

HEALTH AND FAMILY WELFARE DEPARTMENT

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Chapter – 1

INTRODUCTION

உற்றான் அளவும் பிணியளவும் காலமும் கற்றான் கருதிச் செயல் – குறள் 949

The learned physician should ascertain the condition of his patient; the nature of his disease, and the season of the year and then proceed with his treatment.

1.1 Government of Tamil Nadu is committed to build a healthy society not only by providing quality medicare facilities throughout the State but also by ensuring medical services of the highest order, keeping pace with rapid technological developments in the field of medicine. A vibrant health policy that ensures prevention of diseases, easy accessibility of services, availability of doctors and para medical human resources and qualitative treatment is the mandate of the Government. The focus of this Government is to transform the society into a healthy one.

1.2 Tamil Nadu has emerged as a model State in the country in providing health care services. already achieved the Tt has Millennium Development Goals (MDG) and also Sustainable Development Goals (SDG) set by the United Nations Organization (UNO), far ahead than most other Indian States. A significant reduction in Infant Mortality Rate (IMR) from 24 per thousand live births in 2010 to 16 in 2017 as per Sample Registration System (SRS) Data 2017 against the National IMR of 33, substantial reduction in Crude Birth Rate (CBR) over the same period and also reduction of Maternal Mortality Ratio (MMR) from 90 per one lakh live births in 2010-2012 to 66 in 2014-2016 as per SRS Data 2014-2016 are indicative of the robust policy frame work and also sincere efforts of this Government to improve the health profile of the State. Tamil Nadu has received award from the Government of India for the reduction of MMR to 66 per one lakh live births well ahead of the time set by the SDG of 70 per one lakh live births by 2030 in MMR. While Institutional delivery in Tamil Nadu is almost 100 percent, 65% of the deliveries take place in Government Medical Institutions.

1.3 Tamil Nadu is recognized as one of the best performing States in the Health Sector. The primary, secondary and tertiary health care delivery systems are being strengthened utilizing the financial resources from the National Health Mission, Tamil Nadu Urban Health Care Project funded by the Japan International Cooperation Agency (JICA), besides State funding in such a way that health care is delivered efficiently to all the people in the State.

1.4 Government of Tamil Nadu has introduced several landmark schemes such as starting of Nadu Medical Services Corporation Tamil (TNMSC), Tamil Nadu State AIDS Control Society (TNSACS), Transplant Authority of Tamil Nadu (TRANSTAN) on the one hand and implementation of pioneering schemes at the State level such as Dr.Muthulakshmi Reddy Maternity Benefit Scheme, Chief Minister's Comprehensive Health Insurance Scheme, Menstrual Hygiene Programme, Birth Companion Programme, Amma Baby Care Kit, Amma Arogya Thittam, Amma Whole Body Check-up, Magaperu Sanjeevi among others. Amma to the Comprehensive Ensuring access

Obstetric and Newborn Emergency Care (CEmONC) Centres, Neonatal Intensive Care Units (NICU), Blood Banks and Blood Storage Centres have been pivotal to the improvement in maternal and child health. Many novel schemes such as TNMSC, Maternal Death Audit, Birth Companion Programme have been replicated in many other States. Tamil Nadu has been adjudged as the best State in the country in terms of deceased organ transplantation and has the distinction of bagging four also consecutive Best State Award for the years from 2015 to 2018.

1.5 The Government has brought the Tamil Nadu Clinical Establishment (Regulations) Amendment Act, 2018 and the Tamil Nadu Clinical Establishment (Regulation) Rules, 2018 to implement the Tamil Nadu Clinical Establishment (Regulation) Act, 1997 for registration and regulation of all clinical establishments in the State and to prescribe the minimum standards of facilities and services to be provided by them. This is a milestone in the health sector. As per the Act and the rules

made thereunder, all the Clinical establishments in the State will have to be registered.

Today, Tamil Nadu is viewed as the ultimate health care destination in India and it attracts medical tourism not only from other States of the country but also from the other countries around the World.

State Profile

1.6 Tamil Nadu is the seventh most populous State in the country with a population of 7.21 crore as per 2011 census with Decadal Growth Rate of 15.6%. The State has 33 Revenue Districts. For the management of public health services, the State has been divided into 42 Health Unit Districts in addition to Chennai Corporation. Tamil Nadu is one of the best performing States in terms of implementing Reproductive and Child Health schemes and has already achieved the National Health Mission / Reproductive Child Health goals. The department has staff strength of over one lakh persons serving for an average of 6.5 lakh out-patients and 70,000 in-patients per day. Niti Aayog and many independent review missions have commended the performance of the State.

