kumbalangi, Pashayannoor and Pulinkunnu. They covered a population of 50,000, 51,000, 49,000, 20,000, 20,000 30,000 and 21,952 respectively. Vital statistical rates were not available from all these Units.

Medical and Health Units, Hyderabad

The 3 Medical Health Units in Hyderabad State functioned at Pattancheru, Sillod and Chidguppa. The 3 units consisted of 27, 26 and 122 villages respectively.

Health Units, Saurashtra

8 Health Units were functioning at Manavadar, Kotta, Sangani, Rajula, Botad and the Primary Health Centres at Vanthali, Babra, Keshod and Kalawad. Information was available for Manavadar, Vanthali and Keshod only.

Sirur Health Unit, Bombay State

Sirur Health Unit, Poona had a population of 50,486 and it covered an area of 256 square miles. Unfavourable changes were observed in the

State Vital statistics probably as a result of the scarcity conditions existing in 32 villages of the Unit. There was no serious outbreak of epidemic. Re-investigation into the causes of death of 1953 for the Unit was carried out in 1954. Several causes previously reported had to be modified and arranged in accordance with the list of International causes of death.

There was an increase in the birth rate for the Health Units at Madras, Poona, Delhi and Calcutta in 1956 when compared with that of 1954. Death rate had also increased slightly during the period. The Unit at Calcutta recorded a high death rate of 15.7 in 1956, while the death rate for 1954 was 9.79.

As reports on figures of percentage of 'still births' are not available, very little can, therefore, be commented on. (Table No. 46). However, infant mortality rate was high as reported on by Health Units. It is gratifying to note that the maternal mortality rate was kept down during the period under review. To prevent the great loss in infant life, it is necessary to maintain an intensive and sustained effort through more and more maternal and child health Centres and services.

From Table No. 47, one may observe the high death rates due to diarrhoea and dysentery, and those due to respiratory diseases.

Primary Health Centres in National Extension Service Blocks—1954-56

The Government of India formulated a Scheme for the establishment of Primary Health Centres in NES Blocks and provided Rs. 50 lakhs for this purpose in the revised First Five Year Plan. During the First Five Year Plan, the Government of India agreed to meet the entire non-recurring expenditure on the Centre, viz., a Jeep, equipment, furniture, bedding and clothing estimated at a cost of Rs. 23,200 per centre, the annual recurring expenditure estimated at Rs. 37,500 per centre being shared by the Central Government and State Governments as under :—

	Centre	State.
First 6 months	100%	
Remaining Plan period	66·2/3%	33·1/3%

The State Governments could establish only 67 Centres during the First Five Year Plan period for which Government of India paid grants totalling Rs. 20,08,940. Central Assistance for Health Centres started during the First Five Year Plan was to be continued for three years from the date of their opening.

A provision of Rs. 22 lakhs was made during 1956-57 for giving grants-in-aid to State Governments for such Primary Health Centres which were established during the First Five Year Plan period.

Each Primary Centre is intended to serve a population of 60—65 thousands.

Medical Inspection of School Children—1954-1956

Children form the major group of the vulnerable part of population and hence are to be given the highest priority in any programme of health care. This particular type of service should encompass the three aspects of the problem, namely, medical inspection, treatment, facilities and follow-up arrangements.

Some progress has been made in this direction, but, no State has, to date, adopted all the three measures stated above. Wherever an attempt has been made, it has been on a minor scale. The defects noted were generally bad teeth, defective eyes, skin diseases, malnutrition and enlarged tonsils.

The position in different States is described for the period under review.

Andhra : There was no organised scheme of medical inspection in secondary schools in the State, though, there was provision for such inspection in 22 institutions including colleges. A dispensary with full time medical Officer was attached to the Government Engineering Colleges at Kakinada and Anantapur. A dispensary with a part time doctor was also attached to certain Government colleges. Mid-day meals were arranged by Social Welfare Department for 433 welfare schools, feeding 21,908 pupils at a cost of Rs. 5,18,727 in 1955.

Assam : There was no school health service in Assam. The hostels and high schools were occasionally visited by Medical Officers.

Bhopal : The School Medical and Health Officer was attached to the Director of Education of Bhopal State under the control of the Director of Medical and Health Services. He was assisted by a Medical Officer In-charge of rural dispensary. 20,476 students from 289 schools were examined. Following treatment was carried out at the nearest hospital or dispensary.

Bihar : The 4 posts of Medical Officers incharge of the 4 divisions of the State were held in abeyance in 1954. A lady School Medical Officer carried out medical examinations in the Girls High Schools and Middle Schools of the State. 4,000 students were examined in 31 schools. School children and their mothers were supplied 70 lakhs lbs. of milk allotted by United Nations International Children Emergency Fund in 1954.

Bombay : Instructions on health and hygiene were imparted as part of the school curriculum in primary schools. Schemes of medical inspection of school children were enforced in certain District Local Boards, Municipalities and Cantonments. The sanitary inspectors advised school children on healthy habits, personal cleanliness and the prevention of epidemic diseases, various Health Authorities visited the schools and brought to the notice of higher authorities, defects in sanitation, in and around schools.

Coorg : Two school Medical Officers were appointed by the State Government. The Harijan students were given mid-day meals and those between the age group of 5 and 17 were supplied with UNICEF skim milk.

Himachal Pradesh : Medical inspection of school children was entrusted to the Medical Officers incharge of rural dispensaries and in the urban areas to Medical Officers incharge of hospitals. Defects observed were treated in the O.P.D. sections. Skim milk from UNICEF was supplied to School children.

Hyderabad : 7 whole time Medical Officers for schools in Hyderabad city and Secunderabad, included two women Medical Officers. Where Government Medical Officers were not available, private practitioners were employed and the students paid a nominal charge of 8 annas per head.

At District and Taluka Headquarter School, medical inspection was conducted by the respective Medical Officers, in addition to their normal duties. 25,000 school children were daily given skim milk supplied by UNICEF.

Kutch : The State had no School Health Services of its own, though it deputed a Medical Officer once every two years to examine the high school students. As for colleges, the examination is conducted yearly. Supplementary feeding for primary school children was carried out by the Public Health Department in 1954.

Madhya Bharat : The School Medical Service in the State was under the Education Department. Three Medical Inspectors of Schools for the three divisions of the State inspected the 50 institutions.

Madhya Pradesh : The University of Nagpur had men students of the colleges in Nagpur, medically examined once a year. Those colleges, outside Nagpur had their own doctors approved by the Executive Council. Women students were also examined by lady Doctors. Each institution in the jurisdiction of Saugar University had its own qualified Medical Officer. 96% of students of the 39 institutions were examined once every year and treatment advised at the University dispensary or at the Government hospital. 33 poor students were supplied with glasses by Nagpur University in 1954 and 91 in 1955.

Madras : A scheme for the medical inspection of school children attending secondary schools and selected elementary schools in Madras and other Municipal towns was proposed for inclusion in the Second Plan at an estimated cost of Rs. 7.76 lakhs.

Manipur : Medical inspection of school children was started at Imphal in 1954, where the two doctors attached to the Civil Hospital did part-time duty. A dispensary was set up from the contributions made by students at the rate of 2 annas per head. The Medical Officer inspected the schools and medically examined 6,833 in 1956. Skim milk supplied by UNICEF was distributed amongst the school children.

Mysore : Medical inspection of school children was conducted by qualified medical personnel under the supervision of the Chief Medical Inspector of Schools attached to the Education Department. Milk distribution formed the major part of the Feeding Programme.

Punjab : The schools continued to make their own arrangements at a small monthly charge collected from the students in urban areas for the medical examination of school children. Part time Medical Officers were appointed under the charge of whole time qualified Medical Practitioner. In rural areas Medical Officers incharge of rural dispensaries continued work of medical inspection of primary and middle schools in District Boards and Government schools, free of charge.

Rajasthan : Though medical inspection of school children was a regular feature in the States of Jodhpur and Jaipur, the defects were treated at local hospitals and dispensaries by the parents concerned. Mid-day meals were arranged for most of the public schools.

Travancore-Cochin : There was no systematic programme for medical inspection of school children in the State.

Tripura : One Medical Officer was appointed as the School Health Officers in the State from March, 1954.

Mysore : Medical inspection of school children was conducted by qualified medical personnel under the supervision of the Chief Medical Inspector of Schools attached to the Education Department. Milk distribution formed the major part of the Feeding Programme.

Punjab : The schools continued to make their own arrangements at a small monthly charge collected from the students in urban areas for the medical examination of school children. Part time Medical Officers were appointed under the charge of whole time qualified Medical Practitioner. In rural areas Medical Officers incharge of rural dispensaries continued the work of medical inspection of primary and middle schools in District Boards and Government schools, free of charge.

Rajasthan : Though medical inspection of school children was a regular feature in the States of Jodhpur and Jaipur, the defects were treated at local hospitals and dispensaries by the parents concerned. Mid-day meals were arranged for most of the Public schools.

Travancore-Cochin : There was no systematic programme for medical inspection of school children in the State.

Tripura : One Medical Officer was appointed as the School Health Officer in the State from March, 1954. He conducted medical examinations in four institutions and advised parents to have the defects in their children rectified at the hospital or dispensary.

Uttar Pradesh : The Assistant Director of Health Publicity is the administrative officer incharge of school health services in the State of Uttar Pradesh. Medical inspection of school children was done in the 14 large towns. It was the duty of the school Medical Officers to visit the children of junior high schools, higher secondary schools, intermediate colleges, Government normal schools and Training Colleges and to conduct medical inspection of students in the 6th, 8th and 10 classes. The residents in hostels attached to Government institutions were also medically examined. Medicines were provided by the Education Department. Special attention was paid to the correction of defects and the treatment of diseases. Mid-day meals were provided to the 590 Higher Secondary Schools, Junior High Schools, Normal and Model Schools, while 3,27,274 lbs. of UNICEF skim milk powder was distributed free to school children. 394 children with defective visions were supplied spectacles free of charge.

Vindhya Pradesh : There was no arrangement for medical examination of school children in the State. Arrangement for supplementary feeding was made in some schools in Rewa, where a fee of Rs. 7.00 was realised from each student for the purpose. Other institutions were supplied milk powder from the UNICEF and the Red Cross Society.

West Bengal : School children in rural areas were medically examined by the rural Medical Officers of Health attached to Government Health Centres. In urban and semi-urban areas, the work was carried out by Health Officers or Municipalities or District Boards. Emphasis was laid on the assessment of nutrition in addition to the general physical examination. Follow-up work was improved upon and specialised services of Dental Surgeon provided through bigger hospitals. School Health Clinics

were maintained at all the Government Health Centres in rural areas. 2 full time Medical Officers and 1 School Health Nurse were appointed for Calcutta. 1,35,000 pupils from 2,680 educational institutions out of 21,80,000 attending 80,633 institutions were examined during 1954. Supplementary feeding scheme was subsidised by the State Government and poor children suffering from eye defects provided with spectacles free of charge.

Andaman & Nicobar Islands : The Public Health Officer conducted the medical inspection of school children during the period under report.

Industrial and Social Health

Reasonable care and comfort if given to industrial workers, lead to increased production and harmony in industrial undertakings. The industrial workers constituted about 1% of the total population of the country. In numerical numbers this works out to a fairly large group, in comparison with that of other countries. The Employees (State) Insurance Scheme had made rapid progress by March 1957. It was accepted in the States of Andhra, Bombay, Delhi, Kerala, Madhya Pradesh, Madras, Punjab, Rajasthan, Uttar Pradesh and West Bengal. The scheme covered 11.52 lakhs of employees i.e. more than half of the insurable population in the country.

The Employee's (State) Insurance Corporation and the Central Government had decided to extend medical care under the scheme to families and at small centres, where specialist care and facilities are not available, arrangements were made for such treatment at the existing Government hospitals. Hospitalisation was provided on a scale of one bed to 800 employees. Summary of the reports from various States was as follows :—

Assam : The main industries of the State were tea, timber cutting, processing of finished veneers, dressed timber, coal-mining, petroleum, brick-making, soap-making, etc. Some of these industrial concerns had their own medical organisations which looked after employees.

Bihar : The Medical Inspector of Factories carried out investigations and surveys on dermatitis, baggasosis, pulp plants, silicosis, hazards in mother-of pearl, and lead industries.

Bombay : The Assistant Director-in-Charge of Registration, Districts and District Health Officers Inspected factories and mines in their regions as ex-officio Inspectors.

Madras : The health of the workers and the sanitary conditions at factories and environments were generally satisfactory. No epidemics were reported by any of the concerns. Proposals were approved for setting up residential areas, apart from industrial areas in respect of 6 municipal towns and 3 panchayats in 1956. The Director of Town Planning approved proposals for setting apart industrial areas in respect of 7 municipalities and 6 panchayats.

Workers were given facilities for medical treatment by Government dispensaries. A well-equipped hospital was under construction for use of the employees of the Indian Telephone Industries Ltd., Bangalore. It was reported by the Imperial Tobacco Co. of India, Bangalore, that absenteeism due to sickness ranged between 2.55 and 9.39% with an average of 5.73% for the year 1955. The Mysore Spun Silk Mills Ltd., Channapatna,

provided hoods and exhaust fans in departments, where dust reducing processes were operating and workers were provided with gum boots to protect their feet during "pupae boiling". They were also given onions, jaggery and butter-milk. The Government Porcelain Factory, Bangalore, provided masks and protective glasses to their welders, while those of the Hindustan Machine Too's (Bangalore) employed in painting heat-treatment were periodically examined and provided with milk daily. Similarly the workers of AMCO Batteries Ltd., Bangalore were kept under observations to detect lead poisoning.

Shri Krishna Rajendra Mills Ltd., Mysore reported a sickness rate of about 5%.

Uttar Pradesh : There were about 1,350 registered factories in the State employing 2,34,000 workers, mostly men, except for certain industries as cotton and jute, which employed some women workers. The important industries consisted of sugar, textiles, tannery, engineering, chemicals, presses, oils and soap, leather, metal-rolling, etc. Other cottage industries as brass, carpet, glass, bangles, shellac, etc. employed about 50 lakhs of workers. The Industrial Health Organisation at Kanpur established by the Uttar Pradesh Government in 1955 functioned as a specialised agency under the direct control of Director of Medical and Health Services, Uttar Pradesh. It had its own laboratory to conduct experiments on thermal study, dust counting examination for lead absorption, estimation of haemoglobin and measurements of height, weight and blood pressure. Data collected from mill records and ESIS dispensaries revealed that :—

1. There was no sickness absenteeism among 96.8% of workers.
2. Sickness absence was high in the weaving department.
3. Short illness upto 7 days constituted 73.8% of all sick absentees by duration.
4. Digestive disorders caused 23.7% of all absences, with respiratory diseases and malaria showing 15.7% and 15.1% respectively.

Thermal studies revealed that corrected effective temperature in turbines and boiler rooms was high in both the rainy and summer seasons, being 94°F.

1. The zone of comfort for worker was 77°F. to 80°F.
2. Heat radiation was high near turbines and boilers (128°F).
3. Air velocity was low at certain points, the lowest being 39 feet per minute in turbine rooms. In view of the above the workers were supplied salinised water, effective exhausting of hot air and improvement of general ventilation.

West Bengal : Industrial Hygiene Section of the Director of Health Services, West Bengal was set up about five years ago with the object of improving hygienic conditions of the towns associated with the various manufacturing and industrial concerns. In addition to the above activities the Medical Benefit Scheme under the Employees (State) Insurance Act of 1948 was given effect to in 1954.

Punjab : The District and Medical Officers of Health functioned as official factory inspectors under the Factories Act, 1948. 388 factories were inspected in 1956.

Rajasthan : The Factories Act and Rules of Rajasthan were enforced in nearly all the registered factories by the Labour Commissioner, Rajasthan. Facilities for lighting, canteen, creches, cool drinking water, first aid and ambulance, rooms, etc. were provided in 19 big factories in the State. The main industries consisted of textiles, marble, mica, salt, bones and cement.

Health of Prisoners—1954-56

Studies on the Health of Prisoners evince special interest as they are based on correct diagnosis.

Average daily population in jails of different States is given in Table No. 43 against authorised accommodation. Information for the year 1954 is also shown for comparison.

If it is postulated, rather arbitrarily, that 20% of the over-crowding will be moderate and above that it will be heavy, it will be seen that there was heavy over-crowding in Assam and Punjab in 1954 and 1955, was moderate in Bihar, and Uttar Pradesh in 1954 and 1955 and in Assam, Andhra Pradesh and Uttar Pradesh in 1956. The number of prisoners per 100 units of authorised accommodation for 1955 for the States of Assam, Punjab, Bihar, and Uttar Pradesh were 138, 161, 112, and 103 respectively. The tabulated figures show an overall picture; it is by no means implied that the position was as stated in all the jails taken individually.

During the period under report, there was improvement for the better in certain States. This change could be ascribed to authorised accommodation or the average daily population or both. Authorised accommodation decreased in some States due to closing of some temporary jails. The average daily population increased in Andhra Pradesh, Assam, Kerala, Uttar Pradesh, West Bengal and Rajasthan as in 1956. To meet the situation the State Governments adopted one or more of the following measures :—

- (i) Transfer of Prisoners to other jails under the jurisdiction of the same court of trial;
- (ii) Speedy disposal of cases;
- (iii) Release of under trial prisoners on bail as far as possible;
- (iv) Remission of sentences and release before serving full sentences;
- (v) Extension of some of the jails; and
- (vi) Construction of more temporary jails.

The percentage of admissions in the hospitals for treatment of various diseases, indicated that malaria was responsible for the greatest number in all the three years in 1954 and respiratory diseases in 1955 and 1956 followed by dysentery. Respiratory diseases formed an important cause of sickness among jail population. It may be noted that cholera was conspicuous by its absence in most of the States. A negligible percentage of attacks due to cholera was reported in 1954 and 1955 from Bihar and in 1956 from Uttar Pradesh. The highest percentage of malaria cases was partly due to the fact that so many prisoners were suffering from malaria even before admission to jails. Similarly it is claimed that very few cases of Tuberculosis were due to fresh infection and the reported admission were of the cases which were suffering even when outside the jail. The low

percentage of cases of smallpox and cholera was due to the efficient measures taken against the out-break of these diseases in jail. All new prisoners were vaccinated against smallpox and cholera. As far as possible cases of Tuberculosis were isolated for treatment. (Table No. 49).

In Table No. 50 is shown the case Fatality Rate, i.e., deaths per 100 of hospital admissions. It will be seen that the C.F.R. due to Tuberculosis of lungs is highest in the States of Pepsu, Madhya Bharat and Rajasthan. Admission rate per thousand of average daily strength and constantly sick rate for each State are shown in Table No. 51. The former is a measure of the incidence and the latter that of prevalence of sickness among the jail population. The admission rate was higher in 1956 than in 1954 in Andhra Pradesh, Kerala, Orissa, Uttar Pradesh and West Bengal. It decreased in Bombay, Madras and Rajasthan, while the consistently sick rate increased in Andhra Pradesh, Assam, Bombay, Orissa, Mysore and Kerala and remained more or less constant in Uttar Pradesh and West Bengal.

Increase or decrease in weight is generally interpreted as improvement or deterioration in health respectively. The prisoners were weighed at the end of each year in all the jails as a matter of routine. The following tables show the percentage of prisoners who gained in weight, remained stationary in weight and those who lost weight during the year under report. It was observed that 6% of prisoners lost weight during the course of the period under review despite sickness, whether newly acquired or carried over from the last year.

Percentage of prisoners who gained in weight, State-wise

	Percentage	1954	1955	1956
Highest		Coorg	Travancore-Cochin	Mysore
Lowest		Bombay	Bombay	Tripura

Percentage of prisoners who did not show any change in weight

	1954	1955	1956
30—50% in all Part A States except Bombay.	30—50% in all States	30—50% in all States	
	Bombay-(59%)	..	except Bombay 64.5%
	Punjab-(62%)	..	West Bengal 79.4%
	Assam-(62.6%)	..	Assam 64.3%
			Tripura 85%

The jail authorities were particularly careful about the scale and quality of diet supplied to prisoners. Diet was given according to the scales laid down in the respective jail manuals. Sick prisoners were given special diet as prescribed by the Medical Officers.

Facilities for recreation and library facilities were available in the jails of almost all the States. Film shows on informative subjects and lectures on moral topics were also arranged. In some States dramas were staged by the convicts. In Andhra Pradesh, there is a library in each of the jail schools for prisoners and a radio with loud speakers in all the Jails. In West Bengal, Bratachari songs and dances are performed by convicts regularly in central and District jails and also in some of the sub-jails. In order to keep prisoners fully occupied and to afford recreation interesting programme of various kinds of activities like kabaddi, volley-ball, wrestling etc. were arranged. Facilities for outdoor and indoor games were available to prisoners in many of the States.

Fairs and Festivals—1954-1956

Fairs and festivals form part and parcel of the social and religious life of India. Held annually and attracting large crowds, they formed the trouble spots in the spread of epidemics, as smallpox and cholera mainly, and were a challenge to the Public Health Administrators of the country. The challenge was met and overcome and one does not now hear of the outbreaks of epidemics from this source. Research, immunisation and isolation, good environmental sanitary arrangements and control over food and water supplies during the gathering of vast multitudes, helped prevent and avert considerable loss of human life and suffering.

The magnitude of the task undertaken by the health authorities can be gauged from the Table No. 52. There were 1,155 such gatherings in West Bengal during 1956 with 44,12,790 congregating, a record for the period under review. The data thus presented is neither exhaustive nor complete, for it is not always possible to know the number attending.

Nutrition—1954-56.

As in previous years, the assessment of the nutritional status of the people and measures taken for its improvement formed the basis of public health nutrition work both at the Centre and in the States. To combat malnutrition, ameliorative measures were undertaken at both levels. They consisted of school feeding schemes in the States; distribution of protective foods, such as, multi-vitamin tablets, milk and cod liver oil to the vulnerable groups and hospital patients through Maternity and Child Welfare Centres, schools and hospitals and Community Feeding Programmes with UNICEF milk on a large scale.

Distribution of milk, which first began in 17 States is now carried out by all the States. The UNICEF Programme of allotment of skimmed milk, 3,000 tons in 1954, 8,200 tons in 1955 and 5,250 tons in 1956 were a boon to the beneficiaries.

To meet the demand for dieticians, a course in Dietetics of the University of Calcutta was started in 1949 at the All India Institute of Hygiene and Public Health, Calcutta, in collaboration with the Calcutta University Medical College. 5 qualified for the Diploma in 1954, while 10 were undergoing training. As regards research in nutrition, the Nutrition Research Laboratory, Coonoor was the main centre, with the Indian Council of Medical Research financing its various research schemes. In order to study the palatability and acceptability of food yeast as a supplement to Indian diets, large scale consumer trials were conducted in 1955 in four

selected States of Madras, West Bengal, Bihar and Uttar Pradesh with 3 tons of food yeast received from U.S.A. The results were as follows:—

Madras: The consumed trials indicated that though there was no noticeable increase in the weight and heights of the experimental subjects, there was a decided improvement in the Vitamin B complex deficiency.

West Bengal: 10 to 20 per cent of those experimented upon were reluctant to accept yeast, because of its disagreeable smell and taste. The results of the trials were satisfactory and an improvement in the nutritional status of the beneficiaries was observed.

Bihar: The trials indicated that the daily dose of 1/8th ounce of food yeast used as a supplement in diet increased the height of children by 0.2 inches and weight by 0.7 lbs. in four months. An improved nutritional status was also observed.

Uttar Pradesh: The following average increase of weight were recorded, in village Indurabagh:

Adult Males	3.0 lbs.
Adult Females	1.8 lbs.
Children	2.2 lbs.

On the whole, it can be stated that food yeast can be palatable and acceptable to certain groups of people when used up to 1/8th to 1/4th ounce per head per day and in some cases up to 1/2 ounce per head per day in the daily diet.

Diet surveys, nutrition surveys, investigations, small scale consumer trial of fish flour and ameliorative measures were carried out in the following States:

Andhra: A marked rise in the consumption of protective food as milk, vegetables and fruits in the higher income groups and a corresponding fall in the consumption of cereals was observed. The deficiencies exhibited were those of vitamins A and B complex and C which were more common among the low income group families. Beri-beri investigations under the auspices of the Williams Watermans Foundation, U.S.A. and the Nutrition Research Laboratories, Coonoor conducted at the Beri-beri Research Unit, Visakhapatnam in 1955, indicated no significant difference between suspected cases of sub-clinical Beri-beri and the average healthy individual. It was also revealed that sub-clinical thiamin deficiencies occurred in expectant and nursing mothers more frequently than previously realised. 350 tons of UNICEF skim milk powder and multi-vitamin tablets were distributed to the vulnerable groups.

Bihar: The majority of the subjects (cultivators and labour class) consumed less protective foods than was desirable and their calorie intake was below the recommended level. Further the nutritional status of school going children was low and deficiency symptoms of B complex vitamin A & C encountered. Intestinal disorders as diarrhoea with enlargements of the liver and spleen were present in 10 to 15 per cent of the children.

Over 25% of the people using tube well water were found to have developed goitre within 2 to 6 months while those people who used water from other sources, showed an incidence of about 2.5% or even less.

Analysis of water from four of these tube wells showed that the iodine content was on an average 1.32 m.g. per litre as against 6.47 m.g. per litre in 5 of the superficial wells of the same area. 2 Pilot Schemes were operating in the affected areas and weekly doses of 10 milligram potassium iodide tablets were distributed in the affected areas. The progress was satisfactory. Distribution of UNICEF milk powder to the vulnerable group figured mainly in the ameliorative programme.

Bombay : The average intake among the casual farm labour of all items of food was below the desired level and school children were found deficient in sub-cutaneous fat and suffered from dental caries. The incidence of vesical calculus was rather high. Industrial Workers showed a bluish discoloration of gums which was not nutritional in origin. Vitamin B complex deficiency was very common among the dubhra men and women. The amino acid composition of leafy vegetables and millets by micro-biological methods was being continued to determine the nutritional evaluation of food stuffs. The work of compiling data on the average heights and weights of 21,000 primary and secondary school children of the six districts of Ahmedabad Division have now been completed. Fish flour trials among the school children had no visible effect and were objected to because of the smell.

Himachal Pradesh : The absence of leafy vegetables and fruits in the diet of agriculturist families, besides the lack of milk and milk products, meat, sugar, vegetables, etc. was detected on survey. The diet consisted mainly of cereals, wheat, rice, maize and pulses.

Hyderabad : The diet of the agricultural labour class and that of petty tradesmen indicated adequacy in cereals, but lacking in all other items. Vitamin B2 complex deficiency was prominent. Studies on endemic flourosis and protein malnutrition were being continued. As in Bombay, cheap 'square meals' were provided at industrial canteens for workers.

Madras : The majority of the subjects consumed parboiled rice and sometimes raw rice, ragi and handpounded rice. The consumption of leafy vegetables fats and oils was below the recommended level. Vitamins A and B2 complex deficiencies were mainly observed amongst the school children. Evidence of poor physique among the school children was a marked feature in rural areas. Measurements of heights and weights of 7,905 children and adolescents were carried out during the major exhibition in 1955. The data was still being analysed. The UNICEF gift of rice and skim milk were used for supplying mid-day meals at the Nutrition Unit, Poonamallee Health Centre and Gandhigram Community Project area in Madurai district. 73,000 pupils attending 922 labour schools, and 11,000 malnourished children attending the elementary schools run by the Corporation were benefited by free mid-day meals during 1956. Kitchen gardens in schools and houses were actively encouraged by the Government.

Madhya Pradesh : Diet of students (a girls school) was found to be fairly satisfactory, but that of the vulnerable group was poor. UNICEF skim milk, fish liver oil, capsule, and vitamin tablets had to be distributed to supplement their foods.

N.E.F.A. : This is one of the goitre regions in India. Preliminary surveys indicated that the aetiology of endemic goitre is more complicated than was believed hitherto.

Punjab : The Dietary intake was found satisfactory except in the consumption of leafy and non-leafy vegetables and flesh foods. Vitamins A and B2 complex deficiencies were found in the majority of the members surveyed. Goitre Pilot Project sponsored jointly by the Governments of India and Punjab completed its first phase of activity in Kangra District. Data was being analysed. In addition to the UNICEF skim milk, calcium and iron tablets and iodised salts were also distributed. Iodised salt was distributed to families in the Kangra valley.

Travancore-Cochin : The nutrition section has not been organised to date and relief measures were conducted through Maternity and Child Health Centres, voluntary organisations, etc. Survey of hill tribes diet showed a lack of cereals, millets, pulses, leafy vegetables, vegetable oil, milk and milk products, sugar and jaggery. It consisted chiefly of tapioca, coconut and flesh foods. Anaemia, bleeding gums and caries were prevalent.

Uttar Pradesh : The diet was found adequate in calorie, but not in protective foods, Vitamins A and B2 complex were the main deficiencies observed. A Goitre Survey in Baduan District showed enlarged thyroids among 5% of the population. Improvement in the water supply and distribution of iodine were the main measures undertaken. Mid-day meals for the higher secondary children at a nominal charge of eight annas per mensem has been arranged. The Government sponsored milk scheme benefited 4,000 expectant and nursing mothers of the lower middle class families of Kanpur, Allahabad, Agra, Lucknow, etc. in 1955. The distribution of iodised salt to school children in goitre affected areas is being continued.

West Bengal : The diet consisted mainly of rice supplemented with pulses, but the consumption of leafy vegetables, fruits, vegetable oil, milk, etc. was found to be low. Vitamins A and B2 complex deficiencies were noticeable. UNICEF skim milk powder was distributed to the School children and the vulnerable groups. 60 schools benefited from the mid-day meals scheme sponsored by the State Government.

Adulteration of Food—1954-1956

Food like water is a primary necessity of life and supply of wholesome food, adequate in quantity and rich in nutritive value is an important factor in the prevention of disease. Scarcity of certain essential articles of food and the high cost of living are factors to be reckoned with, more so, when such articles are adulterated. The Prevention of Food Adulteration Act 1954 was enacted by Parliament to make provision for the prevention of food adulteration. It extends to the whole of India except Jammu & Kashmir.

Andhra : The Madras Prevention of Food Adulteration Act of 1929 was in force in the State in 96 Local Bodies. Samples taken were forwarded to the King's Institute, Guindy, Madras. Under the present arrangement, the Institute will extend its facilities to Andhra for a period of five years from the date of formation of the State.

Assam : The Assam Pure Food Act, 1947 and the Assam Pure Food Rules of 1949 were in force in the State before the Prevention of Food Adulteration Act of 1954 and the Prevention of Food Adulteration Rules,

1955. Water and skimmed milk powder were generally the adulterants noticed in milk food samples examined at the State Public Health Laboratory, Shillong.

Bihar : The Prevention of Food Adulteration Act, 1954 was passed to replace the Bihar Prevention of Food Adulteration Act, 1947. The State Public Health Laboratory under the chemical analyst examined the food stuffs collected under the Act.

Bombay : The Bombay Prevention of Food Adulteration Act, 1925 was in force up to the end of May, when the Prevention of Food Adulteration Act of 1954 became effective.

Bhopal : The Bhopal Prevention of Food Adulteration Act, 1946 was in force in municipal areas of Bhopal and Sehore towns. The Vegetable Oils Product Control Order of 1947 was extended to the State by the Government of India, Ministry of Food and Agriculture in 1953. Health Officers of Municipal Boards, Sanitary Inspectors and Inspectors of Food and Civil Supplies Departments were delegated the powers of food inspectors.

Coorg : Coorg has no laboratory facilities for the examination of food samples and hence such samples are sent to the Government of Mysore. The Prevention of Adulteration of Food stuffs was ensured through the Coorg Pure Food Act of 1943 till 1955.

Himachal Pradesh : The Punjab Pure Foods Act, 1929 was applicable to the Himachal Pradesh in 1954 and 1955. Food samples were sent to the Public Analyst, Ambala Cantonment for examination. Prevention of Food Adulteration Act, 1954 became effective in 1956.

Hyderabad : The Food Adulteration Act, 1954 was not in force in the State during 1954. No Food Inspectors were appointed as the Act was not implemented in the State, but action was taken under the Hyderabad Sanitary Powers Act by the Health Officers for collection of food samples and analysis at the Public Health Central Laboratory.

Madhya Pradesh : The Central Province and Berar Food Adulteration Act, 1919 was effective in the corporation and in the municipal areas of the State in 1954 and 1955. Information for 1956 is not at hand. Laboratory facilities were available at the Vaccine Public Health Institute, Nagpur and the corporation laboratories of Nagpur and Jabalpur.

Madras : The Prevention of Food Adulteration Act of 1954 came into force on 1-6-1955 and a satisfactory feature was that punishments imposed in cases of food adulteration during 1956 were severe. There was marked increase in adulteration of turmeric and tea. Samples contained more than the permitted limit of lead because of the use of lead chromate for colour polishing.

Manipur : The Prevention of Food Act of 1935 was in force in 1956. It has no laboratory for sample analysis and only such food as biscuits were examined.

Mysore : The Mysore Food Adulteration Act of 1921 was in force in certain areas of the State and the Food Adulteration Act of 1954, though extended to the State in general in 1954, was not operated till about the end of the year. Water was the common adulterant in case of milk, and the cheaper varieties of hydrogenated fats in the case of ghee and butter.

Punjab : The Punjab Pure Food Act was replaced by the Prevention of Food Adulteration Act, 1954 in 1955. Food samples were examined at the State Food Laboratory at Ambala Cantonment and Patiala. Routine food analysis were also carried out at each of the Food Laboratories in the municipalities of Amritsar, Jullundur, Ludhiana and Simla.

Rajasthan : The rules under the Prevention of Food Adulteration Act, 1954 were finalised and enforced in the State in 1956. Analytical Laboratories of Jaipur and Jodhpur conducted examinations of food samples.

Travancore-Cochin : The Prevention of Food Adulteration Act, 1954 became effective in the State the same year.

Tripura : The Food Adulteration Act was not in operation during the period under review.

Uttar Pradesh : The Uttar Pradesh Pure Food Act, 1950 and the Uttar Pradesh Food Rules of 1952 were in force in the State during 1954 and continued to be so in 1955, in addition to the introduction of the Prevention of Food Adulteration Act, 1954 in 1955. Adequate facilities were available at the State Government Laboratory at Lucknow for analysis of food samples.

West Bengal : The Bengal Food Adulteration Act of 1919, the Calcutta Municipal Act, 1951 and the Bengal Municipal Act of 1932 were in force before the Prevention of Food Adulteration Act, 1954 became effective. Laboratory examinations of food samples were carried out in the district laboratories, Central Public Health Laboratory, Calcutta and the Calcutta Municipal Laboratory.

Andaman & Nicobar Islands : There is no legal provision existing in the Andaman and Nicobar Islands with regards to Food Adulteration.

Please vide Tables No. 53 and 54 for further details.

Railway Health Services—1954-56

There were six different Railways (grouped according to regions) as Northern, Southern, Eastern, Western, Central and North-Eastern during the years 1954-55. In 1956, the South-Eastern Railway came into existence. Each Railway had its own Medical and Public Health Organisation, which catered to the needs of railway staff and sanitation at railway stations and railway colonies. Medical facilities offered by Railways in general were good. Each year saw an increase in the number of hospitals, dispensaries and beds. The additions by each Railway towards hospitals, dispensaries and beds in the period under review were as follows :—

	North- ern Railway	South- ern Railway	East- ern Railway	West- ern Railway	Central Railway	North- East- ern Railway	South- East- ern Railway
Hospitals		1	3	1	1	—	1 7
Dispensaries		15	3	—	—	—	2 —
Beds		113	23	77	28	36	50 392

Railway Administration did not generally have Tuberculosis Clinics or Sanatoria exclusively for their staff, but, had beds reserved in neighbouring institutions. Eastern Railway had 7 Tuberculosis Clinics, one T.B. Hospital with 25 beds and a mass miniature X-ray plant. To these have been added 3 additional Camera Units facilitate mass radiography. 2 Dental Clinics have been attached to Divisional Workshops and Divisional Hospitals. (Table No. 55).

Maternity & Child Welfare Centres were maintained by Railways in most cases by grants from the Staff Benefit's Fund or by reimbursement of cost of treatment to the low-income group staff in the cases, where facilities by Railways were not available (*vide* Tables 56 & 57).

On such occasions, as fairs and festivals, additional arrangements were made to meet the rush and stress created by multitudes of moving humanity. Mass immunization against smallpox, cholera, plague and enteric group of fevers and the extensive use of D.D.T. and other insecticides as protection against flies and mosquitoes were carried out. (*vide* table No. 58). Unprecedented floods in Bihar, North Bengal and Assam called for concerted efforts to stem and limit the spread of epidemics. The mortality and sickness statistics were higher in 1956 than in 1954 in the Northern, Southern, Central and Western Railways than in the Eastern, North-Eastern and South-Eastern Railways. Controlled measures were effective as observed from the low mortality figures. (Table No. 59).

Sanitation of railway colonies was effected through Sanitary Boards and Sanitation Committees by employing considerable staff, *vide* table No. 60. The staff strength had been steadily increased each year to cope with the intensive measures put into practice. The sources of water supply, protected or otherwise, were other problems undertaken by the Railways. Bacteriological and chemical examinations of water were systematically conducted as pure water had to be ensured to the travelling public and the families in railway colonies (table No. 61). Scarcity of water was experienced at way-side stations of Central Railway. The staff then were, therefore, supplied with water from engine tenders.

To ensure good food to the travelling public and staff, foodstalls were regularly inspected by the Medical and Health staff of the Railways and vendors subjected to medical examination. The Health staff of Railways, except the Central and the North-Eastern, were vested with powers as Food Inspectors and the work carried out is detailed in Table No. 62. Training in First-Aid and propagation of health education were progressing *vide* Tables No. 63 & 64.

The policy of providing quarters for certain categories of staff, who are required to be near their work had been pursued and some quarters would be provided in the Second Plan. General health of staff and their families were reported as satisfactory.

Health Education—1954-56

Dissemination of Health Education was carried out on a very limited scale by the Central and the State Governments, and it was recognised with the passage of time that Health Education was very necessary to orientate the people to a better and healthier way of life.

During the second meeting of the Central Council of Health in 1954, a resolution was passed welcoming the decision of the Government of India to include in the First Five Year Plan the establishment of a Central Health Education Bureau in the Directorate General of Health Services and recommended the setting up of similar Bureaux in Health Directorates of different States. The Central Health Education Bureau was sanctioned by the Ministry of Health in October, 1955 and its first Assistant Director General was appointed in November, 1956. The scheme was to be continued in the Second Five Year Plan at a total cost of Rs. 17.75 lakhs.

The Central Health Education Bureau will undertake basic studies in behavioural sciences required for the development of Health Education. The functions of the Bureau will be :—

- (1) To interpret the services of the Central Health Ministry in order to gain public support for the national health programmes and encourage maximum utilisation of the services.
- (2) To procure or prepare 'Type' health education material for distribution in the country.
- (3) To render technical assistance to the official and voluntary organisations at the national and State level in the programmes which require the educational methods and the application of behavioural sciences.
- (4) To represent the Central Health Ministry in planning, conducting and evaluating national health and welfare projects which use education as a principal method for achieving the aims of the projects.
- (5) To promote and coordinate health education work in the country particularly initiating and conducting in-service training sessions, and research studies, and education activities, aimed at increased and more effective use of education by workers throughout the country.

A provision of Rs. 37.09 lakhs has been made by State Governments for development of Health Education in the States during the Second Plan period.

Health Education was carried out when various Public Health Schemes came into operation such as mass BCG Vaccination, Yaws Control, National Malaria Control Scheme, National Filaria Control Scheme, etc. The education was conducted through radio, posters, leaflets, brochures, lectures, film shows and exhibitions. The activities of State Governments were as follows :—

Andhra Pradesh : There was no separate Health Education Bureau in the office of the Director of Public Health. A proposal for the establishment of a Bureau with a mobile van equipped with projectors was submitted to the Government in 1954 for inclusion in the Second Plan.

Bombay : Health Education formed an important field of activity in the Public Health Organization of the State. It was conducted through various agencies as the Public Health Department, Directorate of Publicity, Bombay, Mothers and Children Welfare Society and the Arogya Mandal, Poona. A Visual Education Section of the Education Department arranged

exhibitions in Bombay City in the larger towns and in rural areas, fairs and festivals, Agricultural and Industrial Exhibitions. As part of the M.C.H. project, the UNICEF had supplied a Propaganda Vehicle for carrying out Health Education in the primary health units in Poona district in 1955.

Hyderabad : The Bureau of Health Education continued its health propaganda with the help of its Health Museum, exhibitions, etc. A cinema car of the Bureau toured the villages for 69 days in 1954 and 91 days in 1955. A second car was added in 1955, which covered 3,915 miles and arranged 83 cinema shows.

Kerala : Kerala like Madhya Pradesh conducted its propaganda through its Health Inspectors and health staff of Public Health Department.

Madhya Pradesh : The scheme for the establishment of a Bureau of Health has been included in the Second Plan and hence no special activities in respect of Health Education were conducted, except those in connection with infectious diseases, leprosy control, B.C.G. immunisation, malaria, environmental sanitation, etc., through mobile rural dispensaries and the concerned health staff. Propaganda was also done on the ill-effects of the use of opium.

Madras : Health Education was chiefly carried out by the Public Health staff in districts and municipalities through talks, discussions, lectures, demonstrations, film shows, etc. A number of models were purchased, besides the 45 films in the regional language added to the Film Library. An exhibition on a very large-scale was held at Madras during the Congress Exhibition on 1955. A multi-purpose Health Education van equipped with cinema projector, public address system, tape recorder, models, etc. was acquired and put into operation. Attractive modern audio-visual aids, such as models, electrical and mechanical devices, coloured posters, etc. were arranged.

Madhya Bharat : Intensive propaganda was conducted during the 80th and 85th fairs during the years 1954 and 1955 respectively, through health exhibition, leaflets, lectures, etc. Baby shows were also held at the Gwalior Fair, the biggest to be held in the State.

Tripura : Efforts were made to awaken the health consciousness among the people through the media of health stalls, charts, models and slides at fairs, festivals and conferences.

The Central Health Education Bureau brought out in 1956, folders on Malaria I, Malaria II, Dental Caries and Jeevan Dan, and reprinted health bulletins entitled 'Nutrition Value of Indian Foods', 'Prevention of spread of the Yellow Fever of India' and 'What Malaria costs India'. Two posters, one on B.C.G. and the other on Yellow Fever, were designed during the year. 25,292 copies of posters were distributed in 1956.

The following articles were sent to the Press by the Director General of Health Services in 1956 :—

Iron for Health;
Vitamins;
Cheap Protein Food;
Sweatmeats from trees;

How to eat potatoes;
Minerals and Health;
Eat them raw;
Fads and Fallacies;
Balanced Diet; and
Meals for the Young.

The Film Division of the Ministry of Information and Broadcasting included the production of the following films in their programme. They were Dental Care, Venereal Diseases, Filariasis, Health Education Methods and Media and Fly nuisance.

There were 224 films and 51 film strips in the Film Library of the Bureau. 928 films were loaned to 192 organisations and exhibited to 5,05,120 persons. An expenditure of Rs. 39,200 was incurred up to the end of December, 1956, against an Annual Budget Grant of Rs. 2,50,000 for 1956-57.

CHAPTER IV

MEDICAL RELIEF

	PAGE
Hospitals and Dispensaries C.H.S.	63
Medical Relief to Displaced Persons	64
X-ray treatment	65
Radium treatment	66
Blood Transfusion Service	66
Mental Hospitals and Psychiatric Problems	66
Appendices Tables 65—77	282—306

CHAPTER IV

MEDICAL RELIEF

Hospitals and Dispensaries—1954–1956

Generally all hospitals and dispensaries in the States during the period under review continued to work satisfactorily. Hospitals and dispensaries were well-equipped as reported by the States of Hyderabad, Manipur, Rajasthan, Madras, Orissa, West Bengal, Delhi, Pepsu, Himachal Pradesh, Andhra, Bhopal, Mysore, Tripura, Andaman and Nicobar, Madhya Pradesh and Madhya Bharat. Other States as Assam, Punjab and Coorg did not have enough equipment in their institutions, while institutions in Uttar Pradesh, Kutch and Vindhya Pradesh reported equipment position as satisfactory.

The general trend of opinion was that the dispensaries run by the Local Bodies did not come up to the desired standard and hence they either had to be taken over completely by the State Governments or provincialized. This was reported from the States of Punjab, Madhya Bharat, Orissa, Bihar and Himachal Pradesh. The Government of Mysore reported that all the dispensaries were under Government control. The progress achieved during the period under review is as depicted in Tables No. 65, 66 and 67.

In order to provide better health facilities the Scheme of opening Primary Health Units/Centres has been initiated by certain States. These Units have within their scope domiciliary and institutional services with transport facilities for staff to tour villages within their jurisdiction. Maternity and Child Welfare Services and School Health Services also form an integral part of these Units. 70 such centres were established during the first Five Year Plan period by the States with assistance from the Government of India.

Medical Relief Advisory Committees functioned in Punjab, Mysore, Madras, Orissa, West Bengal, Kutch and Uttar Pradesh and in Delhi only from 1955.

It is gratifying to note that most of the States took a very vital part in the new schemes, such as constructions of hospitals, dispensaries and homes, equipment for dispensaries and laboratories, opening up of Maternity and Child Health Centres, Leprosy Centres, Tuberculosis Centres and stepping up of Medical Education.

The question of Nursing Homes has not been taken up seriously so far. They are only located in Hyderabad, Madhya Bharat, Delhi, Bihar and Orissa. The position is similar with regard to convalescent homes in the States. There is much that can be done for such Homes.

The number of hospitals and dispensaries, patients treated and expenditure incurred are shown in Appendix Tables, Nos. 65, 66, 67, 68, 69, and 70.

Note on the C.H.S. Scheme

The Contributory Health Service Scheme for Central Government servants in Delhi/New Delhi was introduced on an experimental basis in

1954. With a view to improving the services, re-organisation and expansion of the Scheme has been taken in hand. At present 26 static and 3 mobile dispensaries are functioning under the Scheme and it is proposed to open 4 more new dispensaries in the near future. The strength of the medical and other ancillary staff has also been increased considerably. The number of Medical Officers sanctioned under the Scheme at present is 181 including 30 specialists. The Scheme has proved to be very popular and more and more persons are taking advantage of the services provided under it. The daily average attendance in the C.H.S. Dispensaries which was 4,504 during 1954, now ranges from 10,000 to 15,000 cases daily. The total attendance in the C.H.S. Dispensaries during 1956 has been 32,50,930 as compared to 7,37,572 during 1954. In view of the value of the Scheme there is a great demand from a number of semi-Government organisations for its extension to these organisations. The table below gives an indication of the progress made by the Scheme since its inception in 1954.

	1954	1955	1956
1. No. of beneficiaries covered	2,23,000	2,73,00	3,20,028
2. No. of dispensaries (Static)	16	18	19
3. No. of dispensaries (Mobile)	—	3	3
4. Total attendance	7,37,572	22,95,678	29,62,265
5. No. of Medical Officers (Specialists)	11	20	20
6. Asstt. Surgeons, Grade I	29	69	69

The figures of expenditure on the Scheme and the contributions realised during the period 1954—1956 are given below :—

	1955-56	1956-57
	Rs.	Rs.
Expenditure	27,91,174	35,44,967
Receipts	16,55,601	20,90,119

Medical Relief to Displaced persons—1954-56

Displaced persons are being rehabilitated by various State Governments and the problem is not as acute as it was in previous years. Those persons requiring medical relief are treated in general hospitals and dispensaries in the States of Hyderabad, Rajasthan, Tripura, Kutch and Vindhya Pradesh. Certain other States such as Coorg, Madhya Bharat, Pepsu, Bihar, Assam, Madhya Pradesh and Himachal Pradesh do not have this problem.

The special facilities still continued by certain States are detailed below :—

Punjab : The usual high standard of sanitation was maintained in the nine Mud Hut Colonies, homes and infirmaries in 1954, which were later reduced to 6 by 1956. There was no outbreak of epidemic amongst the refugees during the period.

Rajasthan : Beds for tuberculosis cases were reserved and homes for displaced persons conducted.

Tripura : It has a separate medical establishment to render medical aid to displaced persons.

Manipur : 2 colonies are still being maintained with civil hospital affording medical attendance.

Vindhya Pradesh : A dispensary was opened in 1955-56 expressly for displaced persons.

Andaman and Nicobar Islands : 3 new dispensaries were opened in 1954 and 8 dispensaries were functioning during the years 1955-56.

Jammu and Kashmir : 1 dispensary was opened in 1954 to render medical assistance to refugees.

Bhopal : A hospital at Bairagarh Refugee Colony and dispensary for the Gandhi Nagar Refugee Colony functioned during the period.

Orissa : The Relief Camp Hospital at Ramanagar, Cuttack continued its services.

West Bengal : The 24 R.C. Hospitals and dispensaries gave medical aid to the people in the relief camps. Mobile Medical Units were also posted to check the spread of communicable diseases and to prevent the outbreak of epidemics of small-pox and cholera.

Radiology

X-ray : It will be observed from the Table Nos. 71 and 72 that the facilities for X-Ray diagnosis and treatment are still not adequate. The total number of major and minor X-Ray sets at present in India are shown below as against those available during 1953 and as compared to those in 1954, 1955 and 1956.

Period	X-ray sets	
	Major	Minor
1953	302	456
1954	416	524
1955	418	472
1956	435	478

This is less than 6.1% (1956) of the total number of hospitals and dispensaries. The Director General of Health Services will be placing an

indent to obtain X-ray equipment and laboratory facilities for 60 tuberculosis clinics in the country.

Radium

Facilities for radium treatment continue to remain inadequate. Table No. 73 provides data of the amount of radium available in India during the year 1956. The total quantity is 15,792.75 mgs. and 34 needles of various strength as compared to 11,043.05 mgm. available in 1953.

Blood Transfusion

Blood Banks.—During the period under report there has been an appreciable progress in the establishment of Blood Banks and Blood Transfusion Units. The increase is noticeable in the States of Andhra, Bombay, Hyderabad, Madras, Madhya Bharat, Mysore, Punjab, Rajasthan, Uttar Pradesh, and West Bengal. The States which have still to develop blood banks are Bhopal, Coorg, Himachal Pradesh, Kutch, Manipur, Pepsu, Saurashtra, Tripura and Andaman and Nicobar Islands.

The lack of Blood Banks does not indicate lack of Blood Transfusion Service in that particular State, for most Government hospitals are provided with Blood Transfusion facilities. Some of these States are moving in the direction of establishing Blood Banks to augment the service in the hospitals (Table No. 74 and 75).

The Blood Banks at Punjab are preserving blood in A.C.D. mixture instead of Trisodium-citrate solution. Glucose-saline is also manufactured. Andhra Pradesh has set up plasma processing centres at Guntur and Vishakhapatnam. Schemes under the consideration of the Government of Bombay are (1) separate resuscitation wards, (2) Preparation of Crystalloid solution in Blood Bank, (3) Training to Medical Officers, students and nurses and (4) Establishment of a voluntary Blood Transfusion Service at the St. George's Hospital, Bombay. The Governments of Madhya Pradesh and Bihar have sanctioned grants of fees to blood donors so as to make the blood transfusion service more attractive. This has been introduced in other States as well. The "Blood Insurance Scheme" introduced in Delhi assures free transfusion to a donor or his closest friend within a period of a year, while other States like Assam offered special amenities and facilities to prisoners who donated blood towards the Blood Transfusion Service.

A Blood Group Research Centre was established at Bombay in 1956 with the Indian Cancer Research Centre serving as the main base. It will train personnel in blood group technology for Blood Transfusion Services.

Mental Hospitals and Psychiatric Problems—1954 – 56

Progress in the fields of mental health and psychiatry has been very limited. Except for a few institutions, most of the hospitals function largely as custodian agencies and for want of adequate staff equipment and funds, a high standard of clinical work cannot be achieved.

The small number of existing institutions (Table 76) are unable to afford relief to the sufferer or to take care of the mentally defective

children. Over-crowding is the rule rather than the exception in all the mental hospitals. The system of allowing patients on parole, though to some extent relieves the congestion in Mental Hospitals, cannot, however, be regarded as an adequate measure for relieving the pressure on hospitals. The remedy, therefore, is to increase the number of Mental Institutions to accommodate the increasing number of patients, by remodelling and expansion of the existing hospitals, construction of Mental Homes, both by Government and through private enterprise, schools for mentally defective children and care, treatment and training of children in need of special care, Table No. 77.

The existing facilities for medical treatment is wholly inadequate on account of the meagre equipment. At present Insulin Shock Treatment therapy and Cradiazol Convulsive Therapy and B.C.T. are given in certain institutions. Occupational Therapy, which is one of the successful methods of modern treatment has, at present, been restricted mainly to domestic work, agriculture, weaving and carpentry.

The Government of India took over the management of the Hospital for Mental Diseases, Ranchi, from 1st June, 1954, with a view to making it a model centre for the treatment of mental disorders. This hospital provides accommodation for 420 patients, beds being reserved for contributing States, West Bengal (255), Bihar (60), Uttar Pradesh (35), Madhya Pradesh (10), Delhi (10), Assam (6), Orissa (6), Pepsu (1), Tripura (4), Other areas (3) and (30) independent beds. A provision of Rs. 8.25 lakhs has been included in the Second Five Year Plan for the development of the Hospital.

Similarly a provision of Rs. 25 lakhs has been made in the Second Five Year Plan for the establishment of a Home for the incurable mental patients at Ranchi, a sum of Rs. 2 lakhs being provided in the budget for the year 1956-57.

To make provision for special studies and research in Mental Health and to promote post-graduate training to advise the Governments on matters relating to the organisation of mental health services and promote post-graduate and special studies and research, the Government of India opened the All India Institute of Mental Health, Bangalore, in August, 1954. This Institute works in association with the Mental Hospital, Bangalore. A course for the Diploma in psychological medicines and another in Medical Psychology were started in 1955 and the number of candidates so far trained are as follows :—

D.M.P.	(2 years course)	7
D.M.P.	(2 years course)	6
Diploma in Psychiatric Nursing (1 year course)		

A provision of Rs. 41.0 lakhs was made in the Second Five Year Plan for the expansion of this Institute.

With the reorganisation of the States in November, 1956, the Mental Hospital, Dharwar (formerly in Bombay State) now belongs to the State of Mysore, while the Mental Hospitals at Nagpur (formerly in Madhya Pradesh), Bhavnagar (formerly in Saurashtra) and Bhuj (formerly in Kutch) have been added to the State of Bombay.

The magnitude of the problem of mental diseases can be gauged from the figures shown in Table No. 77. Proposals have been made by various State Governments in their Second Five Year Plans for the construction of new Mental Hospitals and Homes.

Certain States as Orissa, Pepsu, Himachal Pradesh, Tripura, Delhi, Bhopal and Manipur have no Mental Hospitals of their own. Orissa has made arrangements with Bihar to accommodate cases sent by the State for treatment.

The types of mental disorders observed at the various hospitals can be classified under the following heads :—

- Schizophrenia
- Epilepsy
- Toxic-Psychosis
- Maniac Depressive Psychosis
- Mania Melancholia Paranoia
- Neurosis and Psycho Neurosis

In certain States as Madhya Bharat, Madhya Pradesh, West Bengal, Andhra, Bihar, Manipur and Assam drug addiction plays in important part in the causation of mental diseases.

At the end of 1956, there were 33 Mental Hospitals in India with 15,679 patients against the sanctioned accommodation of 10,631 beds.

CHAPTER V
FAMILY PLANNING

CHAPTER V

FAMILY PLANNING

1954—56

The Planning Commission in formulating its First Five Year Plan stated "increasing pressure of population on natural resources (which must inevitably be limited) retards the economic progress and limits seriously the rate of extension of social services so essential to civilized existence". Hence the objectives of family planning programme as laid down by the Planning Commission were (i) to obtain an accurate picture of factors contributing to the rapid population increase in India, (ii) to discover suitable techniques of family planning and devise methods by which the knowledge of these techniques could be widely disseminated and (iii) to make advice on family planning an integral part of the service of Government Hospitals and Public Health Agencies.

During the First Five Year Plan efforts were primarily directed towards the building up of an active public opinion in favour of family planning and the promotion of the family planning advice and service on the existing knowledge. At the same time demographic as well as medical and biological studies were carried out. The implementation of the scheme involved the following activities :—

- (a) Subsidies to State Governments, Local Bodies and Voluntary Organisations for the opening and maintenance of family planning clinics, (b) Training, (c) Education, (d) Research and (e) Central Organisation.

During the First Five Year Plan period financial assistance was offered to State Governments, Local Bodies and Voluntary Organisations on the following pattern for a period of three years.