Current Scenario

1.7 Medical and Health facilities in Tamil Nadu have grown rapidly. The details of Government Medical and Health Facilities in Tamil Nadu is given below:

SI. No.	Description	Units
1	Government Medical Colleges	24
2	Hospitals attached with the Medical Colleges	50
3	Tamil Nadu Government Multi Super Speciality Hospital	1
4	Tamil Nadu Government Dental College and Hospital	1
5	District Headquarters Hospitals	29
6	Taluk and Non-Taluk Hospitals	273
7	Primary Health Centres (PHCs)	1,806
8	Health Sub Centres (HSCs)	8,713
9	Urban Primary Health Centres (UPHCs) including Chennai Corporation	460
10	New Community Health Centres (CHCs) being established under	15

SI. No.	Description	Units
	NHM in Chennai Corporation	
11	Employees' State Insurance (ESI) Hospitals	10
12	ESI Dispensaries	216
13	Indian System of Medicine Hospitals and Dispensaries	1,534

With the network of primary, secondary, tertiary care hospitals and a plethora of cross cutting programmes such as the National Health Mission, AIDS Control Society, Maternal and Child Health initiatives, Indian Medicine, other focused programmes and special initiatives, the department is fully involved in implementing the two pronged strategy of prevention and cure to ensure that the health needs of the citizens in our State are taken care of. The State has a robust public private partnership by which the people are able to access the best of the services in the Government and private sector through the landmark Chief Minister's Comprehensive Health Insurance Scheme (CMCHIS), free of cost. The World Bank has

come forward to provide funding support of Rs.1,999.902 crore for implementing Tamil Nadu Health Systems Reforms Programme to improve the access of the poor and disadvantaged to the Government health facilities and Programme Agreement with the World Bank has been signed on 4.6.2019 and implementation is under progress.

1.8 The schemes of the Government are described in detail in the rest of the Chapters of the Policy Note, while a summary of few significant achievements are narrated below:

Significant Achievements in the Health Sector during the last Eight Years

Health Indicators

 Infant Mortality Rate (IMR) which was 24 in 2010 has been reduced to 16 per 1,000 live births in 2017 as per SRS data 2017 against the National IMR of 33. This Government has received a sum of Rs.489.40 crore during the period from 2012-2013 to 2014-2015 as incentive from the Government of India for reducing the IMR.

- Maternal Mortality Ratio (MMR) was 90 in 2010-2012 and this has been reduced to 66 per one lakh live births as per latest SRS data 2014-2016. Now, it is further reduced to 60 as per 2018 State Health Management Information System Data. The current MMR of India is 130.
- Total Fertility Rate (TFR) is 1.6. The target of 12th Five Year Plan has already been achieved by the Government. This is the lowest in the country against the India's status of 2.3. The above lowest rate is maintained by the State for the last three years.

State Schemes

 Chief Minister's Comprehensive Health Insurance Scheme, one of the flagship schemes of the Government, was introduced in 2012 for providing treatment to the public in the Government and private sector hospitals. Smart Cards were issued to 1.58 crore families, whose annual income is less Rs.72,000. than After successful implementation for five years, the scheme is continued from 11.01.2017, through the United India Insurance Company Limited, which is a public sector company. Treatment is provided for 1,027 medical & procedures, 154 specialized surgical procedures, 154 follow up procedures, 38 standalone diagnostic procedures and 8 procedures. 977 Hiah end hospitals including the Medical all Government Colleges Hospitals and the District Headquarters Hospitals are empanelled to provide treatment under this scheme. Migrants including construction workers who reside in the State for more than six months are included and orphans as defined by the State Government are given Insurance So far, 35.25 lakh persons have got Card. Rs.6,027 for benefitted crore from 11.01.2012 under this scheme. Patients got treated in Government hospitals at a cost of Rs.2,163 crore.

- A Corpus Fund has been created with the Government contribution of Rs.35 crore and contribution from insurance receipts in Government Hospitals to meet the expenditure towards eight specialized high end surgeries requiring amount higher than Rs.2 lakh and so far, 7,588 beneficiaries have been benefitted and the total approved amount is Rs.563.02 crore.
- Dr. Muthulakshmi Reddy Maternity Benefit Scheme (MRMBS) and Amma Maternity Nutrition Kit: Tamil Nadu is the India implementing State in only Dr.Muthulakshmi Reddy Maternity Benefit Scheme, providing financial assistance of Rs.12,000 since 2011 to pregnant mothers compensating for the loss of wages during pregnancy and to meet the expenses on nutrition diet. Financial assistance of Rs.12,000 hitherto has been increased to Rs.18,000 with effect from 1stApril, 2018. Under the scheme, two Amma Maternity Nutrition Kits are given comprising of iron tonic, and nutrition supplement to reduce Anaemia amongst pregnant women and

improve the birth weight of infants. Hon'ble Chief Minister inaugurated the distribution of Nutritious kits to the pregnant mothers on 04.03.2019. During the last 8 years, 53.78 lakh pregnant and delivered mothers received the financial assistance of Rs.5,233.17 crore.