	%
Non-recurring	100
<i>Recurring</i>	
for first six months	100
for next twelve months	66½
for next twelve months	50
for next six months	33½

The pattern of financial assistance during Second Five Year Plan is as follows :—

Non-recurring	%	
	100	
Recurring		
	State Govts. and Local Bodies	Voluntary Organisations
First Year	% 80	% 100
Second Year	70	80
Third Year	50	80
Fourth Year	30	80
Fifth Year	20	80

An officer on deputation from Ministry of Defence joined the Directorate General of Health Services on 27th September, 1956 as Officer on Special Duty, Family Planning.

In order to give an impetus to the family planning programme during the Second Five Year Plan, a High Powered Family Planning Board was formed on the 1st September, 1956 to give advice on policy and programmes relating to family planning, with the O.S.D. (F.P.) as secretary.

The first meeting of the Family Planning Board was held on 27th October, 1956. The following are some of the important recommendations of the Board.

- (i) Offer of grants to voluntary organisations.
- (ii) Inclusion of training in Family Planning in Health Visitor and Nurses Training Centres and in the Re-orientation Training Centres at Najafgarh, Poonamallee and Singur.
- (iii) Establishment of training centres in each State in institutions with well developed M.C.H. Centres and family planning clinics.
- (iv) Undertaking of Medical and Biological research schemes relating to family planning by the Indian Council of Medical Research.
- (v) Laying down detailed standards for contraceptives.
- (vi) Formation of an Executive Committee to implement the policies formulated by the Board and scrutinize the proposals relating to family planning.
- (vii) Appointment of Family Planning Officers at State Headquarters in the State Directorate of Health Services to organise and coordinate family planning work and to act as liaison officer between the State and Central Government. Expenditure for the first three years will be borne by the Government of India.

The Indian Council of Medical Research *Ad hoc* Committee for research in Physiology of Human Reproduction held its meeting in Mysore on 16th November, 1956. At this meeting it was stressed.

(i) The research programme sponsored by the Indian Council of Medical Research should have as its chief aim the promotion of research into the physiology of human reproduction in its broadest sense. Systematic and Coordinated studies on the problems relating to the normal reproductive process should be undertaken by both animal experimentation and human studies.

(ii) The success of the field studies into the various aspects of human reproduction depended largely upon the willing cooperation of the people. Practical experience showed that it was very difficult to gain the confidence of the people in the project of this type unless it was combined with general medical relief work in the community. Facilities should be provided to the field units to undertake some type of medical work.

Budget Provision

A provision of Rs. 33 lakhs was made for family planning during 1954-55, Rs. 30 lakhs during 1955-56 and Rs. 30 lakhs during 1956-57.

The details of the expenditure are as follows :—

Item	1954-55	1955-56	1956-57 [up to Dec. '56]
(In lakhs of rupees)			
Grants-in-aid for opening maintaining clinics ..	2.75	5.24	2.99
Training and Education	—	0.40	0.49
Research	1.81	2.18	3.61
Organisation	0.97	1.13	0.86
TOTAL ..	5.53	8.95	7.95

Clinics

Grants for opening 205 clinics were sanctioned during 1954—56. The 205 clinics sanctioned during First Plan period included 96 clinics to State Governments, 29 Local Bodies and 80 to Voluntary Organisations. Against this 147 clinics (21 rural and 126 urban) including 85 by State Governments, 23 by Local Bodies and 39 by Voluntary Organisations were actually opened. 10 rural and 6 urban clinics including 10 rural and 5 urban clinics by State Governments and 1 urban clinic by voluntary organisation were opened during 1956-57 up to December, 1956.

Training

Short term training courses in Family Planning were conducted in Delhi and Kerala. 30 doctors, 32 health visitors and 5 social workers were trained during First Plan.

Pending the establishment of the Family Planning Training and Research Centre, Bombay, short term training courses were conducted in Delhi, Jamnagar, Junagadh, Rajkot, Amravati, Calcutta and Trivandrum. 88 doctors, 66 health visitors, 60 social workers and 79 others were trained.

A rural centre was set up in 1952 at Ramanagaram for conducting pilot studies on Rhythm Method. During 1955, it was decided to develop it as a Training, Demonstration and Experimental Centre for rural areas. Nine health probationers were given training in family planning during 1956-57.

Education

With a view to arouse the consciousness of the general public in favour of Family Planning, an educational programme was carried out by means of posters, pamphlets, films, filmstrips etc. An all India posters and pamphlet competition was organised for designs for posters and scripts for pamphlets, leaflets folders, plays etc. About 70,000 posters and 20,000 folders were printed for free supply to State Governments, Local Bodies and Voluntary Organisation conducting Family Planning clinics. The films entitled "Planned Parenthood" and "Family Planning" were produced by the Films Division of Ministry of Information and Broadcasting. Five Films—(i) Ripening Seed, (ii) Before the Baby Comes, (iii) Your Baby can be Healthy, (iv) Drums of Manipur, (v) Story of Mensuration were produced.

The education materials were made available to various agencies for propaganda purposes. A Family Planning exhibition was arranged at the Industries Fair, New Delhi and in Mysore.

Seminars on marriage guidance were conducted in Bombay, Calcutta and Delhi.

Research

The Family Planning Research and Programmes Committee at its first meeting recommended that studies should be undertaken to determine :—

1. Attitudes and motivations affecting fertility, and the economic and social determinants of population trends, and

2. Long range effects of Family Planning.

13 research studies relating to Medical, Biological and Demographic programmes were undertaken in the year 1954-55 and 5 studies were sanctioned in the year 1955-56.

During the First Five Year Plan period the Demographic sub-Committee drew up a programme of demographic research on the high birth and death rates of the country in relation to economic, social, cultural and allied factors. Accordingly, the Government of India sanctioned the establishment of a Demographic Teaching and Research Centre in Bombay, in collaboration with Dorabji Tata Trust and United Nations. The Demographic Centre, was established in Bombay in September, 1956. This centre, in due course, will be developed into a regional centre, in collaboration with the United Nations to serve the needs of other Asian countries as well.

The Demographic sub-Committee recommended that data on sterilization might be collected from the hospitals records. The data on sterilization was collected from two hospitals viz., Eden Hospital, Calcutta, and the Cama and Albless Hospital, Bombay.

Out of the twenty medical biological and demographic research schemes started during the First Plan period 13 research schemes were continued during 1956-57. (List of research schemes in Appendix Table No. 78). Grant-in-aid sanctioned for research schemes during 1956—57 was about Rs. 1.32 lakhs. Rs. 3 lakhs were sanctioned for the construction of the building for the contraceptive testing centre at the Indian Cancer Research Centre, Bombay.

CHAPTER VI
MATERNITY AND CHILD WELFARE

Appendix Table Nos. 79 & 80 308-309

CHAPTER VI

MATERNITY AND CHILD WELFARE

A review of the maternity and child welfare services in the States revealed a satisfactory progress in the expansion of Health Services for Mothers and Infants during the period under review.

The Government of India provided Rs. 50 lakhs for its First Five Year Plan as subsidy to State Governments in expanding the services in backward rural areas.

Maternity and Child Welfare Services continued under the State M.C.H. Programmes and under State Urban and District Health Organisation under Community Development and National Extension Services and under Central assistance to States. Voluntary Organisations and the Social Welfare Board continued to produce good results. By the end of 1954, 15 out of the 23 States had created Maternity and Child Welfare Bureau in State Directorates of Health. The 'B' and 'C' States of Jammu and Kashmir, Madhya Bharat, Vindhya Pradesh, Tripura, Manipur, Coorg, Bhopal and Rajasthan did not have any special M.C.H. Bureaux. However, efforts were made to assist State Governments to strengthen the administration of these services at State level, but, States of Andhra, Assam, Bihar, Bombay, Delhi, Himachal Pradesh, Hyderabad, Jammu and Kashmir, Orissa, Madhya Pradesh, Madras, Punjab, Saurashtra, Travancore-Cochin, Uttar Pradesh and West Bengal and Maternity and Child Welfare Officers with special training and experience to direct the services at State level by 1955.

The expenditure on Maternity and Child Welfare in the States has steadily increased, the cost of maintaining Maternity and Child Welfare Centres varying from Rs. 2 lakhs in some States to Rs. 14 lakhs in others.

Health Services for Mothers—1954

Institutional beds for midwifery services in urban areas were more than the prescribed standard of 1 Maternity Bed for 100 Births and provided for 60% of the births in cities. The adequacy of institutional beds for most of the States as a whole (including urban and rural areas) was, however, below the prescribed standard. In States as Coorg, Madhya Bharat and Manipur, where the ratio of beds was more than one per hundred births may be due to inaccuracy in the recording of births in rural areas. On the whole, there were approximately 15,000 maternity beds, sufficient for 15% of the total requirements of the country in the way of institutional maternity services. In States, where such services have been established, 20 to 30% of the births are attended in the homes by qualified staff, whereas in urban areas approximately 40% of the births receive Domiciliary Midwifery Services. It is, therefore, estimated that approximately 30% of the births were attended by qualified staff in institutions and in homes and approximately 70% were attended by indigenous dais. The institutional services were sufficiently emphasised in urban and rural areas, but post-natal services did not receive that degree of stress on hospitals and at

Maternity Centres with the result that conditions arising after delivery were not immediately detected and so corrected. By diet supplements and drugs, common nutritional anaemias were found to wane.

1955

469 centres were established during the year providing skilled domiciliary maternity services. Of the total number of 2,949 centres, 1,106 functioned in urban areas and 1,374 in rural areas. 255 Maternity Homes functioned (182 in urban and 73 in rural areas) with 577 maternity beds for normal cases. These homes were meant for affording facilities to mothers, whose home conditions were too poor and insanitary to permit normal delivery without risk of infection to mother and the new-born. 69 hospitals functioned providing skilled care primarily to abnormal cases. They were provided with 4,263 beds. A total of 8,916 midwifery beds were in use in general hospitals during the year in the reporting States. There were thus 18,956 Maternity beds as against 15,000 in 1954. They provided services to approximately 5,68,680 births which accounted for 10% of total births. But, hospitals' statistics revealed that the beds served doubled the number of births, thus indicating, therefore, a degree of pressure exerted on the available beds. Madras had the best provision of 0.48 bed per 100 births and Bombay 0.21 per 100 births. It was estimated that the existing Maternity Services in the urban and rural areas covered 25% of the births. It was likely that the percentage of infants receiving skilled care at birth was 20% of the total births for India as a whole. The proportion of institutional and domiciliary midwifery services was 2 : 1. It was probably due to lack of coordination in the institutional and domiciliary midwifery services. Post-natal clinics were inadequate, though, they were being increased. The follow-up of mothers after delivery and the associated clinics for the follow-ups of new-borns and infants had not yet been developed. The maternity hospitals thus continued to function as receiving stations and have not paid much attention to well-being of the mother and the child once they are discharged from the hospital or the institution of delivery. The follow-up service is, however, supplemented in the domiciliary midwifery services which have much better provision for post-natal advice for health supervision of the mother and infant both at the Centre and in the home.

The reporting States showed a wide variation in percentage of births covered by skilled care as 2% in Manipur to 56% in Coorg. In urban areas, approximately 60% of the births had trained staff to attend on them. In spite of recent rapid expansions in services, both institutional and domiciliary, were below the desired standard. Ante-natal services which were conducted at all Maternity and Child Welfare Centres and Hospitals were popular with mothers taking full advantage of them.

During the year under review 1,380 expectant mothers and children utilised drugs and diet supplements and dried skimmed milk provided by UNICEF. The preventable diseases revealed a lower mortality and morbidity in maternity statistics, though accurate information was lacking, due to defective recording of maternity deaths in rural areas. It was estimated that the maternal mortality for India, as a whole, was approximately 12 per 1,000 live births as compared to the estimated figure of 20 in 1943.

An All India Training Programme for dais was outlined on the basis of the results of the Pilot Scheme, undertaken by the State of Hyderabad.

It was to orient the existing dais in modern trends. The dais will be given a six months' orientation on the job. After such training, she will be required to work under supervision. One dai for every 50 births would thus be provided. The cost of training 60 dais was estimated at Rs. 9,600 and the total scheme for such training in all the States under the Second Plan would amount to about Rs. 90 lakhs. This project would help improve the midwifery services rapidly.

1954

Health Services for Infants and Children

There was an overall increase in the services for infants and children. The M.C.H. Centres and the Primary Health Centres established under the First Plan provided these services, but, the small staff of 1 Health Visitor and 4 Midwives for a population of 60,000 was very inadequate and limited in its scope. In addition to these services, the State Governments maintained over 3,000 M.C.W. Centres and provided 100 M.C.W. Centres during the year. The M.C.H. Projects helped to expand the services for children.

1955

There were 65,07,050 births recorded during 1955 and the birth rate was 27.0 as compared to 24.4 in 1954 registration of births. In areas, where the services were comprehensive and birth registration more accurate, the actual birth rate was higher than the All India figure of 27.0. It was about 40. Here again the lack of accurate registration of births hindered those unregistered births to derive the benefit of services of Health Visitors, even where such were provided. It was essential that full and early information of the registration of births be made available.

Only 20% of the total births had skilled care, 2/3rds of which took place in hospitals and one-third were attended by midwives at home, while the remaining 80% were attended to by indigenous persons, relations of dais.

There were 2,480 Maternity and Child Welfare Centres in the reporting States and 469 centres established during the year, thus, bringing a total of 294 centres, which functioned during 1955. Most of the Centres were maintained by State Governments or by Central subsidy and approximately 800 by municipalities and about 400 or 15% of the total number of Centres by private organisations. Thus Government and Local Bodies were assuming major responsibilities in financing the administration of health programmes for children as contrasted with the position in 1947-48, where private enterprise played the most important role.

In Centres, where there was a full complement of staff, namely, Doctor, Health Visitor and Midwife, and where the services were popular, marked improvement in the health of children was observed. Majority of the centres had standard equipment and received supplies of dried skim milk, drugs and diet supplements. The Milk Feeding Programmes were most helpful in combating malnutrition, while diet supplements helped to reduce conditions of eye infections and avitaminosis. Community Development Programmes were in progress in 52 Projects. The Maternity and

Child Welfare Projects, developed in some States continued to be implemented. This included expansion and improvement of training schemes for staffing maternity and child welfare services and strengthening and expanding these services at State level with provision for hospitalisation of sick children.

The projects undertaken by the States under W.H.O. and U.N.I.C.E.F. assistance in the previous years continued to function in the 8 States of Bihar, Bombay, Hyderabad, Kerala, Madhya Pradesh, Saurashtra, Uttar Pradesh and West Bengal. The total aid received during 1955 was \$48,505.5. W.H.O. provided services of technical personnel to implement the projects and to help develop the services.

Special attention was given to the improvement of paediatric teaching of Medical and Nursing students and to provide a high standard of paediatric service at teaching hospitals. The States of Bihar, Bombay, Hyderabad, Kerala, Madhya Pradesh and Uttar Pradesh included such services at their Medical Colleges. They were associated with Maternity and Child Health State Projects.

The State Governments during the First Plan period utilised the allocation of Rs. 59 lakhs by the Government of India for the expansion of Maternity and Child Welfare Services in backward areas. 161 Maternity and Child Welfare Centres were established in the rural areas in different States during the year under review.

Direct services to mother and child and the development of programmes for rural areas have been useful in improving the health states of children. The Infant Mortality rate has been lowered from 118 in 1953 to 100 in 1955. It may be observed that India took 34 years to reduce its Infant Mortality rate from 200 in 1921 to 100 in 1955, which reduction has been steep during the last decade. This is a helpful augury for the future to achieve better health standard for mothers and children under India's Second Plan.

1956

During the Second Plan period about 2,000 Primary Health Centres were proposed to be established by the State Governments in the National Extension Services Blocks. There was a provision of Rs. 19 crores for this purpose. These Centres will be in addition to the 1,000 health centres to be opened in the Plan period in the Community Project areas. At the end of 1956, out of 324 and 500 students admitted respectively to the Health Visitors and Integrated Midwifery-cum-Health Visitors' Course, 223 and 50 candidates completed their training. During the same period, 13 new Centres were opened for training of Auxiliary-Nurse-Midwives. 48 Auxiliary Nurse Midwives and 30 Midwives were trained by these Centres. The target aimed at is 6,000 Auxiliary-Nurse-Midwives for the Plan period. A sum of Rs. 4,38,320 was paid as grants-in-aid to State Governments during 1956.

Moreover the Government of India has sanctioned a Central Assistance Scheme for training 36,000 dais by establishing 150 units, each unit training 60 dais. In this manner, 1 dai will be provided for every 50 births.

A view of the available information from State Governments for 1956 is as follows :—

Andhra : The Government opened 108 Maternity and Child Health Centres during the year and it had 653 centres including Maternity Homes. To improve Maternity and Child Health services in rural areas, the State Government had started the WHO/MCH/Nursing Training Projects at Visakhapatnam and at Hyderabad, with the assistance of WHO/UNICEF. The total number of beds available in the State in General and women hospitals were 1,359.

Jammu & Kashmir : Of the 6 Maternity and Child Welfare Centres in the State 4 were under the control of the Women's Welfare Association and financed by the Municipalities. Dais were trained at the Centre and the work of licenced dais supervised by Lady Health Visitors. The total number of maternity beds in the State was 52.

Himachal Pradesh : With its 31 Centres and 49 beds Himachal Pradesh intended to increase its Maternity and Child Welfare Centres by 11 in the Second Plan period.

Madras : The Maternity and Child Welfare services in the State during 1956 have been rapidly and widely expanded. 217 Maternity and Child Welfare Centres and Homes have been added, of which 96 were new Maternity and Child Welfare Centres and 121 new homes, making a total of 938, with its existing Centres and homes for the year. Actually there were 740 Maternity and Child Welfare Centres. 844 beds were provided by the Maternity Homes, but the total bed strength of the State for the purpose was 1,711. 5 Centres under the Backward Areas Scheme were selected for giving training to 125 dais under the All India Dais Training Programme with UNICEF assistance.

Manipur : 4 Maternity and Child Welfare Centres were opened during the year making a total of five with a bed strength of 14. They were mostly located in the hill areas. 3 more Centres were proposed to be opened while a Maternity Home of 10 beds was completed during the year.

Mysore : 186 Maternity and Child Health Centres were functioning under the control of the Public Health Department as on 31st December, 1956. 4 Maternity and Child Health Centres in Kolar district and 9 in Mandia district were opened during the year. The total number of Maternity beds were 184. The State Government have sanctioned the combined Maternity and Child Health Nursing and Education Project in collaborating with WHO and UNICEF to strengthen and expand the general health services of the State through rural Health Units.

Punjab : Maternity and Child Health Services in Punjab were mainly financed by the Red Cross, Municipal Committees, District Boards, the Post War Service Reconstruction Fund, etc. The State Government provided qualified Lady Health Visitor for all the Maternity and Child Welfare Services. There were 103 Centres in the State.

Rajasthan : Since the merger of Ajmer with Rajasthan, its 3 Maternity and Child Welfare Centres have been added to the 48 existing Centres. There were 687 beds provided at Maternity Hospitals and Homes in the State.

Uttar Pradesh : The Government was responsible for the Maternity and Child Health Services in rural areas, while the Indian Red Cross Society and the Municipalities operated in urban areas. Organizations like Railways, Labour, Military had their own services. The Silver Jubilee Health School, Lucknow and the 2 new Health Schools for training Health Visitors at Allahabad and Bareilly were now undertaking the Integrated course for Health Visitors. Besides the existing 4 Midwifery Training Centres, 6 more Midwifery Training Centres had been opened, while the new scheme for Auxiliary-Nurse-Midwife Training was introduced in December, 1956. 4 of the 6 new Centres had already begun functioning. Thus, by the end of 1956, there were 688 Maternity and Child Health Centres, of which 200 were UNICEF aided and 43 new Centres opened in Primary Health Units. 2 Family Planning Centres were opened at Meerut and at Ballia. The 8 Maternity Homes had a total bed strength of 80 beds. Under the Second Five Year Plan 100 Maternity and Child Welfare Centres are scheduled to be opened every year in the rural areas of the State.

Andaman & Nicobar Islands : There was 1 ante-natal and post-natal clinic attached to the Civil Hospital at Port Blair with a Lady Health Visitor for it. Accommodation for 20 Maternity beds had been provided. Training programme for dais was started during the year.

(Vide Tables 79 & 80).

CHAPTER VII

NURSING

	PAGE
General conditions	87
College of Nursing	88
Indian Nursing Council	88
Appendix Table Nos. 81-86	310-321

CHAPTER VII

NURSING

1954—56

General Conditions

1954 : The situation regarding nursing shows improvement in that the number of training schools was increased and qualified Sister Tutors were appointed in more schools. Measures were also taken to improve the quality of teaching and service by the initiation of projects for that purpose with the help of WHO/UNICEF and by giving refresher course for which also financial and technical assistance was given by W.H.O. Further valuable aid to the training programmes was the gift of teaching equipment from UNICEF to a number of training schools for nurses and midwives. The main obstacle still to the proper development of training and service was inadequate and unsatisfactory living conditions.

A programme for training of Auxiliary Nurse-Midwives for Community Projects under First Five Year Plan was started in the States with financial assistance from the Central Government.

1955 : The most significant event connected with nursing in 1955 was the publication of the Report of the Nursing Committee appointed by the Government of India to review conditions of service, emoluments, etc. of the Nursing profession. This report was approved by the Central Council of Health and recommended by the Central Government to all State Governments. The recommendations of this Committee covered all aspects of nursing service, and the general aspects of nursing training. Two important recommendations were that public health nursing be integrated in the basic course for nurses and midwives, and that the nursing service for hospitals and that for the public health field be combined in one cadre, so that there could be an inter-change of nurses between rural and urban areas and institutional and domiciliary fields.

Another important event during the year was the establishment at the Sirur Health Unit in Bombay of an orientation course in Public Health Nursing for qualified nurse-midwives who would be appointed in place of health visitors and in primary health centres. This was an initial step towards introducing a public health nursing service.

The training of Auxiliary Nurse-Midwives received a great impetus because of the financial assistance made available from the Central Government and Central Social Welfare Board. Training was established in more than 60 centres by the end of the year.

Very valuable assistance continued to be received from the international agencies by way of expert technical assistance, teaching equipment and books.

With assistance from WHO, refresher courses were held at Calcutta, Hyderabad, Trivandrum, and Bombay in Paediatric Nursing, Midwifery, Teaching of Nurses, and Ward Management. Sixty-four nurses attended those courses.

During the year 1955 thirty-three nurses were sent abroad for study with scholarships granted by the Colombo Plan Schemes, WHO, and the T.C.M. and according to the information available seven nurses returned to the country during the year after completing their studies abroad.

Nursing Projects associated with MCH Projects were started with assistance from WHO, and UNICEF in Travancore-Cochin, Madhya Pradesh, Bombay, and U.P. during the year 1955. A Psychiatric Nurse from WHO was assigned for the Institute of Mental Health in Bangalore with the object of developing Psychiatric Nursing and establishing a course for Psychiatric Nurses. A Paediatric Nurse from the TCM was assigned to the Christian Medical College Hospital, Vellore.

In Bombay the project for developing a short orientation course in Public Health nursing was a significant step in the development of public health nursing service.

1956: There was satisfactory improvement in the condition of nursing services in the country during this year.

With assistance from WHO, TCM, and UNICEF four Refresher Courses were held at Hyderabad and New Delhi, for Ward Sisters, midwives, and in Paediatric Nursing. Seventy-eight nurses who came from all the different States participated in these courses.

During the year 1956, five nurses were sent abroad for higher training in nursing education with scholarships from WHO and Colombo Plan, and according to the information available seventeen returned after completion of their studies abroad on scholarships.

Assistance from WHO, UNICEF, and T.C.M. were continued during the year. Nursing experts from other countries were assigned the training schools and Nursing Projects in different States under the assistance Schemes of these agencies.

NURSING

The College of Nursing, New Delhi

The two courses namely, B.Sc. (Hons.) course in Nursing (4 years' Duration) and the Post-Certificate Course in Teaching and Nursing Education (10 months' duration) continued as in previous years. Accommodation for students and staff was adequate, because a new building was made available both for hostel and class-room for the Post-Certificate students. The Child Guidance Clinic, started 5 years ago, continued its work in cooperation with the Paediatric Departments of the Safdarjang and Irwin Hospitals, New Delhi. The expenditure on the clinic was Rs. 13,683 in 1956. The college received a grant of Rs. 3,73,000 from the Central Government and the expenditure for 1955-56 was Rs. 3,35,000. The total Budget Allotment as compared to 1955-56 was Rs. 3,86,600 of which Rs. 3,56,443 was expended.

Indian Nursing Council

The Indian Nursing Council held its annual meeting in the month of December, 1955. During the year under report the Council's recommendation to the State Nursing Councils that Public Health Nursing be integrated in the basic course in nursing and midwifery was accepted by all

the State Nursing Councils. A meeting of Registrars of the State Councils and Secretaries of the Examining Bodies in India was called by the Council to prepare draft rules for the conduct of examinations in various courses in nursing subjects. The report was sent to all the State Councils for their comments. The Council approved the syllabus for the courses in Tuberculosis, Nursing and Ophthalmic Nursing, and recognized the Andhra State Examination Board for conducting examinations for nurses and midwives. A sub-committee was appointed to prepare rules for regulating the practice of nurses, midwives, and health visitors. Efforts were continued to enforce the requirements laid down by the Indian Nursing Council regarding the contents of the courses as well as other conditions for training. Information on existing facilities in the training schools for nurses etc. collected during the year showed progress.

In 1956 the Council approved the following :—

- (1) Syllabii for Ward Sisters, Sister-Tutors, Nursing Administrators and Public Health Nurses.
- (2) Rules and regulations for the conduct of Nursing examinations to be observed with effect from March, 1957.
- (3) Rules for regulating the practice of different categories of Nursing Personnel.
- (4) Syllabus for Ophthalmic Nursing Course as a special course for men student nurses.
- (5) Inclusion of Tuberculosis Nursing in Basic Nursing Course.
- (6) The syllabus for the Training of Nursing Orderlies prepared by the Armed Forces Medical Services Examination Board.
- (7) The admission of students to the Midwifery Course be discontinued from March, 1957. Training Schools for Nurses, Midwives, etc. should introduce the curriculum prescribed by the Indian Nursing Council from March, 1957.
- (8) That the training of Health Visitors should be discontinued gradually by about December, 1956 and that the existing Health Schools should be converted into Centres for Public Health Nursing Training.

The Council recognized the Himachal Pradesh Government Examination Board, Madras Nurses and Midwives Council, Examination Board of the Nurses Auxiliary of CMAI (South India Branch) as authorities for granting qualifications in the course for Auxiliary-Nurse-Midwives. The All India Institute of Mental Health, Bangalore was recognised as an authority for granting qualifications in Psychiatric Nursing, and the Public Health Department, Madras State Government as an authority for granting qualifications in Public Health Nursing.

Nursing conditions in the States are briefly described below and the progress is shown in Tables Nos. 81, 82, 83, 84 and 85.

Andhra : Three new Training Schools for Nurses were opened in 1955 and 5 others in 1956 so as to step up the programmes for increasing training facilities. Construction of quarters for nursing staff was also begun side by side.

Assam : Six and two new Training Schools for Nurses were established in 1954 and 1955 respectively and the number of students in the existing Training Schools increased. New quarters for accommodating 150 nurses were constructed for the Assam Medical College Hospital, Dibrugarh in 1955, besides the use of private rented buildings. The State Nursing Services functioned under the supervision of the Superintendent, Nursing Services. Rs. 5,900 were sanctioned by the State Government for improving the existing nursing conditions in 1954. The budget in 1956-57 for nursing services was Rs. 1,89,400 and a sum of Rs. 1 lakh was sanctioned by the State Government in the Second Five Year Plan.

Bihar : The shortage of trained staff in the State was met by recruitment from South India. New quarters were constructed at Darbhanga and for the staff of the Training School of the Patna Medical College Hospital. The number of trainees for this Centre was increased by another 90.

Bombay : Shortage of nurses was not so noticeable during the period and residential accommodation was available for most of the nurses. Schemes to extend the existing quarters and build new nurses' hostels were taken up.

Madhya Pradesh : Plans were made for increasing the number of students in the First Five Year Plan and Rs. 3.08 lakhs were expended in 1954. The Central Government subsidised scheme for the training of Auxiliary-Nurse-Midwives was started at Chhindwara Hospital with a subsidy of Rs. 15,000. New quarters for nurses at Raipur, Jabalpur and Chhindwara were agreed to be constructed. Scheme for training nurses under the First Plan with an expenditure of Rs. 6.10 lakhs was sanctioned. The two Training Schools for Auxiliary-Nurse-Midwives at Itarsi and Raigarh were recognised in 1955.

Madras : Though accommodation for nurses was sufficient, the number of student-nurses were few. New Nurses' quarters at the Kasturba Gandhi Hospital for women and children, Madras were completed in 1954, and another at the Government Headquarters Hospital, Mangalore in 1953. An innovation introduced in Madras in 1954 was the employment of a Warden and a Physical Directress to the Nurses Home attached to the Government General Hospital, Madras as an experimental measure. It was extended to other Training Centres during the period under review.

A private school sponsored by the Andhra Mahila Sabha for training Auxiliary-Nurse-Midwives continued to meet the demands of the Community Project Areas. A scheme for the training of nurse-midwives with assistance from the Government of India was started in 1956 at the Government General Hospital, Madras.

Punjab : There was no appreciable change in the State as regards nurses and nursing conditions besides the starting of four new Training Schools in 1955. The Missions and private hospitals and Training Schools were subsidised by the Government. A proposal made to establish a State Nursing Service and to create the post of Superintendent of Nursing Services was under consideration of the State Government.

Uttar Pradesh : The State Nursing Services Scheme sanctioned in 1954 was operating in 35 State hospitals including the Ayurvedic College at

Lucknow. It was extended to 37 hospitals in 1955 and to a few more in 1956. Residential accommodation was insufficient during the period under review. The budget provision for the nursing services for 1956-57 was Rs. 24,36,600 of which actual expenditure amounted to Rs. 23,98,000. The budget allotment for extension of nursing services to new districts and for increasing the number of students was Rs. 7,06,500 of which Rs. 79,250 were expended. Four new Training Schools for nurses were started in 1956.

West Bengal : There was general improvement in the conditions of nursing services in the State during the period 1954-1956. Shortage of trained nurses was not felt and qualified Auxiliary-Nurse-Midwives were provided with work in the newly opened Health Centres. A State Nursing Service was created for all the Government employed Nursing personnel under a Superintendent of Nursing Services in 1954. Accommodation being inadequate new quarters were constructed besides the renting of private building. New constructions were being made. Out of a total budget of Rs. 25 lakhs for Nursing Services in the State in 1956, little over Rs. 20 lakhs were spent during the year. Rs. 22,000 were spent by way of grants and scholarships.

Mysore : Nursing conditions in Mysore were not satisfactory during the period under review. No new school was opened, but the existing training centres had to cope with the increased number of admissions from 1955 onwards.

Pepsu : Though there was inadequate nursing staff in early 1954, it was not so in the late years of the period under review. Construction of hostels for nurses was completed in 1954. The course of Nurse-Dais was altered to that of Auxiliary-Nurse-Midwives with stipends for trainees. Rs. 23,000 was provided by the State under the State Government's Five Year Plan.

Rajasthan : There had been no change in nursing conditions and the acute shortage of nursing staff continued to prevail. Training of 30 midwives was begun at Bikaner, under the Principal Medical and Health Officer, Bikaner, from July, 1954. Four new training centres for Auxiliary-Nurse-Midwives with 20 seats each, were started in 1955 with subsidy from the Government of India under the Five Year Plan programme. Rs. 18.40 lakhs were provided for the continuation of the training of more nurses. One Training School for nurses operated at the Sawai Man Singh Hospital, Jaipur; another Training School for Auxiliary-Nurse-Midwives at the General Hospital Kotah and 8 new schools for dais were started during 1956.

Travancore-Cochin (Kerala) : The Training Course for Nurses was reduced from 4 to 3½ years and the pay-scales of nursing staff enhanced in 1955. Nurses were few in number and accommodation for them was inadequate. The State was not able to provide enough hostels for nurse nor increased the number of nurses to meet the requirement of the State.

A new Health Visitor's Training School was started at Trivandrum in 1956 and steps were taken to implement recommendations of the Nursing Committee.

Bhopal : The appointment of Superintendent of Nursing Services in the State was a significant change for the better. The Auxiliary-Nurse-Midwives Training Programme was extended to one of the urban hospitals at the cost of Rs. 71,200. A Nursing Adviser was appointed under the T.C.M. Assistance Programme.

Coorg : Quarters for nurses were under construction at Mercara and Virajpet Rural Centre Midwives continued to be trained as before.

Delhi : Training facilities could not be expanded for lack of accommodation for the nursing staff, though there was no lack of candidates for training. Schemes were prepared to expand the existing buildings of hospitals and to increase the bed strength of the Irwin Hospital, New Delhi. New nurses' hostel for 318 nurses was under construction at the Irwin Hospital, New Delhi. The post of Superintendent of Nursing Services, created in 1956 remained unfilled due to non-availability of a suitable candidate.

Himachal Pradesh : Nursing conditions were improved in the State with and because of better facilities for training, the Training Centre at the District Hospital, Nahan was transferred to the Snowdown Hospital, Simla. Training classes were started for Auxiliary-Nurse-Midwives in the existing training schools and hostel accommodation was found sufficient. Rs. 5,000 were spent for improving the nursing conditions and another sum of Rs. 16,000 for additional staff accommodation, library, equipment, etc.

A Training School for nurses was opened at the Snowdown Hospital, Simla in 1956 and the number of nursing students for the Training Centre was increased to reduce the shortage of nurses. Steps were taken to construct new nurses home at the Snowdown Hospital, Simla. Out of a budget allotment of Rs. 82,13,000 a sum of Rs. 63,62,500 was spent on the Nursing Services in the State.

Kutch : Due to the isolated position of the State and lack of residential quarters and amenities, nurses were not willing to take up appointments in the State. Training class for midwives was started in 1955 with seven midwives qualifying.

Manipur : Nurses and residential accommodation for nursing staff continued to be inadequate during the period 1954 to 1956. Plans for the construction of new quarters and for starting the training in general nursing and for Auxiliary-Nurse-Midwives were contemplated. A new Training School for Auxiliary-Nurse-Midwives was started in 1956.

Tripura : There was marked improvement in the nursing services in the State. Additional posts were sanctioned at the V.M. Hospital, Agartala and the Sub-Divisional Hospital at Kailashar. Two new centres were also sanctioned besides an additional sum of Rs. 14,400 as stipends for student nurses. The Auxiliary-Nurse-Midwives Training Class was continued during the period under review. Government of India sanctioned Rs. 17,591 under the Community Projects Assistance Scheme for increasing the number of nurses, midwives, etc.

Vindhya Pradesh : In 1954 a Nurses Training Centre was started and another for dais. For the training of Auxiliary-Nurse-Midwives, a new building has been constructed at the M.G. Hospital, Rewa.

Andaman and Nicobar Islands : The nursing staff was found adequate for the needs of the State.

Laccadive, Minocoy & Amindivi Islands : The Islands provided six dispensaries and seven midwives for maternal and Child Health work.

The ratio of Nurses to students, beds, and population was better during 1956 than in 1955. This was due to the increase in the number of training Institutions and the raising of admissions for such purposes. (Table No. 86).

CHAPTER VIII
MEDICAL EDUCATION & REGISTRATION

	PAGE
colleges, fellowships and study tours	97
Medical Council of India --	97
Medical Registration .. --	97
Appendices Tables 87, 88, 89 & 90	322—330

CHAPTER VIII

MEDICAL EDUCATION—1954—56

Medical Council of India

The Indian Medical Council Bill of 1956 was passed by Parliament in 1956. It provides for the reconstitution of the Medical Council of India and the maintenance of the Medical Register for India.

The Council appointed a sub-committee to report on and draw up a draft of the required courses in pre-medical education. The report was circulated to the Universities for comments.

The recommendation of the Council to continue the condensed M.B.B.S. for licentiates was for a further period of 5 years beyond April, 1956 was accepted. The Council also suggested the need for providing facilities in accommodation, equipment and staff of colleges.

The Council adopted certain standard requirements for a Medical College for 100 students.

Recommendations were made for the recognition of Degrees of Colleges of neighbouring States. Recognition of foreign medical qualifications on reciprocal basis for post-graduate study and research was not possible, as it was not provided in the Act.

While the Council did not accept full responsibility, it recommended registration of holders of non-scheduled foreign qualifications for special reasons in the interests of medical education and relief.

In 1954 the Council advised direct reciprocity between the Councils of India and Ceylon and decided to entertain reciprocity on a direct basis with South Africa and South Australia. Pakistan was requested to provide a Register to facilitate consideration of the question of reciprocity with India.

111 foreign and 21 Indians were recommended for registration to the State Medical Councils by 1956.

The General Medical Council of U.K. recognised the following Indian Medical Qualifications and included them in Table 'E' of their Register :—

- (i) M.B.B.S. (Nagpur) from 1-9-1953 Medical College, Nagpur.
- (ii) M.B.B.S. (Rajputana) from 1-9-1953 Sawai Man Singh Medical College, Jaipur.
- (iii) M.B.B.S. (Baroda) from 1-4-1954 M.A. Medical College, Baroda.
- (iv) M.M.F. (West Bengal)
- (v) M.B.B.S. (Andhra) from 11-1-1947.
- (vi) M.B.B.S. (Patna) from 11-3-1938.
- (vii) M.B. (Calcutta) except 30-11-24/12-5-28 and 25-2-30/15-10-36.

Medical Education in India has been one of slow growth. Between 1835 and 1935 there were only 25 Medical Schools and Colleges, which by 1945 had increased to 27 and by 1955 to 43. 3 more were added by 1956. Thus 48 Colleges and Schools have been set up-to-date. While only 25 Institutions were in existence for a century, that number was nearly doubled in the last two decades. The policy of the Government of India has been to raise the standard of Medical Education by upgrading Medical Schools to Medical Colleges. At present there are only 3 Medical Schools and the question of upgrading or abolishing 2 of these is under active consideration. As for the third Medical School, started in 1954 and known as the Mrs. Radhabai Palnitkar Medical School, Hyderabad is still continuing. The number of students qualifying are shown in Tables No. 87 & 88.

International Agencies and Organisations, which sponsored fellowships and study tours for Medical men and women from India are shown in Table No. 89.

At the end of 1954, India had 68,629 qualified doctors practising the modern system of medicine. This number increased to 76,716 by 1956.

Table No. 90 shows the number of doctors registered with various State Medical Councils at the end of the years 1954 and 1956.

The Bombay Act LXIII of 1954 came into force on 12th November, 1954.

A comprehensive amendment of the Bengal Medical Act, 1914 was made by the passing of the Bengal Medical (Amendment) Act, 1954. This amendment came into force on 1st June, 1954.

The Medical Councils of Bombay and West Bengal recognised the qualifications of other States as shown below :—

Bombay

M.D. (Gujarat) M.D. (Poona)
M.S. (Gujarat) M.S. (Poona)
M.B.B.S. (Baroda)

West Bengal

1. M.B.B.S. (Nagpur) granted after 1-9-53.
2. M.B.B.S. (Agra) with effect from 1-4-49.
3. M.B.B.S. (Punjab) with effect from 1-1-48.
4. M.B.B.S. (Delhi) with effect from 1-8-52.
5. M.B.B.S. (Gauhati) with effect from 21-5-52.
6. M.B.B.S. (East Punjab)
7. L.M.S. (East Punjab) when granted on or after 15-8-47.
8. M.B.B.S. (Bihar) when granted after 1-4-53.
9. M.B.B.S. (Poona) when granted after 1-9-52.
10. M.B.B.S. (Mysore) when granted after 31-12-32.
11. M.B.B.S. (Rajputana) when granted after 1-9-53.
12. M.B.B.S. (Utkal) when granted after 1-4-52.
13. M.B.B.S. (Gujarat) when granted after 1-4-52.

14. M.B.B.S. (Baroda). This will be a recognised qualification if granted after the 1st April, 1954.

15. Diploma in Medicine (Diploma-De-Medicine).

16. F.C.P.S. (Medical) (Bombay)
17. F.C.P.S. (Pathology) (Bombay)
18. F.C.P.S. (Surgery) (Bombay)
19. F.C.P.S. (Dermatology) (Bombay).

} After 1st April, 1954

The following qualifications were recommended to the Government of Orissa for recognition for purposes of registration by the Orissa Medical Council :—

Sl. No.	Name of the University	Abbreviation of medical degree for registration	This will be a recognised medical qualification when granted after
(1)	(2)	(3)	(4)
1.	University of Delhi	M.B.B.S. (Delhi)	
2.	University of Gauhati	M.B.B.S. (Gauhati)	20-5-52
3.	University of Bihar	M.B.B.S. (Bihar)	1-4-53
4.	University of Gujarat	M.B.B.S. (Gujarat)	1-4-52
5.	University of Poona	M.B.B.S. (Poona)	1-9-52
6.	University of Saugar	M.B.B.S. (Nagpur)	1-9-53

Following qualifications were recommended to the Government of Orissa for recognition for purposes of registration as additional qualifications with Orissa Medical Council :—

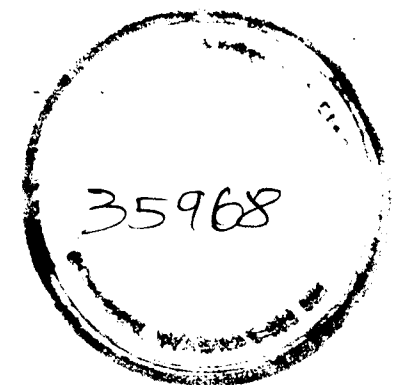
D.O.M.S. (Bombay)	D.O. (England)
D.O.M.S. (England)	D.O. (Oxford)
D.L.O. (London)	D.O. (Bombay)
D.L.O. (Bombay)	
D.M.R.D. (London)	D.P.H. (Lucknow)
T.D.D. (Wales)	D.P.H. (Camb.)
L.M. (Dublin)	D.P.H. (Glasg.)
M.R.C.O.G. (London)	D.P.H., R.C.P.S. (England)
D.R.C.O.G. (Lond.)	D.P.H., R.C.P.S. (Edin.)
D.G.O. (Bombay)	D.P.H., R.C.P.S. (Ireland)
M.D. (New Zealand)	D.T.M. and H. (Eng.)

CHAPTER IX

DENTAL EDUCATION AND REGISTRATION

Appendices Tables 91 & 92

331—332



R

L: 5.21N54

N56

CHAPTER IX

DENTAL EDUCATION AND REGISTRATION

Dental Council

Dental Colleges were regularly inspected during the period under review. The inspection reports were accepted and recommendations were made with reference to certain Dental Colleges, which were carried out in the following years :

Colleges inspected and visited during 1954-55.

- (i) Government Dental College and Hospital, Amritsar.
- (ii) Dental Wing of the Madras Medical College, Madras.
- (iii) Calcutta Dental College and Hospital, Calcutta.
- (iv) Dental College and Hospital, Lucknow.
- (v) Sir C. E. M. Dental College and Hospital, Bombay.
- (vi) Dental Wing of the Armed Forces Medical College, Poona (Dental Hygienists Course).

The Dental Mechanics Course was instituted at the Sir C.E.M. Dental College and Hospital, Bombay from 1st January, 1956.

The following Dental Degrees were recognized by the Council :—

The B.D.S. Degree of the Calcutta University if granted after 1st June, 1956.

The B.D.S. Degree of the Punjab University if granted after 1st June, 1956.

The Council decided that it would not recognize the Diploma or Certificate granted by the Punjab Dental College and Hospital, Lahore (Now defunct).

The Council has prescribed certain minimum basic qualifications for the posts of Deans, Professors and Demonstrators in Dental Institutions. As for the other posts a sub-Committee was appointed to report on them.

The Dentists : Amendment Act, 1955, XII of 1955, to the Dentists' Act of 1948 was passed by the Parliament in 1955.

During the II Five Year Plan, Government of India have provided Rs. 150 lakhs for the establishment of new Dental Colleges and the expansion of the existing ones. An additional provision of Rs. 151 lakhs was also made for the establishment of 250 Dental Clinics in District Hospitals.

There are seven Dental Colleges in India, viz. :—

Nair Hospital Dental College, Bombay.

Sir, C.E.M. Dental College and Hospital, Bombay.

Dental Wing, Madras Medical College and Government General Hospital, Madras.

Punjab Government Dental College and Hospital, Amritsar.
 Dental Wing of the Government Medical College Hospital, Patiala.
 Dental College and Hospital (King George's Medical College),
 Lucknow and
 Calcutta Dental College and Hospital, Calcutta.

With so few Dental Colleges and Dental Hospitals, it is not surprising that the number of Dentists and Dental Clinics in the country are comparatively few (*vide* Table Nos. 91 and 92). Routine dental treatment was given at Government hospitals and dispensaries and in certain States, Dental Departments have been added to General Hospitals as in Bihar, Delhi, Himachal Pradesh, Kerala and Rajasthan.

Dental clinics were attached to hospitals in the States of Andhra, Ajmer, Coorg, Delhi, Himachal Pradesh, Orissa, Punjab, Tripura, Uttar Pradesh, Vindhya Pradesh and West Bengal. Clinics were equipped with facilities for extractions; removal of tartar; fillings; root treatment; incisions of abscess and parulis; coagulations, gingivectomy; alveolectomy; sequestromy; osteomyelitis; fractures; removal of cysts; trigeminal neuralgia; dislocation of jaws and making of artificial dentures.

Two Research Projects (i) "Incidence of Dental Caries and Gingival Status in Lucknow School-going Children" and (ii) "A Study of Periodontal diseases in medical students" continued progressing during 1956. A third scheme "The study of Third Molar tooth among Indians" was also taken up in 1956. Two new projects (i) "Study of Development and Growth of Dentition of Indian Children" and (ii) Study of Blood changes associated with Periodontal disease", were approved by the Indian Council of Medical Research for Dental College and Hospital, at King George's Medical College, Lucknow. This work was started in 1956.

Andaman and Nicobar Islands : One whole-time qualified Dentist was appointed in 1956.

Bombay : The Nair Hospital Dental College, Bombay, since its affiliation to the University of Bombay in June, 1954 began to confer the Degree of B.D.S. instead of the diploma of L.D.Sc. The Government will upgrade certain departments at the Nair Hospital Dental College and the Sir C.E.M. Dental College as Post-graduate institutions in the near future.

Madras : Part-time dental clinics functioned in most of the headquarters hospitals in Madras and in some of the city hospitals. It was proposed to establish full-time dental clinics at all District Hospitals during the Second Five Year Plan with Government of India's assistance. The State Plan provided Rs. 6.75 lakhs for this purpose.

Punjab : Sanction amounting to Rs. 7½ lakhs for the new building of the Dental College and Hospital at Amritsar was granted. The Dental Wing of the Government Medical College Hospital, Patiala with 12 seats was opened in 1956.

West Bengal : An additional sum of Rs. 5½ lakhs was sanctioned for the purchase of property, construction of new blocks and Rs. 1½ lakhs for equipment, films, etc. by the State.

Plans for further expansion of the Calcutta Dental College and Hospital were being finalised by the West Bengal Government, and when completed the following additional courses will be commenced :—

- (i) Course for Dentists registered in Part B and who desire to join Part A.
- (ii) Course for medical Graduates to qualify for B.D.S.
- (iii) Course for L.D.S. to qualify for B.D.S.
- (iv) Course for Dental Hygienists.
- (v) Course for Dental Mechanics.
- (vi) Course for Dental Assistants.
- (vii) Course for Dental Nurses.

Delhi : The Irwin Hospital provides 4 beds for dental cases. Clinics for school children under the School Medical Scheme was started in 1956 at the Willingdon Hospital and Nursing Home, Delhi. The Safdarjang Hospital and the Lady Hardinge Medical College and Hospital were the two other hospitals affording facilities to dental cases.

CHAPTER X

CENTRAL DRUGS STANDARD CONTROL ORGANISATION

	PAGE
Drugs Control	109
Quinine	114
Medical Stores Depots	115
Appendix Table No. 93	333

CHAPTER X

CENTRAL DRUG STANDARD CONTROL ORGANIZATION 1954—56

Drugs Control

The Drugs Act which was hitherto operative in Part A and C States was enforced during the year 1954 in the Part B States of Travancore-Cochin and Saurashtra and in 1955 in the State of Pepsu. With the reorganisation of States in October, 1956 the Drugs Act and the Drugs Rules were extended to the whole of India, except the territory of Jammu and Kashmir. The provisions of the Act became operative in all the States except Rajasthan and Mysore where steps were being taken to set up the necessary machinery for the enforcement of the legislation.

The responsibility for control over the manufacture and sale of drugs rests with the State Governments while control over the quality of imported drugs including 'new drugs', continued to be exercised by the Central Government through the Drugs Controller, India, in the Directorate General of Health Services, who was the controlling officer and the Drugs Licensing Authority under the Drugs Act.

The recommendations of the Pharmaceutical Enquiry Committee regarding centralisation of control over quality of drugs manufactured in the country, which, under the present regulations, is the responsibility of the State Government, were under consideration of the Government of India.

With a view to cope with the increased work and for the maintenance of statistics of drugs imported at the ports, posts of Assistant Chemists and computers were sanctioned for the Offices of the Assistant Drugs Controllers (India) at the ports of Bombay, Calcutta and Madras in 1954. With the increase of work at the ports and consequent on the enforcement of the Drugs and Magic Remedies (Objectionable Advertisements) Act, 1954 the work at the centre also increased. An additional post of Assistant Drugs Controller, India and a Senior Scientific Assistant and 3 posts of Technical Assistants were sanctioned for the Central Drugs Control Organisation at the centre in the Directorate General of Health Services. The post of Advisory Chemist was upgraded and converted to that of a Deputy Drugs Controller, India.

Import of Drugs

The ports of Bombay, Calcutta, Madras and Cochin continued to be the only recognised ports of entry by sea for import of drugs into the country, the port of Bombay accounting for more than half of the value of drugs imported. The value of drugs imported during the year 1956-57 was estimated to be of the order of Rs. 17,51,83,000 as against Rs. 15,38,41,000 in 1955-56 and Rs. 12,81,62,000 in 1954-55. The tendency to import drugs in bulk continued especially as the Import Trade Control Policy of the Government of India was designed to encourage the import of a number of drugs like Vitamins, Hormones and Sulpha drugs in bulk. In the case of a number of finished preparations such as injectibles, tablets, etc., the tendency was to import in bulk for repacking in smaller containers by manufacturers or by parties who held loan licences for the purpose. The price

element also played an important part in inducing importers to import drugs in bulk. The volume of drugs imported from countries such as the U.S.S.R., Poland, Rumania, etc. continued to be on the increase. Substantial imports of drugs from "Free Ports" such as Hong Kong, Aden, etc. through shippers were recorded during the year 1956. A strict check was exercised over the quality of drugs imported through such agencies.

Samples from imported consignments were examined to ensure that they were properly labelled as required under the Drugs Act. Samples were also sent for test to ensure that the Drugs imported were of standard quality.

Biological drugs stored in the storage godowns of importers especially Penicillin, Vitamin preparations, etc., which were likely to deteriorate on storage, were subjected to a running check under Rule 26 of the Drugs Rules. Samples of these drugs were taken at frequent intervals and sent for test to ensure that they had not lost their potency during storage.

The following table gives information regarding the number of samples of drugs drawn for examination from imported consignments and sent for test :—

Year	No. of samples drawn for examination	No. of samples sent for test
(1)	(2)	(3)
1954	22,350	1,028
1955	22,745	1,784
1956	22,291	1,777

Apart from maintaining a check on the quality of imported drugs, statistics were also maintained in respect of essential drugs imported into the country. The quantity of streptomycin and Penicillin imported during the year 1956 was more than double the quantity imported during 1954-55. The level of imports of Tetracyclines were more or less the same as that in the previous years. Though there was a fall in the import of Chloramphenicol in the year 1955 which was thought to be on account of indigenous manufacture, significant increase in its import was observed during the year 1956. This may be attributed to the competitive price at which supplies of this drug were available on the continent, thus permitting of larger imports within the same monetary ceiling. The increase in imports of P.A.S. and Isoniazid was consistent with the larger imports of Streptomycin during the year. Though there was a fall in imports of Sulpha drugs during the year 1955 on account of earlier heavy imports from Hong Kong from the surplus stocks left over after the Korean War, the extent of import of these drugs during the year 1956 was still 30% more than the average of the previous years. The increase in imports of Carbarsone, antileprosy drugs, Ephedrine Hydrochloride, Caffeine and procaine hydrochloride during the year 1956 was noteworthy. No appreciable changes were noted in the trend of imports of Insulin, Neoarsphenamine, Calcium Gluconate and other essential drugs.

Cases of contravention of the provisions of the Drugs Act and Drugs Rules in so far as imported drugs were concerned were not many. They

consisted mostly of labelling defects. Cases of import without licences and import of drugs of sub-standard quality were very few. Consignments with remediable defects were released on letters of guarantee to the importers for remedying the defects. In cases of drugs found to be not of standard quality action was taken to re-export the drugs to the country of origin or to destroy them.

Importers, in general, were found to be earnest in their desire to comply with the provisions of the Drugs Act. The rather large number of labelling contraventions was mainly due to lack of adequate knowledge of the provisions of the Drugs Rules on the part of manufacturers especially those on the continent as during the period under review, a number of new sources of supply of drugs were established such as the U.S.S.R. Poland, Rumania, etc.

Grant of Import Licences under the Drugs Act

In order to ensure that the importers possess adequate storage facilities and accommodation for the drugs desired to be imported, the storage premises of importers were inspected. Import Licences under the Drugs Act were not issued to those parties who did not possess adequate accommodation and storage facilities.

Numbers of Import Licences issued under the Drugs Act during 1954—56

The following table gives information regarding the number of Licences issued under the Drugs Act :—

Year	No. of Import Licences issued in form 10			No. of Import Licence issued on form 11 & 12B	
	Fresh	Renewal	Endorsement	Form 11	Form 12B
1954	568	128	149	647	
1955	437	141	209	614	
1956	547	160	194	638	154

New Drugs

The number of applications for import of new drugs under Rule 30-A of the Drugs Rules received during 1954, 1955 and 1956 were 97, 85 and 107 respectively. The medical literature and result of clinical trials carried out with the drugs and other technical material furnished by the manufacturers on the drugs was examined and only those new drugs were permitted to be imported where the Drug Licensing Authority was satisfied about the efficacy and harmlessness of the preparations. 32 new drugs were permitted to be imported during the year 1954, 27 in 1955 and 29 in 1956.

Drugs Consultative Committee

The third meeting of Drugs Consultative Committee, which is an advisory Committee constituted under the Drugs Act to advise the Central Government, the State Governments and the Drugs Technical Advisory Board on

any matter tending to secure uniformity throughout India in the administration of the Act, was held in February, 1955 and the fourth meeting on 7th and 8th March, 1957 to consider problems and difficulties arising out of the day to day administration of the Drugs Act and the Drugs Rules. The recommendations of the Drugs Consultative Committee were communicated to the Government of India and the State Governments for necessary action.

Drugs Technical Advisory Board

The Drugs Technical Advisory Board constituted under the Drugs Act, 1940 met in January, 1956 to consider the proposal of amendment of Drugs Rules in respect of the provisions relating to (1) the date of manufacture, (2) maintenance of records for sale of spirituous preparations, (3) standards for adrenaline injection, (4) tests for absence of pyrogens, (5) granting exemption under Schedule K to the manufacturer of Tincture Iodine and Tincture Benzoin Co. with methylated or denatured spirit. The Government accepted the recommendations of the Board and necessary amendments were carried out.

Drugs (Amendment) Act

This Legislation was introduced to effect certain amendments in the Drugs Act, 1940 since its enforcement from 1947. The Drugs (Amendment) Act, 1955 which contained amendments to the Drugs Act, 1940 came into force on the 15th April, 1955. The salient features of the Act are given below :—

1. The rule making powers under the Act is vested in the Central Government, thus ensuring uniformity of rules in all the States.

2. Under the Drugs (Amendment) Act, 1955 all patent and proprietary medicines will have to be marketed with their composition displayed on the labels of containers. This provision came into force from the 30th September, 1956.

3. The powers of Drugs Inspectors have been increased and offences under the Drugs Act made cognizable. Penalties for offences have also been enhanced. Under the new definition of the term 'drug' in the Act it is proposed to control, at present, the standards relating to Dicophane Dichlorodiphenyl Trichlorethane (D.D.T.) and all its formulations, Pyrethrum extract and all its formulations and chemical contraceptives.