- Menstrual Hygiene Programme has been introduced to promote hygiene among the adolescent girls. Under this scheme, priceless sanitary napkins are distributed annually to around 32.79 lakh adolescent girls at an annual cost of Rs.61 crores.
- Hospital on Wheels Programme are functioning with 416 teams. Every month 40 camps are conducted in each block. Over 10.53 crore persons have availed benefits from 15.10 lakh camps conducted so far. The scheme is under implementation from 2011-2012 onwards in all the 385 Blocks with modern Medical and Lab Investigation facilities.
- Amma Baby Care Kit containing 16 items at a cost of Rs.1,000/- per kit has been provided to the mothers of about 6.7 lakh

children born annually in the Government Hospitals for improving the hygiene of the post-natal mothers and newborn babies and the scheme has been inaugurated by Hon'ble Chief Minister on 08.09.2015. Under this scheme, 17,70,393 delivered mothers have been given these kits up to March 2019.

- Amma Arokiya Thittam, provides an opportunity for people aged above 30 years living in rural areas to have access to basic health checkup on annual basis in a nearby health facility. 25 parameters are screened under this program in 501 PHCs including urban areas. 49.14 lakh people have been screened up to March 2019
- Amma Whole Body Health Check-up and Amma Women Special Check-up is being implemented since 01.03.2016 in Government General Hospital, Chennai in the first phase. So far, 33,631 persons have undergone this whole body health check-up. This programme has been extended to Tamil Nadu Government Multi Super

Speciality Hospital, Omandurar Estate, Chennai and has been inaugurated on 08.06.2018 by Hon'ble Chief Minister. So far, 6,323 persons undergone the medical check-up. This programme is being extended to the Government Medical College Hospitals at Coimbatore, Madurai and Tirunelveli.

- "104" Health Helpline cum Telemedicine Service was introduced on 30.12.2013 for providing free access to health information, health guidance and grievance redressal. 35.24 lakh calls were received from the public till March 2019 and health information provided.
- Breast Milk Banks have been started in 25 Government Medical College Hospitals and District Headquarters Hospitals. Separate feeding rooms have been established in 352 Bus stands and Terminals to enable the feeding mothers to breast feed their new born child in a safe enclosed room.

Schemes under National Health Mission

 Rashtriya Bal Swasthya Karyakram (RBSK) is a child health screening and early intervention service with the aim to screen all children from 0-18 years for four diseases namely defects at births, disorders, deficiencies and development delays including disabilities. 770 mobile health teams in rural blocks, 15 mobile health teams in Chennai Corporation and 12 mobile health teams in other corporations are screening the children in the Anganwadis, Government and Government aided schools.

Under RBSK, during the year 2018-2019, 1.21 crore children were screened in schools and Anganwadi centres. 6,44,175 children were identified with disease conditions and 5,19,288 children were referred and treatment provided at secondary and tertiary care institutions. From April 2015 to March- 2019, 16,380 children have been identified for surgeries and of which 13,894 children have been managed surgically.

- 108 Ambulance Services: 108 ambulance service is successfully being operated in Tamil Nadu through a single Toll free number and the services are available on 24x7 basis free of cost to the public. 940 ambulances are in operation under the 108 emergency ambulance service and since 2011-2012, 74.09 lakh people availed the services including 18.61 lakh pregnant mothers. First time in the Government India, Neonatal Emergency sector in Ambulance services have been introduced to reduce neonatal mortality. 76 Four Wheel Drive Ambulances are in operation in difficult terrains. First Responder Bike Ambulance Service has been introduced with 41 two wheelers on 08.02.2016 and has been extended to other areas.
 - Reduction of Response Time of Ambulances: Dynamic allocation of ambulances has been done by the 108 Ambulance Services after which there has

been a significant reduction in average response time of the State from 15.04 minutes in 2017 to 13.48 minutes in 2018. The average response time in the city has decreased further from 11 minutes to 8.36 minutes.

- 102 Drop Back Service Janani Sishu Suraksha Karyakram (JSSK) Scheme is implemented under which all delivered mothers in Government Medical Institutions and treated sick infants get free drop back service. To provide 100% free drop back service, a pilot project at the Institute of Obstetrics and Gynaecology and Hospital for and Children, Chennai Women was through Indian introduced Red Cross Society. The scheme has been extended to all other districts now. This service can be by dialling the Toll utilized Free Number '102'.
- Adyar Cancer Institute has been designated as State Level Apex Centre for treating of cancer patients and is being upgraded as Centre of Excellence at a cost of Rs.120

crore. Four Regional Cancer Centres are being established at Madurai, Thanjavur, Coimbatore and Tirunelveli at a total cost of Rs.58.69 crore.