The term 'manufacture' has also now been defined in the Act and covers repacking and relabelling activities. The Act also permits the addition of certain prescribed colours to pharmacopoeial preparations. Pending amendment of the Rules in this connection, the State Drug Control Authorities have been instructed not to take any objection to the addition of colours, if manufacturers add certain prescribed colours to pharmacopoeial preparations.

Indian Pharmacopoeia Committee

The Indian Pharmacopoeia was published in 1955 and the work to keep it up-to-date progressing side by side.

The extended term of the committee expired on the 3rd November, 1954. As the intention of Government of India was that the Indian Pharmacopoeia Committee should be a permanent body which should hereafter be mainly responsible for keeping the Indian Pharmacopoeia up-to-date, the Government of India re-constituted the committee with Dr. B. N. Ghosh as its chairman.

National Formulary Committee

The Government of India, Ministry of Health constituted a National Formulary Committee to prepare a National Formulary of India. The Formulary would contain a list of essential drugs and their formulations. Dr. B. B. Yodh, Professor of Post-graduate Medicine, Grant Medical College, Bombay and Shri S. K. Broker, Drugs Controller (India) were appointed as Chairman and Member-Secretary of the Committee respectively.

Drugs and Magic Remedies (Objectionable Advertisements) Act

The Drugs and Magic Remedies (Objectionable Advertisements) Act, 1954 came into force on the 1st April, 1955. The legislation was enacted with a view to counteracting the increasing danger to public health consequent on people taking recourse to indiscriminate self-medication with drugs, appliances and magic remedies advertised in the lay press particularly for certain diseases and conditions. The Act is administered by the Central and State Governments.

Under the Act, advertisement in any form for diseases and conditions specified in Section 3 of the Act and in the Schedule to the Rules thereunder is prohibited, save with the previous sanction of Government, who may, in particular cases, allow the publication of certain specific advertisement in the interests of the public. The Drugs Controller (India) has been appointed by the Central Government as an officer to whom an application may be made by any person intending to obtain the previous sanction of the Government to publish any advertisement under Section 14(1) (d) of the Act. State Governments have also appointed officers for this purpose.

Import and export of 'objectionable' advertisements is controlled in close liaison with the Customs and postal authorities who can under Section 6 of the Act, intercept articles suspected to contain objectionable Advertisements. The Assistant Drugs Controllers (India), Bombay, Madras, Calcutta and New Delhi and the Technical Officer, Cochin have been appointed as officers for the purpose of Rule 5(1) of the Drugs and Magic Remedies (Objectionable Advertisements) Rules, 1955 to advise the Collectors of Customs. Liaison was also maintained with Indian Embassies, High Commissions, Legations and Consuls abroad with a view to keeping a watch on advertisements by parties from India in their countries and to report to the Drugs Controller (India) details regarding offending advertisements. Instances of export of objectionable advertisements and literature by parties in India were brought to the notice of Drugs Controller (India) who advised the State Authorities to take necessary action under section 8 of the Drugs and Magic Remedies (Objectionable Advertisements) Act. A comparative statement of the number of cases referred to the

Drugs Controller, India by the Foreign Post, and India Embassies etc. abroad during 1955 and 1956 is given below :—

	1955	1956
Foreign Post	—	4
Indian Embassies, etc. abroad	—	8

Similarly the Postal Appraiser, Foreign Post, Customs refers to the Assistant Drugs Controller (India) all cases of suspected objectionable literature imported and also intended for export. At times the importers or exporters themselves approach the Assistant Drugs Controllers (India) for advice. The total number of cases in respect of imports and exports on which advice was given by the Assistant Drugs Controllers (India) at the ports during 1956 is given below :—

Name of the Port	Import	Export
Bombay	58	52
Calcutta	14	5
Madras	4	4
Cochin	—	—

Training of Trade Representatives in Government Laboratories

The Scheme for the training of candidates sponsored by the trade in Government laboratories was continued during the year under review. Candidates are selected by a Board consisting of a representative of the Director General of Health Services, the Director, Central Drugs Laboratory, Calcutta and representative of the Institutions where the candidate is to be trained. A fee of Rs. 100 per mensem payable in advance is charged from each candidate for the training. During the year 1956 one candidate was admitted for training under the Scheme.

Quinine

Consequent on the advent of the synthetic anti-malarial drugs, the use of quinine, cinchona and alkaloids became outmoded. The demand for quinine also fell sharply due to the successful control of malaria by the National Malaria Control programme. Consequently the import of quinine alkaloids and the salts was prohibited during the period under review.

The Quinine Conference in 1955 suggested that the possibilities of putting quinine to uses other than for malaria should be explored. It was further suggested that quinine and its products should be used by State Governments for their hospitals and dispensaries. The policy in regard to restrictions on the import of synthetic anti-malarial drugs was under consideration of the Government of India and the State Governments.

Medical Stores

The Medical Stores Organisation is a permanent organisation of the Government of India. It consists of Medical Stores Depots located at Bombay, Madras, Calcutta and Karnal and two factories attached to the Depots at Madras and Bombay, for the manufacture of tinctures, tablets, bandages, etc. There is also a repair shop attached to Depot at Madras for surgical instruments and appliances. In view of the statutory position of the Central Drugs Laboratory, Calcutta, it was decided to set up a separate inspection Unit at the Medical Store Depot, Calcutta. The Unit is to undertake testing performed by the Central Drugs Laboratory on behalf of the Medical Stores Depots.

The Depots continue to receive from abroad medical and other stores for distribution in India on behalf of International Organisations like UNICEF, WHO and TCM. A small sub-depot is maintained at Delhi to handle certain medical stores and other supplies received from UNICEF, WHO and TCM.

The question of revising the existing priced Vocabulary of the Medical Stores, and the Medical Store Depot Manual are under consideration of the Directorate.

In 1956, the Government of India appointed a Technical Committee to examine the possibility of modernising the Medical Store Depot Factories. Report was submitted in July of the same year. It was estimated that the expenditure to be incurred in carrying out the various recommendations are as shown in Table No. 93.

The activities of the organisation are tabulated below for comparison:—

Activities of the Medical Stores Organisation (1954—56)

Place	No. of indentors			Value of stores supplied by M. S. Depots (Rs.)		
	1954	1955	1956	1954	1955	1956
Bombay .. }	..			41,13,132	38,12,775	38,27,578
Madras .. }	7,860	7,590	8,596	65,83,172	62,72,616	62,72,616
Calcutta .. }	..			33,15,840	27,52,891	27,52,891
Karnal .. }	..			21,48,655	23,93,606	23,94,193

CHAPTER XI

MEDICO-LEGAL WORK AND THE SEROLOGIST DEPARTMENT

ppendices Tables 94 & 95 334—336

CHAPTER XI

MEDICO-LEGAL WORK OF THE SEROLOGIST DEPARTMENT

1954—56

The scope and nature of the work of the Serologist Department remained essentially the same as in previous years. Promptness in analysis and in reporting of cases was maintained throughout the year. Figures of analysis of exhibits due to human poisoning, animal poisoning, stains, blood and semen testing and Rhesus grouping including typing in suspected cases of erythroblastosis foetalis are depicted in the Tables Nos. 94 and 95. The number of cases tested for syphilis by the W.R., V.D.R.L. and the Khan test are also shown collectively. The State Chemical Examiner of U.P. reports that Dhatura is commonly used in human poisoning cases in U.P. 40.2% were so detected in 1956 as against 39.2% in 1955. Opium, Arsenic, Alcohol and Potassium Cyanide came next in order of frequency.

As most of the States do not have a separate organisation, the work of investigation and examination is entrusted to the Chemical Examiners of adjoining States. Thus the Director, Forensic Science Laboratory in Calcutta carries out such work for the States of Assam, Bihar, Orissa and West Bengal; the Chemical Examiner, Agra conducts tests for Uttar Pradesh, Vindhya Pradesh and Ajmer while the Chemical Examiner, Kasauli helps Governments of Pepsu, Delhi and Himachal Pradesh.

Production of Cardiolipin and Lecithin for the preparation of the antigen for V.D.R.L. test was started in 1956. Samples of Cardiolipin and Lecithin were taken and forwarded to the World Health Organisation International Reference Laboratory at the State Serum Institute, Copenhagen to confirm the results obtained in this Laboratory.

In consultation with the State Governments the Government of India set up the Central Medico-Legal Advisory Committee with the Serologist as its *ex officio* Chairman in 1955. The Committee consists of representatives from the Ministries of Law and Home Affairs, Chemical Examiners, Police Surgeons and Professors of Forensic Medicine besides, three retired officers connected with the work of Forensic medicine during their service. This Committee will advise the Centre and the States pertaining to Medico-Legal procedure and practice in India, and promote and develop new techniques in the field of Medico-Legal science.

CHAPTER XII

PORT AND AIRPORT HEALTH ADMINISTRATION

Appendix Table Nos. 96, 97 & 98 337—340

CHAPTER XII

PORT AND AIRPORT HEALTH ADMINISTRATION—1954—1956

The Indian Port Health Rules, 1955, revised in conformity with the International Sanitary Regulations were brought into effect at all major and minor seaports in India from 27th February, 1956. In addition to the six quarantinable diseases, viz., plague, cholera, yellow fever, small-pox, relapsing fever and typhus, 5 more infectious diseases, viz., chicken-pox, diphtheria, cerebrospinal meningitis, influenza pneumonia and jigger are included in the Rules. With the promulgation of the above rules unprotected crew and passengers arriving from yellow fever infected areas within 9 days of arrival were isolated in the yellow fever hospitals or on board the vessels till the completion of their incubation period or till their certificates matured whichever was earlier. The practice of issuing a Bill of Health to vessels leaving for foreign ports was discontinued. To prevent ships leaving ports without medical inspection port clearance was made subject to the production of a "Certificate of Medical Inspection" which is issued after medical inspection of ships going to foreign ports.

Water supply to vessels and provision meant for Indian crew were inspected by the Port Health authorities at various ports and those found not conforming to regulations or sub-standard were replaced immediately.

No case of quarantinable disease occurred on board pilgrimships during the period under review.

The scheme for pre-entry and periodical medical examination of seamen introduced in Bombay and Calcutta in 1950 and later extended to other major ports was working successfully. The desired standard of medical examination was maintained throughout the year. Facilities provided for indoor and outdoor treatment of seamen "off articles" within one year and "on articles" worked satisfactorily. Special sanction was also accorded for free laboratory and other tests of seamen declared temporarily unfit.

International aerial traffic was likewise subjected to the Indian Aircraft Public Health Rules, 1954, which came into effect on 17th October, 1955. Persons at risk to yellow fever infection were quarantined till they ceased to constitute a danger to public health. All incoming aircraft from the West were disinfected on landing and subjected to a careful search for insects harmful to public health and agriculture.

Emergency landing arrangements for diverted international aircraft which due to bad weather or otherwise were unable to land at the specified airports continued at Poona, Ahmedabad, Gaya, Begumpet and Lucknow.

Regular anti-mosquito and anti-rodent measures were taken in and around the ports and airports. Aedes index remained below one per cent in all the ports and airports during the period 1954 to 1956. The general sanitation of the ports and airports was satisfactory throughout the period. Periodical inspection of catering arrangements and water supply were carried out in the ports and airports.

The tabulated statements (Tables 96 to 98 provide detailed information of the health activities at the major ports and international airports).

CHAPTER XIII
MEDICAL RESEARCH

	PAGE
Indian Council of Medical Research, New Delhi	127
Indian Cancer Research Centre, Bombay	129
Central Research Institute, Kasauli	130
All India Institute of Hygiene & Public Health, Calcutta	132
School of Tropical Medicine, Calcutta	136
Malaria Institute of India, Delhi	139
Central Drugs Laboratory, Calcutta	141
Haffkine Institute, Bombay	142
Nutrition Research Laboratory, Coonoor	143
Pasteur Institute of South India, Coonoor	146
Drug Research Laboratory, Jammu & Kashmir	147
King Institute of Preventive Medicine, Guindy, Madras	148
Central Institute of Research in Indigenous Systems of Medicine, Jamnagar ..	149
Central Leprosy & Teaching Institute, Chingleput	150
Virus Research Centre, Poona	150
Vallabhbhai Patel Chest Institute University of Delhi	151
Appendix Table No. 99	341

CHAPTER XIII

MEDICAL RESEARCH

Indian Council of Medical Research—1954-56

The steady expansion of research in the fields of medicine and public health was very marked in 1956-57, as evidenced from the larger number of research proposals supported, 167 as against 115 in 1955 and 116 in 1954, with the corresponding increase in expenditure from Rs. 16,29,103 in 1954, to Rs. 29,14,476 in 1955 and Rs. 33,00,000 in 1956. This remarkable expansion is due to the fact that a majority of the projects included in the Second Plan have been given effect to. The planning stage of the Council was over and the stage of implementation had set in. The projects covered both fundamental and applied research, the objects being :—

- (1) improvement of environmental sanitation and control of communicable diseases;
- (2) development of indigenous drug resources;
- (3) improvement of nutritional status of the people, and
- (4) furtherance of research in medical colleges, particularly in clinical research.

1. A major public health activity in the Second Plan was the National Water Supply and Sanitation programme. It was initiated by the Council in 1956. It covered suitable methods of drawing water from wells study of the different types of strainers in use in tube-wells and involving simple methods for the removal of excess of iron, brackishness and flourides. It was decided to set up a Public Health Engineering Unit at the All India Institute of Hygiene and Public Health at Calcutta.

Pilot plants were established in the States of Bihar, Uttar Pradesh and West Bengal to deal with the distillery, factory and tannery liquid wastes on a laboratory scale. Surveys on waste have been carried out.

The project to evolve satisfactory latrines in rural areas has advanced in most States.

2. Eight selected centres at Medical Colleges would be undertaking a coordinated research from 1957 on the advice of the Physiology and Pharmacology Advisory Committee.

3. Research programmes relating to Nutrition were implemented. They related to the determination of the nutritive value of food in India, study of lathyrism problem in Rewa, survey of growth and physical development of children, survey and prevention of protein malnutrition, studies in protein metabolism and investigation of the physiology of human lactation. Valuable information had been collected regarding the dietary habits, social customs and weaning practices in Andhra, Madras, Mysore and Kerala which would be of great use in the organisation of child health programmes. Other investigations made at the Nutrition Research Laboratories of the Council were the mode of action of vitamin-D, the biological

significance of vegetable proteins as compared with animal proteins, clinical trials in cases of kwashiorkor with vegetable protein foods, the pathogenesis of hair changes in kwashiorkor and the effect of malnutrition on the cardio-vascular system.

Progress had been made by the other Units in the field of energy metabolism, vitamin inter-relationship with reference to folic acid and B-12 and in intra-cellular distribution of vitamins. The Council had undertaken to shift its Laboratories from Coonoor to Hyderabad in the near future. The Government of India had provided a sum of Rs. 3 lakhs for the purpose.

4. (a) A Blood Group Research Centre was established in 1955 at Bombay with the Indian Cancer Research Centre serving as the main base. It would train personnel in blood group technology for blood transfusion services and prepare specific anti-sera required for the work.

(b) The Virus Research Centre, Poona was being expanded by the addition of a wing due to its increased activities. The Centre is engaged in the epidemiology of Japanese B encephalitis discovered in 1955. Eight virus strains were isolated. A field station was set up at Vellore and surveys were being conducted for the disease and other allied arthropod-borne virus diseases. This would open up an area of study which may result in the better understanding of fevers of unknown origin. The Scientific Advisory Board had set up units of virus research in the country, with the virus Research Centre training workers for the regional units.

(c) The preliminary survey of tuberculosis by mass radiography in six areas was concluded in 1956, its results analysed and presented at the XIVth International Tuberculosis Conference held in January, 1957. The outcome of the survey had demonstrated for the first time the magnitude and distribution of tuberculosis in the country and the slight difference between the incidence of T.B. in urban and rural areas.

The chemotherapy project undertaken in collaboration with WHO and the British Medical Research Council had begun to function in Madras. It will produce far-reaching effect in the control of Tuberculosis.

(d) Trachoma is probably the most important single cause of blindness in the country. A pilot project has been initiated in Aligarh with WHO assistance.

(e) Research in the epidemiology and studies in the clinical and therapeutical aspects of leprosy were continuing, with refresher courses held at periodical intervals. Studies on the chemotherapy of leprosy were continued since 1954 at the school of Tropical Medicine, Calcutta. Thiosemicarbazone was stated to have a definite place in the treatment of the disease. The combined treatment of INH and DDS produced better results than INH alone. Operative procedures for the correction of deformities and restoration of function to hands and feet deformed by leprosy were continued and improved upon at the Christian Medical College, Vellore.

(f) The ICMR/RF Fellowship Programme was specifically designed to promote research in medical colleagues and to improve the standard of teaching. Todate, nearly 100 fellowships have been granted to junior members of the teaching staff of medical colleges, 50% of whom have returned to take up the work at their colleges.

(g) A new Advisory Committee on Dental Health was constituted in November, 1956 to give impetus to this field of research. Eight proposals were sanctioned for support during the year.

(h) Another new committee was that of physiology of Human Reproduction. It will help in the development of safe, effective and unobjectionable methods of limiting family size and regulating population growth. The Committee met for the first time in Mysore in 1955.

(i) Toxæmias of pregnancy and anaemia states connected with pregnancy were among the major causes of maternal mortality in India. The Maternity and Child Health Advisory Committee reviewed in 1954 the knowledge of toxæmias of pregnancy and infant mortality in India.

The Indian Council of Medical Research was guided and advised by its eleven Advisory Committees and fourteen Sub-Committees.

Indian Cancer Research Centre, Bombay—1954-1956

The Indian Cancer Research Centre was inaugurated on 30th December, 1952. The Institution is assuming final shape and undertaking research education in cancer. It has set up laboratories for working out problems on Pathology, Experimental Biology, Biophysics, Biochemistry, Human Variation and Statistics.

The Centre has established a Neuro-Pathology Unit at the Tata Memorial Hospital in 1949. Neuro-surgical material is referred to the Unit for opinion. The Unit besides investigating the alleged role of *Lathyrus sativus* in the causation of Lathyrism in the country is also studying the effects of radiation on cutaneous nerves. Work on leprosy has demonstrated the mechanism of cutaneous sensibility.

The Family Planning Programme and Research Committee forwarded various types of contraceptives to the Centre for biological testing because of the availability of controlled laboratory conditions and standard strains of mice of known breeding quality.

The effect of "Meta-xylol-hydroquinone isolated from *Pisum sativus* on laboratory animals" was presented at the Scientific Seminar on Family Planning at Bombay in November, 1956.

The Centre's R.C.A.—E.M.U. 2 D Electron Microscope with its 20,000 magnification is used to study ultrastructures beyond the range of the optical microscope. A systematic investigation of tissue culture of tumours containing M.T.I. (Mammary Tumour Inciter) and tumours not containing M.T.I. is in progress.

One of the objectives in the study of human heredity is to ascertain the mode of inheritance of various traits and their linkage relations which would make it possible for mapping human chromosomes. A study is in progress to determine the precise mode of inheritance of traits and linkage relations with one another and with blood groups.

Diagnostic procedures have been developed using the methods of exfoliative cytology to detect unsuspected cases of cancer of cervix from vaginal smears or intra-oral cancer from mouth smears.

Biologists at the Institution are busy with investigations of breast cancer, the mechanism of endocrine relationships and the nature of carcinogenic processes using "tissue culture" technique.

The completed work on the effect of milk-borne tumour agent on some endocrine glands in "Intact and Castrate" mice was presented at the International Symposium on Breast Cancer, held at Amsterdam in September, 1954. Another paper was read on the "Gonado-Hypophyseal Imbalance in Adrenal Cortex Tumours" at the annual meeting of the Indian Association of Pathologists at Nagpur in December, 1955. Pathological testing of a series of 5 sulphur analogues of polycyclic hydro-carbons has been completed and the results will be published shortly.

Production of oral cancer is alleged to result from the habit of chewing tobacco and lime with or without betelnut and other ingredients of *pan*. Cancer of the mouth and adjacent regions of the pharynx and larynx account nearly 50% of all cancer patients attending the Tata Memorial Hospital. Analysis of the information available at the hospital showed that many such habits may be playing a role in the aetiology of oral cancer.

The Atomic Energy Commission established a Cell Biology Unit in the laboratory of the Tata Memorial Hospital in 1948 to explore the possibilities of the use of radio-active isotopes in biological research. As atomic energy work advanced, the Commission decided to start a medical and Health Division at the Centre to keep a check on the health of the workers of the Commission.

Central Research Institute, Kasauli

The Central Research Institute, Kasauli, continued to manufacture vaccines, sera and toxoids and carried out sample testing and bacteriological examination.

Research

Virus

(a) Investigations for the first time were carried out on consignments of birds from Uttar Pradesh in 1954, for the presence of the agent responsible for psittacosis. Studies are in progress to determine the occurrence of ambulatory or sub-clinical infection in handlers of birds such as pigeons, parrots, parakeets, etc.

(b) Reports were received from Bihar, Uttar Pradesh and Delhi in 1954, of the outbreak of an epidemic of encephalitis among children. It has not been possible to isolate the pathogenic organisms culturally or by infection of laboratory animals.

(c) Lack of dried ice and failure of the mechanically operated deep freeze plant prevented the progress of the studies on the yellow fever virus, 17D strain (234th egg passage level).

(d) Three types of polio virus from the Polio Research Unit, Bombay, were grown in tissue culture and serially passaged *via* the intraspinal route through mice.

Anti-biotics

12 soil samples collected round the Kasauli Hills yielded 60 molds, 180 actinomycetes and 50 bacterial cultures. There was a search for new anti-biotics from soil or micro-organism.

To determine the resistance of an organism against anti-biotics as penicillin, chloromycetin, aureomycin and terramycin, suitable anti-biotic sensitivity discs have been evolved.

Studies of Penicillinase

B. asiaticum was found to produce the largest quantity of penicillinase. Attempts were made to extract the intracellular penicillinase by the method of Smith and Smith. The physical and chemical properties were studied. To obtain penicillinase preparations of greater activity alcoholic extracts were precipitated with solid ammonium sulphate or dilute acetic acid of pH 5.2.

Sulphonamide

Sulphonamide sensitivity discs have been prepared and standardised for Sulfanilamide, sulfanethazine, sulfathiazole, sulfacetamide, sulfamidine, sulfadiazine and sulfametazine.

Cholera

Advances have been made in the seriological classification of *V. cholerae* and investigations undertaken to isolate the various chemical fractions during 1955.

The potency of cholera vaccine stored at room temperature for varying number of years in the plains of Punjab is being investigated by active and passive immunisation-assays. Endotoxic theory of cholera pathogenesis was under study and fresh *V. Cholerae* strains will be tested in the Cholera Enquiry proposed under the Indian Council of Medical Research.

A method was developed to carry out accurate paper chromatography of aminoacids from vibrios based on the values of the chromatographic partition coefficients.

Typhoid

T. A. B. Vaccine stored in the dark at room temperature retained its full potency for two years with deterioration by the third year. Experiments have shown that the use of $\frac{1}{2}$ % carbolic acid has a preservative in concentrated *S. typhi* vaccine which is preferable to 1% carbolic acid.

Typhus

The Institute was requested by the Government of Jammu and Kashmir in 1954 to carry out blood examinations of 2,000 peoples for typhus fever. This was undertaken after receiving and testing the imported reagents from abroad through the good offices of the World Health Organisation South East Asia Region.

Stock bacterial Culture

Freeze drying of stock bacterial culture was undertaken, to maintain and supply dried culture to workers in the country, instead of cultures on nutrient media.

Rabies Vaccine Therapy

Treatment in rabies as evidenced from the experiments have shown that :—

- (1) cauterization of bites with carbolic acid or fuming nitric acid as a first-aid measure followed by
- (2) injection of concentrated and refined rabicidal serum within 24 hours of the bite and again followed 24 hours later by anti-rabies vaccination, is the correct procedure.
- (3) Tincture iodine when applied locally to wounds was found to be effective in 45% of cases.

Intranasal administration of anti-rabic vaccine also conferred a high degree of immunity in guinea-pigs kept under varying conditions.

Anti-biotics have been found to have little or no effect on the challenge offered by the rabies virus.

Endogenous creatinine clearance.

It has frequently been observed that the urea-clearance values do not correspond with a clinical assessment of renal function. It was found that the endogenous creatinine clearance value was considerably lower in Indians than in others and that the variability of this test was less than in the urea-clearance test.

All-India Institute of Hygiene and Public Health, Calcutta—1954–56

The Institute's activities of training public health personnel of different categories and research in the varying problems of public health continued during the period under review. The work on Maternal and Child Health Scheme progressed satisfactorily. The Institute did not undertake the manufacture of sera, vaccine, etc. 3,882 persons were immunised against yellow fever and two against typhus in 1954 and 2,383 and 2 in 1955 respectively.

Epidemiology

1. *Studies in epidemiology of plague* : The mechanism of maintenance of plague infection in rats and fleas during the inter-epidemic period and its possible role on the secular trend on plague epidemiology was conducted in 1954 and continued during the period under review. The work indicated that infection might precede in the chronic form in rat population (commensal or wild) and that it was possible for this infection to cause bacteremia at times leading to infection of the infesting fleas and not infrequently causing their own death. It was also considered that these infected fleas in their turn might transmit infection to other susceptible rats and thus ultimately bring about simmering or open epizootic. Experiments conducted with immunized rats was to find out whether chronic foci arose by infecting them naturally or artificially and whether some of them could infect susceptible rats through fleas.

Plague-Gauhati (Assam) : An outbreak of plague was reported from Gauhati, Assam, in November, 1956. The outbreak was investigated and a plan for control drawn up for immediate implementation by the first week of December, 1956.

2. *Cholera and Leprosy* : Calcutta city has been a perpetual endemic centre for diseases such as cholera, small-pox, leprosy, enteric fever, etc. in spite of medical and sanitary facilities. It was revealed by an epidemiological survey that social factors, though not all identical, play no less an important part than insanitary conditions in the case of the two diseases, cholera and leprosy and that complete control cannot be achieved without simultaneous attack on these factors.

Cholera : Isolation and Identification of NAG cholera vibrios belonging to Groups I, II, III, V and VI after artificially infecting fish. Further studies were in progress.

The Hilsa fish caught along the coast of Puri did not have any NAG vibrios, but were present in those examined from the estuarine areas.

3. *Diphtheria* : The incidence of diphtheria in Calcutta has increased recently, being twice as high during 1953-54, as in the preceding three years. Epidemiological data so collected is being analysed.

4. *Fungus* : The monthly data for the five-year period from 1950—54 was analysed to study the seasonal variation and its correlation with climatic conditions. The variation in the sex and age incidence has also been investigated assuming that patients are largely drawn from the Calcutta population.

5. *Encephalitis* : Cases were admitted in 1954 to the Tata Main Hospital, Jamshedpur, who were suspected cases of 'Viral Encephalitis'. Similarly, other outbreaks were reported at Poona, Monghyr (Bihar), Bilaspur (Madhya Pradesh), Allahabad, Lucknow, Kanpur, Hardoi, Bareilly, Sitapur (Uttar Pradesh), Delhi and in certain towns of Punjab. This is described in Chapter XII under Virus Research Institute, Poona.

Surveys

1. *Health Survey of Community Project Areas* : The survey was started during the year 1955 and continued during the year under review. During this period 3 blocks were surveyed vide Table No. 99. These are rapid health surveys of Community Project areas, particularly of Part 'B' and 'C' States to obtain a base line of the existing health and socio-economic conditions at the initial state, so that surveys repeated 5 or 6 years hence, would give comparative pictures of the development and progress made during the period.

2. *Tuberculous Morbidity* : The survey was initiated under the auspices of the Indian Council of Medical Research to assess the tuberculous morbidity in certain parts of India. Six zones comprising of 140 millions were included for the survey. The largest city, six medium sized towns of population between 10,000 and 50,000 and about 30 villages were selected from each zone. Morbidity is assessed from the data of X-ray and bacteriological examinations of sputum.

3. *Nutrition Survey* : The survey was started to determine the incidence of deficient conditions among school children of Chetla Health Centre, Calcutta. The age group ranged between 6 to 12 years. The survey revealed that Vitamin A deficiency was common. Dryness and wrinkling of conjunctivae constitute about 28% and Bitot's spots constituted 6% of the deficiency. Vitamin 'C' deficiency in the form of spongy bleeding gums

also formed a major percentage. Caries of teeth constituted 23% of the total deficiency.

4. *Contraceptives* : Earlier work on adult rats had shown that *Pisum sativum* and Linn (in field pea) and its active principal meta-xylohydroquinone had anti-fertility action. Human trials by the oral methods with synthetic preparation also seem to indicate that the drug is effective in reducing pregnancy rate. To determine the possibilities of the use of the drug as an oral contraceptive, a research project was proposed in collaboration with the M. & C.W. Section of the Institute. Clinical examinations of the "toad test" are being used to detect pregnancy. No definite conclusion on the value of the drug has been reached and the study is being continued.

5. A survey of methods of infant feeding was commenced in the villages around Singur in 1954, with particular emphasis on length of breast feeding and methods of weaning.

6. Investigation into the cause of cirrhosis of the liver was initiated in liaison with the Calcutta School of Tropical Medicine.

7. Mass Chest Radiography of 2,600 workers in industries started in 1954 is being continued.

8. Follow-up studies of B.C.G. vaccinations and B.C.G. environmental child contact with pulmonary Tuberculosis cases were taken up in February 1955 are continuing in collaboration with the Industrial Hygiene section.

Parasitic removal by effective Sewage Treatment

To study the efficiency of parasite removal during different stages of sewage treatment, a series of samples were analysed. Where treatment plants operated efficiently, parasite removal by septic tank was better than in plain sedimentation. The trickling filter treatment was as effective as the activated sludge method.

(a) Ova of *ascaris* can survive digestion for 120 days at normal temperature, but under the thermophilic range of 132.8°F., digestion of ova is effective. This is significant from the hygienic point, of using sewage and its products in agriculture.

Observations on the prevalence and survival of pathogens in night soil compost at the different stages, resulted in the conclusion that where composting was carried out correctly all the pathogens were killed and that there was very little public health hazard in handling the digested compost.

(b) Standardisation of a suitable technique for isolation and enumeration of tubercle bacilli from the Jadavpur Tuberculosis Hospital sewage was continued. It was possible to isolate the tubercle bacilli by pre-treatment with 6% sulphuric acid or heat-treatment at 50°C. The work is progressing. It is sponsored by I.C.M.R.

Sewage samples were also taken at Kancharapara, near Calcutta to determine the presence of tubercle bacilli. This problem is considered to be very important as it constitutes a public health hazard.

Vital Statistics

A new system of vital statistics registration was introduced in 1946 at the Singur Health Centre. The Surveys showed that about 60% of births and 50% of deaths were registered in the area during the period. Vital statistics of the Health Centre from 1946—54 were analysed with the dual object to study the trend of vital events and examining benefits that have accrued from the new system. The results were not encouraging. In view of this, it was considered that a programme should be initiated, so that all deaths where cause was not properly reported, would be investigated and the cause recorded.

Industrial Waste Disposal and Water Pollution Research—I. C. M. R. Schemes

During 1955 information was collected from factories regarding raw materials used, the products obtained and the character and quantity of waste produced for sanitary disposal. Laboratory studies were carried out on the treatment of distillery waste and it was determined that treatment of waste with 2% lime followed by sedimentation, removed about 70% of putrescible organic matter. Further experimental work is in progress, by field units at Patna and Lucknow on different types of wastes.

The efficiency of purification of distillery wastes by lime treatment and passage of carbon dioxide is not high enough to be economical in practice.

Other Activities

A post-graduate course leading to Diploma in Nutrition of the University of Calcutta and a certificate course in Rural Water Supply and Sanitation was introduced in 1954.

The Urban Health Centre at Chetla, Calcutta, began to function under the Institute from January, 1956.

The Maternity and Child Welfare Section of the Institute was developed in 1954 into a Department of Maternal Child Health in collaboration with UNICEF and WHO by the Government of India. It involved an expenditure of Rs. 90 lakhs spread over a period of 5 years to be shared equally by the Government of India and the UNICEF. Under this Scheme an additional storey was added to the main building of the Institute with additions to the existing student's hostel at Calcutta and staff quarters in the urban Centre in Calcutta. The Student's Hostel in the Rural Health Centre at Singur, a special Health Centre at Paltagarh and another at Nasibpur were completed in 1955. The Union Health Centre at Anandanagar was nearly finished by 1956 and was expected to go into operation early 1957.

The Orientation Course in Public Health was started with financial assistance from Ford Foundation during 1956—4 courses were started during the year.

A certificate course in Health Education for 3 months was started with effect from June, 1956.

School of Tropical Medicine Calcutta—1954-56

The work conducted by the School of Tropical Medicine, Calcutta, during the period is classified under the following heads :—

1. Indigenous Drugs

(a) *Rauwolfia Serpentina* : The alkaloid is concentrated mostly in its bark which is significant from the point of view of economy in transport of the crude drug. Total alkaloids are more effective than fractions.

(b) *Cashewnut Shell Oil* : The anthelmintic effect of the Shell liquid of cashewnut has been confirmed in treatment of infections of ascaris and hookworm.

(c) *Leguminous Seeds* : Stigmasterol was detected only in *Lathyrus sativus* from among the chemical studies carried out on the seeds of several Leguminous plants.

(d) The study of anthelmintic action of mepacrine hydrochloride against *T. saginata* and *T. solium* was continued. The results so far are encouraging.

2. Pharmacology

(a) Researches on nutritional disorders were continued in collaboration with the Department of Tropical Medicine. Metabolic studies including hepatic function tests and liver biopsies were carried out in Kwashiorkor and Nutritional Oedema. Nitrogen balance changed to positive in one case after tetracyclin.

Investigations on the protective effect of drugs against X-ray irradiation in mice were commenced.

3. Protozoology

Research on parasitic protozoa was reoriented. During 1954, cytochemical study by newer techniques using rare specially imported chemicals, with a view to obtain fundamental knowledge about their normal constitution and to gain information about the nature of host-parasite relationship, response to drug treatment, nutritional research and drug resistance were conducted.

4. Helminthology and Filariasis

The role of pyogenic organisms in acute filarial lymphangitis could not be conclusively established. Histo-pathological studies of various filarial lesions were continued. The value of intradermal test in the diagnosis of filariasis was studied by the use of various antigens. Phlebogram studies of 'elephantoid legs' are in progress.

5. Entomology

Studies of the bionomics of sandflies were completed. An enquiry on the investigations of the possibility of controlling the incidence of Kala-azar by spray-killing of adult sandflies was terminated in April 1955 after the completion of the studies of bionomics of *P. argentipes*. Studies on the family ceratopogonidae was then started in April, 1955.

6. Bacteriology and Pathology

A series of allergic patients were treated with specific-floccule prepared from their serum and another series with control non-specific floccules. The former appeared to control the allergic attacks better. Those suffering from nasal involvement and cutaneous affections seemed to respond best to the auto-antihuman serum floccule.

From limited observations it was indicated that high Vi agglutinin titre was not always associated with the excretion of *S. typhi* in faeces or in urine.

7. Dermatology and Mycology Research

(a) Studies were undertaken to identify the types of *Mycobacterium tuberculosis* in *Lupus vulgaris*. The work revealed that attenuated eugonic human strain of tubercle bacilli were responsible for the causation of *Lupus vulgaris*.

(b) *Trichyophyton rubrum*, the common caustive organism of ringworm, was isolated for the first time from animals. Their peculiarities are under study.

(c) An analysis of 12,002 cases of superficial mycosis attending the School of Tropical Medicine, skin clinic during 1950-54 was made in respect of age, sex and climatic conditions. The incidence increased with age being higher in females, in the age group 5 to 14 years and about the same in the other age groups. The number of cases during the month was found to be positive with the minimum humidity of current month and the rainfall of the previous month.

Synthetic equivalent of chrysarobin 0.5% in Lassar's Paste, organic mercurials, aniline dyes and Whitefield ointment, was found efficacious as an anti-fungicidal drug.

8. Haematology Research

Dietary inadequacy/hypersplenism were found to be common causes for relapse of nutritional macrocytic anaemia. Achlorhydria in this condition is reversible and is probably the effect and not the cause of anaemia. Citovarum factor is a potent haematinic.

9. Kala-azar Research

The importance of hypersplenism in the causation of blood changes in Kala-azar was confirmed by demonstration of changes in bone marrow compatible with hypersplenism.

10. Leprosy Research

Work on electron microscopy and phase contrast microscopy of the leprosy bacillus has been undertaken to ascertain the significance of its different morphological variants.

Only two cases of the 246 cases examined for the occurrence of leprosy lesions in the fundus of the eye were found to be positive. The condition is, therefore, considered to be very rare.

Histological study of the intracellular lipoid in biopsy specimen from cases of leprosy showed, that its presence was almost pathognomonic and indicating the leprolitic nature of the lesion.

Study of the prognostic value of the lepromin test in context of leprosy cases showed that the negative lepromin reactors were not only more likely to get the disease, but equally likely to get it in the most serious lepromatous form.

11. Tropical Medicine

(a) *Tropical 'Splenomegaly'*: Aetiologically, it appears that the so-called chronic splenomegaly may result from recurrent malaria, vascular thrombosis or anomaly. Medical treatment is mostly palliative and symptomatic.

(b) *Tropical 'Eosinophilia'*: Indefinite abdominal symptoms were common, while physical and X-ray signs in the lungs were absent in some cases. Eosinophilia 8% to 34% were also observed in a good many family members of 10 patients. Studies on its aetiology indicate that it is probably an infection—allergic condition. Remarkable effect of Delta—cortril (not sustained) and hetrazan was observed, besides arsenical injection.

(c) Chronic ulcerative colitis patients were treated with bed and mental rest, diet and haematinics with or without plasma/blood transfusion in some cases, but the results were not permanent in most cases. Bowel washes appear to be of limited value, while anti-biotics do not influence the prognosis.

12. Chemotherapy

(a) *Malaria*: Single dose treatment of malaria with mepacrine followed regularly by fortnightly doses to prevent relapses, was found to be effective. About 200 villagers were kept practically free from malaria without any anti-mosquito measures during the period July to November of the year 1954. Entomological research showed that previous treatment with daraprim had some suppressive action on mosquito infectivity to *P. falciparum*. There was no gland infection in mosquitoes but gut infection was observed.

(b) *Rat-bite fever*: Tetracycline orally appeared to be an effective drug in the treatment of rat-bite fever.

13 Chemistry

(a) *Epidemic Dropsy*: A simple spot fluorescence test for spot detection of traces of argemone was determined. The characteristic golden-yellow glowed under ultraviolet. This property is highly specific from the point of detection of minute traces (up to 0.005%) of argemone oil.

Simple extraction methods for the isolation of cardol from cashewnut shell oil and diosgenin from dioscorea yams were evolved. Profestron, a female sex hormone has been prepared for the first time in India (1956) from diosgenin.

The Medicinal plants Cultivation Scheme by the Government of West Bengal was continued. Plants were examined and samples of soil analysed. Studies on the serum iron in Cooley's anaemia, Kala-azar and Leprosy are being continued.

14. Research and other activities

(a) *Hb. E*: Thalassaemia Disease has been described for the first time in India (1956) and was recently recorded in a Bengali family.

(b) An investigation in the virulence of variola virus and the study of immunity of patients suffering from smallpox during the recent epidemic (1956) indicated, that it was due to the lowered state of immunity rather than to the virulence of the virus which was responsible for the high morbidity and mortality.

(c) Attempts to isolate the influenza virus during the recent epidemic have been successful.

Malaria Institute of India

Malaria Institute of India conducted researches on malaria, both in the laboratory at Delhi and at the South India Branch at Coonoor and in the field in different parts of the country. Research work sponsored by the I.C.M.R., Council of Scientific and Industrial Research and the Indian Council of Agricultural Research were also undertaken.

Routine Instructional Courses

- (1) A twelve-week course in Malariology for Medical Officers was held at the Institute.
- (2) A short course for Malaria Engineers.
- (3) A four-week course in Malariology for Malaria Inspectors.
- (4) An eight-week course in advanced entomology, the first of its kind started in December, 1955.
- (5) A six-week course in Filariology for Medical Officers and entomologists was also held in August, 1955.
- (6) A four-week course in Filariology for inspectors was started in September-October at the Ernakulum field station of the Institute.
- (7) Special courses and demonstrations for students of the different institutions, who visited the Institute during the period under review.

The Institute continued to receive batches of mosquitoes for identification and report and supplied entomological specimens, to workers in India and abroad. Mosquito and housefly colonies were maintained.

Studies on the host parasite relationship between *P. berghei* and white mice under different nutritional states were continued, while the effect of different concentrations of pentaquin, pamaquin and primaquin on the sporogony cycle of *P. gallinaceum* were studied. Field investigations on anti-relapse drugs in Shivpuri were instituted. Primaquin proved highly effective in field studies.

Laboratory Investigations

Insecticides: It was observed that DDT crystals dissolved more rapidly in the cuticular waxes of *Musca nebulosa* and *A. stephensi* than in *C. fatigans*. There was a direct correlation between the lipid solubility and insecticidal action.

It was also determined that when flies and mosquitoes were exposed to DDT and B.H.C. combined deposits at successive generations these insects not only developed resistance to combined deposits, but, also to individual insecticides simultaneously.

Trials on the comparative deposits of different chlorinated hydrocarbon insecticides were carried out in Tripura, Delhi, Madhya Bharat and Vindhya Pradesh. Dieldrin was found to remain toxic to mosquito from 8 to 10 weeks. Preliminary trials indicated that culicine larvae could be effectively controlled in stationary water collections.

Newer insecticides of the phosphate series as malathion and diazinon were tested for their biological effect against houseflies and mosquitoes. The former was found effective for 13 to 14 weeks against mosquitoes and 11 to 13 weeks against flies, while, the latter was effective only for 6 weeks against mosquitoes and 7 weeks against houseflies. DDT when similarly tested was effective only 5 to 7 weeks, a large-scale field investigations were conducted in 1955 in Madhya Bharat, Vindhya Pradesh and Madhya Pradesh in collaboration with the malaria organisations. Conclusions arrived at as in previous years were reported that Dieldrin and DDT may be applied in a ratio of 1 : 4 for similar duration for residual effectiveness. Malathion was found toxic to chicken, rats and cats. It had a disagreeable odour and caused nausea, vomiting and choking amongst the sprayers at work and the villagers who entered the sprayed houses shortly after treatment.

It was determined that DDT when left exposed for long periods lost its dispersible power. Hence DDT should be properly stored and utilized within a reasonable period.

Addition of 2—5% of any one of the dispersing agents as Marasperse, Nicconol, Antrox, Triton, etc. was found to improve the emulsion and dispersal action of DDT solution.

Filariasis

Studies on filariasis were carried out at Delhi, Mangalore, (South India), Travancore-Cochin and Orissa, during the period 1954—56.

A Filaria Unit under an Assistant Director was deputed to Mangalore at the request of the Mangalore Municipality to carry out a filaria survey of the Municipality and to demonstrate the control measures including treatment therapy in a population of about 5,000. Survey was conducted and infection rate worked out to 15%, the disease rate to 9.5% and the endemicity rate to 24.2%. The average infection was 47.2 microfilaria in 20 cc's of blood. The youngest age at which the microfilaria was demonstrated was in a two year old child. The species of infection was *W. bancrofti* and the vector *C. fatigans*. Control consisted of anti-mosquito and anti-larval measures and drug administration. A blood survey, a week after completion of treatment showed a significant reduction in the microfilarial counts of positive persons. A scheme for the control of filaria in Mangalore was drawn up on the basis of the findings.

The Filaria Control Unit in Orissa continued its work of recurrent anti-larval control in one area, no control in another, the insecticidal application with DDT at 100 mgm. in one and 200 mgm/sq. ft. in another area. From the results of over 4 years of study by single method of

control it was concluded that a single course of anti-parasitic therapy with diethylcarbamazine and recurrent anti-mosquito measures would appear to be the best. The work of the Unit was terminated in March, 1955.

At the request of the Travancore-Cochin Government, a Filaria Unit was deputed to Ernakulam in October—December, 1954. The survey showed an infection rate of 7.7%, disease rate of 3.5% and average infection of 20.4 per 20 cc's. of blood, both *W. bancrofti* and *W. malayi* being encountered.

The efficacy of the Filaria antigen conspiculum gunidiensis in the early diagnosis of filariasis was studied at Delhi, a non-filaria area.

Malaria & Mosquito Surveys—Bombay Airport in September, 1956

A Unit from the Malaria Institute of India conducted a *Stegomyia* Survey of Air and Sea ports of Bombay. It was observed that the seaport area had a high *Aedes* (*Stegomyia*) Index, while it was nil at the airport. Recommendations were made for increasing the staff at the seaport.

Central Drugs Laboratory, Calcutta

The Drugs Act of 1940 was implemented in Part 'A' States with effect from April, 1947. Certain States having analytical laboratories undertake the analysis of drugs. But, it was found that the method of reporting was different for each State. This was discussed by the Drugs Technical Advisory Board and it was suggested that a Conference of Government and other analysts of manufacturing firms be convened. The first Conference was held at the Central Drugs Laboratory, Calcutta, in May, 1954 and important resolutions adopted were given effect to during the year. A new scheme providing facilities to analysts engaged in the drug trade, was introduced by the Government of India for training in Pharmaceutical chemistry, Bio-chemistry, Pharmacology and Bio-assay, Bacteriology and Pharmacognosy at this Laboratory. Three candidates from the pharmaceutical firms underwent the practical training in 1954.

The Central Drugs Laboratory, Government of India, being the National Laboratory for distributing International Biological Standards to Institutions in India continued to receive International Standards during the period under review, from the National Institute for Medical Research, Mill Hill, London. Reference Standards were received from the office of the United States, Pharmacopeia Commission and other foreign firms.

A site was bought at No. 3 Kyd Street, Calcutta, in January, 1955 to house the Central Drugs Laboratory, the Cardiolipn Unit and the Food Laboratory. Work is progressing.

Research activities

(a) *Rauwolfia serpentina*: The roots of the plant were commonly found adulterated with those of other species and because of the heavy demand of this particular drug, extensively used for its hypotensive effect, many samples were received for testing, by the Laboratory. Work on the different species of the plant was under study.

(b) *Datura metel*: Work on the drug being completed, the report has been published in 1954.

(c) *Leaves of Buchu*: Leaves of *Buchus* plant grown in India are being sold as substitutes for the foreign variety. Cases of poisoning were reported when the essential oil was used. Hence, a detailed study of the leaves and the essential oil were investigated.

(d) *Balsam Tolu*: Imported samples of the drug failed to conform to the B.P. standard. As the samples failed to show the presence of cinnamic acid (12 to 15%) in genuine samples, it was suggested that the presence of free cinnamic acid should be included as a criterion of purity in the pharmacopoeial monograph.

(e) *Vitamins and Anti-biotics*: Methods for separating Vitamins A from D; panthenol from Vitamin B in multi-vitamin preparations and chemical methods for assay are being worked out. Vitamin E content of pure butter varies from 30 to 60 and 60 to 100 in vegetable oils and hydrogenated fats respectively. This could be used as a criterion of purity for *ghee*, as it is commonly found adulterated with vegetable oils. The newer Vitamin K preparations were found to conform to the B.P. and U.S.P. tests. The recent tendency to incorporate vitamins with anti-biotic preparations especially with Vitamin B for oral therapy are being investigated whether such combinations potentiate with one another from the therapeutic point of view.

(f) Toxicological studies were conducted on antimony preparations for which no official toxicity figures were available. It was observed that the individual toxicity of the drug tetraethylthiurium was low, but high, when used with or shortly before or after ingestion of alcohol. It was an anti-alcoholic drug otherwise known as Antabuse.

(g) Preparations of *Strophanthus*, and *Ouabain*. Assay by the guinea-pig method was found to be fairly accurate on evaluation of the results.

(h) A long-term investigation into the properties of adrenal cortical hormones and corticotrophin and the evolution of suitable assay methods have been taken up. The work was in progress.

Haffkine Institute, Bombay

During the period under review the Institute continued to maintain its steady progress in research and in the manufacture of large-scale production of prophylactic vaccines, sera, anti-toxins, sulpha drugs, vitamin tablets and parenteral solutions. Production of Vitamin 'A' Forte, Nicotinamide and Magnesium trisilicate tablets was started in 1956. It also served as an Analytical Laboratory for the enforcement of the Drugs Act, 1940 and as a provincial Bacteriological Laboratory.

Fall in the incidence of plague and cholera was reflected in the low demand for vaccines by the States. The recent discovery of a suitable laboratory animal in this Institute for inducing experimental cholera infection has resolved one of the major bottle-necks in the advancement of cholera research, and gave rise to the possibility of testing other drugs for their prophylactic and curative value, with a high degree of accuracy. The demand for T.A.B. vaccine was also low in 1955 than in 1954, but, high in 1956. The increase of about 35% and 19% in the demand for anti-rabic vaccine was registered in 1955 and 1956 respectively. The Treatment Centres have progressively increased from 163 in 1954 to 176 in 1955 and 191 in 1956. The laboratory tendered valuable help to the

Prohibition and Excise Departments in the analysis of drugs for the purpose of taking alcohol content. The introduction of Employees (State) Insurance Scheme in October, 1956, has led to manufacture and supply of multi-vitamin, sulphaguanidine and sulphadiazine tablets to approved Chemists and Druggists under the Scheme.

The supply of anti-snake venom serum was more than double in 1954 to that supplied in 1953.

The open air snake farm brought into use in 1953 has been found to work satisfactorily. Snakes such as the cobra, krait and Russell's viper when housed in the farm yielded more venom than those maintained in cages.

4. Influenza strains were isolated and typed in the WHO Influenza Centres in the various sections in 1955.

Studies on the "Pulicidal value of *Pyrethrum*" were undertaken with regard to the deterioration of the insecticide in light and dark. Experiments were also carried out on behalf of WHO to find out if body lice, in and near Bombay showed any resistance to DDT.

Rideal-Walker Tests and tests for pregnancy were conducted. The Typhoid Scheme of the Government of Bombay was found not only useful but very popular. It had entered the 9th year of its initiation in 1954.

The Institute served as a Reference Laboratory on behalf of WHO for the V. D. Control Programme and with the Indian Council of Medical Research for Inter-Laboratory Evolution of a serology test for syphilis.

At the close of 1954 a Field Survey Unit was deputed to Kaira District to assess the extent of hookworm infection. Survey was completed in 1955 and the overall incidence of the disease was 35%.

Other activities: The Institute conducted its routine work of Blood Bank, anti-rabic treatment and yellow fever immunisations, besides analysis of various samples of blood, urine, body fluids, milk, etc.

Eight students were afforded facilities in each of the years 1954 and 1955 and nine in 1956 for undergoing the graduate degree in research.

Nutrition Research Laboratories, Coonoor

A comprehensive account of the major activities of Laboratories are set out in the Annual Report for the period under report. Personnel have been increased. Fundamental and applied aspects of the problems of human nutrition were investigated. The clinical and Public Health phases of nutrition as protein malnutrition, role of diet in atherosclerosis, growth and development in relation to nutritional status, nutrition in relation to factory environment and role of certain diets on population trends have received considerable attention.

Studies on Vitamins

Fluorometric method for vitamin 'A' assay was tried out and found to yield consistent results.

Studies on Proteins

Essential amino acids in certain vegetable foodstuffs was determined by microbiological techniques. In addition to the above cereals, legumes and tubers which contribute appreciable amount of proteins in Indian diets were also investigated.

Cereals, legumes and tubers were deficient in methionine, the deficiency being the greatest in the latter two. Deficiency in tryptophane was also present although it was less marked than that of methionine. Legume proteins in general have a high lysine content and thus can supplement cereals in Indian diets with some advantage.

Attempts have been directed to test various combinations of foodstuffs in proportions commonly consumed to find out if a dietary protein mixture of high biological value could be evolved. The capacity of such proteins (a) to maintain plasma protein and haemoglobin levels in blood, and (b) to regenerate on depletion was also tested. The conclusions arrived at are that the nutritive value of the protein of the commonly consumed cereal is enhanced by supplementation with pulse and amaranth, rice being the only exception. The reason for the latter could be that rice protein had already a high P. E. Ratio as compared with the other three cereals, wheat, bajra and jowar.

Protein deficiency

The effect of protein depletion and calorie restriction in albino rats was significant, in view of the aetiological role of protein malnutrition in kwashiorkor. The results indicated that the added effects of calorie restriction superimposed on protein depletion were variable.

The question of minimum protein requirements, specially those of adults had been a subject of controversy. Voit had suggested the standard of 118 gm. protein for a 70 kg. man. From experiments conducted on Indian adults, it was found that the average biological value (B. V.) and egg replacement value (E.R.V.) of vegetable protein derived from the composite mixture of cereals and pulse were 111 grams and 103 grams respectively, whereas those of the vegetable proteins derived from refined wheat flour alone were 86 grams and 88 grams respectively.

Field Investigations on skeletal growth in Indian children

The present report for the year 1954 reported observations based on analysis of radiograms of 577 children.

Children of the well-do-do class showed ossification centres of bones of the wrist and hand in 78% cases like the American children of the same age. Further studies are being carried out.

Protein Malnutrition Project.

In December 1954, the World Health Organisation financed the project through Indian Council of Medical Research at the Nutrition Research Laboratory. The investigation was to include:—

- (i) a survey of the extent and severity of protein malnutrition in children,

- (ii) collection in information on foods utilized in diets of young children,
- (iii) studies on the use of low cost protein rich foods of vegetable and animal origin, mainly the former, for treatment and prevention of protein malnutrition, and
- (iv) methods of preparation of foods as supplements to children's diets, etc.

An impressionistic survey of protein malnutrition in South India had been undertaken to obtain an idea of the occurrence of this disorder and of the dietary and other contributory factors predisposing or leading to protein malnutrition. Certain areas in Madras, Mysore and Hyderabad State selected at random have already been covered and others were in the process of being surveyed. The surveys were confined to children under 5 years of age, belonging to the poorer sections of the community in rural and urban areas of Madras, Mysore, and Hyderabad.

The commonest ailments of infancy and childhood were observed to be digestive disturbances and diarrhoea. To combat this the mothers of children of Pattancheru and Ramanagaram branded the abdomen at five or six places in the belief that this would prevent such disturbances at a later stage.

Breast feeding was invariably started on the 3rd day after birth because of the current belief that the flow of milk would start at that period. In the meanwhile the baby was wet-nursed. Supplementary foods were also investigated. Tradition, cheapness and availability were the determining factors elicited.

In Poonamalle, Madurai and Malabar animal milk of some kind was used for more than 50 per cent infants whereas in Hyderabad and Mysore, cereals were given first to a majority of the babies. The quantities of milk wherever used, rarely exceeded 200 cc. (7 oz.) a day, given mostly diluted with an equal volume of water. Milk feeds were gradually discontinued in favour of cereal foods. The latter when given to the babies were not submitted to any special processing or cooking. Children were weaned straight on to the usual preparations like cooked rice, idly, appam, roti, etc., consumed by adults. (Idly, a steam-cooked cake made of coarse ground rice and black gram; Appam, a pancake made out of rice flour and Roti, (unleavened bread). These were given mixed with a soup (pulse-water) or cooked vegetables. If the children refused food because it was pungent or spicy, they were given only plain rice. The actual dietary intake of children was uniformly poor.

Chemical composition of Indian Fruits and Vegetables.

(Under the auspices of the Indian Council of Agricultural Research).

It is the purpose of the present project to analyse the nutrient content of fruits and vegetables not listed in Health Bulletin No. 23. During the year under review, 40 fruits and 17 vegetables were investigated. The items analysed were: moisture, fat, protein, mineral matter which includes separate estimations of calcium, phosphorous and iron, and vitamins such as carotene, thiamine, riboflavin, nicotinic acid and ascorbic acid.

1. Among the fruits thus far analysed barhar (*Artocarpus lakoocha*) and giant capsicum are rich in vitamin C. All leafy vegetables and persimmon and apricots among fruits are good sources of carotene. In general, leafy vegetables showed a good distribution of those components of vitamin B complex which were estimated in this investigation. Greens, dried fruits and some fruits of the hilly regions contained appreciable amounts of iron.

2. Chekkur Manis (*Sauropus androgynans*), green leafy vegetable recently introduced into India from Borneo was found to be a fairly good source of all the major nutrients.

3. A rare sample of bamboo fruit obtained from trees flowering once in 50 years in Assam has been investigated.

4. Eight varieties of bananas and five of plums were examined. The varieties did not show on the whole any striking differences in the nutritive value.

5. The juice from coconuts of five, six and eight months in age was analysed to determine if the advancing maturity of the nut had any effect on the nutrient content of the juice. It was observed that the ratio of carbohydrate to total solids tended to decrease with increase in age.

6. Special mention may be made of the richness in nutrients of several leaves of root vegetables—knol khol, beet, turnips, etc.—which are usually thrown away. Several of them are good sources of riboflavin, calcium, iron and carotene.

Pasteur Institute of Southern India, Coonoor

Research Activities

1. The enquiry to determine the value and variation in the mortality rate of 5% Semple rabicidal vaccine, manufactured by the Institute for human treatment against rabies is being conducted.

2. The Institute cooperated with V.D. Serology and Laboratory Section of the W.H.O. in its programme of Inter-Laboratory Evolution of serological methods. Blood was collected from cases of lymphogranuloma venereum, normal healthy persons, secondary syphilis and nodular leprosy from the Nilgiri District and sera separated, "freeze dried tested" for sterility and serological reactions and sent to W.H.O. Reference Sector, State Serum Institute, Copenhagen. This programme has been of great value in assessing the relative sensitivity and specificity of the various tests and techniques as well as the usefulness of freeze-dried sera for reference purposes.

3. Tropical eosinophilia presents a distinctive association of the clinical features and laboratory findings. A very high incidence of the disease is revealed on the West Coast and Coimbatore district of South India. The geographical distribution is confined to the area between the Tropic of Cancer and the Tropic of Capricorn. The results of experimental studies indicate the presence of cellular as well as humoral immunity resistance in tropical eosinophilia. The data is consistent with the possibility that the disease is due to an infective agent, the nature of which is under investigation.

Drug Research Laboratory, Jammu and Kashmir

The Drug Research Laboratory, Jammu and Kashmir had 3 main Field Research Stations at Jammu and Panthal in Jammu Province and at Yarikah in Kashmir Province with a small observation nursery at Sanasar. A brief review of the activities of the Laboratory for the period 1954—56 is given below :—

- (i) The work of compiling a systematic list of herbarium sheets (8,000 by 1956) plants and arranging them family-wise was being continued.
- (ii) A separate herbarium of medicinal plants of Jammu and Kashmir was started in 1952. It would include specimens of important plants of medicinal value. Funds were contributed by the Indian Council of Agricultural Research and the Council of Scientific and Industrial Research.
- (iii) A monograph on the identification, distribution, nutritional value, etc. of grasses was being prepared for publication by the Indian Council of Agricultural Research.
- (iv) About 700 and 450 samples of Drugs, finished pharmaceutical preparations and medicinal plants, etc. were analysed in 1954 and 1955 respectively. They were received from State Departments, factories and drug farms.
- (v) There were more than 100 plants which gave a good yield of essential oils, some of which were *Acorus calamus*; *Saussures lappa*, *Xanthoxylum slatum*, *Jumiper berrecis*, *Carm carvi*, *Angelica glauca*, Himalayan Cedar Wood Oil, *Angelica archangelica* oil and *Albizzia amari*.
- (vi) In 1954 newplants were introduced, namely, *Mentha arvensis* (oil of menthal), *Chenopodium* (oil of Chenopodium), *Artemisia*, *saritime*, *Rauwolfia serpentina* and in 1955 *Pogostemon heynei*, *Ammivisnaga*, *Salvia officinalis*, *Matricaria chamomile*, *Delphinium consolida*, *Thymus vulgaris* and *Basil*.
- (vii) Preliminary experiments were performed on virgin guinea-pigs for the study of the emmenagogue action of drugs, as the alcoholic extracts of the *Raudia dumetorum*, *Sapindus trifoliat*, *Cuseuta reflexa*, *Semicarpus anacardiom*, *Trianthum decandra*, *Trianthema monogyna*, *Momordica charantia*, *Cucumis trigonis*. Further studies with purified active principles of the drugs were being undertaken.
- (viii) Electron microscopic studies of the effect of Streptomycin on the cytology of tubercle bacilli, revealed that the bacilli underwent a series of changes as a result of the action of the drug. The cell would resist the action of the drug and continued to remain intact even after complete disintegration of the cytoplasm and the disintegration of the neuclei at a later stage.
- (ix) Preparation of diosegeni from *Dioscora deltoides* (sapogemin of the yams). It was stated to be one of the best sources for the manufacture of sex hormones.
- (x) Screening of soil in search of new antibiotic substances.
- (xi) Systematic survey of tannin yielding plants was undertaken.

- (xii) Investigation of seeds containing fixed oils. The oils from the plants have been worked out and the results were being determined.

B. Budget allocations and expenditures were as follows :—

	1954-55	1955-56	1956-57
	Rs.	Rs.	Rs.
Budget allocation	1,13,000	1,10,000	1,20,100
Expenditure	1,05,440	1,10,450	1,18,243

King Institute of Preventive Medicine Guindy, Madras—1954–1956

The Institute was opened in 1905 and is maintained by the Government of Madras. Originally designed to serve as a Vaccine Lymph Depot to the State, the King Institute has developed into a Major Public Health Manufacturing, Teaching and Research Centre in the East. It functions as :—

- (1) A general Diagnostic Laboratory.
- (2) A Public Health Laboratory for the analysis and control of water Supplies, Sewage and Industrial Wastes and their treatment.
- (3) A Centre for the manufacture of Vaccine Lymph, Bacterial vaccines such as Cholera, T.A.B., and auto-and-curative vaccines and anti-tetanus and other sera.
- (4) A Centre for the preparation of Blood Group Sera and the processing of plasma and the control of Blood Banks in the State.
- (5) A Centre for the manufacture of sterile saline and other parenteral solutions.
- (6) A Government Analyst Laboratory for the examination of samples of Food under the Prevention of Food Adulteration Act, 1954, and samples of Drugs under the Drugs Act, 1940.
- (7) A Biological Control Laboratory.
- (8) A Centre for training in Laboratory Technology.
- (9) A post-graduate Teaching and Research Centre in Pathology, Bacteriology, Water, Food and Drug Analysis, Public Health Engineer and allied subjects of Public Health Importance.
- (10) A mobile laboratory for the field investigation of undue incidence of any disease, or any disease presenting unusual features or any other similar problems. Water Analysis and Bacteriological Units are also sent to places where large crowds of persons are normally expected to collect as in large fairs and festivals like Pushkarams. These Units keep a close watch on the water supplies and the health of the place and help in the prevention of disease and in the early detection of any disease, like Cholera which is likely to assume epidemic characters, and prevention of its spread to other parts.

Training facilities available at the King Institute, Guindy :—

- M. D. Course in Bacteriology.
- M. Sc. Bacteriology and Ph. D. Bacteriology.
- Post-graduate Training.
- Training in Blood Transfusion.
- Public Health Engineering.
- Practical Training of Technology.
- A short course of Laboratory Technique to private candidates.
- Certified Laboratory Technicians Course.
- Certified Laboratory Attendants Course.

Besides the above training courses, Scientific workers from the trade and private manufacturing concerns are trained at the Institute, under the Government of India Scheme, in the following subjects :—

- (i) Bacterial Vaccine (one seat) Duration of training of 6 months (1st January and 1st July every year).
- (ii) Anti-toxins and sera (one seat) Duration of training of 6 months (1st January and 1st July every year).
- (iii) General Bacteriology, including water Bacteriology and Algae control (one seat). Duration of training of 6 months (1st January and 1st July every year).

Central Institute of Research in indigenous systems of medicines, Jamnagar

The Government of India established a Central Institute of Research in indigenous systems of Medicines in association with the Gulab Kunwarba Ayurvedic Society at Jamnagar, in 1953. The administrative control of the Institute is vested in a Governing Body. The Institute has undertaken the following research programmes :—

- (i) Research on the study of Pandu, Giahari and Kamla Group of Diseases ;
- (ii) Investigations on guineaworm infection in collaboration with the Director of Ayurveda, Saurashtra; and
- (iii) Identification of drugs used in Ayurveda.

A standard had been prepared by the Institute laying down the fundamental equivalent for weights and measures used in Ayurveda in the metric as well as in the English systems. This standard has been adopted by the Government Ayurvedic Departments of Uttar Pradesh and Saurashtra.

Investigations in the progress of herbs used in the treatment of anaemia and in the preparation of iron were progressing. A new unit 'Siddha' was started in 1956-57. In 1954-55, the Institute received Rs. 20,800 as grant-in-aid, with a further provision of Rs. 3.15 lakhs in 1955-56 and Rs. 4 lakhs in 1956-57.

Central Leprosy Teaching and Research Institute, Tirumani, Chingleput.

The Central Leprosy Teaching and Research Institute comprised of the Lady Willingdon Leprosy Sanatorium, Tirumani and the Silver Jubilee Children's Clinic, Saidapet. They were transferred by the Government of Madras to the Governing Body set up under the auspices of the Government of India with effect from 5th January, 1955.

Investigations on the effect of BCG in lepromatous cases were being continued at the Institute. Further, these cases were being studied in greater detail, using lepromin repeatedly after BCG to find out how long lepromin conversions remained positive after BCG.

The nature of I.N.H. in the treatment of leprosy was also investigated.

Virus Research Centre, Poona

The Virus Research Centre, Poona, is jointly maintained by Indian Council of Medical Research and the Rockefeller Foundation. Acquisition of additional equipment and training of technical and professional personnel has made it possible for the study of virological problems, some of the investigations covering vast regions. To accommodate the rapidly increasing laboratory work, an additional three-storey block will be constructed from funds provided by the Government of India to Indian Council of Medical Research. The number of trained employees has increased from 73 to 99 in 1956. The department of Animal Virology is the basic training unit of Virus Research Centre.

Research

In June, 1954, the Jamshedpur Fever appeared in epidemic form in the city of Jamshedpur. 893 cases with 36 deaths were reported. Many hundreds of additional cases occurred in the city with some dozens of deaths. The epidemic was also of a serious nature in Delhi. It was found that the houses in Jamshedpur were heavily infested with several species of mosquitoes and sandflies, known to be potential vectors of virus diseases. Spraying of Gammexane on walls of houses were started from 1st July. The epidemic terminated spontaneously in mid-September. An analysis of the date of on-set and place of residence of the cases revealed no significant difference in the time sequence of cases and the incidence curve of disease in the sprayed and unsprayed areas. It was realised that though the distribution of the cases was compatible with that of the arthropod-borne disease, it was also compatible with the distribution of the diseases caused by an intestinal virus such as poliomyelitis. A strain of Group A Coxsackie virus (P 1065) was isolated. The picture now was, that anti-body to this Pushpalata virus was present in the sera of children in Jamshedpur. This was the similar type of immunity demonstrated in Bombay in regard to poliomyelitis virus. Mouse neutralisation tests and challenge testing of mice for virus isolation gave negative results for dengue, West Nile, Japanese B, sandfly fever and Sindbis viruses. Twenty other arthropod borne viruses tested for at New York Laboratories of the Rockefeller Foundation gave negative results. Hence, the investigation of possible enteric virus aetiology was the next line of planned enquiry. By tissue culture screenings, the enteric viruses isolated from the Jamshedpur fever cases and the Delhi hepatitis cases against serum anti-bodies of these and other agents, two of the isolates were identified as Coxsackie B4 and one as polio virus type I. Tissue culture isolation of polio virus type I from clinical cases seen in Vellore in which an enteric virus aetiology

was suspected, further confirmed the fact that, this JBE virus was common in India. The high incidence of group B virus anti-bodies in human beings in certain localities of the Krishna-Godavari delta, indicated that birds apart from being a reservoir for viruses of JBE-WN complex, may also have played a part in the epidemiology of other group-B viruses. C. vishnui was suspected epidemiologically as the most likely vector.

Vallabhbhai Patel Chest Institute University of Delhi—1954–1956

The Vallabhbhai Patel Chest Institute was established by the University of Delhi with a grant from the Government of India. It was formally opened in January 1953. A Governing Body was constituted by the Executive Council of the University of Delhi on 21st January, 1955 for the management and administration of the Institute.

The Institute undertook research in the following fields :—

1. An investigation to determine the degree of bovine strain of tubercle bacilli responsible for tuberculosis in patients attending Delhi hospitals was begun. 400 specimens of tuberculous material from bone and joint diseases, glands, etc. were examined and 78 were found positive on culture. The cultural method of isolating tuberculous bacilli has been established as it was found to be more sensitive than the microscopic method of investigation.

2. Search for anti-biotics from strains of actinomyces showed that a substance active against a number of gram positive and gram negative pathogenic bacteria including *Pyocyanus* and *Mycobacterium tuberculosis* (bovine and human) could be obtained from a strain of *Streptomyces*. A grant by the Indian Council of Medical Research was given to the Institute to study the effect of anti-biotics on Phthiotic acid formation by tubercle bacilli and the effect of Streptomycin was accordingly taken up.

3. An application for support of the study covering the clinical, chemical and pathological aspects of Bagassosis was presented to the Indian Council of Medical Research in November, 1955. A tentative approval was issued by the Council. The following schemes for research were submitted :—

(i) Investigation into the presence of pathogenic and saprophytic fungi in the respiratory passage of man, particularly in relation to prolonged treatment of tuberculosis with anti-biotics.

(ii) Pollination Calendar for Greater Delhi.

(iii) Studies in the Pathogenesis of Asthma.

Information for studying composition of dust from experiment on laboratory animals was collected.

4. The Institute investigated the outbreak of Infective Hepatitis in Delhi which occurred in November, 1955 in collaboration with Virus Research Centre, Poona. The research was completed in May, 1956.

5. The relatively recent studies of changes in the relation of alveolar pressure to the velocity of air flow in patients suffering from emphysema and asthma were introduced in 1954.

6. The pulmonary circulation time in cats was determined under certain experimental conditions with the aid of radioactive phosphorous. The results showed in the cat averaged only one second. This was communicated to the International Conference on the Peaceful Uses of Atomic Energy held in Geneva in August, 1955.

The evaluation of impairment of pulmonary function in tuberculous and non-tuberculous patients was introduced in 1955. Additional tests including three-second vital capacity, dyspnoea index, maximal mid-expiratory flow rate, functional residual capacity and total capacity of the lungs were performed. Post-operative study of pulmonary functions in patients who underwent successful thoracoplasty and pneumonectomy were evolved and information was under analysis.

The objectives of this systematic study were :—

- (1) The correlation of the study of pulmonary function by the various laboratory methods with the clinical conditions of the patient.
- (2) The pulmonary function loss due to surgical operation.
- (3) The relative importance of the various pulmonary function tests in the assessment of surgical risks.

Asthma : The Clinical Research Department started functioning in March 1956. As the building was not fully equipped, the Department opened an Asthma Clinic, in one of the rooms of the main building.

Other projects under study were experimental study of Tropical eosinophilia, infantile cirrhosis, endometrial tissues and survey of toxoplasmosis and histoplasmosis.

CHAPTER XIV

INDIGENOUS SYSTEMS OF MEDICINES AND HOMEOPATHY

Appendix Table Nos. 100 & 101

342—346

CHAPTER XIV

INDIGENOUS SYSTEMS OF MEDICINE AND HOMEOPATHY

Indigenous Systems of Medicine continue to be popular in the country, as evidenced by the number of dispensaries being established each year. No Act pertaining to these systems of Ayurvedic and Unani is in force except in the States of Andhra, Bihar, Bombay, Delhi, Kerala, Madras, Madhya Pradesh, Rajasthan and Uttar Pradesh. Table No. 99.

Andhra : The 457 Ayurvedic and 11 Unani dispensaries were maintained in 1956 from State funds and by local bodies. Since facilities afforded are inadequate, schemes are under consideration to improve medical relief by opening as many dispensaries as possible through subsidy and grants.

Assam : Assam had no Ayurvedic or Unani Hospital or Dispensary during the period under review, except for a 10 bedded Ayurvedic Ward attached to the Civil Hospital, Gauhati for the primary purpose of imparting training to students of the Ayurvedic College, Gauhati and to treat people desiring the Ayurvedic system of treatment. The College awards a diploma at present and there is a move to upgrade the college during the Second Plan period. A research department was established in 1955.

Bihar : The Ayurvedic and Unani systems were found to be popular with the people and it is intended to increase the number in the Second Plan, having one Ayurvedic and one Unani Dispensary in each District of the State. The four Ayurvedic Colleges and the single Tibbia College will be expanded during the Second Plan and the Government Ayurvedic College, Patna, upgraded.

Bombay : The Bombay Medical Practitioner's Act, 1958, is still in force and the number of Ayurvedic and Unani Practitioners registered under the Act up to 1955 is 870 Ayurvedic and 699 Unani. The total number of Ayurvedic and Unani hospitals and dispensaries up to December, 1955 is 1078. Of the 6 Ayurvedic Colleges, 5 award the G.F.A.M. (Ayurved Mishnat) Degree. The Institutions are affiliated to the Faculty of Ayurved and Unani Tibbi Systems of Medicine, Bombay. The sixth college at Poona does not grant the G.F.A.M. To encourage teaching of the Sudha Ayurved treatment, the Government of Bombay constituted the Committee for the Sudha Ayurvedic course. A diploma course of 4 years' duration making matriculates with a working knowledge of Sanskrit eligible for admission was started. It awards D.S.A.C. (Ayurved Pravin).

Since teaching of Unani medicine was not being done in Bombay, the Government of Bombay award 4 scholarships of Rs. 50 per month to students desirous of studying the Unani system at the Ayurvedic and Unani College, New Delhi. The State Government have also opened Ayurvedic wards of 20 beds each at the Universal Health Institute, Bombay, the Sassoon Hospital, Poona and the Civil Hospital, Ahmedabad for clinical research in Ayurveda. The M. S. University, Baroda carries out research in Ayurveda at the Seth U.P. R.U. by giving an annual State grant.

Madhya Pradesh : There were 391 Ayurvedic dispensaries functioning in the State by the end of 1956, of which 244 were State managed, 10 by Municipal Committees and 123 by Janpad Sabha. In addition to these were the 9 subsidised Ayurvedic dispensaries. The 'medicine chest' supplied to the Gram Panchayats of Madhya Pradesh were also being utilised and the local school teachers taught to render medical aid. There are 2 Government Ayurvedic Colleges at Gwalior and Raipur. Research work on Ayurveda was conducted at the M.G.H. Medical College, Indore.

Madras : The number of hospitals and dispensaries of indigenous medicine in the State at the close of 1956 was 424. Excepting the Hospital of Indigenous Medicines, Madras, and dispensaries under Devakottai Municipality, the other dispensaries rendered out-door treatment only. 270 beds were sanctioned for the Hospital of Integrated Medicine, Madras and 5 for the Devakottai Municipality. For want of qualified practitioners of modern medicines, more and more allopathic dispensaries were being converted into dispensaries for indigenous medicines. As there was no Act applicable in Madras, an Act was made in the year 1956 for indigenous systems of medicine.

Orissa : In pursuance of the policy laid down by the State Government, more Ayurvedic dispensaries were opened during each year of the period under review. Thus by 1956, the total number of Ayurvedic hospitals and dispensaries were 103, of which 2 hospitals and 65 dispensaries were maintained by the Government and 36 dispensaries by local bodies including 5 subsidised dispensaries. A Unani dispensary functioned in the State on a subsidy basis. It has been possible to increase in 1936 the bed strength from 40 to 60 bed at the Gopabandhu Ayurvedic Hospital, Bolangair. It is the intention of the Government to establish 15 more Ayurvedic dispensaries in the Second Plan period. Manufacture of Ayurvedic medicines is undertaken at the Government Ayurvedic Pharmacy, Bolangair. There are also two small Ayurvedic Pharmacies attached to the Ayurvedic Section of the Sadasiva Sanskrit College, Puri and Gopabandhu Ayurveda Vidyapitha, Puri.

The Gopabandhu Ayurveda Vidyapitha awards the D.A.M.S. diploma in Ayurveda. There are 3 other such institutions, namely the Sadasiva Sanskrit College, Puri, Vidya Bhusan Sanskrit College, Bulangair and the Perlakimedic Sanskrit College, which impart education on Ayurveda (Acharya course).

Punjab : Vaid and hakims are employed in a number of subsidised dispensaries in the State, both in Ayurvedic and Unani systems of medicine in rural areas.

Uttar Pradesh : The State Government continued in its efforts to develop and reorganise Indigenous Systems of Medicine on Scientific lines. The expenditure on the organisation increased from Rs. 32,55,800 in 1954 to Rs. 55,22,800 in 1956-57. There were 487 and 90 Government Ayurvedic and Unani dispensaries respectively by December 1955. Besides the above, District Boards maintained and financed 379 Ayurvedic and 44 Unani dispensaries under their direct control, while Government subsidised 674 District Board dispensaries in 1956. The Municipal Boards conducted 54 Ayurvedic and 14 Unani dispensaries. Financial aid was given to private practitioners running Ausadhalayas by the Board of Vedic and Unani Systems Re-organisation Committee, the Government

have sanctioned women Vaidya Subsidy Scheme to improve the maternity and child welfare conditions in rural areas. There are, thus, 80 Ayurvedic and 2 Unani dispensaries. The scheme for subsidising qualified Ayurvedic and Unani Practitioners in rural areas has also been started at the close of 1956. Medicines were supplied by the State Pharmacy of Ayurveda and Unani established by the Government. Facilities to pilgrims at Maha Mela Prayag in Allahabad and the Ardh Kumbha Mela, Hardwar, were provided. The Uttar Pradesh Indian Medicines Act (X of 1939) was amended by the Uttar Pradesh Medicine Amendment Act of 1956, in the light of the recommendations of the Uttar Pradesh Ayurvedic and Unani Systems Re-organisation Committee of 1947.

West Bengal : Five Ayurvedic hospitals affiliated to the General Council of State Faculty of Ayurvedic Medicines, West Bengal, functioned during 1956. The total number of beds was 400. It may be stated that there are several Ayurvedic Hospitals which are not affiliated to the above Council, and which are rendering medical assistance to people, free of cost.

Jammu & Kashmir : The Ayurvedic and Unani dispensaries in the State work as independent units and are scattered in areas, where medical aid cannot reach the villager. They are afforded facilities by the State.

Kerala : The Ayurvedic hospital attached to the Ayurveda College was started in 1890. It provides the D.A.M. diploma course and the B.A.M. degree course. The T.M.P. Act (VII of 1919) was first promulgated in Travancore in 1944 to regulate the registration of practitioners in allopathy, homeopathy, ayurveda, sidha and unani systems of medicine. With the integration of the 2 States of Travancore and Cochin, the TCMP Act was introduced. Three separate councils for modern medicines, homeopathic medicines and indigenous medicines were constituted.

Rajasthan : With the opening of 75 new Ayurvedic dispensaries in 1956, the total number now stands at 578. Subsidies to private institutions and private practitioners continued during the period under review. Ayurvedic camps were organised during fairs. Of the two Government Ayurvedic Colleges at Jaipur and Udaipur, the former has been converted into the Astung Ayurvedic College, while the latter is training compounders and nurses. The Indian Medicines Act has been in force for the past 3 years. There are 4 pharmacies at Jaipur, Jodhpur, Udaipur and Bikaner, which produce finished products for use of the State.

Delhi : Delhi Municipal Committee maintained the 12 Ayurvedic and 4 Unani dispensaries and one pharmacy and one Ayurvedic hospital at Billimaran. The total expenditure incurred during 1956 by the Delhi Municipal Committee amounted to Rs. 2,72,457. There is also an Ayurvedic and Unani Tibbia College Hospital in Delhi. The Board of Ayurvedic and Unani systems of medicines hold the D.I.M.S. examinations in Indian medicines and surgery.

Himachal Pradesh : There are 71 Government Ayurvedic dispensaries established in the rural areas and it is proposed to open 32 Ayurvedic dispensaries during the Second Plan, of which 8 have been opened during the year 1956-57. 2 Ayurvedic Pharmacies at Majra and Jogindernagar manufacture Ayurvedic medicines to meet the demands of the State dispensaries. A Research and Testing Institute is attached with the Pharmacy at Jogindernagar.

Hyderabad : The number of Unani hospitals and dispensaries in Hyderabad (Deccan) were found to be more than the Ayurvedic hospitals and dispensaries.

Manipur : There were no Ayurvedic or Unani Hospitals or Dispensaries in the State. It had no Ayurvedic Council.

Madhya Bharat : 48 new Ayurvedic dispensaries were opened in 1955, thus bringing a total of 350 dispensaries by the close of the year.

Saurashtra : The Ayurvedic College at Jamnagar was provided with an Ayurvedic hospital of 48 beds. The D.A.S.F. course of the college was conducted by the Shri Gulabkunwarbha Ayurvedic Society with State aid. Another Ayurvedic Vidyalaya was opened in 1954 at Bhavnagar with State grant, while the Research Centre in Indigenous Systems of Medicines, Jamnagar, was financed by the Central Government.

Tripura : Tripura had no Act of its own for the registration of practitioners of Ayurvedic and Unani systems of Medicine.

Vindhya Pradesh : Two more Ayurvedic Pharmacies were operated at Ghhatarpur and Rewa in 1955, besides the 74 Ayurvedic dispensaries. They manufactured drugs worth Rs. 33,000.

Andaman & Nicobar Islands : There were no Ayurvedic or Unani dispensaries in the State.

Ajmer, Bhopal, Coorg and Kutch had Ayurvedic and Unani dispensaries, which functioned effectively.

There were 4,327 Ayurvedic Unani Practitioners in 1956 as against 2,981 in 1954, and of whom 2,165 were registered in 1956 and 1,051 in 1954.

The total number of practitioners borne on Register was 81,585 in 1956. (Table No. 100).

CHAPTER XV

VOLUNTARY ORGANISATIONS AND ASSOCIATIONS

	PAGE
Indian Red Cross Society	161
St. John Ambulance Association (India) and St. John Ambulance Brigade, (India)	162
Tuberculosis Association of India	162
Hind Kusht Nivaran Sangh	164
Mission to Lepers	164
Kasturba Gandhi National Memorial Trust	165
All India Blind Relief Society, New Delhi	166
All India Women's Conference	167
Bharat Sevak Samaj	167
Trained Nurses Association of India	168
Indian Medical Association	168
All India Medical Licentiates' Association	169
All India Dental Association	169
Gandhi Memorial Leprosy Foundation	170

CHAPTER XV
VOLUNTARY ORGANISATIONS AND ASSOCIATIONS

Indian Red Cross Society—1954-56

Floods in India are a constant feature. They cause loss and suffering to humans, ravage crops and plantations and allow diseases to take their toll of life. The Indian Red Cross Society afforded relief to flood victims during the years under report. This constituted the most important activity of the Society. The extensive areas affected were Uttar Pradesh, Bihar, Punjab, Assam, West Bengal, Delhi, Jammu and Kashmir, Rajasthan and Tripura. The Society afforded supplies and medicines for immediate relief.

General relief was given to the needy and the under-nourished mothers and infants, with supplies of multi-vitamin tablets, anti-biotics and sulfa-drugs made available to most of the States for free distribution. Further, relief to victims of fires, droughts, cyclones was also provided in the form of milk, vitamin tablets, woollen clothing and cash grants.

The Society extended its activities to hospitals, dispensaries, maternity and child welfare centres, schools and orphanages and social welfare institutions. It has been recorded that nearly 300 such institutions received benefits during the year 1956 as against 230 in 1955; the benefits consisting mainly of milk, medicines, vitamins, protective and processed foods and other supplies.

In addition to assistance at home, the Society discharged its International obligation to other Sister Societies as in the case of flood-affected areas in Sumatra, the earthquake-ravaged region of Ecuador and the heavily devastated parts of Atlantic Magdalena and Bolivar in 1955. Similarly supplies and donations were also made in 1956 to Afghanistan, Argentina, Burma, China, Egypt, Hungary and Austria.

In response to an appeal on behalf of India by the League and Red Cross Societies, a number of foreign Sister Societies assisted India in relief operations. It has been estimated that about Rs. 12,00,000 had been diverted towards India in 1954 and Rs. 6,75,000 in 1956 in supplies.

The Maternal and Child Welfare Services of the Society and its branches continued to make their contributions each year. Welfare Services for women and children in Tehri Garhwal (Uttar Pradesh) were started at Chamba and Narendar Nagar in 1954, with another Centre (Dharkot) added in 1955 and two more in 1956. During the Second Five Year Plan it is proposed to open one centre every year, to make a total of 10 Centres by 1960-61.

Scholarships for post-graduate diploma course in Maternity and Child Welfare were provided at the All India Institute of Hygiene and Public Health, Calcutta, in 1956 and a sum of Rs. 17,342 expended for training of 228 indigenous *dais*.

The care of the sick and wounded of the Armed Forces of the Union constitutes one of the statutory obligations of the Indian Red Cross Society. Amenities were provided to the Indian Units stationed in Indo-China and Jammu and Kashmir.

Junior Red Cross

Membership at the end of 1954 exceeded 13 lakhs and in 1955 it stood at 14,41,788. Close association of this Society with Community Projects, distress relief and public health activities, were some of the activities during the period. Inter-State visits were encouraged and Councillors Training Projects continued.

International Red Cross Day is celebrated each year on the 8th May throughout India.

St. John Ambulance Association (India) and St. John Ambulance Brigade (India)—1954-56

The Association issued 10,17,100 certificates in 1954, 10,98,400 in 1955 and 11,81,500 in 1956. They are certificates of proficiency in first aid, home nursing, hygiene and sanitation, mothercraft and child welfare. Over 58,750 tokens for special proficiency in these subjects were also issued in 1954, 62,180 in 1955 and 65,800 in 1956. Besides, over 1,53,820 certificates were issued in the elementary course in first-aid hygiene and sanitation. Similarly 1,57,300 and 1,60,400 certificates were issued in 1955 and 1956 respectively.

The St. John Ambulance Brigade is a uniformed disciplined body of men and women trained in first-aid and in addition, home nursing for women candidates. A high standard of training and efficiency is maintained by the Ambulance and Nursing Divisions, their services are available to the public on occasions when required. The Brigade Organisation comprises of 19 districts, covering a number of cities and railways in India.

Tuberculosis Association of India 1954-56

The Tuberculosis Association of India continued its various anti-tuberculosis activities through its State Associations. The Institutions under the Association's management, namely, the New Delhi Tuberculosis Centre, Shahdara, the Lady Linlithgow Sanatorium, Kasauli, the King Edward VII Sanatorium, Dharampur and the Tuberculosis Hospital, Mehrauli not only treated the cases at the institutions, but also expanded their home treatment services and training of personnel.

The Domiciliary Service Scheme with 5 Associated Care Committees recorded commendable work during 1956 with 24,665 home visits and 8,657 contact examinations. The number of patients attending the Centres in 1956 rose to 75,000. Further the Mehrauli Tuberculosis Hospital was expanded to accommodate 254 beds instead of the 100 beds.

The Association trained 125 Health Visitors, 6 Social Workers and doctors, besides students for the T.D.D. course of Delhi and Punjab Universities and nurses deputed by States and the College of Nursing, New Delhi. The Association received support from the National Association for the Prevention of Tuberculosis, London and the Colombo Plan Authorities for training doctors.

The suggestion for utilising the Seal Sale collections for tuberculosis schemes was accepted and implemented by the various State Governments. The scheme evolved for utilising the funds were :—

Bombay : Sanctioned Rs. 7,000 to the After-Care Committee for purchasing anti-biotics for patients and paid Rs. 10,000 as a recurring grant to the Organised Home Treatment Clinic.

Hyderabad : Purchase of a mass miniature radiographic apparatus and other requirements for tuberculosis clinics and sanatoria.

Kerala : Construction of wards at various centres from the seal proceeds.

Madhya Bharat : Utilisation of part of the funds for assisting indigent tuberculosis patients.

Ajmer : Proposal to buy a fluoroscope or a small X-ray plant for the tuberculosis Clinic.

Bhopal : Donation of Rs. 34,000 towards creating a special fund to help poor patients.

Coorg : Funds used in constructing tuberculosis wards attached to general hospitals.

Delhi : Earmarked part of the collections for the construction of a ward of 150 beds at the Silver Jubilee Tuberculosis Hospital, New Delhi.

Kutch : Proposal to start a tuberculosis clinic at Mundra.

The Association handed over to the Government of Pepsu, the management of the Tuberculosis Hospital, Sangrur, with effect from 1st April, 1955.

The following figures collected by the Association revealed that there were 135 sanatoria and hospitals, 185 clinics and 115 wards with a total bed strength of 22,300. There were 1,300 doctors, 862 nurses, 155 health visitors, 15 social workers, 98 laboratory and 142 X-ray technicians by the end of 1956.

A Scheme for the "Determination of Pulmonary Tuberculosis" was put up by the Superintendent, Mehrauli Tuberculosis Hospital and accepted by the Indian Council of Medical Research.

The Association took up the question of relaxation of the age limit of ex-patients for employment in Government offices. It also approached business firms to employ them when certified fit. It maintained an Employment Register to assist qualified medical personnel in obtaining appointments in tuberculosis institutions.

The Association organised the XIIIth Tuberculosis Workers' Conference in Travancore-Cochin. The Standing Technical Committee reviewed the discussions held at this Conference and formulated their recommendations.

The Association will play host to the XIVth International Tuberculosis Conference to be held at New Delhi in January 1957.

Dr. P. V. Benjamin was awarded Sir Robert Philips Medal at the 4th Commonwealth Health and Tuberculosis Conference in London in June 1955. He was the recipient of the Padma-Shri from the President of India the same year.

Hind Kusht Nivaran Sangh—1954-56.

The Hind Kusht Nivaran Sangh has 13 branches in the States. The Government of India, in collaboration with the State Governments has embarked on a Scheme of Leprosy Control on a national scale. 'Study and Treatment Centres and Treatment Units' will be stepped up. Large scale trials of B.C.G. Vaccination as a prophylactic measure against leprosy will be undertaken by the Study Centres, and experience thus gained, will help in expansion during the Second Five Year Plan period. Research in leprosy is being conducted at Calcutta, Bombay, and Vellore and also at the Central Leprosy Research and Training Institute, Chingleput, which started functioning from 5th January 1955. Since 1st April 1956, research work at the Leprosy Department of the School of Tropical Medicine, Calcutta, formerly, under the auspices of the Sangh, was transferred to the Indian Council of Medical Research.

It has been concluded from the therapeutic studies in leprosy that the value of thiosemicarbazone has a definite place in the treatment of leprosy, the use of INH in combination with DDS and the usefulness of Dihydrocarpyl-DDS in cases intolerant to pure DDS.

The Belgian Leprosy Foundation working in an area in Chingleput with Polambakkam as headquarters has within the short period of nine months covered 4 taluks establishing 42 centres for treatment of 10,000 registered cases.

The Sangh made constructive contribution to the welfare of healed leprosy patients by equipping a house in Vellore in the vicinity of the Christian Medical College and Hospital. It will accommodate temporarily those healed leprosy cases, who seek physiotherapy and surgical treatment at the hospital. The report of the Committee appointed by the Governing Body in April 1956, to consider a question of rehabilitation of arrested cases of leprosy with recommendations, has been submitted. The report has emphasised the need of the education of Leprosy patients in the use of hands and feet in order that they may not be deformed. Recommendations were made that social workers should be trained in physio-therapy in sufficient numbers for employment; and that education by illustrated pamphlets and educational films should be conducted. It further emphasised that a number of sheltered industries should be established, where it can be demonstrated that deformed leprosy patients can be gainfully employed.

Mission to Lepers—1954-56.

The work of the Mission to Lepers has progressed steadily. Statistics show that sulphone drugs are an answer to the problem and now form the basic treatment of leprosy.

A good start was made towards the completion of the Wellesley Bailey Children's Sanatorium at Faizabad by 1954. The Schieffelin Leprosy Research Sanatorium at Karigiri near Vellore, showed appreciable progress towards the goal of treating patients.

Another Orthopaedic Surgeon joined the staff of the Mission to Lepers in 1954 and is working on the problems connected with the treatment of feet of leprosy patients.

A definite move was made in 1956 in the direction of taking on more and more rural and village work which had been limited previously by inadequate resources and personnel. Work on restorative hand surgery centres functioned at six different places in India and physiotherapy undertaken on an increasing scale. It was found that the normal use of hands could be restored without recourse to surgery through physiotherapy.

At all Homes occupational therapy projects went on side by side with the curative programme.

Kasturba Gandhi National Memorial Trust—1954-1956.

The Central Social Welfare Board was formed in 1953. It granted financial aid to some of the States, like Assam, Mysore, Hyderabad, Andhra, Tamil Nad and Kerala. In this way it enabled the Trust to continue and expand its activities. The Board has now started the Welfare Extension Projects akin to the Rural Welfare Centres of the Kasturba Gandhi Trust.

The programmes and activities of the Projects relate to the welfare of women and children. They comprise of balvadis, community creches, pre-basic schools, maternity and infant health services, social education for women, arts and crafts centres and other cultural activities. At the end of the three years of the Second Five Year Plan, the Central Social Welfare Board would have four Welfare Extension Projects in each district including those begun in the First Plan. Each Project would have five Centres, one for each village. Thus 1,320 Welfare Extension Projects have been envisaged by the Board requiring 6,600 Gram Savikas not including Health Personnel. The Trust undertook to train 793 candidates during 1955-56 at its 15 Training Centres, but, had only 583 such trainees under training by the end of 1955. By the close of 1954 negotiations were being conducted between the Board and the Trust regarding the training of personnel for the Projects.

The Community Project Administration also considered the value of entrusting the training of village women for their projects to the Trust because of available facilities.

Midwifery training is a specialised course of 2 years' duration and is given at the 6 hospitals of the Trust besides 2 other hospitals.

They are :—

- (1) Kasturba Maternity Home, Sitanagaram, District East Godavari.
- (2) Kasturba Gandhi Memorial Trust Maternity Hospital, Singanallur, District Coimbatore.
- (3) Kasturba Maternity Hospital, Omandur, District Trichinopoly.
- (4) Kasturba Maternity Hospital, Ras, Gujarat.
- (5) Kasturba Maternity Hospital, Saragaon, District Raipur.
- (6) Kasturba Hospital, Kasturbagram, District Indore.

It is also conducting a Leprosy Hospital with 32 beds at Malavanthangal, District South Arcot, which is called 'Kasturba Kushtarog Nivaran Nilayam'.

A progressive step was taken during 1955 by the commencement of the Midwifery Training in the Trust's own hospital at Ras.

The Auxiliary Midwifery Course was introduced instead of the Midwifery Course from June 1954 and the first batch of 25 trainees were admitted at the Kasturbagram Hospital. 30 trainees attended the 9 months training for Auxiliary-Nursing and First-Aid Course which started in 1955. The candidates came from Punjab, Himachal Pradesh, Uttar Pradesh, Ahmedabad, Rajasthan, Karnatak, Maharashtra, Gujarat and Mahakoshal.

The total number of gram seva and medical centres, midwifery hospitals and Gram Sevika Training Centres are as shown below :—

	1954	1956
Gram Seva Centres	221	222
Medical Centres	155	161
Gram Sevika Training Centres	15	19
Hostels for midwifery candidates at—Hassan, Sevagram, Gauhati, Madurai, Singhamallen, Allahabad	6	6
Kushtarog Nivaran Nilayam, Malyanthongal, District South Arcot	1	1

The 4 Homes at Rajpura (Pepsu), Faridabad (Delhi) Sardarnagar (Ahmedabad) and Gandhinagar (Kolahpur) were handed over by the Government to the Trust in 1954. The first three in 1956, were managed and supervised for the benefit of displaced persons (unattached women and children). The Home at Gandhi Nagar was handed back to the Government in October, 1955. The sole objective of introducing industries was to make the Homes self-supporting.

During 1955 the Trust renewed the 5 Medical Loan Scholarships at Rs. 75 per month to women students studying for the Degree course at Baroda, Bombay, Vishakhapatnam, Madras and Poona, on the condition of service under the Trust after completion of training. Similar scholarships were awarded in 1956. Two students are now doing their Housemen-ship.

All India Blind Relief Society—1954-56.

The All India Blind Relief Society conducted its activities through its Mobile Eye Hospital, Lajpatnagar, Eye Relief Camps and Mobile Units during the period under review.

The Hospital is provided with 40 beds with attached laboratory and a qualified Ophthalmic surgeon, the daily attendance being 150 patients.

Eye Relief Camps are held at Mehrauli, Badarpur, Madanpur, Atal, Bahadurgarh, Tilaiya, Karnal, Najafgarh, Biswasan, Chirag Delhi, Kodarma with an attendance of 3,402 in 1955 and 5,800 in 1956.

The number of eye operations performed in 1956 were 782 as compared to 490 in 1955. The Mobile Units of the Hospital visited 20 places and treated 3,139 persons in 1955, whereas it visited only nine places and treated 3,600 patients in 1956.

Education through literature and magic lantern lectures was conducted each year on the prevention of blindness.

All India Women's Conference—1954-56.

The All India Women's Conference started in 1926, is the only Women's voluntary welfare organisation in the country. It has 39 branches in Ajmer, Andhra, Assam, Baroda, Berar, Bhavnagar, Bhopal, Bihar, Bombay, Calcutta, Cochin, Delhi, Gujarat, Gwalior, Hyderabad, Indore, Jath, Junagadh, Karnatik, Kolahpur, Madras, Maharashtra, Malabar, Mysore, Orissa, Phaltan, East Punjab, Patiala, Rajasthan, Sangli, Tamilnad, Uttar Pradesh, Agra, Kashmir and two each in Madhya Pradesh and West Bengal. There are 275 constituent branches with 54,600 members on the rolls.

Most of the branches run Maternity and Child Welfare Clinics, Medical Centres, Health Van Services, Industrial Centres, Primary and Adult Education Centres, Milk Centres, Study Circles and Co-operative Stores. The establishment of family planning clinics at the branches is being actively pursued.

Other Activities

A Leper Patients' Children Home at Jamshedpur is the first of its kind in India, where children of lepers are separated from their infected parents and kept in separate homes.

The Cancer Institute is continuing its useful work in Madras.

The 8 Health Vans operating in Bombay, Kodaikanal, Malabar, Phaltan, Gujarat, Delhi, Karnatic and Hyderabad are doing useful work.

The Calcutta Branch runs a college, a women's hostel, Harijan Bal Mandir and Clinic and a Cultural Club, while the Branch at Madhya Pradesh runs the Rajkumari Bai Orphanage and Charkha Sangh Centre.

The Conference has embarked an All India Memorial to commemorate the services of its two founders and patrons, Shrimati Sarojini Naidu and Mrs. Margaret Cousins. It has purchased property at 6, Bhagwandas Road, New Delhi, from the Government and made it the headquarters of the Conference, known as the Delhi Women's League of the Federation of University Women. It is also building the Margaret Cousin's Memorial Library which will collect books dealing with women's movements in India and elsewhere. It is proposed to start a Centre for research and information on women's problems on the same site.

Members of the Conference actively participated in relief operations in flood affected areas in different parts of the country during the period under report. They helped in the distribution of food, clothing and money.

Bharat Sevak Samaj—1954-56.

Throughout the country, the chief work of the Bharat Sevak Samaj sanitation and health in rural areas. Each year the Bharat Sevak Samaj workers operated in about 2,000 villages and 100 towns to improve the sanitation and to stimulate the interest and participation of the people

in it. The extent and the intensity of the work varied in different Pradeshes according to their organisational strength and resources.

The work was of the nature of cleaning slums in cities and towns. The other activities were improving water supply and drainage, latrines and soakpits and disposing of rubbish by composting. D.T.T. sprays and supply of medicines and health administration formed another aspect of their work.

The Samaj worked in collaboration with local bodies and Health Authorities to supplement their activities.

The Trained Nurses Association of India—1954-1956.

The Association has increased the number of its State Branches from 9 in 1954 to 10 by 1956 and its membership of 7,587 in 1954 to 9,947 in 1956 including members of the Students Nurses Association.

The main subject of discussion at the Conference held in December 1954 at Bangalore was 'the Second Five Year Plan and proposals for improving Nursing Services'. The educational activities undertaken by the Association in 1955 were :—

- (i) An assignment from the Florence Nightingale International Foundation to the Trained Nurses Association of India for circulating questionnaires on :
 - (a) a study of basic nursing education and
 - (b) advance programmes in Nursing Education.
- (ii) An assignment from the International Council of Nurses to discuss in detail the subject "Nurses, their education and their role in Health Programmes" selected for the technical discussion at the W.H.O. Assembly 1956.

To promote wider interest the Trained Nurses Association of India decided to set up a Committee to study the organisation of the membership into "Interest Group", such as a Group for Public Health Nurses, a section for Administrators, a body for Educational Group, etc.

The Association was represented at the W.H.O. Seminar on Nursing; the Indian Conference on Medical Education and the Regional Committee for South East Asia.

Indian Medical Association—1954-56

The Indian Medical Association is a voluntary organisation of men and women, who are qualified in modern scientific medicine and possess registerable qualifications as defined in the Medical Degree Act, 1956 (Act VII of 1916). The Association was established in 1928 and at present has a membership of 19,775. It has 19 States and 560 local branches all over the country. The Association is a Member of the World Medical Association and is mutually affiliated with the British Medical Association. Besides normal activities such as conducting All India Medical Conferences annually, keeping a watch on the progress of science of medicine in India and publishing the Journal of the Indian Medical Association, the Association has organised Relief Committees during periods of natural calamities as floods, epidemics, etc.

For the past 8 years, the Association has sponsored a programme whereby 35 to 40 young Indian doctors are assisted to obtain each year house appointments in American and Canadian Hospitals.

In 1954, the Working Committee of the Association discussed subjects of importance, such as :—

- (1) System of honorary medical officers.
- (2) Three years Medical Course proposed to be started by the Madras Government.
- (3) Spirituous Preparations Bill.
- (4) Coal-mines Labour Welfare Committee.
- (5) Indian Medical Council Act.
- (6) Enforcement of compulsory services in rural dispensaries for medical graduates before setting up practice.
- (7) Employees' (State) Insurance Scheme.
- (8) Tuberculosis Seal Campaign.
- (9) Leprosy Training Courses, etc.

Other subjects discussed in 1955 were, working conditions of Administrative Medical Officers in tea gardens, Amendments to the Indian Medical Council Act, Rural Medical Practitioners' Beneficial Scheme, Prohibition Study of industrial medicines and report of the Pharmaceutical Enquiry Committee.

The Association granted 2 Research Fellowships in 1954 of the value of Rs. 250 per mensem, tenable for one year in the first instance on the following 2 subjects :—

- (i) Research in determination of Rh. state and Rh iso-immunisation with their affect on pregnancy in Punjabi women.
- (ii) Malnutrition, its clinical features and value of repeated plasma transfusion.

All India Medical Licentiates' Association—1954-56

The All India Medical Licentiates' Association since its inception in 1906 has endeavoured to educate the people in the various health problems of the country. It celebrated its Golden Jubilee in 1956. It has increased its branches in the States from 284 in 1954 to 300 in 1956 and has a membership of 4,000. It is endeavouring since 1954 to amend the Indian Medical Act of 1933 and to obtain post-graduate facilities for its members. Medical licentiates have been admitted to the graduate constituencies of the State Legislative Councils of Bombay, Madras, Uttar Pradesh and Punjab. Efforts have been directed to extend the condensed M.B.B.S. course beyond 1956. The Association organised medical relief to flood affected people of Assam, Bihar and Bengal during the period under review.

All India Dental Association—1954-56

The All India Dental Association holds its annual conference each year in the month of February during which scientific sessions are arranged with exhibitions and table demonstrations.

5 candidates were sent to U.S.A. for advanced training in Dentistry in 1954, 3 in 1955 and 4 in 1956.

Dental research work was conducted under the Gibb's Research Grant by a yearly grant of Rs. 7,500 sponsored by M/s. United Traders Ltd., Bombay.

Members of the Association rendered valuable voluntary service to the people during 1956 when the dental state of school going children was examined and the public in general thus made tooth conscious.

Gandhi Memorial Leprosy Foundation—1954-56

The progress made by the Foundation in 1953 was very helpful in overcoming some of the practical difficulties in the working and expenditure of Control Units, Control Clinics and Surveys, Research and training of personnel and scholarship.

The plan consists in continuing the Control Units and Clinics for a period of 10 years and to engage workers for 20 years. The details regarding the number of units and etc. are as follows :—

	Unit/Clinic	No. of Clinics	No. of villages	Total population	Population Exam.
Uttar Pradesh	.. Gorakhpur	1	33	23,675	18,087
Bihar ..	.. Kundahit	3	86	19,327	15,796
Bengal ..	.. Sriniketan	3	98	21,763	14,508
Orissa ..	.. Parlakimedi	3	32	24,110	17,516
Andhra ..	.. Chilakalapalli	2	9	15,830	12,356
Nagpur ..	.. Sevagram	3	36	17,809	16,782
Khandesh ..	.. Jamner	3	28	18,287	13,662
Gujrat ..	.. Bardoli	3	31	22,141	16,261
Mysore ..	.. T'Narsipur	3	40	23,229	21,665
Kerala ..	.. Mararikulum	3	29*	29,168	25,951
<i>Clinics</i>					
Vidrabha ..	.. Shendur-jana	1	**	—	—
Karnatak ..	.. Khanagaon	1	15	11,808	8,760
Marathwada ..	.. Latur	1	15	11,432	9,110
TOTAL ..		30	452	2,38,579	1,90,450

*Blocks.

**Figures not received, and hence have been omitted.

Period	Control Units	Population covered	Population Examined	No. of cases detected
1954	9	1,84,758	76.6%	3,220
1955	10	Over 2 lakhs	90%	4,278
1956	10	2,38,579	80%	5,354*

* 713 Lepromatous.
4,641 Non-lepromatous.

The two research schemes sanctioned in 1951 and continued thereafter were the study of nerves of leprosy cases and contacts by Dr. V. R. Khanolkar of Bombay, and the rehabilitation of leprosy patients under the guidance of Dr. Paul Brand. The Central Laboratory of the Foundation known as the 'study unit', was established at Sevagram and later on transferred to Wardha.

Apart from conducting control units and control clinics, the Foundation carried out a survey of the population in Himachal Pradesh in the endemic areas of five districts between February 1955 and July 1956.

A summary of Survey is presented below :—

District	No. of Villages	Total Population	Population Exam.	Cases detected			Incidence per 1,000
				L.	N.	Total	
Mandi	404	28,840	21,132	104	265	369	17.5
Sirmur	224	27,808	17,547	45	30	75	4.3
Bilaspur	134	13,489	9,319	3	2	5	0.5
Chamba	633	36,377	27,046	107	131	238	8.8
Mahasu	373	28,705	19,073	73	129	202	10.6
TOTAL	1,768	1,35,219	94,117	332	557	889	9.4

The Foundation conducts a Leprosy Social Workers' Training Class at Chilakalapalli in Andhra Pradesh, the candidates are deputed by State Governments and private agencies. 22 workers admitted in October, 1955, finished training in June, 1956. Another batch of 17 was admitted in November, 1956.

4 Medical Graduates were also trained in leprosy at Sevagram Control Unit and at Government Silver Jubilee Leprosy Clinic, Saidapet.

As the work of the Foundation progressed, the need for more doctors was keenly felt. It was decided to grant 10 scholarships of Rs. 75 per month each to poor deserving students who would after completion of their education take up leprosy work under the Foundation. These awards were, however, discontinued in 1954.

CHAPTER XVI

WORLD HEALTH ORGANISATION

Appendix Table No. 102 ..	..	..	..	..	347
---------------------------	----	----	----	----	-----

CHAPTER XVI

WORLD HEALTH ORGANISATION 1954-1956

India continued to be a Member of the W.H.O. during the years 1954 to 1956 and participated in the various activities of the Organisation. Indian medical and public health workers were appointed as Members of the W.H.O. Expert Advisory Panels on various subjects such as International Quarantine, Tuberculosis, Social and Occupational Health (Hygiene of Sea farers) etc. The W.H.O. provide assistance by way of expert technical advisers, field workers and also a limited amount of equipment for projects connected with maternal and child health, epidemic diseases, malaria control, nursing, tuberculosis and other subjects. Fellowships were awarded to selected candidates for training abroad in different medical and allied subjects. The Government of India provided training facilities to students of other nations coming on W.H.O. fellowships.

Contributions for implementation of Health Programmes in U.S. Dollars.

	1954	1955	1956
	\$	\$	\$
W.H.O.'s assistance to India	265,343	421,200	752,053
India's contribution to W.H.O.	272,533	304,970	337,050

UNICEF

The United Nations Children Fund better known all over the world as UNICEF is a part of the United Nations and offers assistance to various countries towards health programme for mothers and children. This aid is usually in the form of equipment and supplies.

Aids provided by UNICEF during 1954-1956.

	1954	1955	1956
	\$	\$	\$
1. M. & C. H., Madhya Pradesh	116,000	—	—
2. M. & C. H., Bombay	196,000	—	—
3. M. & C. H., Mysore	169,000	—	—
4. M. & C. H., Saurashtra	—	101,000	—
5. M. & C. H., Assam	—	111,400	—
6. Maternal and Child Welfare Services and Training	—	—	204,000
7. Stipends for Women Medical Officers Training	—	5,000	—

	1954	1955	1956
8. Training of Nurses, Midwives and Health Visitors	\$ —	\$ —	\$ 76,700
9. Rehabilitation and Training Project for the physically handicapped children at Bombay	—	—	11,000
10. Health Services in Community Development	—	—	842,000
11. B.C.G. Campaign	177,000	80,000	204,000
12. Provision of isoniazid tablets for domiciliary treatment of active Tuberculosis cases ..	—	—	4,000
13. D.D.T. Production Plant	—	250,000	—
14. Yaws control	—	44,000	—
15. Dairy Plant Saurashtra	—	223,000	—
16. Skim Milk Powder for Long Range Feeding Programmes	—	—	210,000
17. Drugs and diet supplements for distribution through MCW Centres	—	—	135,000
18. Relief and emergency supplies	723,000	25,000	—

The Government of India contributed towards UNICEF Rs. 15,00,000 in 1954 and Rs. 16,00,000 each in the years 1955 and 1956.

Ford Foundation : The Ford Foundation assisted financially in the establishment of 3 Orientation Training Centres at Singur, West Bengal (16-11-58), Poonamallee, Madras (15-2-54) and at Najafgarh, Delhi (15-2-54). The Foundation provided \$ 353,105 to cover certain non-recurring expenditure on hostel and residential construction and for operating expenses for the 3 Centres, during the first 2 years of operation. Upto December 1956, 926 Health Personnel were trained as detailed below :—

	Najafgarh	Poonamallee	Singur	Total
1954	69	90	86	246
1955	75	192	48	315
1956	67	182	117	366
TOTAL	211	464	251	926

The Ford Foundation made a further grant of \$295,000 to the Government of India for the establishment of 3 Research-Cum-Action Centres at Singur, Poonamallee and Najafgarh, for research in and the improvement of environmental sanitation in villages.

Rockfeller Foundation—1954-1956

The office of the Rockfeller Foundation was opened at Delhi in 1953 after the closure of the office at Bangalore. Rockfeller Foundation continued its support to Medical Education in India. It represented the

major effort of the Division of Medicine and Public Health. The Programme consisted of local fellowships, foreign fellowships and travel grants and support to selected departments as Training Centres.

Statement showing the scholarships, grants-in-aid, etc., made by Rockfeller Foundation during the period under review : .

	1954	1955	1956
Local Fellowships Programme—			
(a) No. of fellows selected	27	21	—
(b) No. of fellows in the process of selection	15	—	—
(c) No. of fellows undergoing training	—	43	86
(d) No. completed training	—	18	37
Foreign Fellowships awarded	12	—	10
	(including 2 nurses)		
	Professional Education—6.		
	Pub. Health Administration—2		
	Pub. Health Engineering—2		
	Biological & Med. Research—2.		
Travel Grants awarded	5	9	10
	Medical College Deans—3		
	Professional Education—2		
	Public Health Engineering—1		
	Biological & Med. Research—4		
Grants-in-aid to Institutions	Rs. 3,12,550	Rs. 8,19,850	Rs. 41,70,300
	or \$65,800	or \$1,72,600	or \$8,77,958

In the field of population studies, the Foundation made a grant of \$ 163,280 for the continuation of the Harvard-Ludhiana population study initiated 3 years ago.

The Rockfeller Foundation also appreciated \$ 88,200 for neurological research, a grant of \$ 7,000 for research in biophysics at the Indian Cancer Research Centre, Bombay and a grant of \$ 10,000 for research in Virology at Lucknow Medical College for the year 1956.

The Virus Research Centre, Poona, continued its various activities in the investigation of Jamshedpur Fever, Poliomyelitis, Japanese B Fever etc. and isolated many virus strains.

The Delegation from India attended the International Conferences at home and abroad during the period under review. Table No. 102.