- Emergency Care and Recovery Centres with 50 beds established at 10 districts catering to the needs of wandering mentally-ill, rescued through retrieval vehicles. Tamil Nadu is the 1st State to have dedicated retrieval vehicles for mentally-ill to rescue them to the hospitals.
 - Mera Aspataal (My Hospital) is an initiative to capture patient feedback for the services received at the hospital through user-friendly multiple channels such as Short Message Service (SMS), Outbound Dialling (OBD), mobile application and web portal. In this regard Tamil Nadu is the leading State in Patient Satisfaction Index.
 - Early detection of Haemoglobinopathies: Tamil Nadu is the first among the South Indian States to implement program for like Sickle Cell Anaemia, Thalassemia among the tribal population. The timely identification

and genetic counseling will prevent the transmission of the carrier from parent to children which breaks the propagation of the disease.

- Non-Communicable Diseases Our State implementing has the Nonbeen Communicable Diseases Intervention Programme since 2013-2014 in all the districts. This is the first of its kind to be implemented on such a large scale in India. It is under implementation in all the districts in Tamil Nadu involving 2,602 Government health facilities across Primary / Secondary / Tertiary and municipal levels of health care. Under the programme, screening, treatment and follow-up services are provided for Hypertension, Diabetes Mellitus, Cervical and Breast cancer to all individuals aged 30 years and above who are attending anv Government Health facility in the State.
- Medical Services Recruitment Board, a first of its kind in India has been established exclusively for the Health Department in the State to recruit medical and para-medical

personnel. As on 31.03.2019, 26,777 personnel in the category of Assistant Surgeon, Nurse, Physiotherapist, Radiographer, Pharmacist, Village Health Nurses have been recruited.

In the past eight years, 254 new PHCs have been established at a total cost of Rs.221.30 crore and 165 PHCs have been upgraded with 30 beds, Ultra Sonogram, operation theatre facility, etc., at a cost of Rs.190.37 crore. Maternity and Child Health centres have been established in 42 PHCs at a cost of Rs.19.45 crore. Under National Urban Health Mission (NUHM) 40 new urban PHCs in Chennai Corporation and 37 new urban PHCs in the other Corporations and Municipalities have been established. Besides this, 52 Taluk Hospitals have been started by upgrading Non Taluk Hospitals and the existing Upgraded Primary Health Centres at a cost of Rs.93.96 crore.

Medical Education

Increase of 1,350 additional M.B.B.S. Seats: Six new Government Medical started in Sivagangai, Colleges were Tiruvannamalai, "B" Block of Omandurar Government Estate, Chennai, Pudukkottai, ESIC Hospital - Coimbatore and Karur with an annual intake of 700 students. Apart from this, 650 additional MBBS seats were increased in the existing nine Government Medical Colleges, i.e. Chengalpattu Medical College, Chengalpattu, Kilpauk Medical College, Chennai, Madras Medical College, Chennai, Stanley Medical College, Chennai, Thoothukudi Medical College, Thoothukudi, Viswanatham KAP Medical College, Tiruchirapalli, Mohan Government Kumaramangalam Medical College, Salem, Madurai Medical College, Madurai and Medical College, Tirunelveli. Tirunelveli Besides this, 40 MBBS seats in IRT Medical College Perundurai has been increased from the academic year 2017-18. Totally, 1,350 MBBS seats were increased during the last eight years.

- Increase of Post Graduate seats: During the last eight years, 1,213 Post Graduate medical seats were increased in the Government Medical Colleges. This includes conversion of 393 Post Graduate Diploma seats as Post Graduate Degree Medical seats and 4 DNB seats
- Super Speciality facility with Trauma Care Centre in the Government Medical Colleges at Madurai, Thanjavur and Tirunelveli at a cost of Rs.150 crore each under 'Pradhan Mantri Swasthya Suraksha Yojana' (PMSSY) were inaugurated by Hon'ble Prime Minister of India on 4th January, 2019.
- To improve the services in secondary care hospitals, DNB courses were initiated. Presently 40 accredited DNB seats approved 10 Secondary Care hospitals in and 2 Medical college hospitals. Tamil Nadu is one among the 2 States which got accredited for 5 Emergency Medicine seats in Government Headquarters Hospital, Erode, Government Medical College, Pudukottai and Government Medical

College, Omandurar Government Estate, Chennai.

1.9 Some of the best practices recognised by the Government of India are as follows:

- i. Cadaveric Organ Transplantation: Our State has been always cited as a model for other States due to the systems put in place under this programme. For the past four years, Tamil Nadu has bagged the 'Best State Award' nationally under this category.
- ii. **Public Health Cadre**: In Tamil Nadu, there is a separate Public Health Cadre with a separate directorate, budget and legal support. This has helped to improve preventive and promotive public health activities in the State in addition to the management of primary care services.
- Tamil Nadu Medical Services
 Corporation (TNMSC) is the 'State of Art' nodal agency in the State, started in 1995, for the procurement of drugs,

equipment and supplies for all public health facilities. This has ensured availability of essential drugs. During the visit, Common Review Mission (CRM) team observed that there is no out of pocket expenditure on drugs and diagnostics. the TNMSC, Tamil Similar to Nadu Medicinal Plants and Herbal Medicine Corporation Limited (TAMPCOL) acts as drug manufacturing, procurement and supply agency for AYUSH medicines.

- iv. Congenital Foetal Abnormality
 Detection: To monitor congenital abnormality in foetus, Medical Officers use advanced Ultrasonogram machines across CHCs.
- v. Birth Companion Programme: The State has introduced this new Programme since 2004, to allow one family member as birth companion in the labour room. This has had positive impact on increasing institutional deliveries in public facilities.

- vi. **Maternity Picnic & Bangle Ceremony**: This helps in reducing gap between service providers and the community and builds more trust and confidence in availing services from public institutions. It is organised by the Village Health Nurses and Auxiliary Nurse Midwives under the guidance of Medical Officer.
- vii. Well Functional and Co-located AYUSH services are provided across most facilities in the State.
- viii. **Mortuary Van Services**: Tamil Nadu Health System Project has provided mortuary vans in all district hospitals for helping the deceased to reach home or to the place of funeral, free of cost with the assistance of the Red Cross Society. Very good utilization of the mortuary vans was observed by the Common Review Mission (CRM) team.
 - ix. Awards for District Collectors: Based on the performance under National Health Mission (NHM), every year three District Collectors are given awards encouraging their involvement in health sector.

1.10 Awards Won / Secured at all India Level in the last Eight Years

- Winner of National e-governance award-Gold 2011-2012 under category of "Exemplary use of ICT based solutions" received from Government of India, at Bhubaneswar for Health Management Information System.
- ii. 1st prize Award for Child Survival given by Government of India (among Non Empowered Action Group States) at the event "National Summit on Best Practices in Public Health Care System" – July 3-5, 2013.
- iii. 1st prize Award for Infant Survival given by Government of India (among Non EAG States) at the event "National Summit on Best Practices in Public Health Care System" – July 3-5, 2013.
- iv. South Asia and Asia Pacific Manthan Juror's Award for the year 2013 received from Digital Inclusion for Development, New Delhi for Health Management Information System.

- v. **e-India Award** given by e-health publication in co-ordination of Government of Andhra Pradesh for the year 2012 and 2013 for the best use of Information and Communication Technology (ICT) in the Chief Minister's Comprehensive Health Insurance Scheme in the form of certificate.
- vi. **e-India Award** for the year 2013-2014 received from e-lets, Thiruvananthapuram for Health Management Information System.
- vii. Award for Making India Polio Free from World Health Organisation – 2014
- viii. South Asia and Asia Pacific Manthan Special Mention Award for the year 2014 received from Digital Inclusion for Development, New Delhi for Health Management Information System.
 - ix. **South Asia-E-health Summit Award** in the form of certificate for 2014 for Innovation in quality of service delivery from the ITC Post Uttar Pradesh (Private Organization).
 - x. Tamil Nadu was awarded first place for having highest reduction of Infant

Mortality Rate among larger States in 2015.

- xi. Tamil Nadu was awarded **Gold Medal for best performing State for scaling up cervical cancer screening early detection and treatment** by Common Wealth Association for Public Administration and Management (CAPAM) in Malaysia in 2016.
- xii. Tamil Nadu was awarded for **Exemplary Contribution** in **Post Partum Sterilization Programme** at National Family Planning Summit (2016), New Delhi
- xiii. Tamil Nadu was awarded first place for having lowest out of pocket expenditure incurred in public hospitals for deliveries and child birth among larger States at National Summit on Good, Replicable Practices and Innovations in Public Health Systems in India at Tirupathi (2016).

- xiv. Tamil Nadu was awarded first place for maximum improvement in IPD -In Patient Services in Public Health Institutions among larger States at National Summit on Good, Replicable Practices and Innovations in Public Health Systems in India at Tirupathi (2016).
- xv. National Award for best performance in the country in terms of **Deceased Organ Transplantation** for the years 2015, 2016, 2017 and 2018.
- xvi. Tamil Nadu received the Award from the Hon'ble Union Health Minister on 29.06.2018 for reducing the Maternal Mortality Ratio in Tamil Nadu.
- xvii. Tamil Nadu received the Express Public Award on 05.10.2018 from the Indian Express Group for the best implementation of Reproductive and Child Health Scheme in Tamil Nadu.