PART II
STATISTICAL ABSTRACTS

STATISTICAL ABSTRACTS

Table No. 1

Population and Density in Certain Countries

Country			Last census date and population		Estimate for 1953 & 1956 (in thousand)		Density per Km.	
							1953	1956
Belgium	..	..	31-12-1947	85,12,195	8,778	8,924	288	291
Burma	...	..	5-3-1941	1,68,23,798	19,045	19,856	28	20
Canada	..	..	1-6-1956	1,60,80,791	14,781	16,081	1	2
Ceylon	..	..	20-3-1953	80,98,637*	8,155	89,29	124	131
China ¹	..	..	30-6-1953	58,26,03,417	4,63,493 (1952)	5,82,603 (1953)	48	60
Denmark ²	..	..	1-10-1955	44,48,401	4,369	4,466	102	103
Egypt	..	..	26-3-1947	1,90,21,840	21,935	23,410	22	23
France	..	..	10-5-1954	4,28,43,520	42,860	43,648	78	79
Hungary	..	..	1-1-1949	92,04,799	9,600	9,906	103	105
India	..	..	1-3-1951	35,68,79,394	3,72,000	3,87,350	113	116
Indonesia	..	..	7-10-1930	6,04,12,962	79,900	84,000	54	55
Japan ³	..	..	1-10-1955	8,92,75,529	86,700	90,000	235	241
Netherlands ⁴	..	..	31-5-1947	96,25,499	10,493	10,888	324	333
Switzerland	..	..	1-12-1950	47,14,992	4,877	5,039	118	121
United Kingdom	..	..	4-4-1951	5,02,25,224	50,857	51,430	208	209
United States of America	..	..	1-4-1950	15,06,97,361	1,59,629	1,68,174	20	21

NOTES : *Provisional.

¹Excluding Taiwan.

²Excluding Faeroe Islands & Greenland.

³Comprising Hokkaido, Honshu, Shikoku, Kyushu and small outlying islands, and the Amami Islands transferred to Japan on December, 1951 and 25th December, 1953.

⁴Excluding population of villages of Elten and Tuidern ceded by Germany (Population estimated at 9,000 at the time of transfer).

Table No. 2
Agencies registering Births, Deaths in certain States—1954—56

Name of the State	Reporting Agency	Registering Authority	Official Channel
Bihar	Head of the family	Municipality	Civil Surgeon—Director of Health Services
Punjab	Do.	Do.	Do.
West Bengal	Do.	Do.	Do.
Delhi	Do.	Do.	Municipality — Medical Officer of Health—Director of Health Services
Madhya Pradesh	Do.	Police Station	Civil Surgeon—Director of Health Services
Bihar	Village Chowkidar or Watchman	Do.	Do.
Delhi	Do.	Do.	Do.
Madhya Pradesh	Do.	Do.	Do.
Punjab	Do.	Do.	Do.
Uttar Pradesh	Do.	Do.	Do.
West Bengal	Do.	Municipality	District Officer of Health — Director of Health Services
Bombay	Do.	Police Station	Police Patel—mamlatdar, Director Public Health
Madras	Do.	Village Headman	Tehsildar—Director of Health Services

Table No. 3

Registration of Births and Deaths in the various States (1954—56)

State	District where registration of births and deaths is compulsory in both urban and rural areas	Districts where registration is compulsory in urban areas only	Districts where registration is voluntary in both urban and rural areas	Districts where registration is voluntary in rural areas only	Districts where registration of births and deaths does not exist
(1)	(2)	(3)	(4)	(5)	(6)
Andhra Pradesh*	Ananthapur Kurnool Cuddapah Chittoor Nellore Krisana & Guntur	—	—	—	—
Assam		1. Cachar 2. Goarpara 3. Kamrup 4. Darrang 5. Sibsagar 6. Lakhimpur 7. Nowgong	Registration is voluntary in rural areas	All districts	Rural areas of Hill District viz. United Khasi and Jaintia Hills, Naga Hills districts
Bihar		—	Compulsory throughout the State	—	—
Bombay		—	Registration of births and deaths is not compulsory in rural areas and non-Municipal urban areas of the State. Registration is compulsory in all the Municipalities.	—	—

* (1) Registration is compulsory in urban and rural areas of East Godavari and West Godavari with the exception of certain rural agency parts where informal registration is carried out.

(2) Registration is compulsory in both urban and rural areas of Srikakulam and Visakhapatnam with the exception of certain rural agency parts.

Table No. 3—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Madhya Pradesh*		Compulsory in all the urban areas. Shore district where registration is compulsory in Bhopal and Shore Municipalities only	Raisen district	Shore district	—
Madras†					
Orissa ..		1. Cuttack 2. Balasore 3. Puri, 4. Sambalpur 5. Doenkanal 6. Sundergarh 7. Mayurbhanj 8. Keonjhar 9. Kalahandi 10. Koraput 11. Ganjam 12. Ganjam Agency (some portions only) 13. Khondmals (excluding some portions of Balliguda Sub-Division)			
Punjab ..					
Uttar Pradesh ..					
West Bengal ..					
Jammu & Kashmir ..					

Compulsory throughout the State—

Compulsory throughout the State except the Port, Fort and areas within the City of Calcutta which covers 8.4 sq. miles with a population of 27,756 persons only according to the 1951 census.

*Registration is not compulsory in the rural areas. The registration is done through the village Kotwara, Makkadam etc. †Not available.

‡Compulsory through the State except certain backward areas and hill tracts at Salem and North Arcot.

Table No. 3—concl'd.

(1)	(2)	(3)	(4)	(5)	(6)
Kerala ..				Compulsory throughout the State—	
Mysore ..					
Rajasthan ..				Neither compulsory nor voluntary—	
Delhi ..				Compulsory in both rural and urban areas of the State—	
Himachal Pradesh ..				Compulsory throughout the State—	
Manipur ..				Not compulsory—	
Tripura ..				Do.	
Andman & Nicobar Islands ..				Compulsory throughout the State—	

Table No. 4
Registered Birth Rate—1955-56

State	Birth rate per 1,000 of population					
	Rural		Urban		Total	
	1955	1956	1955	1956	1955	1956
Andhra	30.3	28.4	28.4	27.3	30.0	27.4
Assam	11.5	10.1	27.0	23.8	12.3	10.2
Bihar	+	+	+	+	+	16.8
Bombay	40.2	+	31.2	+	37.2	30.3
Jammu & Kashmir	+	+	+	+	+	+
Kerala	22.2	21.5	22.2	36.8	22.2	23.0
Madhya Pradesh	+	+	+	+	24.3	+
Madras	30.1	24.4	35.1	38.5	31.2	27.6
Mysore	17.3	16.4	26.6	28.5	20.3	20.4
Orissa	+	+	+	+	+	+
Punjab	44.6	+	37.2	+	43.2	40.0
Rajasthan	5.2	13.0	9.2	14.8	8.9	13.4
Uttar Pradesh	13.0	13.3	31.1	30.2	15.5	15.5
West Bengal	27.2	+	20.4	+	25.6	26.9
Andaman & Nicobar Islands	+	+	+	+	+	+
Delhi	34.4	32.3	31.5	35.0	32.0	33.0
Himachal Pradesh	18.3	+	24.1	+	18.6	21.7
Manipur	+	4.8	+	19.4	+	8.2
Tripura	8.4	9.3	+	14.7	10.0	9.6

NOTE:— + Data not available.

Table No. 5

Percentage of deaths from different causes—1954-56

State	Year	Cholera	Smallpox	Plague	Fevers	Dysentery & Diarrhoea	Respiratory Disease	Other Causes
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Andhra	1954 1956	0.3 0.55	+	0.015	+	7.1 5.34	6.87 7.38	+
Assam	1954 1956	0.05 0.20	+	0.004	+	8.4 8.39	+	+
Bihar	1954 1956	0.12 1.8	+	+	+	+	+	+
Bombay	1954 1956	0.07 0.83	+	+	+	4.0 3.83	16.36 16.60	+
Madhya Pradesh	1954 1956	0.16 0.30	+	+	+	4.9 +	7.38 +	+
Madras	1954 1956	0.31 +	+	+	+	7.1 7.58	10.66 10.15	+
Orissa	1954	+	+	+	+	5.2	3.06	+
Punjab	1954 1956	0.12 —	+	+	+	2.3 3.10	14.52 13.86	+
Uttar Pradesh	1954 1956	0.37 0.68	+	0.01	+	4.3 4.29	7.93 8.16	+
West Bengal	1954 1956	0.86 1.77	+	+	+	2.2 6.84	11.39 11.43	+

Table No. 5—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Kerala	1954 1956	0.22 —	+ 0.30	+ —	+ 12.10	4.9 5.01	10.76 11.10	+ 71.49
Madhya Bharat	1954	—	+	+	+	+	+	+
Mysore	1954 1956	1.90 0.14	+ 0.63	+ 0.10	+ 36.64	9.8 9.94	8.45 5.86	+ 46.69
Pepsu	1954	—	+	+	+	+	+	+
Rajasthan	1954	—	3.80	—	39.50	6.3	15.2	35.29
Saurashtra	1954	—	+	+	+	+	10.81	+
Ajmer	1954	—	+	—	+	+	+	+
Bhopal	1954	—	+	—	+	+	2.72	+
Coorg	1954	—	+	—	+	+	4.27	+
Delhi	1954 1956	— —	+ 0.66	+ —	+ 15.48	7.1 6.03	28.06 23.79	+ 54.04
Himachal Pradesh	1954 1956	0.10 —	+ —	+ —	+ 74.57	+ 7.62	6.85 10.58	+ 7.23
Manipur	1954 1956	— —	+ —	+ —	+ 65.49	2.5 6.81	21.49 12.73	+ 14.87
Tripura	1954 1956	1.22 2.79	+ 0.24	+ —	+ 56.59	+ 4.34	+ 3.41	+ 32.63
Andaman & Nicobar Islands	1954	—	+	+	+	+	13.39	+
India	1954 1956	+ 0.53	+ 0.53	+ 0.009	+ 41.82	+ 5.25	+ 11.09	+ 40.77

NOTE : + Not available,
— Nil.

Table No. 6

Percentage of Deaths among Various age groups.

Country	Year	Under 1 year	1—4 Years	5—9 Years	10—14 Years	15—19 Years	20—29 Years	30—39 Years	40—49 Years	50—59 Years	60 Years above
India	1955	23.20	19.02	4.96	3.05	3.63	5.88	6.21	6.79	7.48	19.88
Japan	Do.	9.92	4.41	2.05	0.94	1.58	5.59	4.77	6.88	11.68	52.18
Ceylon	Do.	24.65	19.60	4.19	1.33	1.36	4.42	4.48	4.61	5.80	29.66
United Kingdom	1956	3.18	0.46	0.28	0.21	0.30	0.93	1.72	4.51	10.90	77.51
United States of America	1954	7.21	1.14	0.56	0.42	0.69	1.99	3.27	6.87	12.91	64.95

Table No. 7

Death Rate per thousand of population in various States in India—1955-1956

State	Rural		Urban		Total	
	1955	1956	1955	1956	1955	1956
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh	15.4	14.2	12.3	11.8	14.8	13.7
Assam	5.3	4.6	11.4	10.3	5.6	4.2
Bihar	+	+	+	+	+	8.3
Bombay	16.7	+	12.1	+	15.2	13.9
Jammu & Kashmir	+	+	+	+	+	+
Kerala	6.3	7.0	5.9	11.4	6.2	7.4
Madhya Pradesh	+	+	+	+	+	14.0
Madras	13.9	12.6	14.9	16.4	14.1	13.5
Mysore	7.8	7.0	10.2	9.7	8.4	8.3
Orissa	+	+	+	+	+	+
Punjab	14.8	+	8.9	+	13.7	14.6
Rajasthan	2.3	6.2	6.0	9.1	3.0	6.8
Uttar Pradesh	7.7	8.1	12.6	12.7	8.4	8.6
West Bengal	8.9	+	9.1	+	8.9	9.3
Andaman & Nicobar Islands	+	+	+	+	+	+
Delhi	10.6	10.0	8.3	9.2	8.7	8.9
Himachal Pradesh	8.8	+	7.8	+	8.8	9.7
Manipur	+	2.0	+	5.0	+	2.7
Tripura	4.6	4.1	3.9	5.5	4.5	4.1

NOTE :— + Not available.

Table No. 8

Infant Mortality Rate (1952—1954—1956)

Name of the State	Year	Rate per miles of live births
Andhra	1953	129.2
	1954	122.8
	1956	123.6
Assam	1952	82.6
	1954	76.3
	1956	81.3
Bihar	1952	68.9
	1954	78.0
	1956	60.3
Bombay	1952	110.3
	1954	116.3
	1956	107.0
Delhi	1952	56.7
	1954	81.3
	1956	79.3
Kerala	1952	41.4
	1954	37.6
	1956	50.7
Madhya Pradesh	1952	168.5
	1954	149.6
	1956	140.3
Madras	1952	108.2
	1954	100.7
	1956	117.0
Mysore	1952	72.8
	1954	23.0
	1956	86.2
Orissa	1952	159.2
	1954	133.0
	1956	+
Punjab	1952	126.6
	1954	112.9
	1956	113.1
Uttar Pradesh	1952	129.1
	1954	110.4
	1956	105.0
West Bengal	1952	99.6
	1954	86.9
	1956	80.0
Himachal Pradesh	1953	103.4
	1954	77.1
	1956	77.2

Table No. 8—contd.

(1)	(2)	(3)
Manipur	1952 1954 1956	28.0 + 12.5
Tripura	1952 1954 1956	77.2 + 39.3
Andaman & Nicobar Islands	1952 1954 1956	62.7 44.0 40.6
India	1952 1954 1956	115.9 113.8 108.0*

NOTE:— + Not available
*Provisional.

Table No. 9
Infant Mortality Rate—1953—1956

Name of the country	1953	1955	1956
India	117.8	130.0	108*
Ceylon	71.2	71.0	66.5
Japan	48.9	40.0	40.7*
France	41.9	38.0	35.9*
Canada	+	31.2	31.7
U.S.A.	27.7	26.5*	26.0
England & Wales	27.6	+	24.0
New Zealand	25.7	25.0	23.2
Australia	+	22.0	21.7

NOTE:— + Not available.
*Provisional.

Table No. 10

Table showing the Districts Infected, Number of Villages Affected, etc.
for 1954—56
Small-pox

State	Year	No. of Distt. infected	No. of villages affected	Cases* notified	Deaths	C.F.R.	Peak months
Andhra Pradesh	1954 1956	11 +	575 +	3,060 +	693 2,240	22.6 +	March June
Assam ..	1954 1956	5 5	+ +	56 +	29 109	51.8 +	April +
Bihar ..	1954 1956	15 15	+ 314	2,281 2,712	632 482	27.7 +	May +
Bombay ..	1954 1956	1 43	+ +	+ +	3,048 5,537	+ +	April March
Delhi ..	1955 1956	+ +	+ +	+ +	40 129	+ +	April December
Kerala ..	1955 1956	+ +	+ +	+ +	31 329	+ +	March October
Madhya Pradesh	1954 1956	22 43	957 +	4,452 +	888 1,450	+ +	May +
Madras ..	1954 1956	2 +	+ +	+ +	1,711 1,129	+ +	January August
Mysore ..	1954 1956	+ +	+ +	+ +	1,022 532	+ +	August August
Orissa ..	1954 1956	+ +	7 +	879 +	+ +	+ +	May +
Punjab ..	1954 1956	13 +	250 +	1,318 782	221 187	19.9 23.9	January +
Uttar Pradesh	1954 1956	+ +	2,551 +	+ +	16,450 5,742	+ +	June April to June
West Bengal ..	1954 1956	14 15	+ +	2,300 2,785	850 836	37.0 29.9	March December
Rajasthan ..	1955 1956	+ 26	+ 468	+ 4,071	1,181 1,435	+ +	April March
Himachal Pradesh ..	1955 1956	+ 3	+ +	+ 15	2 4	+ 26.7	April +
Manipur ..	1955 1956	+ 1	+ 1	+ 12	+ 3	+ 25.0	+ February
Tripura ..	1955 1956	— 1	— 20	— 27	— 7	— 25.0	— March

NOTE:—

*As per report from the Health Officers.

+ Not available.

—Relates to rural areas.

Table No. 11

Table showing the number of primary vaccinations, the number of re-vaccinations and percentage of success for 1954—55

Small-pox

State	Total operations performed				Percentage of success	
	Year	Primary Vaccination	Re-vaccination	Total	Primary Vaccination	Re-vaccination
Andhra Pradesh	1954	6,45,571	21,35,562	27,81,133	94.2	10.8
	1955	6,51,036	21,28,565	27,99,621	93.1	11.8
Assam	1954	+	+	+	+	+
	1955	4,12,085	8,07,209	12,19,294	95.5	63.0
Bihar	1954	10,47,057	54,29,779	+	+	+
	1955	9,96,342	74,06,379	84,02,721	80.0	25.0
Bombay	1954	13,17,496	51,21,328	64,38,824	99.0	31.6
	1955	13,20,114	52,94,680	66,14,794	99.0	33.0
Madhya Pradesh	1954	3,54,492	4,89,271	8,43,763	98.79	+
Madras	1954	12,27,555	40,36,288	52,63,843	97.1	14.1
	1955	10,40,162	33,64,445	44,04,607	96.2	13.7
Punjab	1954	5,21,618	14,38,439	19,60,057	97.95	47.71
	1955	5,23,685	16,04,911	21,28,596	98.0	47.4
Uttar Pradesh	1954	16,58,063	18,57,487	35,15,550	97.40	86.45
	1955	17,43,437	25,65,949	43,09,386	96.8	89.8
Hyderabad	1954	9,90,115	9,12,956	19,03,071	71.4	23.2
West Bengal	1954	10,98,859	75,54,064	86,52,923	85.6	27.3
	1955	10,57,964	67,48,891	78,06,855	90.1	40.4
Travancore-Cochin	1954	6,42,768	19,80,956	26,23,724	91.3	71.9
	1955	5,34,472	13,51,469	18,85,941	93.9	73.1
Madhya Bharat	1954	1,83,479	56,621	2,40,100	71.1	26.8
Pepsu	1954	1,40,784	2,82,631	4,23,415	94.5	67.2
	1955	1,37,536	3,83,909	5,21,445	94.2	69.5
Rajasthan	1954	4,19,111	3,13,912	7,33,023	90.0	51.0
	1955	4,77,105	3,39,704	8,16,809	76.1	37.7
Saurashtra	1954	1,82,913	90,426	2,73,339	88.5	27.5
	1955	1,82,649	2,33,664	4,16,313	88.4	10.6
Bhopal	1954	31,296	32,722	64,018	96.5	73.4
	1955	36,610	32,348	68,958	93.4	94.5
Delhi	1954	70,651	4,90,643	5,61,294	92.5	32.5
	1955	77,147	5,86,886	6,64,033	92.1	30.2

Table No. 11—contd.

State	Total operations performed				Percentage of success	
	Year	Primary Vaccination	Re-vaccination	Total	Primary Vaccination	Re-vaccination
Manipur	1954	34,089	43,647	77,736	84.8	67.6
	1955	32,932	34,871	67,803	86.8	65.2
Tripura	1954	34,226	1,16,389	1,50,615	86.1	73.3
	1955	37,684	1,48,318	1,86,002	86.2	54.2
Andaman and Nicobar Islands	1954	1,420	3,390	4,810	57.0	98.0
	1955	1,010	2,502	3,512	62.0	53.0

NOTE:—

+ Not available.

Table No. 12

Table showing the number of children successfully vaccinated for 1954-55

State	Year	Children successfully vaccinated		Successfully vaccinated children as percentage live births.
		Under 1 year	Between 1-6 years	
Andhra Pradesh	1954	2,44,404	2,40,379	45.2
	1955	2,40,239	2,36,204	37.7
Assam	1954	+	+	+
	1955	+	+	+
Bihar	1954	+	+	+
	1955	2,46,520	4,85,070	+
Bombay	1954	7,74,022	1,48,703	61.4
	1955	7,62,776	1,14,599	52.7
Madhya Pradesh	1954	2,09,603	92,065	40.0*
Madras	1954	5,47,351	3,27,615	55.6
	1955	4,95,187	2,34,720	42.0
Punjab	1954	3,41,343	5,923	61.93
	1955	3,40,545	82,068	56.9
Uttar Pradesh	1954	8,69,923	5,49,251	79.64
	1955	8,85,105	5,52,769	86.2
West Bengal	1954	3,24,768	5,42,048	54.7
	1955	2,98,299	5,32,655	44.9
Hyderabad	1954	2,50,647	3,16,427	+
Kerala (Travancore-Cochin)	1954	98,119	3,82,602	52.0
	1955	85,630	3,25,053	38.3
Madhya Bharat	1954	1,07,968	56,144	51.0
Pepsu	1954	58,841	25,809	85.7
	1955	54,979	25,049	66.8
Rajasthan	1954	1,92,715	78,899	+
	1955	2,28,612	1,10,497	+
Saurashtra	1954	1,20,080	40,780	+
	1955	1,21,276	39,698	+
Bhopal	1954	15,982	6,092	75.9
	1955	22,600	6,996	83.3
Delhi	1954	56,973	7,843	91.7
	1955	61,685	8,751	91.8
Manipur	1954	8,232	16,260	33.6
	1955	8,181	16,609	33.0
Tripura	1954	2,509	26,958	+
	1955	2,766	29,118	+
Andaman & Nicobar Islands	1954	394	237	54.5
	1955	225	270	31.0

NOTE:—

*Decrease due to the non-receipt of information from some of Civil Surgeons.

Table No. 13

Deaths among children due to Smallpox (1954-1956)

State	Year	Deaths among children			Percentage of total deaths among children		
		Total deaths	Under 1 year	1-10 years	Under 1 year	1-10 years	Total (0-10 years)
Andhra Pradesh	1954	1,471	550	542	37.4	36.8	74.2
	1956	+	+	+	+	+	+
Bombay	1954	3,048	1,032	1,136	33.9	37.3	71.2
	1956	5,537	1,312	3,179	23.7	57.0	80.7
Madras	1954	1,711	416	605	24.3	35.4	59.7
	1956	+	+	+	+	+	+
Punjab	1954	221	50	117	22.6	52.9	75.5
	1956	+	+	+	+	+	+
Uttar Pradesh	1954	16,405	3,806	4,318	23.2	26.3	49.5
	1956	5,742	1,807	2,223	31.5	38.7	70.2
West Bengal	1954	850	76	282	8.9	33.2	42.1
	1956	835	+	+	+	+	+
Travancore-Cochin	1954	695	76	243	11.8	34.8	46.6
	1956	+	+	+	+	+	+
Delhi	1954	39	6	16	15.4	41.0	56.4
	1956	129	24	44	18.6	34.0	52.6

NOTE:—
+ Not available.

Table No. 14
Incidence of Plague and Preventive Measures taken in different States for 1954-56

State	Year	No. of districts affected	Cases	Deaths	Case fatality Rate	Inoculation	Rats caught
Andhra Pradesh	1954	1	9	3	—	1,965	8,695
	1956	+	+	8	+	26,675	+
Assam	1956	+	+	5	+	57,263	+
Bihar	1954	—	—	—	—	30,080	27
	1956	—	—	—	+	+	27
Bombay	1956	—	—	—	—	+	+
Madhya Pradesh	1954	7	5,047	679	13.0	1,10,959	1,14,802
	1956	—	—	—	—	—	—
Madras	1954	1	9	6	—	—	+
	1956	1	2	1	50.0	2,256	37,676
Punjab	1956	—	—	—	—	—	36,867
Uttar Pradesh	1954	15	458	155	34.0	2,95,260	+
	1956	3	+	94	+	43,419	+
West Bengal	1954	—	—	—	—	34,813	87,639
	1956	—	—	—	—	+	+
Kerala	1956	+	+	3	+	+	+
Mysore	1954	9	231	106	46.0	11,371	+
	1956	8	+	87	+	16,385	+
Rajasthan	1956	—	—	—	—	—	+
Delhi	1956	—	—	—	—	—	—
Himachal Pradesh	1956	—	—	—	—	—	+
Manipur	1956	—	—	—	—	—	—
Tripura	1956	—	—	—	—	—	+
Vindhya Pradesh	1954	3	106	35	33.0	+	—
Andaman & Nicobar Islands	1956	—	—	—	—	—	—

NOTE:— + Not available.
— Nil.

Table No. 15

Statistics on Cholera—1954-56.

State	Districts Affected	Cases	Deaths	C.F.R.	Deaths as % of total	Peak period	Inoculation	
							1954	1956
	1954	1956	1954	1956	1954	1956	1954	1956
	2	3	6	7	8	9	14	15
Andhra Pradesh	1	+	1,670	1,623	51.01	+	12,78,473	20,13,830
Assam	3	+	26	82	+	+	9,84,346	7,09,370
Bihar	16	15	1,425	708	31.28	+	73,58,800	1,07,40,042
Bombay	+	+	376	4,689	+	+	—	42,34,700
Madhya Pradesh	13	27	888	390	19.95	+	14,55,361	+
Madras	+	+	1,545	+	+	+	12,58,300	+
Orissa	+	+	859	+	+	—	+	+
Punjab	+	+	221	10	+	+	2,65,326	3,81,681
Uttar Pradesh	+	—	2,350	3,909	+	+	2,00,770	29,76,210
West Bengal	15	14	2,065	4,148	43.68	+	35,31,237	66,73,814
Hyderabad	6	—	165	+	+	+	7,82,810	+
Jammu & Kashmir	+	—	+	+	+	—	+	+
Kerala	—	+	128	1	+	+	68,228	—
Madhya Bharat	—	—	—	—	0.22	+	2,97,581	+

Table No. 15—contd.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Mysore	..	..	+	665	1,642	261	+	39.2	—	+	+	Jan.	+	3,73,540
Pepsu	..	..	—	—	—	+	—	—	—	—	—	—	22,923	—
Rajasthan	..	..	—	—	—	+	—	—	—	—	—	—	76,339	66,404
Saurashtra	..	..	—	—	—	+	—	—	—	—	—	—	+	+
Ajmer	..	..	+	+	+	+	+	+	+	+	+	—	+	+
Bhopal	..	..	—	—	—	+	—	—	—	—	—	—	—	—
Coorg	..	..	—	—	—	—	—	—	—	—	—	—	+	+
Delhi	..	..	—	—	—	—	—	—	—	—	—	—	+	+
Himachal Pradesh	..	..	—	—	—	—	—	—	—	—	—	—	7,18,990	6,48,786
Kutch	..	..	—	—	—	—	41.4	—	0.10	—	May	—	—	7,620
Manipur	..	..	—	—	—	—	—	—	—	—	Dec.	—	+	+
Tripura	..	..	98	—	28	81	28.6	—	1.20	—	+	Feb. & Dec.	28,942	66,915
Vindhya Pradesh	..	..	+	+	+	+	+	+	+	+	+	—	+	+
Andaman & Nicobar Islands	..	..	—	—	—	—	—	—	—	—	—	—	2,254	2,727

NOTE:— + Not available,
— Nil.

Table No. 16

Table showing the percentage of Malaria deaths among fever deaths during 1954-56

State	Percentage of malaria deaths among fever deaths	
	1954	1956
Andhra Pradesh	3.67	6.2
Assam	35.56	25.9
Bihar	+	+
Bombay	10.75	+
Madhya Pradesh	71.33	49.1
Madras	2.29	3.0
Orissa	+	+
Punjab	1.54	+
Uttar Pradesh	20.03	23.32
West Bengal	22.85	12.1
Kerala	0.55	+
Madhya Bharat	20.58	+
Mysore	46.11	40.90
Pepsu	79.10	+
Rajasthan	+	+
Saurashtra	+	—
Bhopal	+	—
Coorg	+	—
Delhi	4.13	2.75
Himachal Pradesh	+	+
Manipur ..	25.89	1.06
Tripura	+	48.30
Jammu & Kashmir	+	+
Andaman & Nicobar Islands	+	17.30

NOTE:— + Not available.

Table No. 17

Statement showing the progressive allotment of units made to States and the number of units functioning in each State during 1954-55, 1955-56 and 1956-57

National Malaria Control

State 1	Number of units allotted			Number of units functioning		
	1954-55 2	1955-56 3	1956-57 4	1954-55 5	1955-56 6	1956-57 7
Andhra	2	4	9.00	2	2	5
Assam	5	7	14.00	—	5	5
Bihar	14	17	20.00	14	17	20
Bombay	19	22	28.50	19	19	28.50
Madhya Pradesh ..	12½	17½	22.50	10	12½	22.00
Madras	3	3½	3.70	2	3	2.70
Orissa	5	6½	10.50	5	5	9
Punjab	7	7	9.00	7	7	9
Uttar Pradesh ..	8	10	25.00	5	8	20
West Bengal	22	22	23.00	16	16	23
Hyderabad	6	6	+	5	6	+
Jammu & Kashmir ..	1	1	1.00	—	1	1
Kerala	2	2	2.50	2	2	2.50
Madhya Bharat ..	4	6	+	4	4	+
Mysore	6	6	14.63	5	6	12.63
Nepal	2	2	+	2	2	+
Rajasthan	2	5	8.67	—	2	2.67
Marathwada	3	4	+	3	3	+
Jaipur	½	½	+	½	½	+
Udhal	1	1	+	1	1	+
Coorg	½	½	+	½	½	+
Delhi	2	2	2.00	2	2	2
Uttaranchal Pradesh ..	1½	1½	1.25	1½	1½	1.25
Goa	½	½	+	½	½	+

Table No. 174—contd.

1	2	3	4	5	6	7
Manipur	1	2	2.00	1	1	1
Tripura	1	1	1.00	1	1	1
Vindhya Pradesh ..	3	3	+	2	3	+
Coalfields	1	1	1.00	—	1	1
North-East Frontier Agency	½	½	0.25	—	—	—
Sikkim	½	½	0.50	—	—	—
TOTAL ..	136	162	200.00	110½	132½	169.25

NOTE:— + Date Not available
— Nil

Table No. 18

Quantity of anti-malaria drugs distributed free to the States during 1954 & 1956

State	Year	Quinine in lbs.	Chinchona febrifuge in lbs.	Total quina in lbs.	Other chinchona alkaloids	Quinine Substitute in lbs.	Quantity D.D.T. used in lbs.
1	2	3	4	5	6	7	8
Andhra ..	1954 1956	895.4 + 454*	738.8 +	233 +	9.1 + 4,860*	55 + 18,599*	1,72,890 +
Assam ..	1954 1956	3,950 2,199.5	158.7 1,044.5	40 163	32,26,477* 20	94,400* 758.5	+ 5,00,000
Bihar ..	1954 1956	1,801 +	— +	84 +	— +	2,715 +	+ +
Bombay ..	1954 1956	1,706 +	94 +	189 +	369 +	+	+
Madhya Pradesh ..	1954 1956	+	+	+	+	+	+
Madras ..	1954 1956	181 405.5	49 322.1	1 208.1	32 +	43 94.3	425 short tons. +
Orissa ..	1954 1956	662 776	390 357	36 65	69 25	229.5 301	+ +
Punjab ..	1954 1956	1,314 +	— +	59 +	— +	769 +	+ +
Uttar Pradesh ..	1954 1956	4,008* 226&1,000	1,392 —	67 —	— —	2,341 44,60,100*	2,40,865 +
West Bengal ..	1954 1956	13,450 37,983	4,616 1,852	739 239	2,915 3	4,282 492	5,01,177 18,78,864

Table No. 18—contd.

1	2	3	4	5	6	7	8
Hyderabad ..	1954 1956	88,000* +	— +	— +	— +	3,33,000* +	2,67,629 +
Jammu & Kashmir ..	1954 1956	511.5 12.25	— —	1 —	— —	136.5 —	+ +
Kerala ..	1954 1956	122.4 +	— +	2,78,129.5 +	1,43,946* +	1,06,617* +	+ 35,000†
Mysore ..	1954 1956	235 34	— —	— —	— —	67 29	+ +
Coorg ..	1954 1956	128 147	— —	— —	— —	436 —	67,640† +
Delhi ..	1954 1956	62 161	— 29	— —	10 —	14 52	32,022† +
Himachal Pradesh ..	1954 1956	306.0 177	— —	7.0 22	— —	1.5 68	+ +
Kutch ..	1954 1956	68 —	— —	— —	— —	62 —	+ +
Manipur ..	1954 1956	— —	— —	— —	— —	— —	+ +
Tripura ..	1954 1956	— —	— —	— —	— —	— —	+ +
Andaman & Nicobar Islands ..	1954 1956	— —	— —	— —	— —	— —	+ +

Note:— + Not available.

—Nil.

*Tablets.

† Supplied to anti-malaria organisations.

Table No. 19

Percentage of Total Deaths and Death rate per Mille due to Dysentery and Diarrhoea (1954-56)

State	Year	Percentage of total deaths due to Dysentery and Diarrhoea	Death rate per mille
(1)	(2)	(3)	(4)
1. Andhra Pradesh	1954	7.1	1.0
	1956	5.3	0.7
2. Assam	1954	8.4	0.6
	1956	8.4	0.4
3. Bihar	1954	0.72	0.07
	1956	0.48	0.04
4. Bombay	1954	4.0	0.6
	1956	3.8	0.6
5. Delhi	1954	7.1	0.6
	1956	6.0	0.5
6. Kerala	1954	4.9	0.3
	1956	5.0	0.4
7. Madhya Pradesh	1954	4.9	0.9
	1956	2.5	0.35
8. Madras	1954	7.1	1.0
	1956	7.6	1.0
9. Mysore	1954	9.8	0.9
	1956	9.9	0.8
10. Orissa	1954	5.2	1.4
	1956	+	+
11. Punjab	1954	2.3	0.3
	1956	3.1	0.4
12. Uttar Pradesh	1954	4.3	0.4
	1956	4.3	0.4
13. West Bengal	1954	2.2	0.5
	1956	6.8	0.6
14. Manipur	1954	2.5	0.1
	1956	6.8	0.2
15. Rajasthan	1954	6.3	0.1
	1956	6.5	+
16. Tripura	1954	+	+
	1956	4.3	0.2
17. Himachal Pradesh	1954	5.5	0.1

NOTE:— + Not available.

Table No. 20

Percentage of deaths due to respiratory diseases among the deaths due to all causes (1954-56)

State	Deaths due to Respiratory diseases		Percentage of deaths among total deaths	
	1954	1956	1954	1956
Andhra Pradesh	20,190	21,655	6.87	7.38
Assam	+	3,754	+	9.21
Bihar	2,980	+	0.72	+
Bombay	93,387	91,518	16.36	16.60
Madhya Pradesh	28,211	5,889	7.38	5.0
Madras	53,498	44,221	10.66	10.15
Orissa	6,577	+	3.06	+
Punjab	27,510	34,387	14.52	13.86
Uttar Pradesh	51,296	46,737	7.93	8.16
West Bengal	27,219	25,771	11.39	11.43
Kerala	6,143	12,090	10.76	11.10
Madhya Bharat	3,423	+	+	8.12
Mysore (Erstwhile)	7,299	4,923	8.45	5.86
Rajasthan	+	3,369	+	16.7
Saurashtra	1,408	—	10.81	+
Bhopal	255	+	2.72	+
Coorg	79	+	4.27	+
Delhi	4,803	4,679	28.06	23.79
Himachal Pradesh	789	1,005	6.85	10.58
Pepsu	882	+	+	+
Manipur	424	198	21.49	12.73
Tripura	159	99	+	3.41
Andaman & Nicobar Islands	34	+	13.39	+

NOTE :+ Not available.

Table No. 21

Statement showing the number of Venereal Diseases in-patients treated at hospitals and dispensaries in the various States during 1954—56.
(Where information for 1956 is not available, 1955 statistics are included)

States	Year	Syphilis		Gonor- rhea	Chancroid	Other Venereal Diseases
		Acquired	Congenital			
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh	1954 1955	3,275 1,829	1,685 701	2,660 3,255	71 273	1,631 1,279
Assam	1954 1956	140 45	27 11	73 25	1 —	24 1
Bihar	1954 1956	784 612	258 248	350 497	42 44	325 1,002
Bombay	1954 1956	1,088 1,419	580 373	389 726	145 125	746 732
Madhya Pradesh ..	1954 1956	676 317	249 243	364 168	8 46	117 29
Madras	1954 1956	1,993 1,430	655 544	1,671 1,217	331 130	2,185 1,637
Orissa	1954 1956	907 896	104 248	493 674	31 175	465 698
Punjab	1954 1956	475 193	62 27	219 401	7 2	98 114
Uttar Pradesh ..	1954 1956	+ 605	+ 258	+ 817	+ 60	+ 1,210
West Bengal ..	1954 1955	157 —	37 506	87 547	5 70	115 299
Hyderabad	1954 1955	316 183	40 43	54 201	16 25	12 32
Jammu & Kashmir ..	1954 1956	— 1	— 1	— 3	— —	— —
Madhya Bharat ..	1954 1955	194 145	213 19	221 118	117 4	994 107
Mysore	1954 1956	223 472	9 107	113 387	63 120	39 405
Pepsu	1954 1955	150 43	— 39	107 40	— 2	19 52
Rajasthan	1954 1956	343 343	156 96	395 301	— —	266 218
Saurashtra	1954 1956	147 +	133 +	262 +	15 +	162 +
Travancore-Cochin ..	1954 1956	149 668	28 77	46 506	10 104	47 67

Table No. 21—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Bhopal	1954 1955	19 27	1 13	14 17	— —
Coorg	1954 1955	75 112	13 12	31 57	— 11
Delhi	1954 1956	14 148	— 2	9 138	2 3
Himachal Pradesh ..	1954 1956	— 2,474	— 161	— 1,559	— 4
Kutch	1954 1955	11 26	— —	4 6	3 4
Manipur	1954 1956	99 15	17 4	75 19	37 —
Tripura	1954 1956	1 4	— —	1 4	— —
Vindhya Pradesh ..	1954 1955	168 58	45 12	118 32	26 —
Andaman and Nico- bar Islands.	1954 1956	9 22	2 4	1 21	— —

NOTE.—Nil.

+ Information not available.

Table No. 22

Statement showing the number of Venereal Diseases out-patients treated at hospitals and dispensaries in the various States during 1954—56
(Where information for 1956 is not available, 1955 statistics are included)

State	Year	Syphilis		Gonor- rhoea	Chancr- oid	Other Venereal Diseases
		Acquired	Congenital			
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh ..	1954	36,280	12,885	74,337	859	34,174
	1955	42,654	18,278	50,775	5,545	40,620
Assam	1954	872	67	851	22	159
	1955	671	41	176	18	258
Bihar	1954	22,096	6,441	13,313	832	4,577
	1956	14,598	5,357	10,676	1,287	10,820
Bombay	1954	22,097	35,008	87,563	30,300	9,112
	1956	38,993	5,791	1,26,331	11,731	29,138
Madhya Pradesh ..	1954	14,870	1,753	11,442	49	3,381
	1956	7,819	705	6,795	929	1,193
Madras	1954	33,459	7,572	56,087	17,320	66,293
	1956	31,069	9,599	1,18,029	9,419	25,590
Orissa	1954	17,431	1,930	13,082	818	10,884
	1956	13,702	2,893	20,550	954	7,521
Punjab	1954	3,141	525	2,322	45	2,205
	1956	4,254	1,042	2,644	328	3,260
Uttar Pradesh ..	1954	+	+	+	+	+
	1956	16,627	5,673	15,900	485	25,435
West Bengal	1954	9,372	739	6,729	1,500	18,169
	1955	20,274	20,274	15,454	1,234	13,773
Hyderabad	1954	1,831	77	7,746	39	21
	1955	4,611	139	5,500	93	31
Jammu & Kashmir ..	1954	535	—	110	1	363
	1956	4,542	1,468	7,836	390	208
Mysore	1954	4,083	201	2,391	754	1,634
	1956	3,274	821	5,881	1,348	3,179
Pepsu	1954	13,495	548	1,044	245	262
	1955	4,514	319	907	93	438
Rajasthan	1954	7,756	2,918	8,253	—	4,912
	1956	10,413	1,787	9,475	—	4,985
Saurashtra	1954	944	296	1,667	42	432
	1956	+	+	+	+	+
Madhya Bharat ..	1954	3,856	1,722	4,440	537	1,27
	1955	3,768	774	2,763	265	7,36

Table No. 22—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Travancore-Cochin ..	1954	511	44	126	45	237
	1956	8,027	1,552	9,921	1,319	5,245
Bhopal	1954	601	17	412	—	14
	1955	922	34	793	24	788
Coorg	1954	157	3	120	3	17
	1955	178	17	165	2	2
Delhi	1954	6,657	260	1,523	86	957
	1956	15,066	1,164	9,862	562	1,948
Himachal Pradesh ..	1954	8,386	96	1,576	31	1,087
	1956	4,152	179	421	3	24
Kutch	1954	242	—	78	62	—
	1956	315	—	89	72	—
Manipur	1954	1,091	107	1,122	35	18
	1956	242	27	21	27	229
Tripura	1954	150	16	505	2	209
	1956	100	27	310	6	50
Vindhya Pradesh ..	1954	1,159	301	1,115	47	1,344
	1955	768	26	720	2	139
Andaman and Nicobar Islands.	1954	75	—	7	—	—
	1956	4	—	2	—	—

NOTE.— Nil.

+ Date not available.

Table No. 23

Statement showing the number of Venereal Diseases Clinics/Institutions with the number of beds in each Institution

State	No. of Venereal Diseases Clinics		No. of Beds for Venereal Diseases cases	
	1954	1956	1954	1956
Andhra	—	8	—	123
Assam (1956)	—	2	—	4
Bihar (1956)	—	1	—	45
Bombay	—	10	—	150
Madhya Pradesh	—	8	—	+
Madras	1	12	—	145
Orissa	—	7	—	33
Punjab	2	4	3	13
Uttar Pradesh	2	7	18	21
West Bengal	—	30	—	110
Hyderabad	—	—	—	—
Jammu & Kashmir	—	—	—	—
Kerala	—	—	—	—
Madhya Bharat	—	—	—	—
Mysore	—	—	—	—
Pepsu (1955 and 1956 not given)	1	—	8	—
Rajasthan	—	3	—	51
Saurashtra	—	—	—	—
Ajmer (1954 not given)	—	—	—	—
Bhopal	—	—	—	—
Coorg	—	—	—	—
Delhi	—	—	—	2
Himachal Pradesh	5	5	—	—
Kutch	—	—	—	—
Manipur	—	—	—	—
Tripura	—	—	—	—
Vindhya Pradesh	4	4	—	—
Andaman & Nicobar Islands	—	—	—	—
TOTAL	15	103	29	697

NOTE: (—) Nil.
+ Not available.

Table No. 24

Venereal Diseases beds in each State including those in Special Institutions 1954—1956

State	1954	1956
Andhra	113	71
Assam (1956)	4	4
Bihar (1956)	50	60
Bombay	116	130
Madhya Pradesh (1955)	31	31
Madras	150	145
Orissa	34	29
Punjab	13	13
Uttar Pradesh	26	21
West Bengal	66	110
Hyderabad	34	30
Jammu & Kashmir	—	—
Kerala (1954 not given)	+	64
Madhya Bharat (1955)	13	8
Mysore	65	68
Pepsu (1955)	8	—
Rajasthan	51	51
Saurashtra (1955)	—	—
Ajmer (1955)	—	—
Bhopal (1955)	—	—
Coorg (1955)	—	—
Delhi	2	2
Himachal Pradesh	—	—
Kutch (1955)	—	—
Manipur	—	—
Tripura	—	—
Vindhya Pradesh (1955)	—	—
Andaman & Nicobar Islands (1955)	—	—
TOTAL	776	837

NOTE: (—) Nil.
+ Not available.

Table No. 25

Statement showing the expenditure incurred in various States on Venereal Diseases (1954—1956)

State	1954	1956
	Rs.	Rs.
Andhra	+	+
Assam	+	+
Bihar	68,847	93,187
Bombay	1,10,368	1,99,633
Madhya Pradesh	13,053	12,512
Madras	+	+
Orissa	+	+
Punjab	29,796	72,450
Uttar Pradesh	+	+
West Bengal	3,51,741	3,84,235
Hyderabad	26,000	+
Jammu & Kashmir	+	1,39,397
Kerala	+	+
Madhya Bharat	+	+
Mysore	+	+
Pepsu	19,234	9,087 (1955)
Rajasthan	+	+
Saurashtra	+	+
Ajmer	—	—
Bhopal	+	+
Coorg	—	—
Delhi	12,579	24,750
Himachal Pradesh	1,24,400	1,01,958
Kutch	+	+
Manipur	+	+
Tripura	+	+
Vindhya Pradesh	1,000	13,451 (1955)
Andaman & Nicobar Islands	—	—

NOTE:—+ Not available.
—Nil.

Table No. 26

No. of Leprosy Centres established up to 31st December, 1956
(under the Leprosy Control Scheme)

Name of the State	Treatment and study centre	Subsidiary Centre
Andhra	—	3
Assam	—	1
Bihar	—	7
Bombay	—	4
Himachal Pradesh	—	1
Kerala	—	2
Madhya Pradesh	1	4
Madras	1	3
Manipur	—	1
Orissa	—	3
Uttar Pradesh	1	3
West Bengal	1	1
TOTAL	4	33

Table No. 27

Statement showing expenditure on Leprosy Control Scheme during 1st Five Year Plan

Name of the State	Expenditure incurred during 1st Plan Period
1. Andhra	53,865
2. Assam	38,839
3. Bihar	2,74,357
4. Bombay	73,851
5. Madhya Pradesh	2,79,440
6. Madras	1,27,794
7. Orissa	46,070
8. Punjab	12,000
9. Uttar Pradesh	85,100
10. West Bengal	45,874
11. Hyderabad	95,569
12. Mysore	—
13. Saurashtra	55,617
14. Kerala	8,282
15. Himachal Pradesh	—
16. Manipur	15,600
TOTAL	12,12,278

Table No. 28

Statement showing Special Institutions for treatment of Leprosy (1954—56)

State	Period	Hospitals		Homes, & colonies		Treatment centres, clinics, dispensaries etc.	Beds
		Govern-ment	Private	Govt.	Private		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Andhra Pradesh	1954 1956	— —	4 4	— 2	4 0	2 2	1,076 2,038
Assam	1954 1956	— —	— —	4 4	5 5	6 6	732 867
Bihar	1955* 1956	— —	2 2	— —	6 6	78 78	2,060 2,010
Bombay	1954 1956	5 7	8 8	2 3	2 4	— 2	2,160 3,321
Madhya Pradesh	1954 1956	1 5	5 5	— —	1 —	1 —	2,682 2,227
Madras	1954 1956	— —	3 4	1 —	3 3	12 18	1,623 1,764
Orissa	1954 1956	2 —	1 1	— 2	9 10	9 9	1,212 1,647
Punjab	1954 1956	— —	— —	— —	3 4	31 31	360 580
Uttar Pradesh	1954 1956	— —	3 7	1 3	11 6	1 1	1,279 1,520
West Bengal	1954 1956	— —	4 4	2 2	2 2	105 134	1,350 2,336
Hyderabad	1954 1956	1 +	1 +	3 +	1 +	4 +	710 +
Jammu & Kashmir	1954 1956	— 2	— —	3 —	— —	— —	173 140
Madhya Bharat	1954 1956	— +	— +	3 +	1 +	— +	168 +
Mysore	1954 1956	— —	1 1	1 1	1 —	4 +	412 +
Pepsu	1954 1956	— +	1 +	— +	— +	— +	150 +
Rajasthan	1954 1956	— —	— —	2 2	— —	— —	80 80

Table No. 28—Contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Saurashtra	1954	—	—	1	—	2	100
	1956	+	+	+	+	+	+
Travancore-Cochin ..	1954	—	2	—	2	3	1,737
	1956	1	1	—	1	8	1,706
Ajmer	1954	—	—	—	—	—	—
Bhopal	1954	1	—	—	—	—	36
Coorg	1954	—	—	—	—	—	—
Delhi	1954	—	—	—	—	1	—
	1955*	—	—	—	—	1	—
Himachal Pradesh ..	1954	—	—	2	—	11	57
	1956	—	—	1	1	13	102
Kutch	1954	—	—	—	—	—	—
Manipur	1954	1	—	1	1	—	148
	1956	1	—	1	1	—	136
Tripura	1954	—	—	—	—	1	—
	1955*	—	—	—	—	1	—
Vindhya Pradesh	1954	—	—	—	—	—	—
Andaman & Nicobar Islands.	1954	—	—	—	—	—	—
	1956	—	—	—	—	—	—

NOTE.—*Where information is not available, 1955 statistics are inserted.
(+)Information not available.

Table No. 29

Statement showing details of cases (Leprosy) treated and discharged (1954 & 1956)

(1)	State	Year	No. of patients treated	No. of Patients discharged as					Decidedly improved
				Cured	Non-infectious	Symptom free	Disease arrested	Apparently cured	
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Andhra Pradesh	..	1954	24,862	133	355	92	614	94	263
	..	1956	3,867	177	142	224	356	76	2,467
Assam	..	1954	1,308	13	200	103	251	212	278
	..	1956	1,628	35	83	45	86	32	182
Bihar	..	1954	22,543	487	1,652	611	1,114	723	2,285
	..	1956	32,378	398	906	499	1,096	420	1,658
Bombay	..	1954	13,865	73	1,062	782	1,052	775	2,226
	..	1956	44,618	116	2,020	1,494	1,436	1,193	5,175
Madhya Pradesh	..	1954	2,069	—	318	129	99	—	—
	..	1956	1,780	—	—	171	134	—	—
Madras	..	1954	+	+	+	+	+	+	+
	..	1956	2,63,262	35	1,557	763	1,147	395	3,302
Orissa	..	1954	10,745	—	—	238	—	—	1,883
	..	1956	26,037	441	978	645	622	264	1,243
Punjab	..	1954	397	9	18	25	10	11	57
	..	1956	527	19	18	22	17	11	132
Uttar Pradesh	..	1954	38,040	+	+	+	+	+	+
	..	1956	26,731	+	+	+	+	+	+

Table No. 29—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
West Bengal	1954 1956	27,366 61,668	279 317	1,996 2,072	1,023 1,044	2,607 2,560	469 826	5,176 8,396
Hyderabad	1954	6,253	143	289	144	327	109	2,173
Jammu & Kashmir	1954 1956	297** 139	2 1	4 1	1 1	1 9	1 1	10 2
Kerala	1954 1956	2,621 11,045	124 59	30 1,140	14 211	27 756	71 263	2,268 473
Madhya Bharat	1954	356	22	30	14	40	16	32
Mysore	1954 1956	+ 7,567	+ 38	+ 220	+ —	+ —	+ 27	+ 4
Pepsu	1954	177	4	9	8	9	11	136
Rajasthan	1954 1956	366 232	— —	5 19	2 9	11 4	5 3	6 29
Saurashtra	1954	151	—	—	—	—	—	—
Ajmer	1954	18	—	—	—	—	—	—
Bhopal	1954	23	—	—	—	23	—	—
Coorg	1954	23	—	—	—	—	—	—
Delhi	1954 1955*	330 436	— 1	— 1	4 3	285 358	— 1	41 75
Himachal Pradesh	1954 1956	277 6,189	2 —	16 38	14 33	12 33	14 11	44 115
Kutch	1954	—	—	—	—	—	—	—

Manipur	1954 1956	97 219	— —	— —	— —	9 71	— —	— —
Tripura	1954 1955*	15 266	1 —	— 2	— 1	— 57	— 1	6 9
Vindhya Pradesh	1954	82	—	—	—	—	—	—
Andaman & Nicobar Islands	1954 1956	— 5	— —	— 1	— —	— —	— —	— 1

Note—

*Where information for 1956 is not available, 1955 statistics are inserted.

**Besides these 56 patients were treated in mofussil dispensaries.

+ Information not available.

(—) Nil.

Table No. 30

Statement showing General Hospitals for Diseases of the Eye from available information (1954—56)

State	Eye Hospitals				Beds	
	Government		Private			
	1954	1956	1954	1956	1954	1956
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh	+	+	+	+	+	+
Assam	—	—	1		25	25
Bihar	—	—	—	—	—	—
Bombay	3	2	16	15	582	437
Madhya Pradesh	—	—	4	2	186	100
Madras	1	1	2	3	392	497
Orissa	+	+	+	+	+	+
Punjab	1	1	2	1	350	286
Uttar Pradesh	2	2	5	6	940	996
West Bengal	+	—	+	1	+	48
Hyderabad	1	—	—	—	100	+
Jammu & Kashmir	+	—	+	—	—	—
Madhya Bharat	1	—	—	—	54	+
Mysore	1	1	—	—	175	175
Pepsu	—	—	—	—	—	—
Rajasthan	—	—	—	—	—	—
Saurashtra	—	—	—	—	—	—
Travancore-Cochin	1	1	—	1	150	162
Ajmer	—	—	—	—	—	—
Bhopal	—	—	—	—	—	—
Coorg	—	—	—	—	—	—
Delhi	1	1	3	3	274	226
Himachal Pradesh	—	—	—	—	—	—
Kutch	—	—	1	—	15	+
Manipur	—	—	—	—	—	—
Tripura	—	+	—	—	—	—
Vindhya Pradesh	—	—	—	—	—	—
Andaman & Nicobar Islands	—	—	—	—	—	—
TOTAL	12	9	34	32	3,243	2,821

NOTE.—+ Information not available.

Table No. 31

Statement showing the number of in-patients treated for diseases of the Eye (1954 & 1956)

State	Patients treated (in-door)	
	1954	1956
Andhra	4,333	4,980
Assam	1,558	1,160
Bihar	12,121	16,910
Bombay	16,436	43,553
Madhya Pradesh	35,456	5,262
Madras	24,281	26,287
Orissa	3,518	4,171
Punjab	1,72,067	23,238
Uttar Pradesh	@	@
West Bengal	+	16,765
Hyderabad	15,115	52,207*
Jammu & Kashmir	+	14,506
Madhya Bharat	19,087	
Mysore	5,140	8,401
Pepsu	1,344	
Rajasthan	6,968	8,328
Saurashtra	12,350	
Travancore-Cochin	6,517	+
Ajmer	488	
Bhopal	544	
Coorg	232	
Delhi	9,597	6,670
Himachal Pradesh	789	817
Kutch	698	
Manipur	84	16
Tripura	112	26
Vindhya Pradesh	1,088	
Andaman & Nicobar Islands	97	153

NOTE :—@ Figures for U.P. are those for in-door and outdoor. 1954—26,35,957
1956—27,94,351

+ Information not available.

* Where information for 1956 is not available, statistics for 1955 are inserted.

Table No. 32

Statement showing the number of out-door patients treated for diseases of the Eye (1954 & 1956)

State	Patients treated (Out-door)	
	1954	1956
Andhra Pradesh	4,05,452	3,53,924
Assam	46,566	29,604
Bihar	2,55,831	2,73,928
Bombay	4,50,603	6,47,260
Madhya Pradesh	3,66,080	1,89,454
Madras	9,33,316	6,86,817
Orissa	2,51,788	2,39,077
Punjab	27,354	5,56,390
Uttar Pradesh	@	@
West Bengal	+	4,57,457
Hyderabad	32,716	*
Jammu & Kashmir	+	61,378
Madhya Bharat	1,03,743	*
Mysore	5,47,471	6,77,859
Pepsu	2,79,828	+
Rajasthan	9,08,202	10,13,170
Saurashtra	55,234	*
Travancore-Cochin	1,02,111	+
Ajmer	11,197	*
Bhopal	19,953	*
Coorg	3,052	*
Delhi	4,52,069	3,14,495
Himachal Pradesh	14,212	31,039
Kutch	21,606	*
Manipur	14,367	3,044
Tripura	7,047	8,455
Vindhya Pradesh	59,550	*
Andaman & Nicobar Islands	120	642
TOTAL	53,69,490	57,43,993

@ Figures for U.P. are those for In-door and Out-door patients and so cannot be included separately.
(1954 26,35,957)
(1956 27,94,351)

+ Information not available.

*Where information for 1956 is not available, statistics for 1955 are inserted.

Table No. 33

Statement showing the number of Eye Operations performed—Major & Minor (1954—1956)

State	Operations performed			
	Minor		Major	
	1954	1956	1954	1956
(1)	(2)	(3)	(4)	(5)
Andhra Pradesh	3,660 †	4,896	3,291@	6,618
Assam	753	804	407	837
Bihar	6,725	9,203	8,680	8,846
Bombay	10,213	17,176**	7,921	13,648*
Madhya Pradesh	6,841	2,300	8,676	973
Madras	15,751	17,833	15,505	16,658
Orissa	1,759	1,272	2,672	2,833
Punjab	17,982	27,206	11,584	17,158
Uttar Pradesh	‡	‡	‡	‡
West Bengal	+	8,292	+	13,620
Hyderabad	1,708		1,872	
Jammu & Kashmir	+	2,579	+	4,507
Madhya Bharat	3,745		1,495	
Mysore	‡	‡	‡	‡
Pepsu	1,428		44,208	
Rajasthan	‡	‡	‡	‡
Saurashtra	1,198		904	
Travancore-Cochin	4,584	+	11,682	+
Ajmer	‡		‡	
Bhopal	241		272	
Coorg	17		33	
Delhi	6,166	5,492	8,141	6,773
Himachal Pradesh	323	387	112	707
Kutch	672	—	1,971	—
Manipur	19	6	56	2

Table No. 33—contd.