Budget

1.11 The Government of Tamil Nadu is increasing the budget to the health sector every year substantially. Rs.12,563.83 crore have been provided in the budget for 2019-2020. The directorate wise allocation for 2019-2020 under Demand No.19, Health and Family Welfare is as follows:

SI. No.	Name of the Office	Amount (Rs. in crore)
1	Health and Family Welfare Department, Secretariat	12.55
2	Directorate of Medical and Rural Health Services	1,393.34
3	Directorate of Medical Education	3,537.75
4	Directorate of Public Health and Preventive Medicine	3,317.01
5	Directorate of Family Welfare	180.36
6	Tamil Nadu Food Safety and Drugs Administration	79.73

7	Directorate of Indian Medicine and Homoeopathy	312.37
8	Tamil Nadu State Health Transport Department	30.05
9	Reproductive and Child Health Project	1,952.79
10	Tamil Nadu Health Systems Project	1,747.88
	Total	12,563.83

NOTE:

- Apart from the above provision, Rs.391.34 crore has been allocated towards civil works being undertaken by Public Works Department under Demand No.39.
- Provision towards ESI scheme hospitals for Rs.535.53 crore has been made in the Labour and Employment department Demand No.32.

1.12 As stated earlier, the introductory chapter has tried to capture a snapshot of the activities of the department which have been elaborated in detail in other chapters.

Chapter - 2

HISTORY

2.1 Tamil Nadu has rich history in health sector like other sectors. Our ancient Indian System of Medicine 'Siddha' and 'Ayurveda' are in practice for over thousands of years. Eighteen siddhars were supposed to have contributed to the development of siddha medicine. Sashrutha and Charaka were the pioneers of Ayurveda. Roots of modern medicine are linked to the advent of Britishers.

Origins:

- 1639 The first British hospital is believed to have been established to treat the sick soldiers of the East India Company.
- 1644 The origin of the modern hospital (the present Government General Hospital attached to the Madras Medical College)
- 1835 The first Medical College in the State viz., The Madras Medical College was inaugurated

- 1883 Dental Department was started in the Government Hospital
- 1885 The Kasturba Gandhi Hospital (KGH-Gosha Hospital) was started at Triplicane
- 1923 Directorate of Public Health and Preventive Medicine
- 1954 Adyar Cancer Institute was started
- 1966 Department of Medical Education was formed
- 1970 Department of Indian Medicine was formed
- 1981 Department of Drugs Control was formed
- 1981 The State Health Transport Department was formed
- 1983 Department of Family Welfare was formed
- 1986 State and District Blindness Control Societies was formed

- 1994 Tamil Nadu Medical Services Corporation was formed
- 1994 Tamil Nadu State AIDS Control Society was formed
- 1999 Directorate of Medical and Rural Health Services (ESI) was formed.
- 2002 The Revised National Tuberculosis Control Programme was launched
- 2005 State Health Society was formed
- 2008- Deceased Organ Transplant Programme was launched
- 2011- Food Safety Department was formed
- 2013- Government of India launched Urban Health Mission
- 2016- Transplant Authority of Tamil Nadu (TRANSTAN) was formed.

Distinctions:

• Tamil Nadu has not only the largest number of Government Medical colleges

but also was one of the pioneers in starting them

- Madras Medical College has the distinction of being the second oldest Medical College in India
- The Eye Hospital, Egmore, attached to the Madras Medical College is the second oldest eye hospital in the world
- At present, The Institute of Mental Health is the second largest Institute in India, offering mental health services to the population of Tamil Nadu
- Madras Medical College was also the first Medical College in the world to admit a lady student, Mary Ann Dacomb Scharlieb in 1878
- Charles Donovan in the year 1903 had the distinction of independently discovering the parasite Leishmania Donovani in Madras Medical College (which causes Kala-azar disease) along with William Boog Leishman from Netley, England

• Dr.Muthulakshmi Reddy was the first Indian woman to graduate in 1912 from this college

The department thus has a rich history of traditional directorates which continue to expand and function with vibrance, effective societies for focussed activities, apart from effective and experienced human resources to carry forward the rich tradition of the department.

Chapter - 3

HEALTH ADMINISTRATION

3.1 The following Directorates and Board are functioning under the administrative control of the Health and Family Welfare department :

- Directorate of Medical Education responsible for providing tertiary care and medical education.
- Directorate of Medical and Rural Health Services - responsible for providing secondary care and regulations as appropriate authority.
- Directorate of Public Health and Preventive Medicine - responsible for providing preventive and public health.
- Directorate of Indian Medicine and Homoeopathy - responsible for providing AYUSH (Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy) services.
- Directorate of Family Welfare focusing on family planning related initiatives.

- Directorate of Food Safety and Drugs Control - focusing on food safety and standards and also on drug regulation and licensing as per the respective Central Acts and Administration through two different wings respectively.
- Directorate of State Health Transport responsible for maintenance and upkeep of the vehicles of the various Directorates under Health and Family Welfare Department.
- Medical Services Recruitment Board focusing on the recruitment of personnel for the various cadres in the health sector in a speedy and transparent manner.

Apart from these Directorates, the Health Department also provides staff to the Directorate of Medical and Rural Health Services (ESI) under the Labour and Employment Department.

Other Programmes and Initiatives

focused, speedy 3.2 To ensure and decentralized implementation a number of initiatives across the Directorates such as National Health Mission - State Health Society, Tamil Nadu State AIDS Control Society, Tamil Nadu Blindness Control Society, the Revised National Tuberculosis Programme, National Mental Health Programme, National Vector Borne Diseases Control Programme, Universal Immunization Programme and School Health Programme among others are implemented.

3.3 While the Tamil Nadu Health Systems Project has come to a close in 2015-2016, the State has embarked on a new project for strengthening the Urban Health Care with the assistance of Japan International Co-operation Agency (JICA) at a cost of Rs.1,634 crore. Tamil Nadu has also got approval for the Tamil Nadu Health Systems Reforms Project at a total project cost of Rs.2,857 crores supported by the World Bank. These missions, programmes and projects have been explained in detail in subsequent chapters.

Councils

3.4 The following councils are established through various Acts to register the qualified medical, nursing and paramedical professionals to regulate their practice in Tamil Nadu:

- i. Tamil Nadu Medical Council
- ii. Tamil Nadu Dental Council
- iii. Tamil Nadu Nurses and Midwives Council
- iv. Tamil Nadu Pharmacy Council
- v. Tamil Nadu Siddha Medical Council (Siddha and Traditional Practitioners)
- vi. Board of Indian Medicine (Ayurveda, Unani and Yoga and Naturopathy)
- vii. Tamil Nadu Homoeopathy Council

These are all the Statutory Bodies regulated by Government of India and Government of Tamil Nadu. Apart from these Councils, there is a Government order for constituting a Physiotherapists Council in the State. Recently, Government have nominated President, Vice President and other Members to the council so as to make it functional.

Classification of Hospitals and Dispensaries

3.5 A broad classification of hospitals and dispensaries in the State are as follows:

State-Public Medical Institutions: All i. Medical institutions – Allopathy and Indian System of Medicine maintained through State funds are directly managed by the Government. These form the backbone of health care. It ranges from the the grassroot level - 8,713 Health Sub Centres catering to an average population of 5,000 to the 1,806 PHCs catering to an average population of 30,000 at the next level. Above the primary health care institutions, there are secondary and tertiary care hospitals in the State. In addition, 460 Urban Primary Health Centres across the Urban areas in the State including Chennai Corporation 15 and Community Health care centres in Chennai Corporation are also functional.

- State-Special ii. Medical Institutions: intended to Institutions serve special sections of public such as Police, State Corporations / Undertakings, owned Employees State Insurance Medical Institutions, etc. which include 10 FSI Hospitals and 216 ESI dispensaries.
- iii. Medical Institutions under the Local Bodies: Medical Institutions are under the management of Municipal Corporations, Municipalities and Panchayat Unions are covered under this classification. Urban Primary Health Care Centres have now been started to cater to the primary health care of the rapidly expanding urban population.
- iv. Private Aided Medical Institutions: Institutions supported / guaranteed by private contribution and receiving Government aid as well.
- v. **Private Non-Aided Medical Institutions:** All hospitals, dispensaries and clinics solely managed by private persons / establishments.

Chapter - 4

MEDICAL EDUCATION

4.1 The Directorate of Medical Education has been functioning as an independent Directorate, Julv 1966 on bifurcation from the from Directorate of Medical and Rural Health services, Chennai. The prime objectives of the directorate are the development of teaching, training and research programmes in the medical field, administration of Government medical colleges, hospitals and various teaching medical institutions. Further under the control of the Directorate of Medical Education, Selection Committee is functioning for admission of students to the various Medical, Dental, Para Medical and Nursing courses. While the Directorate of Public Health and Preventive Medicine is providing primary level health care services and the Directorate of Medical and Rural Health services, secondary level health care services, the Directorate of Medical Education plays a vital role in providing tertiary care facilities to the public, through the Government Medical College hospitals.