(1)	(2)	(3)	(4)	(5)
Tripura	—	8	226	1
Vindhya Pradesh .. .	383		535	
Andaman & Nicobar Islands ..	3	3	20	30

NOTE]

†In addition to figures shown in Column Nos. 2 and 4, 320 more operations have been performed and which have not been categorised by the State authorities into Major and Minor.

+ Information not available.

*Where information for 1956 is not available, statistics for 1955 are inserted.

—Nil.

‡Figures for U. P., Mysore, Rajasthan and Ajmer are those for Major and Minor operations.

State	1954	1956
Uttar Pradesh	4,11,282	40,195
Mysore	13,066	71,184
Rajasthan	6,004	5,968
Ajmer	715	

**In addition to figures shown in Column Nos. 3 and 5, 4,135 more operations have been performed and which have not been categorised by the State authorities into Major and Minor.

Table No. 34

Statement showing the expenditure on Eye Institutions for 1954 & 1956

State	Expenditure	
	1954	1956
	Rs.	Rs.
Andhra Pradesh	+	+
Assam	25,200	40,347
Bihar	—	—
Bombay	3,05,402	2,10,819
Madhya Pradesh	78,897	28,927
Madras	4,56,745	3,51,014
Orissa	—	—
Uttar Pradesh	8,55,487	10,34,431
Punjab	73,467	+
West Bengal	+	+
Hyderabad	2,01,287	+
Jammu & Kashmir	+	—
Madhya Bharat	+	+
Mysore	1,31,870	1,75,510
Pepsu	—	+
Rajasthan	—	—
Saurashtra	—	+
Kerala	77,131	1,10,959
Ajmer	—	+
Bhopal	+	+
Coorg	—	+
Delhi	4,04,819	3,07,862
Himachal Pradesh	—	—
Kutch	+	+
Manipur	—	—
Tripura	—	—
Vindhya Pradesh	+	+
Andaman & Nicobar Islands ..	+	+

† Not available.

Table No. 35

Statement showing the number of persons tuberculin tested (State-wise)
during the year 1954-56 (Provisional figures).

State	1954	1956
Andhra Pradesh	1,46,885	13,59,820
Assam	4,86,727	5,91,388
Bihar	20,95,033	24,64,561
Bombay	16,01,471	23,66,100
Madhya Pradesh	11,30,975	4,42,192
Madras	5,13,646	2,34,531
Orissa	8,15,621	7,63,567
Punjab	13,67,808	9,20,329
Uttar Pradesh	15,47,995	11,48,688
West Bengal	15,32,680	20,09,686
Hyderabad	19,89,786	12,48,385
Jammu & Kashmir	5,73,098	4,02,594
Madhya Bharat	3,44,463	1,72,085
Kerala	7,43,851	4,79,687
Mysore	7,29,588	6,40,804
Pepsu	6,41,956	3,46,012
Rajasthan	10,33,340	4,73,986
Saurashtra	4,83,227	2,53,820
Ajmer	68,389	31,358
Bhopal	1,25,592	1,07,017
Coorg	21,469	1,802
Delhi	2,19,841	1,65,417
Himachal Pradesh	99,785	68,363
Kutch	8,086	22,006
Manipur	1,19,649	72,646
Tripura	2,33,593	64,540
Vindhya Pradesh	84,870	37,512
Sikkim	—	13,099
TOTAL ..	1,87,59,434	1,69,01,595

NOTE : —Nil.

Table No. 36

Statement showing the number of persons B.C.G. Vaccinated (State-wise)
for the years 1954—1956 (Provisional figures).

State	B.C.G. Vaccinated	
	1954	1956
Andhra Pradesh	45,774	4,24,092
Assam	2,15,950	2,49,220
Bihar	10,04,603	10,49,671
Bombay	3,84,023	8,27,074
Madhya Pradesh	3,96,885	1,60,352
Madras	1,88,872	83,292
Orissa	2,91,038	3,25,659
Punjab	3,86,484	2,87,035
Uttar Pradesh	4,14,209	3,61,973
West Bengal	8,39,375	8,79,501
Hyderabad	6,83,932	4,80,128
Jammu & Kashmir	2,20,959	1,97,921
Madhya Bharat	83,582	52,198
Mysore	3,10,783	2,74,993
Pepsu	1,93,090	92,891
Rajasthan	2,36,272	1,13,793
Saurashtra	1,24,878	64,461
Kerala	3,58,422	2,18,020
Ajmer	14,505	7,080
Bhopal	55,084	51,128
Coorg	14,451	583
Delhi	36,502	41,251
Himachal Pradesh	45,437	44,738
Kutch	2,418	6,328
Manipur	69,244	6,39
Vindhya Pradesh	24,671	13,622
Tripura	1,04,336	28,912
Sikkim	—	6,007
TOTAL ..	65,45,779	63,68,322

Table No. 37
Statement showing the total number of beds in each State including those in special institutions.

Tuberculosis—1954-56								
Name of State							Year	Total number of beds
Andhra Pradesh	..	..	..	..	..	..	1954	1,068
							1956	1,089
Assam	..	..	..	..	..	..	1954	246
							1956	335
Bihar	..	..	..	..	..	..	1954	567
							1956	581
Bombay	..	..	..	..	..	..	1954	1,842
							1956	3,072
Madhya Pradesh	..	..	..	..	..	..	1954	565
							1956	972
Madras	..	..	..	..	..	..	1954	1,650
							1956	1,907
Orissa	..	..	..	..	..	..	1954	77
							1956	77
Punjab	..	..	..	..	..	..	1954	454
							1956	616
Uttar Pradesh	..	..	..	..	..	..	1954	786
							1956	1,076
West Bengal	..	..	..	..	..	..	1954	2,355
							1956	2,741
Hyderabad	..	..	..	..	..	..	1954	872
							1956	+
Jammu & Kashmir	..	..	..	..	..	..	1954	255
							1956	370
Madhya Bharat	..	..	..	..	..	..	1954	238
							1956	+
Mysore	..	..	..	..	..	..	1954	993
							1956	963
Pepsu	..	..	..	..	..	..	1954	125
							1956	+
Rajasthan	..	..	..	..	..	..	1954	314
							1956	707
Saurashtra	..	..	..	..	..	..	1954	+
							1956	
Travancore-Cochin	..	..	..	..	..	..	1954	439
							1956	311
Ajmer	..	..	..	..	..	..	1954	439
							1956	+

Table 37—contd.

Name of the State							Year	Total number of beds
Himachal Pradesh							1954	94
							1956	117
Bhopal							1954	69
							1956	+
Coorg							1954	65
							1956	+
Delhi							1954	527
							1956	889
Kutch							1954	45
							1956	+
Manipur							1954	16
							1956	16
Tripura							1954	—
							1956	—
Vindhya Pradesh							1954	100
							1956	+
Andaman & Nicobar Islands							1954	18
							1956	18
TOTAL ..							1954	14,201
							1956	15,957

NOTE : —Nil

Table No. 38

Statement showing the number of special institutions for the treatment of Tuberculosis in the various States (1953—55)

Tuberculosis
(from available data)

Name of States	Hospitals						Sanatoria						Clinics						Beds	
	Government			Private			Government			Private			Government			Private			1953	1955
	1953	1955	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	1953	1955	(11)	(12)	1953	1955			
																		(1)		
Andhra ..	1	9	1	2	—	1	2	1	—	2	—	—	—	—	—	—	593	1,089		
Assam ..	1	5	—	5	—	—	—	1	—	—	—	—	1	—	—	—	87	336		
Bihar ..	—	1	—	—	2	2	2	2	—	16	—	—	—	—	—	—	499	571		
Bombay ..	13	20	9	5	1	1	7	5	—	5	—	—	1	3	—	—	1,794	1,614		
Madhya Pradesh ..	—	1	—	—	1	2	1	1	—	3	4	1	—	—	—	—	476	558		
Madras ..	16	9	2	2	1	2	6	9	4	11	1	1	3	—	—	—	1,697	1,919		
Orissa ..	1	4	—	1	—	—	1	—	—	1	1	—	—	1	—	—	47	77		
Punjab ..	1	1	—	1	2	2	—	—	—	2	1	9	9	—	—	—	367	515		
Uttar Pradesh ..	—	4	1	—	3	4	4	—	—	3	7	16	14	—	—	—	730	1,030		
West Bengal ..	+	35	+	6	+	1	+	2	+	+	—	+	—	—	—	—	+	2,707		
Hyderabad ..	2	3	—	—	1	1	—	—	—	3	4	—	—	—	—	—	772	872		
Jammu & Kashmir	—	+	—	+	1	+	—	+	—	—	+	—	+	—	—	—	205	+		
Madhya Bharat	—	2	—	—	1	1	—	—	—	10	16	—	—	—	—	—	108	274		
Mysore ..	1	1	—	—	—	4	—	1	—	—	5	—	—	—	—	—	902	962		
Pepsu ..	—	4	—	—	3	—	—	3	—	2	3	—	—	—	—	—	87	238		
Rajasthan ..	3	14	—	—	2	1	—	—	—	1	2	—	—	—	—	—	239	322		
Saurashtra ..	1	+	1	+	—	+	—	+	—	—	+	1	+	—	—	—	176	+		
Travancore-Cochin ..	1	+	—	+	1	+	—	+	—	3	+	—	—	+	—	—	3,504	+		
Ajmer ..	—	—	—	—	—	—	1	1	—	2	1	—	—	—	—	—	250	290		
Bhopal ..	—	1	—	—	—	—	—	—	—	1	1	—	—	—	—	—	15	191		
Coorg ..	—	—	—	—	—	—	—	—	—	2	3	—	—	—	—	—	39	80		
Delhi ..	1	1	1	1	—	—	—	—	—	1	2	3	2	—	—	—	519	628		
Himachal Pradesh	—	—	—	—	1	1	—	—	—	1	3	—	—	—	—	—	55	99		
Kutch ..	—	1	—	—	—	—	1	—	—	—	2	1	1	—	—	—	37	66		
Manipur ..	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	23	20		
Vindhya Pradesh	+	2	+	—	+	—	+	—	—	+	1	+	+	—	—	—	+	100		
Andaman & Nicobar Islands ..	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18		
TOTAL ..	43	120	15	23	20	23	25	26	63	67	34	33	13,221	14,571						

Note: + Not available.
— Nil.

Table No. 39

Statement showing the patients treated for tuberculosis in Hospitals, Dispensaries in each State in the years 1954-56.
(1955 Statistics were utilised when 1956 statistics were not available)

Name of the State	Tuberculosis of respiratory system (giving also separately in each case the number of cases associated with occupational diseases of lung such as silicosis anthracosis, etc.)							Tuberculosis other forms		
	(1)	(2)	(3)	(4)		(5)	(6)	(7)	(8)	
				Pulmonary	Pleural (without lung affection)					Others
Andhra Pradesh	{ New admission	1954	17,665	252	616	1,690	930	1,819	2,202	
		1956	16,232	930	2,199	1,687	3,678	823	553	
	{ Of those fresh cases	1954	3,882	66	317	--	458	931	75	
Assam	{ New admission	1954	886	27	59	73	88	56	10	
		1956	1,678	36	69	+	74	57	12	
	{ Of those fresh cases	1954	587	6	24	33	43	32	4	
Bihar	{ New admission	1954	+	1,586	1,315	+	2,154	1,803	710	
		1956	21,554	1,265	1,171	1,310	1,911	1,017	473	
	{ Of those fresh cases	1954	+	894	905	+	1,167	1,084	158	
Bombay	{ New admission	1954	28,241	955	1,699	+	2,439	2,067	1,283	
		1956	23,514	417	656	712	1,026	746	264	
	{ Of those fresh cases	1954	8,530	270	189	+	677	235	30	
		1955	5,124	997	1,027	29	715	410	22	

Table No. 39—contd.

Name of the State	(1)	Abdominal			(11)	(12)	(13)	(14)	(15)	Remarks.
		Intestinal	Mesenteric	Both combined						
		(9)	(10)	(11)	(12)	(13)	(14)	(15)		
Andhra Pradesh	New admission	1954	761	275	399	429	176	1,400	Fresh cases	
	Of those fresh cases	1956	1,251	296	184	577	533	3,498	mean such cases who have not been treated before for Tuberculosis in any other hospital or sanatorium.	
Assam	New admission	1954	556	150	200	350	120	422		
	Of those fresh cases	1956	138	49	15	55	66	1,650		
Bihar	New admission	1954	46	30	30	6	5	23		
	Of those fresh cases	1956	68	25	44	4	11	48		
Bombay	New admission	1954	29	10	17	5	3	9		
	Of those fresh cases	1956	49	1	20	4	2	44		
Bombay	New admission	1954	684	351	1,004	176	265	2,402		
	Of those fresh cases	1956	850	408	403	155	92	3,151		
Bombay	New admission	1954	350	214	314	81	45	1,839		
	Of those fresh cases	1956	307	119	98	109	29	896		
Bombay	New admission	1954	—	1,292	868	81	2,272	868		
	Of those fresh cases	1955	305	83	—	—	554	2,305		
Bombay	New admission	1954	—	195	45	—	3	58		
	Of those fresh cases	1955	86	18	491	—	126	79		

Table No. 39—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)							
Madhya Pradesh	New admission ..	1954 1956	+	9,194	+	142	+	214	+	323	+	197	+	76
	Of those fresh cases ..	1954 1956	+	417	+	16	+	31	+	33	+	7	+	—
Madras	New admission ..	1954 1956	40,462 36,216	1,031 6,088	1,729 1,246	5,093 1,089	3,959 4,663	1,236 36	583 486					
	Of those fresh cases ..	1954 1956	10,199 14,617	193 747	1,018 548	62 239	599 1,795	38 106	22 96					
Orissa	New admission ..	1954 1956	2,309 1,900	223 179	81 100	595 187	3,532 262	95 38	152 43					
	Of those fresh cases ..	1954 1956	1,663 1,147	149 100	70 35	325 45	3,485 142	23 13	141 8					
Punjab	New admission ..	1954 1956	5,905 5,553	130 42	286 189	100 259	350 78	108 257	14 69					
	Of those fresh cases ..	1954 1956	5,074 2,958	130 29	286 61	100 7	350 41	108 30	14 41					
Uttar Pradesh ..	New admission ..	1954 1956	25,295 35,906	1,170 1,574	1,084 1,401	5,165 3,360	3,330 4,182	1,966 2,534	460 573					
	Of those fresh cases ..	1954 1956	6,566 7,789	269 750	233 216	157 754	765 586	491 335	112 271					
West Bengal ..	New admission ..	1954 1956	12,489 9,498	466 173	224 247	3 6	734 338	902 124	385 260					
	Of those fresh cases ..	1954 1956	7,075 1,979	243 12	142 43	3 1	219 43	752 10	368 1					

Table No. 39—contd.

(1)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	+	+	+	+	+	+	NOTE : Fresh cases mean such cases who have not been treated before for tuberculosis in any other hospital or sanatorium.
Madhya Pradesh	New admission ..	1954 1956	91	49	102	2	639
	Of those fresh cases ..	1954 1956	7	7	39	—	52
Madras	New admission ..	1954 1956	1,753 2,010	360 351	1,122 547	258 338	8,398 6,369
	Of those fresh cases ..	1954 1956	266 160	20 35	12 59	12 59	932 931
Orissa	New admission ..	1954 1956	61 75	12 16	48 36	1 29	943 145
	Of those fresh cases ..	1954 1956	36 45	2 8	48 15	— 12	598 90
Punjab	New admission ..	1954 1956	126 1	49 72	91 110	12 66	8 34
	Of those fresh cases ..	1954 1956	126 —	49 44	91 2	12 —	8 2
Uttar Pradesh	New admission ..	1954 1956	3,589 3,174	1,247 2,409	1,284 1,952	4,063 706	4,723 5,959
	Of those fresh cases ..	1954 1956	682 680	147 123	278 135	164 244	1,481 899
West Bengal	New admission ..	1954 1956	178 50	121 33	59 14	308 22	1,145 187
	Of those fresh cases ..	1954 1956	111 —	58 2	26 —	46 —	917 —

Table No. 39—contd.

(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
Hyderabad	New admission	1954 589	5	37	2	9	3	—
	Of those fresh cases	1955 6,093	78	297	124	59	98	33
Jammu & Kashmir	New admission	1954 567	—	—	—	—	—	—
	Of those fresh cases	1954 793	25	—	92	53	15	—
Madhya Bharat	New admission	1956 1,856	136	30	948	129	7	5
	Of those fresh cases	1954 793	25	—	92	53	15	—
Mysore	New admission	1954 4,135	8	35	1,187	137	18	1
	Of those fresh cases	1955 +	+	+	+	+	+	+
Mysore	New admission	1954 848	—	9	3	56	16	1
	Of those fresh cases	1955 2,729	—	—	43	—	—	21
Mysore	New admission	1955 5,473	276	383	79	94	25	15
	Of those fresh cases	1954 2,729	—	—	43	—	—	21
Pepsu	New admission	1955 1,500	27	62	—	91	13	5
	Of those fresh cases	1954 591	21	33	5	14	17	3
Rajasthan	New admission	1955 1,089	24	82	160	44	66	11
	Of those fresh cases	1954 17	3	—	—	2	—	—
Saurashtra	New admission	1955 174	2	11	—	13	17	1
	Of those fresh cases	1954 9,683	30	139	131	381	546	6
Saurashtra	New admission	1956 14,705	1,308	94	464	542	181	59
	Of those fresh cases	1954 1,205	27	—	—	189	306	5
Saurashtra	New admission	1955 2,555	+	—	+	+	+	+
	Of those fresh cases	1954 353	—	—	2,800	320	755	265
Saurashtra	New admission	1955 353	—	—	+	+	+	+
	Of those fresh cases	1954 1,022	—	—	1,304	150	25	27

Table No. 39—contd.

(1)		(9)	(10)	(11)	(12)	(13)	(14)	(15)
Hyderabad	New admission	1954 7	—	—	—	—	—	—
	Of those fresh cases	1955 11	—	13	—	—	—	—
Jammu & Kashmir	New admission	1954 —	—	—	—	—	—	—
	Of those fresh cases	1955 3	—	—	—	—	—	—
Madhya Bharat	New admission	1956 2	2	7	62	—	3	—
	Of those fresh cases	1954 3	—	—	—	—	—	—
Mysore	New admission	1955 31	—	—	—	—	—	—
	Of those fresh cases	1954 +	+	+	—	—	—	—
Mysore	New admission	1955 8	—	2	62	—	3	—
	Of those fresh cases	1954 —	—	—	—	—	—	—
Mysore	New admission	1955 —	—	—	—	—	—	—
	Of those fresh cases	1954 48	21	12	—	—	79	12
Pepsu	New admission	1955 5	3	—	—	—	—	—
	Of those fresh cases	1954 17	—	—	—	—	79	12
Rajasthan	New admission	1955 31	—	—	—	—	—	—
	Of those fresh cases	1954 2	—	—	—	—	—	—
Saurashtra	New admission	1955 263	28	200	7	52	779	624
	Of those fresh cases	1954 605	195	109	83	—	779	624
Saurashtra	New admission	1956 120	9	153	—	40	715	—
	Of those fresh cases	1954 84	112	1	3,389	656	461	+
Saurashtra	New admission	1955 15	2	1	178	107	251	—
	Of those fresh cases	1954 —	—	—	—	—	—	—

NOTE : Fresh cases mean such cases who have not been treated before for tuberculosis any other hospital or sanatorium.

Table No. 39—contd.

(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
Travancore-Cochin	New admission	1954 1956	119 627	81 878	27 328	168 924	38 164	1 97
	Of those fresh cases	1954 1956	19 6	16 13	27 171	27 12	— 2	1 15
Ajmer	New admission	1954 1955	9 —	23 18	— 48	74 11	1 1	—
	Of those fresh cases	1954 1955	7 —	20 5	— 13	69 3	1 —	—
Bhopal	New admission	1954 1955	25 16	62 88	— 148	214 99	173 169	20 6
	Of those fresh cases	1954 1955	25 16	62 88	— 148	214 99	173 169	20 6
Coorg	New admission	1954 1955	2 —	— 16	— 14	48 95	10 9	4 5
	Of those fresh cases	1954 1955	2 —	— 9	— 8	43 60	6 6	4 3
Delhi	New admission	1954 1956	106 111	430 290	— —	1,318 1,157	69 59	5 4
	Of those fresh cases	1954 1956	20 290	123 53	— —	270 261	16 17	3 3
Himachal Pradesh	New admission	1954 1956	15 32	53 27	47 109	241 155	1 58	— 19
	Of those fresh cases	1954 1956	14 16	53 21	38 56	154 34	1 34	— 14

Table No. 39—contd.

(1)		(9)	(10)	(11)	(12)	(13)	(14)	(15)
Travancore-Cochin	New admission	1954 1956	31 930	— 26	— 16	— 276	8 1,687	
	Of those fresh cases	1954 1956	5 —	— 1	— 4	— 5	8 47	
Ajmer	New admission	1954 1955	9 10	12 8	1 4	1 —	20 —	
	Of those fresh cases	1954 1955	7 —	10 —	1 —	1 —	20 —	
Bhopal	New admission	1954 1955	321 268	— 2	3 19	3 2	23 58	
	Of those fresh cases	1954 1955	321 268	— 2	3 19	3 —	23 58	
Coorg	New admission	1954 1955	— 5	— —	— 3	— —	— 3	
	Of those fresh cases	1954 1955	5 2	1 —	— 3	— —	14 3	
Delhi	New admission	1954 1956	3 7	1 76	— —	— —	14 81	
	Of those fresh cases	1954 1956	127 5	1 —	— —	12 —	6 —	
Himachal Pradesh	New admission	1954 1956	1 172	1 25	— 31	— —	15 72	
	Of those fresh cases	1954 1956	89 136	70 16	1 28	3 —	43 49	

NOTE : Fresh cases mean such cases who have not been treated before for tuberculosis in any other hospital or sanatorium.

Table No. 39—concl'd.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Kutch	New admission ..	1954 403	2	3	8	7	8	8
	Of those fresh cases ..	1955 415	2	7	9	6	9	—
Manipur	New admission ..	1954 326	—	—	—	—	—	—
	Of those fresh cases ..	1955 332	—	—	—	—	—	—
Tripura	New admission ..	1954 26	—	—	—	—	—	—
	Of those fresh cases ..	1955 59	—	—	—	—	—	—
Vindhya Pradesh	New admission ..	1954 208	—	—	42	—	2	2
	Of those fresh cases ..	1955 357	—	—	34	—	—	—
Andaman & Nicobar Islands.	New admission ..	1954 182	130	229	125	70	120	66
	Of those fresh cases ..	1955 473	3	49	67	41	83	61
	New admission ..	1954 68	—	—	—	—	—	—
	Of those fresh cases ..	1955 73	8	8	—	12	2	4
	New admission ..	1954 —	—	—	—	—	—	—
	Of those fresh cases ..	1956 —	—	—	—	—	—	—

NOTE : + Not available.
— Nil.

Table No. 39—concl'd.

	(1)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Kutch	New admission ..	1954 50	66	35	1	—	1	—
	Of those fresh cases ..	1955 8	3	3	—	—	9	—
Manipur	New admission ..	1954 —	—	—	—	—	—	—
	Of those fresh cases ..	1955 —	5	4	—	—	10	—
Tripura	New admission ..	1954 —	—	—	—	—	—	—
	Of those fresh cases ..	1955 —	—	—	—	—	—	—
Vindhya Pradesh	New admission ..	1954 34	25	—	47	—	—	—
	Of those fresh cases ..	1955 53	21	5	—	1	2	—
Andaman & Nicobar Islands	New admission ..	1954 —	—	—	—	—	—	—
	Of those fresh cases ..	1955 8	—	—	—	—	10	—
	New admission ..	1954 —	—	—	—	—	—	—
	Of those fresh cases ..	1955 —	—	—	—	—	—	—

NOTE : Fresh cases mean such cases who have not been treated before for tuberculosis in any other hospital or sanatorium.

Table No. 40

Statement showing the expenditure incurred in various States on Tuberculosis (1954-56)

State	1954	1956	
	Rs.	Rs.	
Andhra	5,70,777	9,41,529	(1955)
Assam	+	4,90,749	
Bihar	8,83,640	9,38,676	
Bombay	+	+	
Madhya Pradesh	2,71,505	2,15,995	
Madras	19,90,311	26,23,595	
Orissa	3,61,006	3,95,000	
Punjab	6,51,476	9,54,578	
Uttar Pradesh	8,62,717	11,54,400	
West Bengal	29,55,584	+	
Hyderabad	7,86,767	8,60,884	(1955)
Jammu & Kashmir	4,18,370	7,18,267	
Kerala	+	16,22,000	
Madhya Bharat	1,55,675	+	
Mysore	About 9 lakhs	7,69,259	(1955)
PEPSU	1,40,069	2,60,643	(1955)
Rajasthan	2,68,170	+	
Saurashtra	4,200	+	
Ajmer	+	+	
Bhopal	1,37,262	2,55,138	(1955)
Coorg	—	—	
Delhi	13,61,878	18,58,490	
Himachal Pradesh	55,492	1,19,036	
Kutch	15,721	92,487	(1955)
Manipur	9,004	33,805	
Tripura	—	—	
Vindhya Pradesh	2,31,000	1,14,257	(1955)
Andaman & Nicobar Islands	+	+	

NOTE : + Not available.
— Nil.

Table No. 41

Amounts paid to State Governments in Ist Plan period for the National Water Supply and Sanitation Programme (Urban).

State	No. of Schemes		Cost of approved Schemes	Funds paid during 1st Plan period
	Water Supply	Sewage		
(Rupees lakhs)				
Andhra	16	2	529.09	109.30
Bihar	9	1	230.36	118.00
Bombay	16	7	335.25	85.75
Madhya Pradesh	9	—	132.42	51.09
Madras	14	3	815.18	25.00
Punjab	21	16	205.60	50.625
Uttar Pradesh	20	9	331.66	250.00
West Bengal	10	—	77.28	37.50
Kerala	4	2	368.00	43.75
Mysore	14	3	210.65	25.45
Rajasthan	14	—	274.13	18.75
Delhi	2	1	191.30	14.25
TOTAL	149	44	3,700.92	829.465

Table No. 42

Amounts paid as grant-in-aid to State Governments in the Ist Plan period for National Water Supply and Sanitation Programme (Rural)

State	No. of Schemes	Cost of approved Schemes	Funds paid during 1st Plan period
(Rs. in lakhs)			
Andhra	4	80.00	10.00
Assam	7	55.55	6.24
Bihar	7	120.84	36.00
Bombay	6	124.92	15.630
Madhya Pradesh	5	103.87	10.00
Madras	6	144.00	15.00
Orissa	13	48.60	6.00
Punjab	5	42.00	10.25
Uttar Pradesh	3	212.00	86.50
West Bengal	10	100.77	10.25
Hyderabad	3	49.50	6.125
Kerala	6	49.90	8.10
Mysore	4	30.90	12.84
Pepsu	9	16.87	179.75
Rajasthan	2	41.20	20.60
Saurashtra	1	40.00	15.625
Delhi	2	22.00	1.75
Himachal Pradesh	38	17.62	1.36
Vindhya Pradesh	2	23.99	6.00
TOTAL	133	1,324.53	280.0075

Table No. 43

Grants-in-aids sanctioned to State Governments up to the end of March, 1957

National Water Supply & Sanitation Programme.

Name of State	(Rs. in lakhs)
Andhra	10.0
Assam	3.0
Bombay	9.64
Orissa	10.5
Uttar Pradesh	28.5
West Bengal	8.0
Jammu & Kashmir	5.0
Kerala	2.875
Delhi	2.50
Himachal Pradesh	4.93
TOTAL	84.945

Table No. 44
Protected Water Supply in Urban Areas (1954 & 1955)

State	Year	No. of towns in the State	Corresponding population	No. of towns having protected water supply	Corresponding population	% of urban population having water supply	No. of towns having inadequate water supply	Corresponding population	% of urban population having adequate water supply	No. of towns with no protected water supply	Corresponding population	% of urban population having no protected water supply
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Andhra ..	1954 ..	35	17,24,167	—	—	—	21	13,25,941	76.9	14	3,98,226	23.1
	1955 ..	35	17,24,167	—	—	—	19	12,43,204	72.11	16	4,80,963	27.89
Assam ..	1954 ..	27	4,00,210	3	10,251	2.6	6	1,94,017	48.5	18	1,95,942	48.9
	1955 ..	27	4,00,210	3	10,251	2.61	6	1,94,017	48.48	18	1,95,942	48.96
Bihar ..	1954 ..	113	27,04,731	—	—	—	13	10,74,288	39.7	100	16,30,443	60.3
	1955 ..	113	27,04,731	—	—	—	16	12,30,986	45.51	97	14,73,745	54.49
Bombay ..	1954 ..	241	92,83,320	44	61,08,051	65.8	47	9,84,088	10.6	150	21,81,181	23.6
	1955 ..	242	93,35,501	55	62,37,903	66.82	43	9,29,172	9.95	144	21,68,426	23.23
Madhya Pradesh ..	1954 ..	114	26,19,118	3	1,21,570	4.6	22	+	+	89	11,06,963	42.3
	1955 ..	114	26,19,118	3	1,21,570	4.64	22	—	—	89	11,06,963	42.26
Madras ..	1954 ..	61	36,27,295	7	5,72,459	15.8	29	20,65,003	56.9	25	9,89,833	27.3
	1955 ..	61	36,27,295	6	5,49,789	15.16	30	20,87,673	57.55	25	9,89,833	27.20
Orissa ..	1955 ..	40	5,87,079	5	1,90,323	32.42	33	+	+	2	31,656	5.39
Uttar Pradesh ..	1954 ..	486	86,26,000	42	41,84,000	48.5	5	2,12,000	2.5	439	42,30,000	49.0
	1955 ..	486	86,26,000	40	41,84,000	48.50	5	2,12,000	2.46	441	42,30,000	49.04
West Bengal ..	1955 ..	84	58,99,424	—	—	—	37	48,98,182	83.03	47	10,01,242	16.97
Travancore-Cochin ..	1954 ..	104	15,37,767	4	3,99,825	26.0	3	2,05,702	13.4	97	9,32,240	60.6
	1955 ..	104	15,37,769	4	3,99,825	26.00	3	2,05,702	13.38	97	9,32,240	60.62
Madhya Bharat ..	1954 ..	67	14,41,231	9	7,70,690	53.5	14	2,18,255	15.1	44	4,52,286	31.4
	1955 ..	67	14,41,231	9	7,70,690	53.47	14	2,18,255	15.15	44	4,52,286	31.38
Mysore ..	1954 ..	112	22,95,802	—	—	—	53	19,25,137	83.9	59	3,70,665	16.1
	1955 ..	112	22,95,802	—	—	—	54	19,30,028	84.07	58	3,65,774	15.93
Pepsu ..	1955 ..	70	6,59,362	7	1,76,392	26.00	63	4,82,970	73.25	—	—	—
Rajasthan ..	1954 ..	218	26,00,000	25	10,20,000	39.2	—	—	—	193	15,80,000	60.2
	1955 ..	218	26,00,000	33	13,00,000	50.00	—	—	—	185	13,00,000	50.00
Bhopal ..	1954 ..	25	2,01,962	2	1,16,149	57.5	—	—	—	23	85,813	42.5
	1955 ..	25	2,01,962	2	1,16,149	57.51	—	—	—	23	85,813	42.49
Delhi ..	1954 ..	9	13,78,272	6	13,56,151	98.4	—	—	—	3	22,121	1.6
	1955 ..	9	13,78,372	6	13,56,151	98.4	—	—	—	3	22,121	1.6
Himachal Pradesh ..	1954 ..	11	43,876	5	30,725	70.0	—	—	—	6	13,151	30.0
	1955 ..	11	43,876	5	30,725	70.03	—	—	—	6	13,151	29.97
Kutch ..	1954 ..	6	1,90,476	2	1,03,177	54.2	—	—	—	4	87,299	45.8
	1955 ..	6	1,90,476	2	1,03,177	54.17	—	—	—	4	87,299	45.83
Tripura ..	1954 ..	1	42,595	—	—	—	—	—	—	1	—	—
	1955 ..	1	42,559	—	—	—	—	—	—	1	—	—

NOTE :
+ Not available.
— Nil.

Table No. 45

Statement showing the total expenditure on Rural Medical Relief for the period 1954-56.

State	1954	1956
Andhra	Rs. 12,33,525	Rs. 12,25,536
Assam	35,69,825	48,89,883*
Bihar	6,76,448	47,43,251*
Bombay	12,45,747	13,26,027*
Madhya Pradesh	30,01,562	32,00,000*
Madras	20,74,682	2,27,399
Orissa	27,78,147	34,82,813
Punjab	35,06,164	13,76,875**
Uttar Pradesh	+	80,400**
West Bengal	1,45,63,370	2,09,41,000*
Hyderabad	6,64,184	—
Madhya Bharat	39,04,489	62,54,886*
Mysore	13,39,443	44,62,018
Rajasthan	7,29,950	+
Saurashtra	7,49,080	—
Bhopal	9,60,105	14,72,683*
Coorg	8,78,400	—
Delhi	3,36,768	1,85,454
Himachal Pradesh	9,86,913	14,04,566
Manipur	3,86,571**	12,65,624
Tripura	5,55,471	3,74,502*
Vindhya Pradesh	19,22,000	2,89,800*
Andaman & Nicobar Islands	75,05,758	49,92,629
TOTAL	4,61,15,844	5,72,02,717

NOTE:

*Where information for 1956 is not available, 1955 statistics are inserted.

**Information both urban and rural.

+ Not available.

Table No. 46

Vital Statistical Rates in Health Units—1954-1956

Health Units	Birth rate		Death rate		Infant mortality rate		Maternal mortality rate		% of still birth among total birth	
	1954	1956	1954	1956	1954	1956	1954	1956	1954	1956
Sirur Health Unit, Poona, Bombay	34.84	46.9*	23.84	21.9*	173.39	156.6*	5.54	4.6*	2.5	2.1
Poonamalle Health Unit, Madras	39.95	44.8	17.9	18.1	126.6	120.0	1.6	1.7	2.4	2.7
Rural Health Unit and Training Centre, Singur, Calcutta	40.91	46.7	9.79	15.7	104.2	113.1	3.9	0.6	2.5	0.3
Medical & Health Units, Hyderabad										
(a) Pattancheru		37.4*		15.5*		71.4*		1.4*	1.1	1.1
(b) Chidguppa		9.2*		6.7*		20.0*		30.0*	4.9	4.9
Health Training Centre, Ramnagar, Mysore	41.9	41.0	14.3	14.6	115.4	119.7	4.4	5.1	3	3
Health Units, Saurashtra										
(a) Manavadar		8.5*		3.3*		120.5*		9.1*		
(b) Vanthali		47.3*		17.8*		126.4*		+		
(c) Keshod		43.5*		13.3*		94.6*		+		
Health Units in Travancore-Cochin:										
(a) Medical College Health Unit, Ulloor	42.02		10.38		29.23		2.72		4.98	
(b) Primary Unit, Karungapally	30.3		9.9		31.0		1.00			
Najafgarh Health Unit, Delhi	49.19	46.7	14.65	15.7	92.12	113.1	2.01	0.6	+	0.3

NOTE: *Where statistics for 1956 are not available 1955 have been quoted.

+ Data not available.

Table No. 47

Death Rate per mille due to primary disease injuries and other causes—1954-56

				Poonamalee Health Unit, Madras	Training Health Centre, Ramnagaram	Training Health Centre, Singur, West Bengal	Najafgarh Health Unit, Delhi	Sirur Health Unit, Poona, Bombay	Medical College Health Unit, Ulloor	Primary Health Unit, Karunagapally	Medical Health Unit, Pattanchur, Hyderabad	Medical Health Unit, Sillod, Hyderabad	Medical Health Unit, Chidguppa, Hyderabad
Cholera	..	..	..	1954 1956	0.016 —	0.21 0.18	—	—	—	—	—	—	—
Small-pox	..	..	..	1954 1956	—	0.005 —	—	0.09 0.01	—	—	—	—	—
Plague	..	..	..	1954 1956	—	—	—	—	—	—	—	—	—
Malaria	..	..	..	1954 1956	—	—	—	0.27 0.21*	—	—	—	—	—
Other Fevers	..	..	..	1954 1956	1.82 1.40	1.361 1.53	9.87	0.01 0.58*	0.64	—	—	—	—
Dysentery & Diarrhoea	..	..	..	1954 1956	3.70 3.50	1.02 1.11	0.40 0.60	3.81 4.37*	0.50	0.02	—	—	—
Enteric Fever	..	..	..	1954 1956	—	0.042 +	0.59 0.10	0.49 0.48	0.34	0.04	—	—	—
Respiratory Diseases	..	..	..	1954 1956	2.20	+	0.41	+	+	+	+	+	+
Tuberculosis	..	..	..	1954 1956	0.666 +	0.097 0.14	+	0.85 1.03	0.42	0.02	+	+	+
Maternal Causes	..	..	..	1954 1956	0.65 +	0.115 0.04	+	+	0.12	0.06	+	+	+
Inquiries	..	..	..	1954 1956	+	+	+	+	+	+	+	+	+
All other causes	..	..	..	1954 1956	4.51 10.30	5.78 13.37	3.9	15.90 15.10*	8.36	0.08	+	+	+

*Where Statistics for 1956 are not available 1955 have been quoted.

+ Not available.

—Nil.

Table No. 48
Authorised accommodation in Jails—1954 & 1956.

State	Average daily population		Authorised accommodation		No. of prisoners per 100 units of authorised accommodation.	
	1954	1956	1954	1956	1954	1956
Andhra Pradesh	5,139	7,894	5,284	7,926	97	100
Assam	3,918	4,399	2,905	3,984	135	110
Bihar	16,960	+	16,176	+	105	+
Bombay	19,004	17,059*	23,514	21,050*	81	84*
Madhya Pradesh	5,914	+	9,465	+	62	+
Madras	18,799	15,015	16,939	14,548	111	+
Orissa	3,829	4,226	5,504	5,504	70	77
Punjab	7,162	+	4,665	+	154	+
Uttar Pradesh	36,573	35,619	35,793	35,521	102	100
West Bengal	10,472	11,306	11,939	12,461	88	84
Hyderabad	4,462		5,159		86	
Kerala	1,219	40	+	4,750	82	23
Madhya Bharat	2,633		4,133		64	
Mysore	2,633	4,911	4,797	5,568	65	88
Pepsu	880		+	5,815	+	
Rajasthan	3,571		5,395		66	
Saurashtra	981		+		67	
Bhopal	304		+		45	
Coorg	49		+		44	
Himachal Pradesh	131	198	206	261	64	36
Kutch	124		148		84	
Manipur	219	124	260	294	84	+
Tripura	+	333	+	+	+	+
Vindhya Pradesh	721		982		73	
Andaman & Nicobar Islands	+	+	+	+	+	+

NOTE : † Not available.

*Information up to 31-10-56.

Table No. 49

Percentage of admission in hospitals for treatment of various diseases—1954-56.

State	Year	Cholera	Small-pox	Plague	Influenza	Enteric fever	Malaria	Pyrexia of uncertain origin	T.B. of Lungs	Pneumonia	Other respiratory diseases	Dysentery	Diarrhoea	Anaemia and debility	Other deficiency diseases
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Andhra Pradesh	1954 1956	— —	0.03 —	— —	1.64 3.69	0.19 0.09	27.10 17.71	4.63 9.16	4.0 2.0	2.99 0.76	7.81 11.73	16.59 13.53	2.51 5.62	7.71 9.31	— 4.95
Assam	1954 1956	— —	— —	— —	3.14 0.95	0.39 0.09	17.44 16.45	1.84 5.25	0.79 1.74	2.58 0.95	5.73 5.68	28.37 30.12	10.93 5.51	4.11 4.73	0.26 1.26
Bihar	1954 1956	— —	0.19 +	— —	4.9 +	1.03 +	15.89 +	0.79 +	0.90 +	0.24 +	6.41 +	11.14 +	5.38 +	— +	— +
Bombay	1954 1956	— —	0.05 —	— —	0.44 2.67	0.19 1.18	16.85 15.46	1.00 0.72	2.78 4.51	0.85 1.45	4.70 9.34	5.71 12.58	3.37 3.71	2.62 6.10	5.62
Madhya Pradesh	1954 1956	— —	0.12 +	— —	1.01 +	0.79 +	19.75 +	9.70 +	3.33 +	0.7 +	6.15 +	9.44 +	4.30 +	3.95 +	— +
Madras	1954 1956	— —	0.0 +	— —	1.47 +	0.17 +	2.23 +	1.17 +	2.93 +	0.95 +	3.82 +	3.73 +	0.74 +	— +	— +
Orissa	1954 1956	— —	— —	— —	1.23 2.74	0.78 0.21	20.81 15.57	10.09 3.63	1.50 0.66	0.60 0.53	11.53 5.03	7.49 5.91	10.36 9.64	3.83 3.77	2.10 7.69
Punjab	1954 1956	— —	— —	— —	0.22 +	0.21 +	25.08 +	2.51 +	9.75 +	0.75 +	9.77 +	2.40 +	0.99 +	4.47 +	— +

Table No. 49—concl'd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Uttar Pradesh	1954 1956	+	0.17	+	0.33	+	0.11	+	7.02	+	7.90	+	4.42	+	0.94
West Bengal	1954 1956	—	0.06 0.01	—	2.55 3.01	0.29 0.44	19.93 8.84	1.53 9.47	1.79 1.51	0.54 0.28	6.98 10.52	11.16 10.45	8.03 5.71	2.24 2.69	0.61 4.57
Kerala	1956	—	1.15	—	13.0	2.92	20.96	1.59	1.33	0.44	13.09	7.34	3.98	7.31	6.64
Mysore	1954 1956	—	—	—	—	—	22.11 11.41	+	0.49 0.21	0.33 0.39	12.86 12.52	17.19 5.23	7.91 1.59	3.39 2.42	+
Rajasthan	1954 1956	—	0.04	—	1.73 1.02	0.10 0.11	20.82 29.37	1.94 0.49	0.58 0.98	0.01 1.25	16.84 16.42	18.70 4.34	7.14 6.23	2.55 1.70	1.33 1.17
Delhi	1954 1956	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Himachal Pradesh	1954 1956	—	—	—	2.73 4.91	0.14	0.51 3.76	—	—	—	24.67 20.61	4.81 2.86	2.62 3.75	0.80 3.74	0.71
Kutch	1954	—	—	—	0.22	—	22.43	—	21.89	—	9.93	13.21	11.52	11.79	4.48
Manipur	1954 1956	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Tripura	1954 1956	+	+	+	+	+	8.51	11.61	—	—	22.82	11.61	10.06	4.45	—
Vindhya Pradesh	1954	—	0.05	—	5.84	—	22.07	0.28	0.05	0.43	11.66	9.81	7.89	5.23	—

Note :

+ Not available.

—Nil.

Table No. 50

Case Fatality Rate (1954 & 1956)

State	Year	Cholera	Small-pox	Influenza	Enteric Fever	Malaria	Pyrexia of uncertain origin	T.B. of Lungs	Pneumonia	Other Respiratory diseases	Dysentery	Diarrhoea	Anaemia & Debility	Other deficiency diseases
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Andhra Pradesh	1954 1956	—	—	—	66.66	0.52	—	11.90 1.49	3.23 8.0	—	1.74 1.13	3.85 0.54	3.75 1.46	—
Assam	1954 1956	—	—	—	11.11	1.25 1.06	—	27.78 22.50	5.08 9.01	3.05 1.53	1.39 1.44	1.20 1.57	8.51 13.77	1.05 3.45
Bihar	1954 1956	—	—	—	1.26	0.81	1.64	13.77	8.11	0.51	0.46	0.12	—	—
Bombay	1954 1956	—	—	—	7.7	—	—	10.59 8.04	—	0.50 0.24	0.21	0.35	0.45 1.49	81
Madhya Pradesh	1954 1956	+	+	+	+	+	+	+	+	+	+	+	+	+
Madras	1954 1956	—	25.0	—	22.22 6.25	0.44 1.06	0.15 2.38	15.53 2.41	12.50	—	0.93	—	11.11	—
Orissa	1954 1956	—	—	—	—	0.29 0.17	—	10.00 2.13	15.00 5.26	0.78 0.28	0.80 1.18	0.58 1.01	0.78 0.74	—
Punjab	1954 1956	+	+	+	7.69	—	—	6.38	—	—	—	—	—	—
Uttar Pradesh	1954 1956	—	3.12	—	1.61	9.52	0.14 0.10	0.50 0.15	6.25 5.80	1.22	0.36	0.53 0.43	4.32 1.35	0.57
West Bengal	1954 1956	—	—	—	0.21	—	0.37	2.46 2.63	1.35 7.14	0.31 0.06	0.13 0.06	0.09	0.98 0.49	0.28

Table No. 50—concl'd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Hyderabad ..	1954	—	+	+	+	+	+	+	+	0.03	+	+	0.05	+
Kerala ..	1956	—	—	—	—	—	—	—	—	—	—	—	—	—
Mysore ..	1954 1956	—	—	5.17	—	0.06 4.36	1.10	0.63 6.70	0.18	14.86	2.76	1.3	0.16 28.77	—
Pepsu ..	1954	—	—	—	—	—	—	100.0	—	—	—	—	—	—
Madhya Bharat ..	1954	—	—	—	—	1.50	—	50.0	15.4	1.58	1.92	—	50.0	—
Rajasthan ..	1954 1956	—	—	—	—	—	1.75	35.29 7.7	—	1.1	—	0.60	—	—
Saurashtra ..	1954	—	—	—	—	—	—	7.14	—	—	—	—	—	—
Bhopal ..	1954	—	—	—	—	—	—	—	—	—	—	—	—	—
Coorg ..	1954	—	—	—	—	—	—	—	—	—	—	—	—	—
Himachal Pradesh ..	1954 1956	—	—	—	—	—	—	—	—	—	—	—	—	—
Kutch ..	1954	—	—	—	—	—	—	—	—	—	—	—	—	—
Manipur ..	1954 1956	—	—	—	—	—	—	—	—	—	—	—	—	—
Tripura ..	1954 1956	—	—	—	—	—	—	—	—	—	—	—	—	—
Vindhya Pradesh ..	1954	—	—	—	—	0.16	—	—	4.0	—	—	0.66	—	—
Andaman & Nicobar Islands ..	1954 1956	+	+	+	+	+	+	+	+	+	+	+	+	+

NOTE: + Not available.
— Nil.

Table No. 51

Admission Rate in Hospitals & Constantly Sick Rate—1954—1958.

State	Admission rate per thousand of average daily population		Constantly sick rate per thousand of average daily population	
	1954	1956	1954	1956
Andhra Pradesh	202	415	7.6	15.6
Assam	984	524	23.6	56.8
Bihar	909	+	31.9	+
Bombay	446	259*	9.9	11.2*
Madhya Pradesh	385	+	14.2	+
Madras	287	154	11.8	8.1
Orissa	872	1,694	39.3	58.0
Punjab	877	+	22.6	+
Uttar Pradesh	522	523	15.9	16.0
West Bengal	1,305	1,340	38.9	38.0
Hyderabad	+	—	75.0	—
Kerala	560	2,800	19.3	33.1
Madhya Bharat	222	—	5.1	—
Mysore	647	325	18.7	29.9
Pepsu	472	—	131.7	—
Rajasthan	823	630	32.2	22.6
Saurashtra	+	+	83.6	—
Delhi	+	+	+	+
Himachal Pradesh	+	6,177	424.3	1,002.0
Kutch	+	—	40.3	—
Manipur	352	+	54.8	+
Tripura	+	+	+	+
Vindhya Pradesh	803	—	71.1	—

NOTE: + Not available.

*Information upto 31-10-56.

Table No. 52

Fairs & Festivals—1954—1956

State	Year	No. of Fairs	Total congregation	No. banned for reasons of public health	No. of infections disease	No. of anti-Cholera inoculations performed	No. of vaccination performed	Death due to		Remarks
								Cholera	Small-pox	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Andhra Pradesh ..	1954 1956	355 +	1,000 to 1,00,000 +	— +	24 +	29,358 +	+	— +	— +	+
Assam ..	1954 1956	11 15	1,42,000 50,000	— —	— —	— —	+	— —	— —	No out-break of epidemic.
Bihar ..	1954 1956	186 +	50,00,000 +	— +	— +	— +	+	— +	— +	+
Bombay ..	1954 1956	25 +	15,79,000 +	— +	— +	97,013 +	+	— —	— —	All fairs passed with a clean bill of health. Management of fairs was either under Govt. or municipalities or village panchayats or pilgrim committees.
Madhya Pradesh ..	1954 1956	78 +	10,000 to 1,00,000 +	— +	— +	35,43,325 +	+	— +	— +	
Madras ..	1954 1956	..	+	+	+	+	+	+	+	No out-break of epidemic.
Orissa ..	1954 1956	..	+	+	+	+	+	+	+	No out-break of epidemic. Sacred tanks were chlorinated.
Punjab ..	1954 1956	..	1 lakh 2 lakhs +	— —	— —	— —	— —	— —	— —	No out-break of epidemic; proper arrangements for sanitation & medical relief were made at these fairs.
Uttar Pradesh ..	1954 1956	..	5 6 +	45,40,000 +	— —	5 +	3,29,164 +	+	+	No out-break of epidemics.
West Bengal ..	1954 1956	..	1,155 +	44,12,790 +	27 +	27 +	2,35,278 1,13,831 +	23,140 1,02,606 +	— — +	+
Kerala ..	1954 1956	..	+	+	+	+	—	+	—	
Hyderabad ..	1954 1956	..	2,463 +	+	58 +	—	48,502 +	32,422 +	— +	
Madhya Bharat ..	1954 1956	..	77 +	+	+	+	+	+	+	
Mysore ..	1954 1956	..	+	+	+	+	+	+	+	No out-break of epidemics
Rajasthan ..	1954 1956	..	21 40 +	+	+	—	2,320 +	+	—	No out-break of epidemic.
Bhopal ..	1954 1956	..	20 +	1,40,006 +	— +	— +	+	+	— +	

NOTE: + Not available.
— Nil.
P—For Plague.

Table No. 52—concl'd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Coorg ..	1954	7	3,000 to 10,000	—	—	—	6,000	—	—	
	1956	+	+	+	+	+	+	+	+	
Himachal Pradesh	1954	18	13,00,000	1	—	793	532	—	—	No out-break of epide- emics. Proper arrangements were made for water supply and conservancy.
	1956	20	1,87,000	—	—	6,288	208	—	—	
Manipur ..	1954	+	+	+	+	+	+	+	+	No out-break of epide- emics.
	1956	2	+	—	—	—	—	—	—	
Tripura ..	1954	5	10,000	—	5	+	+	—	—	No out-break of epide- emics. Health staff were deputed for health education.
	1956	3	+	—	—	+	+	—	—	
Andaman & Nicobar Islands.	1954	—	—	—	—	—	—	—	—	No out-break of epide- emics.
	1956	1	5,000	—	—	—	—	—	—	

NOTE :
+ Not available.
— Nil.

Table No. 53

Number of samples examined and percentage found adulterated 1954-1956

State	Year	Milk & milk products		Ghee		Edible Oils		Flours & other Food Stuffs		Total examined	Percentage adulterated
		No. examined	% adulterated	No. examined	% adulterated	No. examined	% adulterated	No. examined	% adulterated		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Andhra Pradesh ..	1954	3,886	66.4	763	39.7	917	13.0	1,104	2.3	6,670	48.4
	1956	+	+	+	+	+	+	+	+	+	+
Assam ..	1954	120	592.4	14	64.3	131	37.4	408	65.9	673	59.1
	1956	352	49.7	12	50.0	125	32.0	140	54.3	629	47.2
Bihar ..	1954	289	16.3	308	45.8	1,367	31.2	1,163	11.6	3,127	24.0
	1956	+	+	+	+	+	+	+	+	+	+
Bombay ..	1954	15,548	30.1	1,850	12.4	+	+	10,501	23.4	27,899	26.4
	1956	1,074	53.4	162	74.7	146	17.8	23	21.7	1,405	51.6
Madhya Pradesh ..	1954	+	+	+	+	+	+	+	+	+	+
	1956	+	+	+	+	+	+	+	+	+	+
Madras ..	1954	6,919	46.5	773	35.8	1,929	11.4	2,050	24.8	11,671	36.2
	1956	+	+	+	+	+	+	+	+	+	+
Orissa ..	1954	+	+	+	+	+	+	+	+	+	+
	1956	+	+	+	+	+	+	+	+	+	+
Punjab ..	1954	9,021	25.9	1,003	13.3	478	9.6	2,768	44.8	13,270	28.3
	1956	6,014	27.2	854	12.4	491	8.7	2,415	23.9	9,864	26.3
Uttar Pradesh ..	1954	11,045	31.3	3,998	23.0	5,062	23.5	4,982	21.0	25,087	28.4
	1956	+	+	+	+	+	+	+	+	+	+

Table No. 53—concl'd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
West Bengal	1954 1956	3,236 2,796	47.0 34.5	748 426	34.9 37.8	5,600 4,256	18.3 10.4	818 1,328	17.4 25.4	10,402 8,806	28.4 21.6
Hyderabad	1954	1,133	27.2	108	48.2	389	22.4	426	13.4	504	24.5
Kerala	1956	+	+	+	+	+	+	+	+	+	+
Mysore	1956	313	42.2	135	27.4	38	2.6	121	3.3	607	29.0
Rajasthan	1954 1956	3,222 4,173	33.6 22.8	8,985 6,140	13.4 14.2	86 240	32.6 33.3	232	24.1	10,785	18.6
Bhopal	1954	21	43.0	59	59.3	10	40.0	3	10.0	93	54.8
Coorg	1954	95	8.4	28	21.5	+	+	+	+	123	19.3
Himachal Pradesh ..	1956	+	+	+	+	+	+	+	+	+	+
Andaman & Nicobar Islands.	1956	12	25.0	+	+	+	+	+	+	12	25.0

+ Not available.

Table No. 54

Action taken against adulteration of food
(1954-55)

State	Prosecution launched		No. of cases punished		Fines realised	
	1954	1956	1954	1956	1954	1956
					Rs.	Rs.
Andhra	3,228	+	2,757	+	89,136	
Assam	+	+	+	+	+	
Bihar	773	+	277	+	12,980	
Bombay	+	10,153	+	3,692	+	
Punjab	4862	2,326	3,668	2,620*	3,19,152	1,91,242
Uttar Pradesh	+	7,013	+	4,279		3,60,286
West Bengal	675	+	606	+	+	
Hyderabad	+	+	+	+	+	
Kerala	+	1,020	+	+	+	
Rajasthan	201	1,170	+	+	+	
Bhopal	41	+	7	+	107	
Coorg	+	13	14	+	310	

NOTE :

+ Not available.

*Old cases also included.

Table No. 55

Table showing the number of Hospitals, Dispensaries, number of beds reserved for Tuberculosis patients under the Railways for the years 1953 and 1956.

	Eastern		Western		Northern		Southern		Central		North Eastern		South Eastern	
	1953	1956	1953	1956	1953	1956	1953	1956	1953	1956	1953	1956	1953	1956
1. No. of Hospitals	17	15	9	10	12	12	12	13	12	12	11	12	7	7
Number of beds	801	584	187	202	385	449	440	479	462	482	433	481	377	377
2. No. of Dispensaries.	109	58	54	59	59	75	63	67	52	50	65	67	54	54
Number of beds	117	60	86	91	75	138	—	23	29	25	38	52	9	9
3. No. of beds for Tuberculosis.	54	55	27	49	6	50	—	30	—	—	7	29	21	41
4. No. of M. & C.W. Centres.	39	21	15	16	11	11	17	19	3	3	1	1	16	21
Number of beds	—	—	52	58	2	4	—	—	16	16	—	—	—	—
5. No. of Chest Clinics	—	5	—	—	—	3	—	—	—	—	—	—	2	2
Number of beds	—	—	—	—	—	18	—	—	—	—	—	—	—	15
6. No. of other institutions.	—	10	—	—	—	—	—	19	—	—	—	—	—	—
Number of beds	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table No. 56

Table showing the number of Maternity and Child Welfare Centres with beds available and staff employed by them together with the work done during the years 1954 and 1956 (Railways.)

Name of the Railway	No. of M. & C.W. Centres		No. of beds		Supervisory		Nurses		Midwives		Dais		Health Visitors		Ayahs
	1954	1956	1954	1956	1954	1956	1954	1956	1954	1956	1954	1956	1954	1956	
1. Eastern ..	39	21	—	—	4	—	—	—	37	21	13	5	5	5	—
2. Western ..	15	16	59	58	—	—	—	—	21	20	27	—	2	10	26
3. Northern ..	11	11	2	4	2	3	1	1	7	7	4	5	4	4	—
4. Southern ..	17	19	—	—	6	5	4	18	13	—	12	15	4	5	—
5. Central ..	3	3	16	16	—	—	1	1	4	4	2	—	2	1	2
6. North Eastern.	1	1	—	—	1	1	—	—	3	3	1	1	1	1	—
7. South Eastern.	—	21	—	—	—	8	—	—	—	56	—	5	—	1	—

Number of Home Visits made during the years 1954—1956. (Railways)

Name of the Railway	Pre-natal		Ante-natal		Infant visits		No. of Labour cases		No. of deliveries		Attendance		Classes for Mothers	
	1954	1956	1954	1956	1954	1956	1954	1956	1954	1956	1954	1956	1954	1956
Eastern ..	42,177	19,630	16,531	7,740	34,485	24,434	3,441	2,038	2,642	1,227	17,326	13,548	1,002	8
Western ..	23,597	912	+	1,419	+	1,199	—	2,023	1,726	1,689	—	12,764	—	92
Northern ..	32,884	23,111	5,692	6,980	17,022	41,203	873	1,255	641	1,148	32,842	37,021	221	138
Southern ..	17,533	19,791	31,197	30,576	12,952	20,743	1,882	1,754	1,654	1,707	45,237	85,356	410	200
Central ..	902	—	2,158	183	+	20	+	361	382	500	+	2,993	+	+
North Eastern ..	1,018	4,920	881	5,037	512	2,186	1,958	2,243	79	1,359	19,213	4,673	—	2
South Eastern ..	+	13,348	+	11,690	+	11,256	+	1,927	+	1,491	+	3,499	+	—
TOTAL ..	118,111	81,712	87,217	65,625	64,971	101,041	8,154	11,601	7,124	9,121	114,618	159,854	1,633	519

+ Not available.
— Nil.

Table No. 58

Immunisations & Control (Malaria)

	Eastern Railway		Western Railway		Northern Railway		Southern Railway	
	1954	1956	1954	1956	1954	1956	1954	1956
No. of vaccinations performed:								
Primary	14,689	7,345	3,527	5,152	6,820	5,424	4,282	4,855
Re-vaccination	123,974	85,241	3,844	10,075	32,002	33,047	29,284	30,012
TOTAL	138,663	92,586	7,371	15,227	38,822	38,471	33,566	34,867
No. of inoculations:								
Anti-Cholera ..	31,848	29,627	137	242	10,395	8,571	6,544	6,843
Anti-Plague ..	50	832	—	—	15	109	347	20
Anti-Typhoid ..	9,061	7,924	642	414	1,214	3,261	1,194	944
Others ..	3,561	2,991	135	1,372	117	44	9	95
No. of B.C.G. Vaccinations performed	2,026	—	—	230	—	—	678	543
Quantity of Quinine and other Anti-malarials distributed:								
Powder used	+	—	53	223	21	1,025	574	99
Tablets number	+	57,590	271,000	603,000	402,939	8,385	75,838	77,278
Injectons number	+	—	18,060	37,350	612	340	1,278	2,286

Table No. 58—concl'd.

	Eastern Railway		Western Railway		Northern Railway		Southern Railway	
	1954	1956	1954	1956	1954	1956	1954	1956
No. of Anti-malaria Units working.	56	19	+	28	23	31	3	—
No. of anti-malaria surveys	—	—	+	—	69	—	—	—
Larvicidal operations	300	36	+	—	—	—	—	—
No. of Houses sprayed	79,410	13,697	+	70,960	65,746 *	65,110	9,000	9,500
Quantity of D.D.T. used (in lbs.)	21,594	4,348	+	8,049	4,174	4,226	3,400	4,478

+ Not available.

—Nil.

Table No. 58—cont'd.

Preventive Measure:

	Central Railway		North Eastern Railway		South Eastern Railway	
	1954	1956	1954	1956	1954	1956
No. of vaccinations performed:						
Primary ..	7,627	13,077	—	14,291	+	8,776
Re-vaccination ..	28,910	43,464	55,693	59,462	+	1,39,381
TOTAL ..	36,537	56,541	55,693	73,753	+	1,48,157
No. of inoculations:						
Anti-cholera ..	12,063	24,493	19,979	31,464	+	27,603
Anti-plague ..	599	214	6	11,700	+	—
Anti-typhoid ..	1,001	7,295	13,539	14,916	+	11,671
Others ..	80	141	—	—	+	60
No. of BCG Vaccinations performed	—	+	—	—	+	+
Quantity of quinine and other Anti-malarials distributed:						
Powder used (in lbs.) ..	15	26	—	35	+	21
Number of tablets ..	2,54,498	3,14,130	11,98,951	11,56,633	+	1,67,869
Number of injections ..	5,871	8,562	73	624	+	192
No. of anti-malaria units working ..	28	28	24	26	+	37

Table No. 58—concd.

	Central Railway		North Eastern Railway		South Eastern Railway	
	1954	1956	1954	1956	1954	1956
No. of anti-malaria surveys ..	..	..	..	..	+	10
Larvicidal operations ..	..	..	..	21	+	—
No. of houses sprayed ..	30,993	31,004	97	27,593	+	14,600
Quantity of DDT used (in lbs.) ..	39,115	17,825	20,863	15,805	+	4,985

+ Not available.

— Nil.

Table No. 59
Mortality and Sickness Statistics (Railways)
(1955-56)

Diseases	Eastern Railway				Western Railway		
	1955		1956		1955		1956
	C	D	C	D	C	D	C
Cholera ..	24	3	25	2	—	—	—
Smallpox ..	112	12	95	21	225	4	286
Plague ..	—	—	—	—	—	—	—
Malaria ..	3,741	5	1,597	2	81,454	9	84,994
Enteric fever ..	1,055	15	1,247	8	584	1	731
Other fevers ..	90,867	18	25,422	11	8,784	1	5,963
Dysentery ..	25,352	3	25,704	3	18,636	2	21,754
Diarrhoea ..	27,616	9	25,904	12	39,899	4	49,828
Tuberculosis ..	1,050	33	569	17	895	15	1,315
Leprosy ..	25	—	23	—	21	—	7
Injuries ..	36,512	18	38,363	8	71,056	23	80,691
All other causes	423,049	142	505,617	158	510,600	140	570,916
TOTAL ..	609,351	258	624,566	242	732,163	199	816,485

*NOTE.—

+ Not available.
 — Nil.
 C—Cases.
 D—Deaths.

Table No. 59 : contd.
Mortality and Sickness Statistics (Railways)

Diseases	Northern Railway				Southern Railway			
	1955		1956		1955		1956	
	C	D	C	D	C	D	C	D
Cholera ..	2	—	2	—	5	—	—	—
Smallpox ..	466	13	220	14	92	1	172	11
Plague ..	—	—	—	—	—	—	—	—
Malaria ..	37,890	3	47,519	2	8,052	2	8,167	—
Enteric fever ..	1,597	5	1,325	6	587	8	781	11
Other fevers ..	41,089	3	53,624	11	1,42,334	16	1,61,013	18
Dysentery ..	28,193	1	40,610	—	28,136	3	33,786	4
Diarrhoea ..	38,010	3	40,179	1	53,896	2	63,398	4
Tuberculosis ..	1,670	16	1,377	17	1,216	52	1,489	52
Leprosy ..	10	—	2	—	199	3	251	1
Injuries ..	54,013	14	67,834	19	1,21,350	12	1,20,371	10
All other causes	7,71,520	93	6,71,598	108	6,66,581	13	7,10,866	113
TOTAL ..	9,74,460	151	924,250	178	1,022,498	237	1,100,294	226

Table No. 59
Mortality and Sickness Statistics (contd.)
1954—1956

Diseases	Central Railway				North-Eastern Railway				South-Eastern Railway			
	1954		1956		1954		1956		1956		1956	
	C	D	C	D	C	D	C	D	C	D	C	D
Cholera ..	4	1	8	2	—	—	20	6	40	8	—	—
Smallpox ..	609	21	451	16	73	1	164	18	49	4	—	—
Plague ..	—	—	—	—	—	—	—	—	—	—	—	—
Malaria ..	34,421	5	26,802	2	23,199	34	10,795	8	7,439	4	—	—
Enteric fever ..	786	19	653	14	1,768	22	1,199	7	1,637	6	—	—
Other fevers ..	60,633	11	72,621	16	59,653	2	62,791	36	1,18,050	19	—	—
Dysentery ..	23,318	3	20,481	3	40,118	3	56,914	6	58,120	7	—	—
Diarrhoea ..	22,517	10	35,183	14	33,768	3	41,557	20	29,469	6	—	—
Tuberculosis ..	1,049	58	1,517	62	1,070	42	1,158	34	1,465	51	—	—
Leprosy ..	38	—	42	—	27	—	25	—	25	—	—	—
Injuries ..	40,559	36	46,186	45	42,992	22	44,735	27	63,103	3	—	—
All other causes ..	1,66,662	170	2,79,827	163	23,04,626	161	3,99,044	203	2,96,333	91	—	—
TOTAL ..	358,986	354	483,771	334	2,507,294	290	638,397	365	679,730	199	—	—

—Nil.
C= Cases.
D= Deaths.

Table No. 60

Medical and Public Health staff employed by the Railways 1954-1956

Railway	Year	No. of stations & colonies having sanitation committees	No. of staff employed	No. of stations where the controlling authority is			
				Traffic Deptt.	Eng. Deptt.	P.H. Deptt.	Medical Deptt.
Eastern Railway	1954	68	Sanitary Supdt.	1	986	—	87
	•		Sanitary Inspector	109			
			Sweepers	27			
			Others	5,373			
Do.	1956	43	Sanitary Inspector	54	445	+	43
			Sweepers	2,558			
			Others	461			
Western Railway	1954	64	Sanitary Supdt.	+ At all other stations.	64	—	—
			Sanitary Inspectors				
			Others				
Do.	1956	59	+	—	—	—	59
Northern Railway	1954	44	Sanitary Inspectors	34	774	220	12
			Malaria Inspectors	11			
Others including carmen, Lorry drivers etc.				2,899			
Northern Railway	1956	50	Sanitary Inspectors	44	731	67	(Delhi area)
			Others	37,940			
Southern Railway	1954	105	†	All Stations premises.			
					—	—	@
Southern Railway	1956	105	Sanitary Inspectors	117	*	—	@
			Sweepers	1,489			
			Others	189			
Central Railway	1954	57	Asstt. Health Officers	1			
			Sanitary Inspectors	69			
			Anti-Malaria Overseer	1			
			Muccadams	127			
			Sweepers	2,462			
			Malaria Khalasis	125			
Do.	1956	60	Asstt. Health Officer	1			
			Sanitary Inspectors	75			
			Sweepers	2,726			
			Others	282			
At all other stations Operating Department is the controlling authority					+	+	+

† Not available.

— Nil.

@ Victoria Terminus, Poona and Wadi Bunder/stations.

Table No. 60—contd.

Railway	Year	No. of stations & colonies having sanitation committees	No. of staff employed	No. of stations where the controlling authority is:			
				Traffic Deptt.	Eng. Deptt.	P.H. Deptt.	Medical Deptt.
North-Eastern Railway	1954	56	Total staff	3,755	Rest of the stations	—	57
North-Eastern Railway	1956	56	+	3,784	+	+	67
South-Eastern Railway	1954		+	+	+	+	+
Do.	1956	33	Sanitary Supdt.	1	+	+	49
			Sanitary Inspectors	52			
			Others	2,331			

+ Not available.

—Nil.

Table No. 61
Sources of Water Supply at Railway Stations and Railway Colonies for 1954—1956

Railways	Sources of Water supply	No. of stations and colonies having protected water supply		No. of stations and colonies in which water supply is open to infection		Bact. & Chemical examination of water samples	
		1954	1956	1954	1956	No. of samples	No. of examinations done
Eastern Railway	.. River, deep wells, tube wells, open wells shallow wells.	267	412	806	137	117	142
Western Railway	.. Open wells, tube wells and rivers.	542	+	Rest of the stations.	193	62	103
Northern Railway	.. Deep tube wells, shallow open wells, Rivers, Canal, Ground tanks, Municipal Water Supply Hand Pumps.	929	+	37	467	332	178
Southern Railway	.. Lake, Municipal sources, ground level, reservoirs, Draw wells, (ground level tanks, wells, canals, river, shallow wells, deep wells.	148	151	All other Stations.	200	300	2,700
Central Railway	.. Wells, reservoirs, tanks, rivers, tube wells and local Municipal sources.	52	55	855	852	689	+
North Eastern Railway	.. Tube wells, Shallow wells, Ground tanks, Rivers and pumps.	148	415	+	+	362	202
South Eastern Railway	.. Tube wells, Hand pumps, Shallow wells, Ground wells etc.	+	+	+	232	+	69

NOTE.—

*Not available.

Table No. 62

Food Inspection by Railway Health Staff in 1954—1956

Railways	No. of officers vested with powers of Food Inspectors		No. of Food Samples examined		Percentage adulterated		No. of employees of Food stalls etc. examined medically		Percentage infected		Any special Food other Regulations in force particularly in Rly. settlement	
	1954	1956	1954	1956	1954	1956	1954	1956	1954	1956	1954	1956
North-Eastern Railway	..	None	106	41	54.7	27.0	3,394	2,972	0.1	0.3	None	None
Central Railway	..	None	1,012	1,220	18.0	21.6	2,384	3,600	0.6	0.2	The Prevention of Food Adulteration Act, 1954.	0.2
Northern Railway	..	143	1,463	756	1.7	15.9	6,873	5,970	0.9	0.9	None	None
Eastern Railway	..	246	814	755	6.0	11.7	4,958	4,962	31.9	2.00	None	None
Southern Railway	..	—	777	—	44.5	—	4,725	5,651	0.4	0.9	—	—
Western Railway	..	90	976	+	16.1	+	4,782	+	0.9	+	—	+

+ Not available.
— Nil.

Table No. 63

Training in First Aid and Home-Nursing number of Staff Trained in 1954 & 1956.
(Railways)

Railways	First Aid		Home-Nursing	
	1954	1956	1954	1956
Eastern Railway	1,439	902	6	+
Western Railway	1,488	1,327	+	+
Northern Railway	1,470	2,463	16	85
Southern Railway	1,989	1,748	+	—
Central Railway	16,785	+	6 classes	+
North-Eastern Railway	718	1,495	—	—
South-Eastern Railway	+	1,955	+	—

+ Not available.
— Nil.

Table No. 64

Health Education and Publicity (Railways)
1954—1956

Railways	Exhibitions shows		Childrens Fairs		Health weeks		Baby weeks or shows	
	1954	1956	1954	1956	1954	1956	1954	1956
Eastern Railway	2	—	—	—	—	—	—	—
Western Railway	2	—	2	—	2	—	—	2
Northern Railway	—	—	4	—	3	—	1	1
Southern Railway	—	—	—	—	—	—	—	—
Central Railway	—	—	—	—	—	—	—	—
North-Eastern Railway	—	1	—	—	—	—	1	—
South-Eastern Railway	—	—	—	—	—	—	—	—

+ NOTE :— Nil.

Table No. 65

Statement showing the number of existing Institutions and new Institutions opened during the period 1954-1956.

State	Year	Existing Institutions	Newly opened	
			Hospitals	Dispensaries
Andhra	1954	447	6	6
	1955*	431	4	12
Assam	1954	540	—	28
	1955*	554	—	2
Bihar	1954	779	—	32
	1956	818	4	9
Bombay	1954	916	—	—
	1956	1,410	—	3
Madhya Pradesh	1954	493	—	2
	1955*	498	—	4
Madras	1954	714	2	1
	1956	665	4	40
Orissa	1954	383	—	6
	1956	401	1	14
Punjab	1954	638	—	2
	1956	624	—	14
Uttar Pradesh	1954	1,119	1	12
	1956	1,170	—	20
West Bengal	1954	1,223	25	—
	1955*	1,254	39	—
Hyderabad	1954	237	—	4
	1955*	238	1	—
Jammu & Kashmir	1954	103	—	2
	1956	153	—	—
Madhya Bharat	1954	291	—	—
	1955*	292	5	1
Mysore	1954	542	2	18
	1956	776	—	25
Pepsu	1954	139	—	—
Rajasthan	1954	504	1	9
	1956	587	—	28
Bhopal	1954	29	3	—
	1955*	32	—	3
Coorg	1954	24	2	—
Delhi	1954	71	2	1
	1956	81	—	—
Himachal Pradesh	1954	75	—	8
	1956	80	—	—

Table No. 65—contd.

(1)	(2)	(3)	(4)	(5)
Kutch	1954 1955*	70 80	4 —	1 3
Manipur	1954 1956	52 +	— —	1 16
Tripura	1954 1956	69 +	1 —	2 —
Vindhya Pradesh	1954 1955*	84 112	2 —1	— —
Andaman & Nicobar Islands	1954 1956	21 22	— —	3 1
TOTAL	1954 1956	9,563 10,279	51 59	138 195

*Where information for 1956 is not available, 1955 statistics are inserted.

—Nil.

Table No. 66

Statement showing the number of Hospitals, Urban and Rural for the year 1954-56

State (1)	Year (2)	Urban					Rural					Total (14)	
		Govt. (3)	Govt. aided (4)	Local Bodies (5)	Mis- sionary (6)	Others (7)	Total (8)	Govt. (9)	Govt. aided (10)	Local Bodies (11)	Mis- sionary (12)		Others (13)
Andhra Pradesh	1954 1956	46 37	12 7	17 6	— —	14 20	89 70	47 54	2 5	14 23	— —	18 15	81 97
Assam	1954 1955	39 39	1 1	9 9	— —	8 8	57 57	7 7	— —	— —	— —	3 3	10 10
Bihar	1954 1956	65 75	4 —	15 5	— —	19 18	103 98	28 43	3 1	26 17	— —	16 16	73 77
Bombay	1954 1956	64 180	15 45	26 42	— —	30 57	135 324	16 34	1 10	3 20	— —	9 9	29 73
Madhya Pradesh	1954 1955	52 52	28 28	71 71	— —	24 24	175 175	— —	24 24	62 62	— —	17 17	103 103
Madras	1954 1956	75 82	10 8	16 10	— —	13 18	114 118	40 45	10 8	35 31	— —	21 29	106 113
Orissa	1954 1956	41 42	1 1	5 3	— —	— —	47 46	78 81	1 1	16 21	— —	5 6	100 109
Punjab	1954 1956	63 113	19 16	30 28	— —	7 13	117 170	7 9	1 1	4 2	— —	2 2	14 14
Uttar Pradesh	1954 1956	207 217	17 17	40 40	— —	10 9	274 283	57 60	7 7	42 41	— —	2 2	108 110
West Bengal	1954 1955	116 126	23 25	19 20	— —	14 17	172 188	299 814	5 8	9 8	— —	13 12	326 342
Hyderabad Deccan	1954 1955	31 32	— —	— —	— —	— —	31 32	— —	— —	— —	— —	— —	— —
Jammu & Kashmir	1954 1956	2 4	1 3	— —	— —	2 —	5 7	7 7	2 2	— —	— —	— —	9 9
Madhya Bharat	1954 1955	40 40	— —	— —	— —	6 6	46 46	8 8	1 1	— —	— —	1 1	10 10
Mysore	1954 1956	44 60	7 8	6 7	— —	3 4	60 79	7 37	3 4	31 37	— —	— —	41 78
Pepsu	1954 1956	47 +	— +	— +	— +	— +	47 +	— +	— +	— +	— +	— +	— +
Rajasthan	1954 1956	180 207	— —	— —	— —	27 19	207 226	58 74	— —	— —	— —	4 1	62 75
Saurashtra	1954 1956	+	+	+	+	+	+	+	+	+	+	+	+
Travancore-Cochin	1954 1956	+	+	+	+	+	+	+	+	+	+	+	+
Ajmer	1954 1956	+	+	+	+	+	+	+	+	+	+	+	+
Bhopal	1954 1955	5 5	— —	— —	— —	— —	5 5	6 11	— —	— —	— —	— —	6 11
Coorg	1954 1956	2 +	— +	— +	— +	— +	2 +	13 +	— +	— +	— +	2 +	15 +
Delhi	1954 1956	13 18	6 10	1 1	— —	— —	20 29	6 2	1 1	— —	— —	— —	7 3
Himachal Pradesh	1954 1956	14 14	— —	— —	— —	— —	14 14	10 7	— —	— —	— —	— —	10 7

(1)	(3)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Kutch Merged with Bombay ..	1954	13	—	—	—	1	14	1	—	—	—	1	2
Manipur	1954	5	—	—	—	—	5	12	—	—	—	3	15
	1956	7	—	—	—	—	7	12	—	—	—	—	12
Tripura	1954	1	—	—	—	—	1	3	—	—	—	—	3
	1956	1	—	—	—	1	2	4	—	—	—	—	4
Vindhya Pradesh	1954	21	—	—	—	4	25	22	—	—	—	—	22
	1955	22	—	—	—	7	29	40	—	—	—	—	40
Andaman & Nicobar Islands ..	1954	1	—	—	—	—	1	3	—	—	—	—	3
	1956	1	—	—	—	—	1	4	—	—	—	—	4

+ Not available.

Year	Urban					Rural							
	Govt.	Govt. aided	Local Bodies	Mis-sionary	Others	Total	Govt.	Govt. aided	Local Bodies	Mis-sionary	Others	Total	
1954..	..	1,187	144	255	—	183	1,768	735	61	242	—	117	1,155
1956..	..	1,374	169	242	—	221	2,006	853	73	262	—	113	1,301

State	Year	Urban					Rural						
		Govt.	Govt. aided	Local Bodies	Mis-sionary	Others	Total	Govt.	Govt. aided	Local Bodies	Mis-sionary	Others	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Andhra Pradesh	 1954	23	—	35	—	10	68	22	24	142	—	21	209
	 1955	8	1	18	—	7	34	28	29	143	—	30	230
Assam	 1954	9	1	—	—	—	10	163	—	158	—	142	463
	 1955	9	1	—	—	—	10	173	—	161	—	143	477
Bihar	 1954	6	2	12	—	2	22	67	5	476	—	33	581
	 1956	5	5	16	—	2	28	120	3	468	—	24	615
Bombay	 1954	35	25	81	—	11	152	240	109	181	—	70	600
	 1956	137	43	75	—	14	269	275	61	346	—	66	748
Madhya Pradesh	 1954	4	3	11	—	22	40	4	9	126	—	36	175
	 1955	4	3	11	—	22	40	11	9	124	—	36	180
Madras	 1954	9	—	88	—	13	110	49	41	260	—	59	409
	 1956	16	1	30	—	9	56	66	6	259	—	47	378
Orissa	 1954	3	1	6	—	6	16	98	—	102	—	20	220
	 1956	2	1	7	—	5	15	112	—	100	—	19	231
Punjab	 1954	34	12	45	—	9	100	162	84	157	—	2	405
	 1956	76	16	43	—	6	141	290	87	82	—	1	460
Uttar Pradesh	 1954	57	9	61	—	11	132	289	17	203	—	90	599
	 1956	63	9	61	—	10	143	329	17	200	—	88	634

Table No. 67—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
West Bengal	1954 1955	24 24	10 11	56 58	— —	5 7	95 100	63 63	35 34	483 480	— —	49 47	630 624
Hyderabad Deccan	1954 1955	12 12	— —	— —	— —	— —	12 12	194 194	— —	— —	— —	— —	194 194
Jammu & Kashmir	1954 1956	2 7	— —	— —	— —	— —	2 7	87 130	— —	— —	— —	— —	87 130
Madhya Bharat	1954 1955	29 29	— —	— —	— —	6 6	35 35	199 200	— —	— —	— —	1 1	200 241
Mysore	1954 1956	15 19	3 3	31 35	— —	— —	49 57	68 132	— —	323 429	— —	— 1	392 562
Pepsu	1954 1956	34	—	—	—	—	34	58	—	—	—	—	58
Rajasthan	1954 1956	72 120	— —	51 3	— —	— 24	123 147	98 126	— —	1 1	— —	13 12	112 139
Saurashtra	1954*	+	+	+	+	+	+	+	+	+	+	+	+
Travancore-Cochin	1954* 1956*	++ ++	++ ++	++ ++	++ ++	++ ++	++ ++	++ ++	++ ++	++ ++	++ ++	++ ++	++ ++
Ajmer	1954* 1956	++ ++	++ ++	++ ++	++ ++	++ ++	++ ++	++ ++	++ ++	++ ++	++ ++	++ ++	++ ++
Bhopal	1954 1955	7 7	— —	— —	— —	— —	7 7	11 8	— —	— —	— —	— —	11 9
Coorg	1954 1956	1	—	—	—	—	1	5	1	—	—	—	6

288

L15Health—20

Delhi	1954 1956	15 14	— —	16 18	— —	— —	31 32	7 11	— —	6 6	— —	— —	13 17
Himachal Pradesh	1954 1956	10 7	— —	— —	— —	— —	10 7	34 52	7 —	— —	— —	— —	41 52
Kutch	1954	2	—	—	—	—	2	—	9	—	—	31	52
Manipur	1954 1956	1 1	— —	— —	— —	— —	1 1	31 36	— —	— —	— —	— —	31 36
Tripura	1954 1956	3 2	— —	— —	— —	— 1	3 3	58 67	1 —	— —	— —	3 1	62 68
Vindhya Pradesh	1954 1956	— 2	— —	— —	— —	— 2	— 4	34 40	— —	— —	— —	3 —	37 40
Andaman & Nicobar Islands ..	1954 1956	— 3	— —	— —	— —	— —	— 3	17 18	— —	— —	— —	— —	17 18

NOTE :—Where information for 1956 is not available, 1955 statistics are inserted.

*Information not available.

SUMMARY

Year	Urban					Rural						
	Govt.	Govt. aided	Local Bodies	Mis-sionary	Others	Total	Govt.	Govt. aided	Local Bodies	Mis-sionary	Others	Total
1954 ..	407	66	493	—	95	1,061	2,070	342	2,618	—	574	5,604
1956 ..	567	94	375	—	115	1,151	2,481	246	2,799	—	517	6,043

289

Table No. 68

Statement showing the distribution of dispensary & hospital beds (urban & rural) and the total number of patients treated (indoor & outdoor)—1954—56.

State	Year	No. of beds			No. of patients treated		
		Urban	Rural	Total	In-door	Out-door	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Andhra ..	1954 ..	5,426	2,783	8,209	3,07,212	6,74,919	
	1955* ..	6,517	3,080	9,597	3,64,470	82,73,677	
Assam ..	1954 ..	2,302	489	2,791	42,795	19,19,026	
	1955* ..	2,302	489	2,791	35,904	21,50,722	
Bihar ..	1954 ..	5,518	1,522	7,040	1,85,113	55,10,682	
	1956* ..	5,678	1,983	7,661	2,34,534	47,88,745	
Bombay ..	1954 ..	10,114	2,651	12,765	6,54,468	83,30,389	
	1956* ..	19,138	4,647	23,785	1,61,799	99,84,017	
Madhya Pradesh ..	1954 ..	5,038	610	5,648	1,07,630	40,96,323	
	1955* ..	5,068	624	5,692	1,36,809	53,65,763	
Madras ..	1954 ..	14,661	3,576	18,437	1,03,010	1,21,62,623	
	1956 ..	12,726	3,407	16,133	7,30,972	1,41,92,442	
Orissa ..	1954 ..	2,114	1,309	3,423	4,35,209	52,78,029	
	1956* ..	2,161	1,362	3,523	2,93,746	54,97,782	
Punjab ..	1954 ..	7,239	2,132	9,371	2,02,459	61,02,834	
	1956 ..	9,313	2,295	11,608	2,43,442	99,04,785	
Uttar Pradesh ..	1954 ..	19,961	3,176	14,137	3,81,991	1,41,63,388	
	1956 ..	13,200	3,620	16,820	4,52,691	1,51,30,142	

West Bengal ..	1954 ..	13,429	7,290	20,719	4,24,450	63,08,177	
	1955* ..	14,368	7,600	21,968	5,00,656	69,57,264	
Hyderabad ..	1954 ..	5,293	966	6,259	1,43,140	62,59,934	
	1955* ..	5,293	966	6,259	1,48,013	71,76,825	
Jammu & Kashmir ..	1954 ..	450	400	850	18,397	19,87,335	
	1956 ..	1,063	438	1,051	19,550	20,54,412	
Madhya Bharat ..	1954 ..	2,608	280	2,888	76,627	48,47,657	
	1955* ..	2,608	280	2,888	70,614	49,93,889	
Mysore ..	1954 ..	6,111	1,147	7,528	1,94,278	95,50,687	
	1956 ..	7,877	2,713	10,590	3,09,480	1,29,14,381	
Pepsu ..	1954 ..	1,463	24	1,487	2,89,663	39,08,605	
Rajasthan ..	1954 ..	6,386	379	6,765	1,06,855	75,70,927	
	1956 ..	7,566	508	8,074	1,40,587	82,35,176	
Bhopal ..	1954 ..	673	78	751	34,742	6,03,166	
	1955* ..	893	116	1,009	24,004	6,19,464	
Coorg ..	1954 ..	406	216	522	20,158	1,48,040	
Delhi ..	1954 ..	2,368	218	2,586	66,474	49,80,402	
	1956 ..	3,449	106	3,555	1,02,042	67,12,941	
Himachal Pradesh ..	1954 ..	710	259	969	1,33,380	15,12,194	
	1956 ..	817	252	1,069	2,18,260	14,45,074	
Kutch ..	1954 ..	229	33	262	4,141	2,21,158	
Manipur ..	1954 ..	200	183	383	4,169	3,78,729	
	1956 ..	180	110	290	3,587	4,18,534	
Tripura ..	1954 ..	83	46	129	39,219	5,98,274	
	1956 ..	162	72	234	84,343	7,81,428	

Table No. 68—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Vindhya Pradesh	1954 1955*	775 1,308	— 201	775 1,509	14,112 87,683	8,32,886 7,59,305
Andaman & Nicobar Islands	1954 —	218 +	140 —	358 —	9,289 —	7,992 —
	1956	218 (28*)	160	406	10,826	96,733
TOTAL	1954 1956	1,04,975 1,21,933	29,907 35,029	1,34,882 1,56,962	39,98,981 52,72,012	10,79,55,576 12,80,53,501

NOTE :—*Where information for 1956 is not available, 1955 statistics are inserted.

**Detention beds in outlying dispensaries.
Nil.

Table No. 69

Statement showing the total grants-in-aid made to Hospitals and Dispensaries
by State Governments during the period 1954-1956.

State	1954	1956
	Rs.	Rs.
Andhra	1,24,896	5,53,068
Assam	5,89,100	+
Bihar	15,55,936	8,80,237
Bombay	26,83,501	22,93,077
Madhya Pradesh	10,56,563	6,95,799
Madras	1,86,331	2,77,846
Orissa	4,17,220	4,03,577
Punjab	12,04,743	5,28,544
Uttar Pradesh	6,14,900	52,58,777
West Bengal	23,43,287	27,99,100
Hyderabad	+	+
Jammu & Kashmir	22,300	49,100
Madhya Bharat	6,600	18,500
Mysore	58,590	58,925
Pepsu	30,345	
Rajasthan	9000	6,000
Bhopal	—	—
Coorg	9000	
Delhi	1,66,148	1,37,793
Himachal Pradesh	—	—
Kutch	25,982	Merged with Bombay
Manipur	—	—
Tripura	500	500
Vindhya Pradesh	—	+
Amdaman & Nicobar Islands	—	—
TOTAL	1,11,04,942	1,39,60,928

NOTE : + Not available.
—Nil.

Table No. 70

Statement showing the expenditure incurred on Medical Relief by State Governments during the years 1954—1956.

State	1954 Rs.	1956 Rs.
Andhra	85,64,055	93,09,130
Assam	58,33,526	84,43,408*
Bihar	1,05,13,718	1,94,16,197
Bombay	1,68,40,031	1,65,82,212*
Madhya Pradesh	86,33,050	1,00,76,800*
Madras	1,83,26,128	1,30,88,896
Orissa	62,06,125	73,95,246
Punjab	85,42,777	1,54,04,021
Uttar Pradesh	2,36,84,500	3,22,27,600
West Bengal	3,78,06,011	4,08,98,000*
Hyderabad	94,52,692	Merged with Andhra Pradesh
Kerala	+	+
Madhya Bharat	84,75,952	1,26,63,049*
Mysore	1,06,35,142	90,93,960
Pepsu	50,58,073	
Rajasthan	1,16,66,041	1,43,29,300
Saurashtra	+	+
Ajmer	+	+
Bhopal	16,12,006	27,51,175*
Coorg	7,09,582	+
Delhi	62,43,653	48,49,870
Himachal Pradesh	17,84,570	23,49,817
Kutch	3,48,673	7,60,455*
Manipur	+	12,65,624**
Tripura	7,79,178	11,37,415
Vindhya Pradesh	19,22,000	23,35,245*
Andaman & Nicobar Islands	+	6,09,348
TOTAL	20,37,34,483	22,47,86,768

NOTE :—*Where information for 1956 is not available, 1955 statistics are inserted.
 **Public Health and Medical Sections are combined.
 +Not available.

Table No. 71

Statement showing the number of institutions in India having X-ray facilities 1954-56.

State	Total No. of General Hospitals & Dispensaries		No. of Hospital with X-ray arrangements		No. of X-ray sets			
	1954	1956	1954	1956	Major		Minor	
Andhra Pradesh	447	431	15	19	—	18	5	18
Assam	540	554	21	18	11	10	19	18
Bihar	779	806	20	22	11	16	16	27
Bombay	916	560	86	128	59	141	60	138
Madhya Pradesh	493	498	35	52	21	20	20	30
Madras	714	665	38	26	28	49	20	33
Orissa	383	390	15	16	9	6	11	18
Punjab	638	624	18	45	14	26	19	19
Uttar Pradesh	1,119	1,170	75	84	49	50	57	63
West Bengal	1,223	1,254	30	34	28	38	49	59
Hyderabad	237	238	12	14	8	6	118	14
Jammu & Kashmir	103	153	3	4	2	7	2	5
Madhya Bharat	291	292	26	+	14	+	23	+
Mysore	542	776	22	35	17	21	24	42
Pepsu	139	+	9	+	83	+	3	+
Rajasthan	504	587	31	37	15	21	30	44
Saurashtra	174	+	14	+	9	+	16	+
Travancore-Cochin	319	+	14	20	20	26	16	8
Ajmer	22	+	3	+	7	+	4	+
Bhopal	29	32	1	+	1	+	1	+
Coorg	24	+	2	+	—	+	2	+
Delhi	71	76	5	7	10	19	13	17
Himachal Pradesh	75	80	5	6	3	6	2	2
Kutch	70	+	3	+	1	+	2	+
Manipur	52	+	1	1	1	1	—	—
Tripura	69	+	1	1	1	1	—	—
Vindhya Pradesh	84	112	4	+	1	+	3	+
Andaman & Nicobar Islands	21	+	—	1	—	—	1	2
TOTAL	10,072	9,298	503	570	433	482	536	557

+Not available.
 —Nil.

Table No. 72

Statement showing the number of X-ray Examinations (1954-1956)

State	Examinations done	
	1954	1956
Andhra Pradesh	1,17,576	1,24,335
Assam	29,961	32,247
Bihar	84,961	1,06,946
Bombay	8,65,492	7,11,446
Madhya Pradesh	99,994	94,982
Madras	3,38,070	3,49,402
Orissa	23,167	17,889
Punjab	7,71,176	68,402
Uttar Pradesh	1,37,064	1,72,710
West Bengal	1,23,821	1,76,968
Hyderabad	58,423	69,470
Jammu & Kashmir	10,751	29,750
Madhya Bharat	35,885	+
Mysore	1,28,520	2,49,009
Pepsu	27,857	+
Rajasthan	85,712	1,32,764
Saurashtra	29,264	+
Travancore-Cochin	1,31,929	1,68,331
Ajmer	11,416	+
Bhopal	10,631	+
Coorg	4,262	+
Delhi	1,01,654	1,38,259
Himachal Pradesh	10,751	13,687
Kutch	5,673	+
Manipur	1,699	1,455
Tripura	1,611	2,330
Vindhya Pradesh	3,574	+
Andaman & Nicobar Islands	374	355
TOTAL	32,56,777	26,62,337

+ Not available.

Table No. 73

Statement showing the Hospital providing radium treatment 1956

State	Name and Location of the Hospital	Quantity of Radium available 1956	
Andhra Pradesh ..	King George Hospital, Visakhapatnam ..	285	mgs
	Radium Institute and Cancer Hospital, Hyderabad.	430	mgs
Assam	Welsh Mission Hospital, Shillong	349.5	mgs
	Assam Medical College Hospital, Dibrugarh	468.57	mgs
	American Baptist Mission Hospital, Gauhati	85	mgs
Bihar	Patna Medical College Hospital	840	mgs
Bombay	Cama and Albless Hospital, Bombay	50	mgs
	Shri S. S. H. Hospital, Baroda	295.47	mgs
	Tata Memorial Hospital, Parel	2,200	mgs
	Wanless Hospital, Miraj Medical Centre, Miraj.	135	mgs
	Dr. K. M. Shah's Nursing Home, Ahmedabad.	65	mgs
	Dr. S. B. Anklesaria's Nursing Home, Ahmedabad.	50	mgs
	Seth Vadilal Sarabhai General Hospital and Seth Chinni Maternity Hospital, Ahmedabad.	258	mgs
	Municipal General Hospital, Sion, Bombay	50	mgs
Madhya Pradesh ..	Christian Hospital, Mungli	225	mgs 1955
Madras	Christian Medical College Hospital, Vellore	195	mgs
	Scudder Memorial Hospital, Ranipet ..	250	mgs
	Government General Hospital, Madras ..	2,000	mgs
	Government Hospital for Women & Children, Madras	612.98	mgs
Orissa	Government Ophthalmic Hospital, Madras	12	mgs
	S.C.B. Medical College Hospital, Cuttack	520	mgs
	V. J. Hospital, Amritsar	245	mgs
Punjab	Laxmi Pannalall Radium Sarojini Naidu Hospital, Agra.	400	mgs
Uttar Pradesh ..	Eye Hospital, Sitapur	60	mgs
	Medical College and Hospital, Calcutta	338.5	mgs
	S. S. Karnani Memorial Hospital (Formerly P.C.H.).	122.87	mgs
	R. G. Ker Medical College & Hospital, Calcutta.	153	mgs
West Bengal ..	Chittaranjan Cancer Hospital, Calcutta ..	1,200	mgs

Table No. —contd.

Madhya Bharat ..	J. A. Hospital, Lashkar	350	mgs 1955
	M. T. Hospital, Indore	70	mgs and 34 needles of various strength
Mysore	Victoria Hospital, Bangalore	500	mgs
	Bowring and Lady Curzon Hospital, Bangalore.	123.13	mgs
	Krishnarajendra Hospital, Mysore ..	140	mgs
Rajasthan	Ganga X-ray and Radium Institute, Bikaner	140	mgs
Saurashtra	Sir Takhtasiahji Hospital, Bhavnagar, Irwin Hospital, Jamnagar	748	mgs
		+	+
Travancore-Cochin ..	General Hospital, Trivandrum	373	mgs
	District Hospital, Ernakulam	150	mgs
Delhi	Lady Hardinge Medical College & Hospital	1,075	mgs
Himachal Pradesh ..	Snowdon Hospital	227.73	mgs
		15,792.75	mgs and 34 needles of various strength.

+ Not available.

Table No. 74

Statement showing the Number of Blood Banks, Officers trained and Number of Blood Transfusions given (1954—1956)

State	Number of Blood Banks		Number of Officers trained		Number of Blood Donors		Number of Transfusion given	
	1954	1956	1954	1956	1954	1956	1954	1956
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Andhra Pradesh	4	1	2	—	1,397	2,454	1,431	2,681
Assam	1	1	—	—	321	644	357	644
Bihar	2+4 Centres	2+4 Centres	9	8	3,834	5,168	3,417	5,601
Bombay	13	13	20	13	14,552	11,160	11,337	7,479
Madhya Pradesh	2	4	—	3	1,213	1,002	1,039	1,038
Madras	18	19	18	15	14,689	16,585	14,71	12,862 B.T. 1,074 P.T.
Orissa	1	1	—	1	394	630	399	851
Punjab	5	5	19	4	3,791	5,376	3,485	5,065
Uttar Pradesh	3	3	12	11	2,346	2,963	2,343	3,296
West Bengal	1	5	1	10	8,327	22,564	9,536	405
Hyderabad	1	7	—	7	1,455	2,815	1,667	2,538
Jammu & Kashmir	2	2	—	—	58	212	58	214
Madhya Bharat	—	+	1	+	76	+	76	+
Mysore	2	3	—	—	380	1,183	1,175	1,050
Pepsu	—	+	—	+	430	+	413	+
Rajasthan	2	4	4	4	739	1,904	918	2,291
Saurashtra	—	+	1	+	99	+	99	+
Travancore-Cochin ..	1	4	—	4	318	1,446	316	1,444
Ajmer	1	+	—	+	496	+	358	+
Bhopal	—	+	—	+	33	+	33	+
Coorg	—	+	—	+	3	+	1	+
Delhi	1	1	6	8	2,670	2,923	2,409	2,709
Himachal Pradesh ..								
Kutch								
Manipur								
Tripura								
Vindhya Pradesh	—	—	—	—	—	15	—	13
Andaman & Nicobar Islands	—	—	—	—	15	2	4	2

—Nil.

+ Not available.

Table No. 75

Statement showing the quantity of Blood collected, issued & Serum Plasma (Manufactured & supplied) (1954 & 1956)

State	Period	Volume of Blood collected	Volume of Blood issued	Volume of Serum Plasma	
				Manufactured	Supplied
(1)	(2)	(3)	(4)	(5)	(6)
Andhra Pradesh	1954	4,79,880 c.c.	4,75,480 c.c.	—	—
	1956	6,97,226 c.c.	6,93,249 c.c.	—	2,500 c.c.
Assam	1954	1,07,100 c.c.	1,07,100 c.c.	—	—
	1956	1,93,200 c.c.	1,93,200 c.c.	—	—
Bihar	1954	8,45,685 c.c.	7,94,410 c.c.	28,410 c.c.	23,335 c.c.
	1956	14,52,305 c.c.	13,19,540 c.c.	59,380 c.c.	21,800 c.c.
Bombay	1954	49,85,775 c.c.	41,35,575 c.c.	4,56,500 c.c.	4,19,750 c.c.
	1956	29,66,008 c.c.	24,64,670 c.c.	21,894 c.c.	24,912 c.c.
Madhya Pradesh	1954	5,78,250 c.c.	5,78,250 c.c.	—	—
	1956	33,269 c.c.	31,964 c.c.	—	—
Madras	1954	48,71,030 c.c.	40,06,930 c.c.	3,14,500 c.c.	3,15,500 c.c.
	1956	53,50,670 c.c.	54,24,280 c.c.	3,17,200 c.c.	2,69,600 c.c.
Orissa	1954	83,790 c.c.	83,790 c.c.	—	—
	1956	2,46,478 c.c.	2,46,478 c.c.	—	—
Uttar Pradesh	1954	8,03,100 c.c.	8,03,850 c.c.	—	—
	1956	9,10,350 c.c.	9,01,275 c.c.	—	—
Punjab	1954	12,03,606 c.c.	10,84,476 c.c.	—	21,850
	1956	16,63,980 c.c.	15,04,970 c.c.	—	25,920
West Bengal	1954	20,82,750 c.c.	20,81,750 c.c.	—	—
	1956	56,50,230 c.c.	55,69,170 c.c.	78,650 c.c.	4,23,150 c.c.
Hyderabad	1954	4,13,392 c.c.	4,13,392 c.c.	—	—
	1956	9,46,150 c.c.	9,17,350 c.c.	19,950 c.c.	19,950 c.c.
Jammu & Kashmir	1954	35,000 c.c.	25,000 c.c.	—	—
	1956	85,150 c.c.	85,150 c.c.	—	—
Madhya Bharat	1954	24,030 c.c.	24,030 c.c.	—	—
Mysore	1954	1,60,050 c.c.	1,60,050 c.c.	—	—
	1956	4,09,500 c.c.	4,07,750 c.c.	—	—
Pepsu	1954	1,14,700 c.c.	1,13,200 c.c.	—	—
Rajasthan	1954	2,61,627 c.c.	1,63,275 c.c.	2,533 c.c.	2,533 c.c.
	1956	7,26,750 c.c.	7,16,850 c.c.	—	—
Saurashtra	1954	15,150 c.c.	15,150 c.c.	—	—
Travancore-Cochin	1954	79,500 c.c.	79,500 c.c.	—	—
	1956	3,87,520 c.c.	3,83,420 c.c.	—	—
Ajmer	1954	67,949 c.c.	64,404 c.c.	—	—
Bhopal	1954	6,520 c.c.	6,520 c.c.	—	—
Coorg	1954	150 c.c.	150 c.c.	—	—
Delhi	1954	8,01,000 c.c.	7,22,700 c.c.	17,500 c.c.	17,500 c.c.
	1956	8,76,900 c.c.	8,12,700 c.c.	—	—
Himachal Pradesh	1954	—	—	—	—
	1956	3,950 c.c.	3,950 c.c.	—	—

Table No. 75—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Kutch ..	..	..	..	..	..
Manipur ..	..	..	..	..	..
Tripura ..	..	..	..	..	..
Vindhya Pradesh ..	1954 1956	..	..	..	..
Andaman & Nicobar Islands ..	1954 1956	..	..	..	..

Nil

+ Not available.

—Nil.

Table No. 76

Statement showing the Mental Institutions in the State, bed strength and Expenditure incurred. (1954—1956)

State	Period	Name & Location of Mental Hospital	Sanc- tioned accom- moda- tion	Expendi- ture Rs.
(1)	(2)	(3)	(4)	(5)
Andhra Pradesh	1954	Government Mental Hospital, Waltair	210	1,31,935
	1956	Do.	210	1,48,435
Assam	1954	Mental Hospital, Tezpur	720	3,97,523
	1956	Do.	740	4,87,536
Bihar	1954	Indian Mental Hospital, Kanki	1380	11,98,979
	1955	Do.	1380	10,28,999
	1954	Hospital for Mental diseases, Ranchi	415	10,16,473
	1956	Do.	420	10,09,243
Bombay	1954	N. M. Mental Hospital, Thana	390	10,00,785
	1956	Do.	440	8,66,640
	1954	Mental Hospital, Ratnagiri	176	1,56,577
	1956	Do.	226	2,33,057
	1954	Central Mental Hospital, Yervada	1247	16,59,717
	1956	Do.	1247	20,43,390
	1954	Mental Hospital, Ahmedabad	267	3,11,699
	1956	Do.	317	4,83,540
	1954	Mental Hospital, Dharwar	199	1,91,930
	1956	Do.	249	2,19,188
	1954	Mental Hospital, Baroda	75	88,188
	1956	Do.	155	1,62,675
Madhya Pradesh	1954	Mental Hospital, Nagpur	630	3,95,001
	1956	Do.	610	31,598
Madras	1954	Government Mental Hospital, Kozhikode	364	4,12,904
	1956	Do.	364	3,37,339
	1954	Government Mental Hospital, Madras	888	12,68,371
	1956	Do.	888	14,94,567
Punjab	1954	Punjab Mental Hospital, Amritsar	500	8,08,733
	1956	Do.	500	7,58,283

Table No. 76—contd.

(1)	(2)	(3)	(4)	(5)
Uttar Pradesh ..	1954	Mental Hospital, Agra	622	6,38,621
	1956	Do.	622	8,36,236
	1954	Mental Hospital, Barielly	408	2,62,577
	1956	Do.	408	2,74,025
West Bengal ..	1954	Mental Hospital, Banaras	331	1,76,859
	1956	Do.	331	1,95,224
	1954	Mental Observation Ward, Bhawanipur ..	30	53,367
	1956	Do.	30	70,556
Hyderabad ..	1954	Lumbini Park Mental Hospital, Calcutta ..	85	1,68,711
	1956	Do.	95	1,90,5487
	1954	Bodi Peet Hospital, Calcutta	75	38,398
	1956	Do.	75	+
Jammu & Kashmir ..	1954	Mental Hospital, Mankundu	60	38,393
	1956	Do.	60	43,711
	1954	Bangiya Umnad Asram, Calcutta	85	63,576
	1956	Do.	90	67,532
Madhya Bharat ..	1954	Hospital for Mental Diseases, Hyderabad ..	600	3,21,718
	1956	Do.	600	3,32,690
	1954	Mental Hospital, Srinagar	24	+
	1956	Do.	24	15,290
Mysore ..	1954	Mental Hospital, Gwalior	120	71,885
	1956	Do.	120	74,577
	1954	Mental Hospital, Indore	50	10,000
	1956	Do.	75	29,617
Rajasthan ..	1954	Mysore State Mental Hospital, Bangalore ..	300	2,96,444
	1956	Do.	300	3,07,422
	1954	Mental Hospital, Jaipur	120	51,600
	1956	Do.	120	92,342
Saurashtra ..	1954	Mental Hospital, Jodhpur	60	39,374
	1956	Do.	60	37,303
	1954	Mental Hospital, Udaipur	24	10,368
	1956	Do.	24	17,977
Travancore-Cochin ..	1954	Mental Hospital, Akwada (Bhavnagar) ..	18	11,620
	1956	Do.	18	3,524
	1954	Mental Hospital, Trichur	144	76,030
	1956	Do.	144	1,03,302
TOTAL ..	1954	Mental Hospital, Trivandrum	201	1,44,756
	1956	Do.	201	1,85,753
	1954	33 Mental Institution.	10,868	1,15,13,112
	1956	33 Mental Institution.	11,143	1,21,72,158

+ Not available.

Table No. 77

Statement showing the number of patients admitted to the Mental Institutions in the State (1954-1956)

State	Period	Name of Location of Institution	No. of Patients admitted	No. of Patients at the end of year
(1)	(2)	(3)	(4)	(5)
Andhra Pradesh	1954	Government Mental Hospital, Waltair	211	213
	1956	Do.	197	276
Assam ..	1954	Mental Hospital, Tezpur	184	676
	1956	Do.	180	712
Bihar ..	1954	Indian Mental Hospital, Kanki	120	1,159
	1956	Do.	388	1,256
Bombay ..	1954	Hospital for Metal Diseases, Ranchi ..	310	408
	1956	Do.	188	374
Bombay ..	1954	N. M. Mental Hospital, Thana	957	1,197
	1956	Do.	1,260	1,692
Bombay ..	1954	Mental Hospital, Ratnagiri	135	277
	1956	Do.	145	280
Bombay ..	1954	Central Mental Hospital, Yeravada ..	1,040	1,880
	1956	Do.	1,215	2,156
Bombay ..	1954	Mental Hospital, Ahmedabad	366	465
	1956	Do.	328	566
Bombay ..	1954	Mental Hospital, Dharwar	97	321
	1956	Do.	81	367
Bombay ..	1954	Mental Hospital, Baroda	38	95
	1956	Do.	70	131
Madhya Pradesh	1954	Mental Hospital, Nagpur	246	566
	1956	Do.	48	592
Madras ..	1954	Government Mental Hospital, Kozhikode ..	273	643
	1956	Do.	410	715
Madras ..	1954	Government Mental Hospital, Madras ..	964	1,923
	1956	Do.	1,290	2,052
Punjab ..	1954	Punjab Mental Hospital, Amritsar	273	551
	1956	Do.	421	654
Uttar Pradesh ..	1954	Mental Hospital, Agra	575	646
	1956	Do.	535	650
Uttar Pradesh ..	1954	Mental Hospital, Barielly	168	389
	1956	Do.	151	396
Uttar Pradesh ..	1954	Mental Hospital, Banaras	27	242
	1956	Do.	27	242
West Bengal ..	1954	Mental Observation Ward, Bhowanipur ..	127	26
	1956	Do.	117	29
West Bengal ..	1954	Lumbini Park Mental Hospital, Calcutta ..	191	70
	1956	Do.	238	87

Table No. 77—contd.

(1)	(2)	(3)	(4)	(5)
West Bengal: contd.	1954	Bodi Peet, Calcutta	44	51
	1956	Do.	14	66
	1954	Mental Hospital, Mankundu, Calcutta	73	48
	1956	Do.	79	54
Hyderabad ..	1954	Bengiya Ummad Asram, Calcutta	140	53
	1956	Do.	130	53
	1954	Hospital for Mental Diseases, Hyderabad	516	723
	1956	Do.	480	788
Jammu & Kashmir	1954	Mental Hospital, Srinagar	37	26
	1956	Do.	57	28
Madhya Bharat	1954	Mental Hospital, Gwalior	198	131
	1956	Do.	245	151
	1954	Mental Hospital, Indore	66	62
	1956	Do.	72	74
Mysore ..	1954	Mysore State Mental Hospital, Bangalore	998	486
	1956	Do.	1,146	552
Rajasthan ..	1954	Mental Hospital, Jaipur	103	106
	1956	Do.	201	135
	1954	Mental Hospital, Jodhpur	89	51
	1956	Do.	105	50
Saurashtra ..	1954	Mental Hospital, Udaipur	99	18
	1956	Do.	29	16
	1954	Mental Hospital, Akwada	6	18
	1956	Do.	+	16
Travancore-Cochin	1954	Mental Hospital, Trivandrum	553	332
	1956	Do.	785	472
	1954	Mental Hospital, Trichur	240	271
	1956	Do.	178	279
TOTAL ..	1954		9,569	14,062
	1956		10,631	15,679

+ Not available.

Table No. 78
Family Planning
List of Research Scheme 1956-1957

- I. India-Harvard-Ludhiana—Population Study, Khanna.
- II. Research on contraceptives used by Abor Hill Tribes—Dr. B. S. Guha.
- III. Scheme of demographic research—V.M. Dandekar Gokhale Institute of Politics and Economics, Poona.
- IV. Scheme for the sample survey in Patna City to estimate the fertility and mortality rates—Dr. D. N. Lal, Patna University.
- V. Multi-purpose family planning research project—J. K. Institute of Sociology and Human Relations, Lucknow.
- VI. Scheme of rural study of population control in Singur, All India Institute of Hygiene and Public Health, Calcutta.
- VII. Field Study on foam tablets in industrial groups—Dr. V. R. Khanolkar, Indian Cancer Research Centre, Bombay.
- VIII. Contraceptive Testing Centre—Biological Clinical Testing of local contraceptives—Dr. Khanolkar, Director, Indian Cancer Research Centre, Bombay.
- IX. Scheme for the development of oral contraceptive from indigenous materials—Dr. Khanolkar, Director, Indian Cancer Research Centre, Bombay.
- X. Scheme for use of sythetic Meta-xylohydroquinone as an oral contraceptive—Dr. C. Chandrasekaran and Dr. (Mrs.) Muktha Sen—All India Institute of Hygiene and Public Health, Calcutta.
- XI. Scheme for the study of spermicidal drugs and oral contraceptive—Dr. M. L. Gujral, Lucknow University.
- XII. Research in sub-fertility at the Government Hospital Egmore, Madras—Madras Government.
- XIII. Studies on twins and rates of consanguineous marriages in endogamous groups—Dr. L. D. Sanghvi, Indian Cancer Research Centre, Bombay.

Table No. 79

Number of maternity beds per 100 births for the Urban and General areas of different States in India for 1954 & 1956

State	Number of beds per 100 births			
	Urban		General (Urban & Rural)	
	1954	1956	1954	1956
*Andhra (1955)	1.25	0.22 (1955)	0.21	0.17 (1955)
*Assam (1955)	0.21	0.65 (1955)	0.01	0.25 (1955)
**Bihar (1955)	+	+	+	+
Bombay	0.98	0.33 (1955)	0.27	0.21 (1955)
Madhya Pradesh	+	+	+	+
Madras	+	0.27	+	0.02
*Orissa (1955)	1.76	+	0.07	+
Punjab	1.14	0.20 (1955)	0.19	0.078 (1955)
*Uttar Pradesh	0.03	0.44 (1955)	0.01	0.098 (1955)
West Bengal (1955)	2.89		0.58	
**Hyderabad (1955)	+	+	+	+
Madhya Bharat (1955)	2.09		1.18	
Mysore	+	0.11	+	0.087
Pepsu (1955)	0.24		0.06	
Rajasthan	2.00	0.37	+	0.58
*Bhopal	2.19		0.43	
*Coorg (1955)	4.55		1.33	
*Delhi (1955)	0.76	+	0.61	+
Kutch (1955)	3.58		0.45	
*Manipur	5.20	+	2.26	+
Tripura (1955)	+	+	+	+
Vindhya Pradesh (1955)	+	+	+	
**Andaman & Nicobar Islands	+	+	+	2.94

*The information is available for only urban areas and the number of beds per 100 births in the general areas (i.e. urban and rural) is based on the information for urban areas only.

**The number of beds per 100 births could not be calculated as birth statistics were not available.

+ Not available.

Table No. 80

Distribution of Maternity & Child Welfare Centres (1954—1956)

State	1954	1956
Andhra	84	445 (1955)
Assam	32	92 (1955)
Bihar	61	65 (1955)
Bombay	302	167 (1955)
Bombay	89	114
Madhya Pradesh	889	978
Madras	28	+
Orissa (1955)	104	103
Punjab	452	688
Uttar Pradesh	334	+
West Bengal	74	60 (1955)
Hyderabad	2	6
Jammu & Kashmir	150	+
Kerala	64	65 (1955)
Madhya Bharat	166	188
Mysore	33	39 (1955)
Pepsu	42	51
Rajasthan	41	
Saurashtra (1955)	9	
Ajmer		19 (1955)
Bhopal	39	30 (1955)
Coorg	58	+
Delhi (1955)	23	31
Himachal Pradesh	4	8 (1955)
Kutch	1	5
Manipur	11	+
Tripura (1955)	3	16 (1955)
Vindhya Pradesh		1
Andaman & Nicobar Islands		

+ Not available.

Table No. 81

No. of candidates trained in B.Sc. (Nursing) and post-graduate courses during 1954—56.

State	No. of candidates	Trained at	Course
Andhra	1 ..	College of Nursing, New Delhi.	Midwife-Tutor.
	2 men nurses	Bangalore ..	Psychiatric Nursing.
	3	Australia ..	Higher Training in Nursing Education.
	1 nurse ..	England ..	Training in Administration and Teaching course.
Assam	1 nurse ..	College of Nursing, New Delhi.	Post-Certificate Course in teaching and nursing.
	1 nurse ..	Australia ..	Ward Administration.
Bihar	1 nurse ..	U.S.A. (1956) ..	Higher training course in Nursing Education.
Bombay	2 students (1954)	College of Nursing, New Delhi.	B.Sc. (Hons.) in Nursing.
	3 nurses (1956)	Do.	Nursing.
	3 nurses ..	All India Institute of Hygiene and Public Health, Calcutta.	Public Health Nursing Course.
Madras	1 male & 1 female	Abroad	Nursing.
	1 nursing tutor	U.S.A.	Nursing Education.
	3 nurses (1955)	Abroad	Nursing Education.
	2 nurses (1956)	All India Institute of Mental Health, Bangalore.	Psychiatric Nursing.
	1 nurse ..	All India Institute of Hygiene and Public Health, Calcutta.	Public Health Nursing.
Punjab	1 nurse ..	Abroad	Higher training.
Uttar Pradesh ..	Senior Matron	U.S.A. on T.C.M. Programme.	Nursing Administration.
	Nursing Superintendent.	U.S.A.	Nursing Administration. (Returned after completion.
	5 nurses	College of Nursing, New Delhi.	Sister tutors and Nursing Administration.

Table No. 81—contd.

State	No. of Candidates	Trained at	Course
West Bengal ..	2 nurses (1954)	College of Nursing, New Delhi.	B.Sc. (Nursing).
	2 nurses (1954)	Do.	Post-Graduate.
	1 nurse (1954)	Do.	Public Health Nursing.
	2 nurses (1955)	Do.	B.Sc. (Nursing).
	2 nurses (1955)	Do.	Sister Tutor's course.
	1 nurse (1955)	All India Institute of Hygiene and Public Health, Calcutta.	Post Certificate Training Course.
	5 nurses (1954)	Abroad	Nursing.
	5 nurses	Abroad	Nursing. (Returned after completing the courses).
	4 nurses (1955)	Abroad	Higher training in Nursing.
	3 nurses	Abroad	Higher training in Nursing. (Returned in 1955 after completing the courses).
	1 sister tutor (1956)	Abroad	Nursing Administration.
	2	Abroad	Higher training in Nursing. (Returned in 1956 after completing the courses).
Kerala	4 students	Europe	Nursing.
	1 nurse	U.S.A.	B.Sc. (Nursing) (Returned in 1955 after completing the course).
	3 nurses	Abroad	B.Sc. (Nursing) (returned in 1956 after completing the courses).
Rajasthan	1 sister (1954)	Abroad	Fellowship.
Delhi	1 nurse ..	Abroad	Nursing.
	2 nurses ..	New Zealand ..	Higher training in Nursing.
Himachal Pradesh	1 nurse ..	All India Institute of Hygiene & Public Health, Calcutta.	Public Health Nursing.
	1 nurse ..	Abroad (Colombo Plan).	Nursing Education
Tripura	1 nurse (1955)	College of Nursing, New Delhi.	B.Sc. (Hons.) in Nursing.

Table No. 82
Number of Training Institutions affiliated to State Nurses Registration Councils (1955 and 1956)

State Nursing Council	General Nursing		Midwifery		Male Nurses		Junior (B. Grade) Nurses		Assistant (Junior) Midwives		Nursing Men patient		Auxiliary Nurses Midwives		Health Visitors		Nurse Dais /Dais	
	1955	1956	1955	1956	1955	1956	1955	1956	1955	1956	1955	1956	1955	1956	1955	1956	1955	1956
Andhra	..	..	12	36	2	2	+	+	+	+	+	2	+	15	+	2	+	—
Assam	..	..	13	12	13	3	8	—	11	—	—	12	5	8	—	—	6	10
Bihar	..	..	9	9	8	7	4	8	—	1	—	—	—	2	6	1	2	—
Bombay	..	..	37	37	35	42	—	6	—	—	—	—	—	3	4	2	—	—
Kerala	..	..	+	3	+	3	+	2	+	1	+	+	2	+	—	+	1	+
Madhya Pradesh	..	..	13	21	19	24	—	3	—	—	—	19	9	10	23	1	2	—
Madras	..	..	46	43	76	86	17	14	9	11	—	15	10	2	3	4	1	—
Orissa	..	..	3	5	3	3	3	3	—	—	—	—	—	—	2	—	14	19
Punjab	..	..	25	20	19	7	7	—	—	—	12	11	15	20	2	3	16	15
Uttar Pradesh	..	..	24	19	19	7	7	—	—	44	—	11	11	—	1	1	3	—
West Bengal	..	..	9	15	10	13	3	3	10	10	8	9	2	2	1	5	1	—
GRAND TOTAL	..	..	181	206	208	265	44	59	27	33	53	9	59	59	47	87	12	36

NOTE:—
 (1) Assam State Council has jurisdiction over Assam, Manipur & Tripura.
 (2) Madhya Pradesh State Council has jurisdiction over Madhya Pradesh, Vindhya Pradesh, Madhya Bharat and Bhopal.
 (3) Madras State Council has jurisdiction over Madras, Andhra, Travancore-Cochin, Mysore, Hyderabad, and Coorg.
 (4) Punjab State Council has jurisdiction over Punjab, Rajasthan, Pepsu, Himachal Pradesh, Delhi, Ajmer & Jammu and Kashmir.
 (5) Bombay State Council has jurisdiction over Bombay, Saurashtra and Kutch.
 (6) West Bengal Council has jurisdiction over W. Bengal & Andaman and Nicobar Islands.
 + Data not available. — Nil information

Table No. 83
Number of students who qualified from different States Nursing Councils Examination during the year 1955 & 56

State	Year	General Nursing		Junior (B Grade) Nursing	**Midwifery			Assistant Midwives	Auxiliary Nurse-Midwives	Nursing of Men Patients	Health Visitors Course	Nurse Dais /Dais
		Men	Women		Those who are registered & training Nurses	Others						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Andhra		1956	34	111	—	123	150	—	2	—	—	—
Assam		1955	1	30	27	46	15	29	4	—	—	35
		1956	7	54	20	45	43	—	45	—	—	50
Bihar		1955	3	76	44	60	7	—	—	—	—	538
		1956	—	103	39	71	71	43	12	—	—	—
Bombay		1955	20	279	—	192	208	—	—	9	17	—
		1956	34	346	—	464	—	—	16	—	24	—
Madhya Pradesh		1955	—	53	—	69	94	—	—	—	14	272
		1956	14	132	—	88	47	—	83	—	22	—
Madras		1955	151	427	—	311	616	—	—	53	11	—
		1956	61	299	87	338	421	—	39	25	29	—
Orissa		1955	3	17	—	20	24	—	—	7	—	46
		1956	3	32	—	15	23	—	—	—	—	—

Table No. 83—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Punjab	1955	20	110	—	129	—	—	5	51	7	1,126
	1956	23	132	—	172	—	—	55	33	14	979
Uttar Pradesh	1955	10	92	36	77	—	101	—	1	14	—
	1956	18	76	31	171	—	43	—	—	25	—
West Bengal	1955	—	71	84	68	68	80	28	21	12	56
	1956	1	117	72	79	107	59	47	28	8	—
Hyderabad	1955	8	23	3	35	—	—	2	—	31	—
	1956	17	34	6	7	27	3	3	—	—	—
Kerala	1955	15	41	12	34	3	—	—	1	—	—
	1956	11	35	—	44	—	—	—	—	—	—
M.I. Board	1955	45	126	98	—	—	—	—	53	—	—
S.I. Board	1955	239	1,575	298	1,058	1,059	215	42	195	106	2,073
	1956	210	1,443	261	1,595	865	145	299	87	123	1,029
TOTAL											

NOTE — Nil

(1) Assam State Council has jurisdiction over Assam, Manipur & Tripura.

(2) Madhya Pradesh State Council has jurisdiction over Madhya Pradesh, Vindhya Pradesh, Madhya Bharat and Bhopal.

(3) Madras State Council has jurisdiction over Madras, Andhra, Travancore-Cochin, Mysore, Hyderabad and Coorg.

(4) Punjab State Council has jurisdiction over Punjab, Rajasthan, PEPSU, Himachal Pradesh, Delhi, Ajmer and Jammu and Kashmir.

(5) Bombay State Council has jurisdiction over Bombay, Saurashtra and Kutch.

(6) West Bengal State Council has jurisdiction over West Bengal and Andaman and Nicobar Islands.

**No exact information is available for columns 6 & 7 as all the Registration Councils do not keep these figures.

Table No. 84

Total number of names entered in the State Nursing Registers for the calendar years 1955 & 1956

State Registration Council	General Nursing	Midwives	Auxiliary Nurses Midwives	Health Visitors	Dais
(1)	(2)	(3)	(4)	(5)	(6)
Andhra	1955	2,361	2,937	—	—
	1956	746	358	4	527
Assam	1955	409	385	38	13
	1956	823	488	—	6
Bihar	1955	932	571	—	6
	1956	3,305	5,613	—	217
Bombay	1955	5,727	5,880	—	231
	1956	1,287	1,114	—	150
Madhya Pradesh	1955	1,384	1,261	5	157
	1956	7,559	11,924	—	—
Madras	1955	6,108	9,871	—	—
	1956	230	176	—	13
Orissa	1955	260	210	—	14
	1956	1,669	1,145	9	170
Punjab	1955	1,878	1,267	39	186
	1956	1,430	1,992	—	92
Uttar Pradesh	1955	1,620	2,014	—	100
	1956	3,025	3,505	262	152
West Bengal	1955	3,791	3,605	311	129
	1956	16	2	12	—
Travancore-Cochin	1955	254	29	—	—
	1956	30	6	1	1
Kerala	1955	+	+	+	+
*Hyderabad	1955	+	+	+	+
	1956	20,128	26,523	288	811
TOTAL	1955	24,724	28,030	393	836
	1956	6,826	7,977	—	—

Number of Nursing staff estimated to be in actual practice in 1955 & 1956

	1955	1956
Nurses	17,000	20,000
Midwives	21,000	25,000
Health Visitors	1,200	1,500
**Auxiliary-Nurse-Midwives	—	400

NOTE:—*Figures for 1956 for Hyderabad Registration Council are included in the figures for Andhra.

**The Auxiliary Nurse-midwife course was started in India in year 1954 only and the first group of students qualified in 1956 since the duration of the course is two years.

Table No. 85

Number of sanctioned and actually filled posts of Nursing Staff for the years 1955 and 56

State	Year	Matrons		Assistant Matrons		Sister Tutor		Ward sister		Staff Nurses		Student Nurses	
		S	A	S	A	S	A	S	A	S	A	S	A
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Andhra ..	1955 ..	16	23	+	+	7	6	177	68	501	483	101	117
	1956 ..	6	6	14	14	14	14	114	114	880	880	+	+
Assam ..	1955 ..	13	12	+	+	—	—	42	42	138	133	251	251
	1956 ..	5	5	1	1	—	—	48	48	177	174	+	+
Bihar ..	1955 ..	10	10	+	+	14	14	94	94	328	305	404	404
Bombay ..	1955 ..	47	47	+	+	27	27	257	257	1,074	1,074	1,202	1,202
	1956 ..	4	4	1	—	3	3	90	75	481	412	+	+
Madhya Pradesh ..	1955 ..	18	18	+	+	15	15	54	54	323	323	463	463
Madras ..	1955 ..	61	81	+	+	57	57	312	312	2,732	2,732	1,186	1,286
	1956 ..	28	24	14	10	25	14	157	127	1,056	836	+	+
Orissa ..	1955 ..	4	4	+	+	1	1	13	13	177	177	133	133
Punjab ..	1955 ..	8	8	+	+	10	10	41	41	151	150	339	339
	1956 ..	4	4	—	—	6	6	48	38	263	213	+	+
Uttar Pradesh ..	1955 ..	40	47	+	+	14	8	236	238	843	551	668	451
	1956 ..	+	+	+	+	+	+	+	+	+	+	+	+
West Bengal ..	1955 ..	32	33	+	+	16	16	115	115	610	617	1,342	1,342
	1956 ..	29	28	7	6	26	25	124	110	780	783	+	+
Jammu & Kashmir ..	1955 ..	2	2	+	+	—	—	2	2	50	50	3	3

Table No. 85—contd.

State	Year	Midwives		Health Visitor		Public Health Visitors		Auxiliary Nurse Midwives		Nurse Dais		Trained Dais	
		S	A	S	A	S	A	S	A	S	A	S	A
(1)	(2)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)
Andhra ..	1955 ..	360	471	7	7	+	+	+	+	—	—	60	98
	1956 ..	446	446	—	—	—	—	—	—	—	—	—	—
Assam ..	1955 ..	54	54	7	7	+	+	+	+	—	—	39	39
	1956 ..	22	12	—	—	—	—	—	—	—	—	—	—
Bihar ..	1955 ..	74	74	12	12	+	+	+	+	22	22	362	362
Bombay ..	1955 ..	421	521	39	39	+	+	+	+	28	28	114	114
	1956 ..	462	377	12	11	—	—	2	1	205	195	19	13
Madhya Pradesh ..	1955 ..	150	150	51	51	+	+	+	+	13	13	12	12
Madras ..	1955 ..	824	824	125	125	+	+	+	+	—	—	—	—
	1956 ..	638	541	26	23	—	—	11	11	1	1	—	—
Orissa ..	1955 ..	85	85	17	17	+	+	+	+	—	—	179	179
Punjab ..	1955 ..	59	59	35	35	+	+	+	+	307	217	191	91
	1956 ..	—	—	110	110	2	2	118	78	293	293	331	331
Uttar Pradesh ..	1955 ..	—	—	—	—	+	+	+	+	—	—	—	—
	1956 ..	+	+	+	+	+	+	+	+	+	+	+	+
West Bengal ..	1955 ..	327	430	27	28	+	+	+	+	—	—	257	257
	1956 ..	—	—	—	—	—	—	665	383	—	—	—	—
Jammu & Kashmir ..	1955 ..	2	2	—	—	+	+	+	+	—	—	125	125

Table No. 85—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Kerala ..	1955 1956	9 8	9 8	4 4	+	8 22	8 22	41 73	41 70	592 712	592 670	125 +	125 +
Madhya Bharat ..	1955	5	5	+	+	4	2	48	42	117	66	120	104
Mysore ..	1955 1956	7 +	7 +	+	+	47 +	47 +	— +	— +	548 +	548 +	106 +	106 +
Pepsu ..	1955	2	—	+	+	1	—	6	—	62	—	37	—
Rajasthan ..	1955 1956	12 8	10 8	+	+	3 6	3 3	46 69	42 33	309 378	232 201	121 +	121 +
Ajmer ..	1955	6	6	+	+	2	2	17	17	44	44	24	24
Delhi ..	1955 1956	15 11	15 11	+	+	8 11	8 11	66 98	66 89	217 449	217 362	279 +	279 +
Himachal Pradesh ..	1955 1956	2 5	4 5	+	—	1 3	3 2	3 5	— 4	25 50	25 30	— +	29 +
Kutch ..	1955	1	1	+	+	—	—	4	4	8	2	7	7
Manipur ..	1955 1956	— —	— —	+	+	— —	— —	2 2	— 2	24 10	24 8	— +	— +
Tripura ..	1955 1956	1 1	1 1	+	+	— —	— —	— —	— —	58 47	14 14	23 +	23 +
Laccadive Islands ..	1956	—	—	—	—	—	—	—	—	—	—	+	+
TOTAL	1955 1956	312 109	343 104	— 53	— 43	235 111	227 100	1,576 828	1,448 710	8,781 5,283	8,419 4,583	6,934	6,809

A=Actually.
S=Sanctioned.
+ Not available.
— Nil.

Table No. 85—contd.

(1)	(2)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)
Kerala ..	1955 1956	687 825	561 783	56 49	44 49	+	18	+	+	—	43	—	—
Madhya Bharat ..	1955	95	57	95	82	+	+	+	+	—	—	424	424
Mysore ..	1955 1956	529 —	543 —	— +	— +	+	+	+	+	+	+	+	+
Pepsu ..	1955	54	8	29	25	+	+	+	+	65	14	522	129
Rajasthan ..	1955 1956	202 325	90 307	32 39	5 17	+	+	+	+	125	79	112	106
Ajmer ..	1955	82	82	3	3	+	+	+	+	8	8	—	—
Delhi ..	1955 1956	70 53	70 49	74 11	74 10	+	+	+	+	11	13	38	38
Himachal Pradesh ..	1955 1956	13 38	28 34	14 32	14 14	+	+	+	+	28	29	2	13
Kutch ..	1955	2	2	—	—	+	+	+	+	37	29	11	11
Manipur ..	1955 1956	37 30	37 30	1 7	1 2	+	+	+	+	—	—	1	1
Tripura ..	1955 1956	10 17	10 17	— 6	— 4	+	+	+	+	11	11	24	24
Laccadive Islands ..	1956	7	7	—	—	—	—	—	—	—	—	—	—
TOTAL	1955 1956	4,128 2,863	4,158 2,592	624 290	569 236	+	34	+	837	514	647 720	463 495	2,011 481

Table No. 86

Ratio of Nurses, Beds, Population and Students (1955 & 56)

State	1955					1956				
	Nurses	Beds	Nurses	Population	Nurses	Students	Nurses	Beds	Nurses	Population
Andhra	..	..	1	30,000	1	2	1	8	1	47,225
Assam	..	..	1	18,594	1	3	1	4	1	18,000
Bihar	..	..	1	48,523	1	2	+	+	+	+
Bombay	..	..	3	3,000	1	4	1	3	1	3,036
Madhya Pradesh	..	..	1	23,000	1	2				
Madras	..	..	1	10,000	1	2	1	7	1	10,000
Orissa	..	..	1	75,107	1	1	1	18	1	75,107
Punjab	..	..	1	27,909	1	5	1	11	1	16,003
Uttar Pradesh	..	..	1	7,500	1	1.5	1	5	1	7,500
West Bengal	..	..	1	4,600	1	8	1	9	1	4,500
Jammu & Kashmir	..	..	1	58,960	—	—	1	30	1	58,960
Kerala	..	..	1	15,500	1	1	1	11	1	16,800
Madhya Bharat	..	..	1	37,000	1	1				
Mysore	..	..	1	17,636	2	1	1	15	1	27,755
Pepsu	..	..	1	8,500	1	4				
Rajasthan	..	..	1	14,688	1	1	1	26	1	64,000
Ajmer	..	..	1	5,630	1	2				
Delhi	..	..	+	+	+		1	5	1	4,600
Himachal Pradesh	..	..	1	30,056	1	6	1	26	1	22,200
Kutch	..	..	1	82,000	1	1				
Manipur	..	..	1	23,068		+	1	19	1	48,137
Tripura	..	..	1	17,888	1	1	1	6	1	15,700

—Nil.
+ Not available.

Table No. 87

Statement showing the number of students admitted to and passed out from the various Medical Schools in India and the total expenditure incurred by them etc. during the years 1954 and 1956.

Name of location of School	Year	Total No. of seats available	No. of students admitted		No. of students qualified		Total No. of students on rolls		Total expenditure	Cost of teaching per student per year
			Men	Women	Men	Women	Men	Women		
1. Roberston Medical School, Nagpur.	1954 1956	202 80	118 265	14 24	73 80	11 5	324 717	25 49	Rs. 1,33,875 1,65,596*	362 297*
2. Arya Medical School, Ludhiana.	1954 1956	35 35	33 25	2 10	33 28	— 1	165 156	11 27	1,46,744 2,10,771	778 990
3. Ronaldshay Medical School, Burdwan.	1954 1956	** **	** **	** **	19 14	— —	29 18	1 —	20,928 50,035	698 2,780
4. Nilratan Sircar Medical School, Calcutta.	1954 1956	** **	** **	** **	10 4	3 —	31 5	3 —	95,337 14,656	2,804 2,931
5. Mrs. Radhabai Palitkar Medical School, Hyderabad.	1954 1956	+ 100	+ 120	+ 15	+ —	+ —	+ 230	+ 42	+ 92,996	+ 279
6. Medical School, Bangalore	1954 1956	100 100	113 109	14 18	59 88	22 19	491 528	91 84	2,00,964 2,51,062	345 410
TOTAL	1954 1956	337 315	264 519	30 67	184 214	36 25	1,040 1,654	131 202	5,97,848 7,85,116	

NOTE :— + Not available.

— Nil.

* Where information for 1956 is not available, statistics for 1955 are inserted.

** Fresh admission stopped.

Table No. 88

Statement showing the number of students admitted to and passed out from the various Medical colleges in India and the total expenditure incurred by them during the years 1954 and 1956

Sl. No.	Name and location of the college	Year	No. of seats available	No. of students admitted		No. of students qualified		Total Number of students of roll		Total expenditure	Cost of teaching per student per year
				Men	Women	Men	Women	Men	Women		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1.	Andhra Medical College, Visakhapatnam.	1954 1956	85 125	66 100	19 25	58 91	17 25	388 497	100 114	5,81,349 5,87,233	1,191 961
2.	Guntur Medical College, Guntur.	1954 1956	50 105	39 85	11 20	— —	— —	102 270	19 56	3,60,989 5,83,319	2,983 1,789
3.	Osmania Medical College, Hyderabad.	1954 1956	100 100	80 70	20 30	52 73	20 23	356 396	123 142	4,56,190 6,04,246	952 1,123
4.	Gandhi Medical College, Hyderabad.	1954 1956	50 50	34 34	6 16	— —	— —	34 153	6 37	55,795 74,865	1,395 394
5.	**Assam Medical College, Dibrugarh.	1954 1956	65 100	66 91	8 9	58 74	7 5	383 460	33 41	6,85,577 7,56,859	1,648 1,511
6.	Prince of Wales Medical College, Patna.	1954 1956	100 120	100 100	17 20	83 94	7 9	502 551	93 107	7,33,574 7,23,008	1,233 1,097
7.	Darbhanga Medical College, Darbhanga.	1954 1956	64+12* 94+12*	58+11* 82+10*	6+1* 10+2*	104 79	3 2	350 427	21 43	5,41,634 5,21,529	1,549 1,110
8.	B.J. Medical College, Poona	1954 1956	100 100	80 75	20 25	44 51	13 16	345 393	105 121	7,27,097 5,34,049	1,616 1,039

Table No. 88—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
9.	**B.J. Medical College, Ahmedabad.	1954 1956	100+15* 100	87+15* 83	13 17	44 65	6 6	379 425	49 72	11,03,878 7,26,841	1,612 1,378
10.	Grant Medical College, Bombay.	1954 1956	120+20* 120+20*	88+15* 87+18*	32+3* 36+2*	118 105	21 30	631 592	136 145	6,64,747 11,03,635	867 1,497
11.	**Seth G.S. Medical College, Bombay.	1954 1956	82 82	64+3* 56+9*	21 29+2*	53 68	24 16	533 339	133 126	5,65,871 6,75,310	850 1,452
12.	Topiwala National Medical College, Bombay.	1954 1956	60 60	46 37	14 23	49 59@	17 15@	310 268	63 80	3,57,187 4,00,220	961 1,147@
13.	Medical College, Nagpur	1954 1956	91 149	73 114	18 35	105 74	12 12	467 503	86 104	25,13,798 26,10,810	4,545 4,300
14.	Medical College, Baroda	1954 1956	60 60	53 47	7 9	27 30	2 6	218 256	32 38	3,70,406 4,17,701	1,482 1,352
15.	Govt. Medical College, Aurangabad.	1954 1956	60	39	21	—	—	37	19	—	+
16.	M.P. Shah Medical College, Jamnagar.	1954 1956	60	54	6	—	—	87	19	4,62,725	+
17.	Lady Hardinge Medical College, New Delhi.	1954 1956	40 60	— —	41 60	— —	42 31	— —	245 274	15,57,359 23,72,457	6,257 8,659
18.	A.I. Institute of Medical Sciences, New Delhi.	1954 1956	+	3/4	+	+	+	+	+	—	+
19.	Medical College, Trivandrum.	1954 1956	104	70	32	36	18	295	98	6,19,426	1,576
20.	**G.R. Medical College, Gwalior.	1954 1956	48 75	36 53	12 22	52 62	6 11	252 256	49 67	3,70,700 5,36,209	1,232 1,640
21.	**Mahatma Gandhi Memorial College, Indore.	1954 1956	100+15* 75	87+15* 59	13 16	44 60	6 8	379 286	49 62	10,94,478 7,11,107	1,529 1,251
22.	Gandhi Medical College, Bhopal.	1954 1956	75	52	19	—	—	93	29	3,30,400	2,708
23.	Medical College, Jabalpur	1954 1956	68	58	10	—	—	104	18	12,23,812@	6,305
24.	Christian Medical College, Vellore.	1954 1956	50 50	28 25	22 25	11+3* 17	21+1* 15	115 128	24 117	4,24,041 5,70,333	1,771 2,328
25.	Stanley Medical College, Madras.	1954 1956	110 110	81 95	29 15	76 87	18 30	544 512	155 138	6,00,290 5,88,053	859 892
26.	Madras Medical College, Madras.	1954 1956	135 135	94 94	41 41	107 145	37 46	1,158 1,029	338 301	10,19,553 10,59,505	682 770
27.	Madurai Medical College, Madurai.	1954 1956	50 70	41 48	9 22	— —	— —	41 144	9 39	4,11,717 6,91,761	8,234 3,434
28.	University Medical College, Mysore.	1954 1956	75 75	67 72	18 14	53 61	14 11	438 458	99 89	2,75,50 2,84,950	513 521
29.	**Medical College, Bangalore	1954 1956	100	80	20	—	—	172	27	1,06,383	414
30.	Kasturba Medical College, Manipal and Mangalore.	1954 1956	120 122	112 112	8 10	— —	— —	159 166	10 13	5,71,742 5,76,266	2,220 2,311
31.	Sriram Chandra Bhanj Medical College, Cuttack.	1954 1956	50 62	39 44	11 18	35 44	3 5	230 222	42 64	4,88,772 6,08,373	1,866 2,092
32.	Medical College, Amritsar	1954 1956	80 80	65 66	15 15	73 79	10 21	536 519	104 96	8,41,803 9,18,116	1,637 1,90
33.	Christian Medical College, Ludhiana.	1954 1956	50 50	26 25	24 25	— 3	30 29	52 101	158 142	6,06,957 9,54,447	— 4,260
34.	Government Medical College, Patiala.	1954 1956	54 80	42 65	12 15	— —	— —	82 186	22 46	9,46,753 5,86,166	9,103 2,527

Table No. 88—concl'd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
35.	Sawai Man Singh Medical College, Jaipur	1954 1956	80 85	64 67	16 18	66 61	5 14	347 350	77 86	4,80,107 5,98,576	1,132 1,373
36.	King George's Medical College, Lucknow.	1954 1956	150 150	174 121	42 26	178 155	24 32	903 1,092	166 208	13,71,310 16,61,249	1,201 1,516
37.	Medical College, Agra	1954 1956	75 75	61 60	15 15	41 55	20 7	273 310	91 88	7,46,988 8,02,710	2,052 +
38.	G.S.V.M. Medical College, Kanpur.	1954 1956	100	75	25	Started in 1955		150	50	3,78,004	+
39.	Medical College, Calcutta	1954 1956	136+400* 136+100*	127+88* 110+83*	9+12* 26+15*	299 200	24 19	1,037 921	118 128	13,50,128 11,84,512	1,16 1,086
40.	**Nilratan Sircar Medical College, Calcutta.	1954 1956	150 100	130 87	27 18	63 105	8 14	693 689	97 109	10,66,055	1,336 +
41.	**R.G. Kar Medical College, Calcutta.	1954 1956	125 125	125+114* 133+109*	15* 26*	128+115* 124+111*	9* 14*	795+327* 728+317*	4+39* 4+69*	2,43,034 4,27,461	304 382
42.	Bankura Samilani Medical College, Calcutta	1954 1956	50	50	—	Started in 1956		50	—	84,311	1,283
43.	**Calcutta National Medical Institute, Calcutta	1954 1956	100 100	136 105	17 5	66 139	1 98	620 590	69 64	4,36,704 4,40,349	634 673
44.	Medical College, Pondicherry	1954 1956	+	+	+	+	+	+	+	+	+
TOTAL			2,905+ 462*	2,459+ 361*	593+ 31*	2,087+ 118*	418+ 10*	13,652+ 327*	2,925+ 39*	2,35,56,028	—
		1954 1956	3,797+ 132*	2,980+ 229*	839+ 47*	2,296+ 111*	574+ 14*	15,209+ 317*	3,621+ 69*	3,01, 3,340	—

NOTE: —+ Not available.

—Nil.

@ Where information for 1956 is not available, 1955 statistics are inserted.

* Condensed M.B.B.S. course.

**Capitation charges per annum are nil for most of colleges except for those marked with double asterisk.

Table No. 89
Fellowships and Study Tours for higher training abroad
1954—1956

International sponsoring agency (1)	Subject (2)	Countries (3)	Scholarships (4)
1954			
Colombo Plan	Tuberculosis	U.K.	1
	Public Health	Canada	1
	Administration		
	Radiology	Canada	1
	Psychiatric	Canada	1
W.H.O.	Physiology and Industrial Hygiene.	U.K.	1
	Tuberculosis	Norway, Switzerland, Turkey and Syria.	1
	Dentistry	New Zealand	2
	Anaesthesiology	Denmark	1
	Obstetrics and Gynaecology.	U.K. & U.S.A.	1
	Anatomy	U. K. and Europe	1
	Health Education	U.S.A.	1
	M. & C.H.	U.S.A.	1
	Environmental	U.S.A.	2
	Sanitation		
	Pharmacology	U.K.	1
T.C.M.	Sanitary Engineering	U.S.A.	1
	Health Education	U.S.A.	1
	E.N.T.	U.S.A.	
	Dermatology & V.D.	U.S.A.	1
	Pathology of Nutritional Disorders.	U.S.A.	2
	Cardiology and Chest Diseases.	U.S.A.	1
	Pathology	U.S.A.	1
	Tuberculosis	U.S.A.	
	Public Health Administration.	U.S.A.	
	Public Health Engineering.	U.S.A.	
	Drugs Control	U.S.A.	
	Paediatrics	U.S.A.	
Rockefeller Foundation	Architecture	U.S.A., U.K., Sweden and Switzerland.	

Table No. 89—*contd.*

(1)	(2)	(3)	(4)
1955			
Colombo Plan	Biochemistry	Newzealand	1
	Microbiology	Canada	1
	Ophthalmology	Canada	1
	Tuberculosis	U.K.	1
	Obstetrics and Gynaecology.	Canada	1
	Medicine	U.K.	1
	Dentistry	Canada	1
	Bacteriology	Canada	1
W.H.O.	Blood Transfusion	Australia	1
	Haematology	Australia	1
	Obstetrics and Gynaecology.	Canada	1
	Surgery	Canada	1
	Paediatrics	U.S.A.	1
	Physiotherapy	U.K.	1
	Health Education	U.K.	1
	Anesthesiology	France	1
Rockefeller Foundation	Psychiatry	U.S.A.	1
	Public Health	U.S.A.	1
	Preventive Medicine 1956	U.S.A.	1
1956			
Colombo Plan	Tuberculosis	U.K.	3
	Surgery	{ U.S.A. Canada U.K.	1 3 1
	Forensic Medicine	U.K.	2
	Pathology	{ Canada U.K.	1 1
	Histo-pathology	U.K.	1
	Pharmacology	{ U.K. U.S.A.	1 2
	Urogenital Surgery	U.K.	1
	Physiology	U.K.	1
	Obstetrics and Gynaecology.	Canada	1
	Pharmacy	Canada	1
	Anaesthesia	U.S.A.	1
	Public Health Administration.	U.S.A.	1
	Sanitary Chemistry	U.S.A.	1
	Public Health Engineering.	U.S.A.	1

Table No. 89—*concl.*

(1)	(2)	(3)	(4)
W.H.O.	Medico-Social work	U.S.A.	1
	M.C.H.	{ U.K. U.S.A.	1 1
	Physiotherapy	U.K.	2
	Tuberculosis	{ U.K. U.S.A.	2 3
	Public Health Engineering.	{ U.S.A. Newzealand	1 1
	Social and Preventive Medicine.	U.S.A.	5
	Medical Education	U.S.A.	1

Table No. 90

Statement showing the number of doctors registered with various State Medical Councils 1954 and 1956.

State	Year	Graduates		Licentiates		Total	With foreign qualifications	
		Men	Woman	Men	Women		Men	Women
Andhra	1954	—	—	—	—	—	—	—
	1956	625	115	312	19	1,071	7	4
Assam	1954	342	5	1,902	17	2,266	80	3
	1956*	386	8	1,937	17	2,348	87	3
Bihar	1954	1,963	110	2,869	125	5,067	90	23
	1956	2,334	146	2,940	130	5,550	92	29
Bombay	1954	6,619	1,112	5,834	568	14,133	590	71
	1956	8,194	1,429	7,298	711	17,632	657	91
Madhya Pradesh	1954	591	96	1,248	117	2,052	52	14
	1956*	810	140	1,278	125	2,353	55	17
Madras	1954	4,752	991	1,999	601	10,343	343	148
	1956	5,187	1,143	3,898	602	10,830	353	149
Orissa	1954	385	45	708	38	1,176	24	4
	1956	460	55	734	38	1,287	26	8
Punjab	1954	1,311	324	2,068	241	3,944	41	14
	1956	1,640	425	2,233	316	4,614	45	18
Uttar Pradesh ..	1954	2,906	275	2,805	215	6,201	+	+
	1956	3,306	368	2,840	220	6,734	+	+
West Bengal ..	1954	6,077	151	13,851	305	20,384	224	19
	1956	7,022	224	13,975	308	21,529	236	23
Hyderabad ..	1954	652	86	410	58	1,206	85	13
Kerala	1954	+	+	+	+	+	+	+
	1956	—596 men and 129 women—				725	+	+
Mysore	1954	507	76	1,044	171	1,798	52	20
	1956	—	1,600	631	—	2,231	—	—
Bhopal	1954	18	4	33	4	59	4	2
TOTAL	1954	26,123	3,275	36,771	2,460	68,629	1,585	331
	1956	29,964	4,053	37,445	2,486	76,904	1,558	342

NOTE.—+ Information not available.

—Nil.

*Where information for 1956 is not available, 1955 statistics are inserted.

Table No. 91

Statement showing the number of students admitted to and passed out from various Dental Colleges in India and the expenditure incurred by them etc. during the year 1954 and 1956.

Name of the College	Year	Annual admissions	No. of students admitted		No. of students qualified	Total Expenditure	
			Men	Women		Men	Women
1. Nair Hospital Dental College,	1954	60	54	6	20	1	2,66,417
	1956	60	43	17	16	2	1,90,756
2. Sir C.P.M. Dental College, Bombay	1954	40	33	5	27	3	1,03,823
	1956	40	32	8	18	5	2,12,788
3. Dental Wing, Madras Medical College, Madras	1954	18	18	—	2	—	44,415
	1956	20	18	2	3	—	44,415
4. Punjab Government Dental College and Hospital, Amritsar	1954	14	12	2	—	—	1,03,910
	1956	14	12	2	12	1	1,40,636
5. Dental Wing, Government Medical College, Patiala	1954	—	—	—	—	—	—
	1956	12	10	2	2	—	4,822
6. Dental College and Hospital, King George's Medical College, Lucknow	1954	20	18	1	13	—	—
	1956	25	26	—	12	—	96,000
7. Calcutta Dental College and Hospital, Calcutta	1954	30	27	1	1	—	1,02,556
	1956	30	29	1	6	—	2,72,735
TOTAL	1954	182	162	15	60	4	6,21,121
	1956	201	170	32	67	8	9,62,252

NOTE:— + Not available.
—Nil.

Table No. 92
Statement showing State-wise the number of Dental Practitioners
(1954 and 1956)

State	Year	No. of dental practitioners		Total
		Men	Women	
Assam	1954	56	2	58
	1956	61	2	63
Bihar	1954	99	—	99
	1956	101	—	101
Bombay	1954	1,048	50	1,098
	1956	626	51	977
Madhya Pradesh	1954	116	1	117
	1956	49	—	49
Madras	1954	288	9	297
	1956	322	12	324
Orissa	1954	12	—	12
	1956	12	—	12
Punjab	1954	486	3	489
	1956	799	10	809
Uttar Pradesh	1954	375	5	380
	1956	374	5	379
West Bengal	1954	545	9	554
	1956	584	10	594
Saurashtra	1954	74	—	74
Bhopal	1954	4	—	4
Delhi	1954	286	10	296
	1956	286	10	296
TOTAL	1954	3,389	89	3,472
	1956	3,514	100	3,614

NOTE: Nil.

Table No. 93
Statement showing State-wise the number of Dental Practitioners
(1954 and 1956)

	Madras	Bombay	Remarks
	Rs.	Rs.	
<i>Non-recurring expenditure</i>			
I. Machinery for normal work and for replacement.	1,15,000	1,97,000	This includes Rs. 20,000 which is required for a new boiler, the repairing cost of the present boiler being Rs. 18 000.
Machinery required for increased production.	68,000	—	
Equipment for Laboratory	23,000	—	
II. Workshop machinery	—	7,000	
Flooring of building	—	35,000	
Renovation & redesigning	—	44,000	
Relaying of steam pipes etc.	—	40,000	
Lighting of the factory	—	10,000	
Fans and exhaust fans	—	20,000	
Miscellaneous	—	17,000	
III. Purchase of a Rotary print Machine	8,500	—	
IV. Canteen	—	50,000	
Total non-recurring expenditure	2,14,500	4,20,000	
GRAND TOTAL	6,34,500		
<i>Initial annual recurring expenditure on staff:</i>			
V. Increased production and analytical laboratory (Pay and Allowances) proposed by the DADG (MS), Madras and Bombay.	39,000	40,500	
TOTAL	39,000	40,500	
Roughly	80,000		

Table No. 94

Table showing summary of work done by Chemical Analysts, Chemical Examiners and the Serologist, Government of India during 1954 and 1956

MEDICO-LEGAL INVESTIGATIONS

Designation of Officers			Human Poisoning		Animal Poisoning		Stains		Miscellaneous	
			Cases	Articles	Cases	Articles	Cases	Articles	Cases	Articles
Director Cum-Senior Chemical Examiner, P.S. Laboratory, Calcutta.	1954 1956		1,408	2,574	79	142	1,418	6,611	63	225
Chemical Examiner, Punjab, Kasauli	1954 1956		857 768	3,698 2,369	29 13	133 42	1,295 1,356	2,973 3,873	23	121 45
Chemical Examiner, U.P. & M.P., Agra	1954 1956		556 629	1,587 1,813	25 14	48 20	1,623 1,928	7,705 9,924	6	54 43
Chemical Examiner, Bombay	1954 1956		2,025 2,102	3,626 3,662	43 56	192 112	1,308 1,552	7,538 9,002	817 246	2,664 1,033
Chemical Examiner, Madras	1954 1956		1,466 1,503	5,735 5,796	36 36	218 234	1,352 1,227	7,177 7,353	269 232	1,453 1,384
Chemical Examiner, Jammu and Kashmir, Jammu.	1954 1956		89 95	238 245	11 17	24 21	38 67	94 152	484 1	1,467 1
Chemical Examiner, Mysore and Bangalore	1954 1956		199 152	574 643	— —	— —	220 191	1,322 1,298	14 15	49 42
Chemical Analyser, Indore	1954 1956		279 142	502 408	7 3	7 3	203 285	1,108 1,210	167 159	317 1,287
Chemical Examiner, Rajasthan, Jaipur	1954 1956		241 263	473 523	— —	1 —	— 7	164 212	869 1,263	68 95
Chemical Analyser, Junagadh	1954 1956		— 62	— 103	— 1	1 —	— 1	— 201	1,306	5
Serologist, Government of India, Calcutta	1954 1956		— —	— —	— —	— —	— —	*6,338 @ 7,313	27,054* 39,984@	— —

*Includes 137 cases and 246 articles from the Union of Burma.

@ Includes 116 cases and 160 articles from the Union of Burma.

Table No. 95

Details of Activities conducted by the Serologist, Government of India during 1954-1956

Year		No. of cases examined	No. of exhibits analysed	Tests for blood and semen		Serologist tests for syphilis	Rhesus grouping and typing
				No. of cases	No. of exhibits		
1954			27,054	1,708	9,374	939	454
1955			30,667	2,112	11,495	13,368	398
1956			39,984	2,820	16,789	20,702	597

Table No. 96

Statement showing the statistics of the Seamen examined at various major Seaports in India and Seamen treated at the Seamen's Clinics, 1954-1956

Particulars	Bombay		Calcutta		Madras		Cochin		Visakhapatnam	
	1954	1956	1954	1956	1954	1956	1954	1956	1954	1956
Seamen examined (including re-examined).	14,990	9,582	15,210	11,580	437	281	94	187	125	15
Seamen declared fit			10,035	6,155	11,764	8,708	404	237	35	179
Seamen declared temporarily unfit	4,622	3,323	3,290	2,508	29	30	8	7	2	1
Seamen declared permanently unfit.	333	104	156	365	4	13	1	1	3	..
Seamen's Clinics	Bombay									
Seamen treated as out-patients ..	Calcutta									
New Cases	2,481	1,778	2,019	2,221	..	..	..	..	..	..
Old Cases	9,230	5,068	15,872	18,377	..	..	..	..	..	..
Seamen treated as in-patients ..	441	..	(bed days occupied, 1,740)	..	..	..	..	..	..	..

Note :— —Nil.

Table No. 97

Statement showing statistics of important work done at the Port Health Organisation at major Seaports in India during the year 1954 and 1956

Particulars	Bombay		Calcutta		Madras		Cochin		Visakhapatnam	
	1954	1956	1954	1956	1954	1956	1954	1956	1954	1956
<i>Incoming vessels</i>										
Ships medically inspected	195	160	156	101	567	438	312	325	35	22
Passengers medically inspected ..	38,707	29,496	371	1,442	37,352	32,374	1,277	2,455	19	1
Crew medically inspected	21,469	17,175	9,826	6,208	36,217	24,221	16,049	16,601	2,294	1,275
Ships arriving from yellow fever areas.	33	124	92	85	70	56	28	2	22	7
Crew arriving from yellow fever areas.	11,984	11,580	5,390	5,202	4,084	3,364	625	257	1,418	634
Passengers arriving from yellow fever areas.	20,378	19,088	327	40	458	89	18	402	6	1
No. of infected ships attended ..	46	23	9	6	6	2	—	—	—	—
<i>Outgoing vessels</i>										
Ships medically inspected	940	965	1,067	1,034	378	337	447	376	291	238
Passengers medically inspected ..	80,418	84,212	20,220	18,802	24,995	27,868	1,143	2,109	272	94
Crew medically inspected	56,504	61,154	64,569	59,998	26,697	20,554	24,605	20,923	17,904	13,309
<i>Pilgrim-Sailings</i>										
Ships deratted	44	41	48	51	—	—	—	—	—	—
Ships issued with Deratization Exemption Certificates.	131	130	102	121	16	30	—	13	—	24
No. of passengers and crew isolated and admitted in Y.F. hospital.	7	—	—	—	—	—	—	—	—	1
No. of infectious diseases cases detected on vessels.	—	37	—	7	—	—	—	—	—	33
No. of ships inspected for prophylaxis.	—	414	—	618	—	90	—	68	—	2
No. of ships inspected for medical stores.	—	22	—	127	—	21	—	—	—	—
<i>Pilgrim-Sailings</i>										
Year	1954	1956	Incom- ing vessels	Pilgrims	Outgo- ing vessels	Pilgrims				
	6	10	8,011	7	7,364	13,079				
	1954	1956	12,731	9	13,079					

Table No. 98

Statement showing particulars of aircraft which arrived from and left for foreign countries from major airports during the years 1954-56.

Particulars	Bombay Airport Santa Cruz		Calcutta Airport (Dum Dum)		Madras Airport		Tiruchirappalli Airport		Delhi Airport Palam		Amritsar Airport		Diversionary Airports			
	1954	1956	1954	1956	1954	1956	1954	1956	1954	1956	1954	1956	1954	1956	1954	1956
Inward Traffic																
Aircraft medically inspected.	1,027	1,180	3,151	3,025	411	427	747	611	1,083	1,286	111	285	7	2	1	4
Passengers medically inspected.	26,492	37,228	85,182	88,618	4,515	6,406	9,334	10,116	22,345	28,501	732	1,865	248	20	24	84
Crew medically inspected.	8,713	11,130	23,347	23,376	1,778	2,000	3,010	2,464	6,820	9,103	402	1,270	47	7	10	—
Passengers quarantined for being at risk to yellow fever.	32	86	—	73	1	1	—	—	1	—	—	—	—	—	—	—
Aircraft dis-inspected.	—	538	—	77	1	1	—	—	1	40	—	—	—	—	—	—
Outward Traffic																
Aircraft medically inspected.	1,292	1,177	1,292	3,160	657	460	743	606	885	959	—	—	2	1	—	4
Passengers medically inspected.	33,346	42,827	33,346	98,116	6,346	7,220	99,99	10,623	18,122	17,990	—	—	28	—	—	84
Crew medically inspected.	10,083	10,317	10,083	24,988	1,818	1,981	2,991	2,435	5,667	7,306	—	—	14	—	—	—

Note :— *Where information for 1956 is not available, 1955 statistics are inserted

Table No. 99

Table showing the record of the Health Survey work in Community Project Blocks in 1956.

Name of the Blocks	State	Period of Survey	Area in sq. mile approx.	Population	Population taken for Survey	Villages taken for Survey	Total No. of villages surveyed	No. of families examined	No. of individuals	Blood samples	Stool Samples
Dabra C.P. Block	Madhya Bharat	2-12-55 to 12-3-56	350	83,111	67,129	161	35	589	3,006	2,239	1,395
Dongarpur Block.	C.P. Rajasthan	26-4-56 to 27-8-56	400	1,01,405	68,009	180	29	581	2,980	2,320	1,434
Ekangasari Block.	NES Bihar	27-8-56 to 31-12-56	75	84,881	67,036	89	27	447	3,139	2,310	1,483

Table No. 100

Statement showing the number of Ayurvedic Hospitals & Dispensaries in Rural and Urban areas for 1954-56.

State	(1)	Urban					Rural				
		Govt.	Municipal	District Board	Subsidiary	Private	Govt.	Municipal	District Board	Subsidiary	Private
		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Andhra ..	1954 1955	—	25 50	1	—	—	1 1	—	112 263	168 197	— 2
Assam ..	1954 1956	—	—	—	—	—	—	—	—	6 13	—
Bihar ..	1954 1956	1 1	—	—	—	—	7 15	8 8	275 160	200 172	450 450
Bombay ..	1954 1955	—	27 28	2 3	—	79 70	35 28	2 1	222 208	365 371	309 350
Madhya Pradesh ..	1954 1956	1 16	13 8	— 1	— 3	9 152	— 228	4 2	234 127	9 6	— 25
Madras ..	1954 1956	2 6	61 48	+ —	+ —	1 1	+ —	+ —	137 152	230 196	+ 21
Orissa ..	1954 1956	4 3	1 1	— —	— —	— —	50 64	— —	28 30	7 5	— —
Punjab ..	1954 1955	—	7 7	— —	— —	8 8	23 38	— —	30 30	16 19	8 8
Uttar Pradesh ..	1954 1956	2 3	44 34	— —	— —	— —	459 485	— —	244 322	62 109	139 224
West Bengal ..	1954 1956	—	1	—	1	4 3	81 2	—	—	—	78 3
Hyderabad ..	1954 1956	+	4	—	—	—	—	57	—	—	53
Jammu & Kashmir ..	1954 1956	—	6	—	—	—	2	35 123	—	—	6
Madhya Bharat ..	1954 1955	—	1 1	8 8	—	—	1 1	302 337	—	—	5 5
Mysore ..	1954 1956	+	+	+	+	+	+	+	+	+	+
Pepsu ..	1954	+	+	+	+	+	+	+	+	+	+
Rajasthan ..	1954 1956	—	40 10	— —	— —	11 20	— —	305 551	—	79	22 61
Saurashtra ..	1954	—	119	—	—	10	24	—	—	—	—
Travancore-Cochin ..	1954 1956	+	1	+	+	+	+	115	+	317	+
* Ajmer ..	1954	+	+	+	+	+	+	1	5	+	40
Bhopal ..	1954 1955	—	1 1	— —	— —	— —	— —	10 10	— —	— —	4 4
Coorg ..	1954	—	—	—	—	—	—	2	—	—	4
Delhi ..	1954 1956	—	—	12 15	— —	— —	1 1	— —	— —	— —	— —
Himachal Pradesh ..	1954 1956	—	—	—	—	—	—	61 71	— —	— —	— —
Kutch ..	1954	—	—	—	—	—	—	—	—	—	—

Table No. 100—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Manipur ..	1954 1955	—	—	—	—	—	—	—	—	—
Tripura ..	1954 1956	1 1	—	—	—	—	—	—	—	—
Vindhya Pradesh ..	1954 1955	3 12	1	—	—	76 60	—	—	—	—
Andaman & Nicobar Islands ..	1954 1956	—	—	—	—	—	—	—	—	—

NOTE :— Where information for 1956 is not available, 1955 statistics are inserted.
+ Not available.
— Nil.

Table No. 101

Statement showing the number of Practitioners of Ayurvedic & Unani System of Medical for 1954—1956.

Name of State		No. of Ayurvedic and Practitioners em- ployed			No. of subsidised Ayurvedic & Unani Practi- tioners	No. of Ayurvedic & Unani Practi- tioners registered	Total No. of Practi- tioners- borne on Register
		Govt. Board	District	Municipal Board			
(1)		(2)	(3)	(4)	(5)	(6)	(7)
Andhra	1954	1	252	28	168	+	+
	1955	2	470	50	218	+	+
Assam	1954	6	6	—	6	25	129
	1956	7	7	—	13	11	161
Bihar	1954	10	305	8	215	815	+
	1956	18	182	10	202	4,126	4,126
Bombay	1954	35	234	30	46	198	10,616
	1955	29	220	30	6	459	+
Madhya Pradesh ..	1954	—	228	19	+	5,655	+
	1956	250	—	11	58	+	+
Madras	1954	2	368	61	241	215	15,145
	1956	6	348	48	196	311	14,456
Orissa	1954	67	28	1	8	—	+
	1956	80	30	1	6	—	+
Punjab	1954	40	32	9	25	192	18,225
	1955	63	32	9	28	153	18,378
Uttar Pradesh ..	1954	547	272	65	250	554	28,933
	1956	577	349	68	1,372	1,202	31,477
West Bengal ..	1955	—	1	—	—	139	6,547
	1956	+	+	+	+	86	6,691
Hyderabad ..	1954	216	—	—	55	26	345
	1956	+	+	+	+	+	+
Jammu & Kashmir	1954	126	+	+	+	+	+
	1956	135	+	+	+	+	+
Madhya Bharat ..	1954	306	—	8	—	1,839	2,589
	1955	344	—	8	—	780	—
Mysore	1954	+	+	+	+	+	+
	1956	+	+	+	+	+	+
Pepsu	1954	+	+	+	+	+	+
	1956	+	+	+	+	+	+
Rajasthan	1954	465	79	—	33	—	4,797
	1956	646	+	+	33	2,557	—

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Saurashtra	1954 1956	+ 124	+ —	+ —	+ 29	+ —
Travancore-Cochin	1954 1956	+ 35	+ —	+ —	+ 35	+ —
Ajmer	1954 1955	+ 1	+ —	+ —	+ —	+ —
Bhopal	1954 1956	45 44	— —	— —	4 4	— —
Coorg	1954 1955	3 3	— —	— —	— —	— —
Delhi	1954 1956	— —	— —	17 19	— —	316 37
Himachal Pradesh	1954 1956	61 70	— —	+ —	+ —	+ —
Kutch	1954 1956	+ +	+ +	+ +	+ +	+ +
Manipur	1954 1956	— —	— —	— —	— —	— —
Tripura	1954 1956	— 1	— —	— —	— —	— —
Vindhya Pradesh ..	1954 1956	+ 1	+ +	+ +	+ +	+ +
Andaman and Nico- bar Islands.	1954 1956	— —	— —	— —	— —	— —
TOTAL	1954 1956	1,930 2,435	1,803 1,638	246 254	1,051 2,163	9,974 9,771
						81,545 87,768

NOTE.— + Not available.

—Nil.

Where information for 1956 is not available, 1955 statistics are inserted.

Table No. 102

International Conferences and Meetings Attended by Delegates from India during 1954—1956.

International Conferences and Meetings	Date and Place 1954—56
7th, 8th and 9th W.H.O. Regional Committees for South-East Asia.	(i) Delhi : September, 1954. (ii) Bandung : September, 1955. (iii) Delhi : September, 1956.
International Federation of Gynaecology and Obstetrics.	Geneva : July, 1954.
Medical Congress	Paris : July, 1954.
W.H.O. Expert Committee on Midwifery Training.	Hague : (Holland) August, 1954.
World Child Welfare Congress	Zagreb (Yugoslavia) : September, 1954.
International Congress on Tuberculosis	Madrid September, 1954.
7th, 8th and 9th World Health Assembly Meetings.	(i) Geneva : May, 1954. (ii) Mexico : May, 1955. (iii) Geneva : May, 1956.
International Conference of Pathologists	Tashkent (USSR) : September, 1954.
Annual Health Congress of the Royal Sanitary Institute.	Scarborough (U.K.) August, 1954.
3rd Congress of International Association of Genetology.	London : July, 1954.
6th International Congress on Cancer, Sao ..	Paulo : (Brazil) July, 1954.
5th International Congress on Mental Health	Toronto : August, 1954.
6th World Congress of the Society for the Welfare of Cripples.	Scheveningen (Netherlands) September, 1954.
3rd International Congress on Diseases of the Chest.	(i) Barcelona : (Spain) October, 1954. (ii) Cologne : August, 1956.
Executive Committee meeting of International Union for Health Education of the Public.	Paris : December, 1954.
4th Commonwealth Health and Tuberculosis Conference.	London, : June, 1955.
International Union against Tuberculosis	(i) Paris : July, 1955. (ii) Paris : April, 1956.
6th International Congress of Anatomists of BCG Bacteriologists.	Paris : July, 1955. Geneva October, 1956.
Conference on Malaria for the Eastern Mediterranean and European Regions.	Athens : June, 1956.
W.H.O. Expert Committee on Malaria	Athens : June, 1954.

R

L: 5 Y N 54
N 56

347

L15Health-800-27-7-1960-(Sec. II)-GIFT.

PRINTED IN INDIA BY THE MANAGER, GOVERNMENT OF INDIA PRESS,
FARIDABAD, 1960