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ADMINISTRATIVE STRUCTURE

4.2 At present, there are 24 Government Medical colleges, one Government Dental College, two Government Pharmacy Colleges (B.Pharm), two Government Physiotheraphy Colleges and five Government College of Nursing along with 24 School of Nursing (16 in Government Medical Colleges and 8 in District Headquarters Hospitals). The Government have ordered for taking over of the Institute of Road Transport (IRT) Perundurai Medical College and Hospital and School of Nursing, hitherto run by the IRT by the Health and Family Welfare department from the academic year 2019-2020. The Director of Medical Education is the head of the directorate and is responsible for the administration of the Government Medical colleges and the tertiary care hospitals and Super Speciality hospitals which are headed by the Deans of the Government Medical colleges and Directors of the Medical Institutions.

4.3 The current total bed strength in the Government Medical College Hospitals and allied institutions is around 37,650 and an average of

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86,655 out-patients attend these hospitals per day and 32,394 persons are treated as in-patients per day.

4.4 The Directorate of Medical Education plays a vital role in providing quality education in the field of Medical, Para–Medical, Nursing and Pharmacy. The intake capacity of the Government medical institutions for Under Graduate and Diploma courses are furnished hereunder:

SI. No.	Name of the Course	Number of Seats*
1	M.B.B.S	3,350
2	B.D.S	100
3	B.Sc Nursing	250
4	Post Basic (B.Sc. Nursing)	90
5	B.Sc Radiology and Imaging Technology	160
6	B.Sc Radio Therapy Technology	20
7	Bachelor of Physiotherapy(B.P.T)	70
8	Bachelor of Cardio Pulmonary Perfusion Technology	40

SI. No.	Name of the Course	Number of Seats*
9	B.Pharm and B.Pharm (Lateral Entry) (108+ 10)	118
10	Bachelor of Audio and Speech Language Pathology	25
11	Bachelor of Optometry	60
12	Para Medical courses (25 Courses)	7,876
13	B.Sc Cardiac Technology	49
14	B.Sc Critical Care Technology	80
15	B.Sc Dialysis Technology	105
16	B.Sc Operation Theatre and Anaesthesia Technology	170
17	B.Sc Physician Assistant	120
18	B.Sc Respiratory Therapy	40
19	Diploma in Nursing	2,000
20	Diploma in Pharmacy	240
21	B.Sc Accident and Emergency Care Technology	130
22	B.Sc Medical Laboratory Technology	120
23	Bachelor of Occupational Therapy(B.O.T)	10

(*These are subject to respective Council approval for annual admission and vary from year to year).

4.5 The details of Post Graduate and Speciality Courses available in the Government Medical institutions in Tamil Nadu are as follows:

SI. No.	Courses	Number of Specialities	Total intake capacity
1	P.G. Degree (Medical Super Specialities) DM / MCH	19	334
2.	P.G. Diploma (Medical)	1	3
3.	M.D.S	8	42
4	P.G. Degree (Medical Broad Specialities) MD / MS *	24	1,758
5	P.G. Diplomate of National Board (DNB)	1	4
6	M.Pharmacy	4	58
7	M.Sc (Nursing)	5	65

SI. No.	Courses	Number of Specialities	Total intake capacity
8	M.Phil (Clinical Social Work)	1	15
9	MSc (Molecular Virology)	1	21
10	M.Phil (Clinical Psychology)	1	8

* Inclusive of 393 Medical Diploma seats converted as P.G. Degree (M.D/M.S) seats as per MCI Amendment Notification dated 12.07.2018.

4.6 Besides the Government Institutions, the private medical / paramedical self-financing institutions affiliated to Tamil Nadu Dr.M.G.R Medical University have surrendered the following seats for allotment by the Government:

SI. No.	College	No. of Colleges	Number of Seats*
1	Medical College	14	1,850
2	Dental College	19	1,842
3.	B.Sc Nursing	163	5,921
4	B-Pharm	51	2,242
5	B-Pharm (Lateral Entry)	33	180
6	B.P.T	30	1,625
7.	B.O.T	4	225
8.	Post Basic B.Sc Nursing	49	1,050

(* The number of seats will vary annually subject to the approval of the respective Council)

4.7 Admission policy in Medicine and opposition to National Eligibility cum Entrance Test (NEET) :

The Government of Tamil Nadu has been consistently opposing NEET for admission to Medical and Post Graduate Medical Courses. The Government of India has made amendments to the Indian Medial Council Act, 1956 and Dentists Act, 1948 by incorporating section 10(D) to mandate NEET for admission to all medical and dental courses throughout India. In order to protect the rights of the State in medical admission and to sustain the existing admission policy in the State of Tamil Nadu, two bills viz. L.A Bill No:7 of 2017-Tamil Nadu Admission to MBBS and BDS courses Act, 2017 and L.A Bill No:8 of 2017-Tamil Nadu Admission to Post Graduate courses in Medicine and Dentistry Act, 2017 were unanimously passed in the floor of Tamil Nadu Legislative Assembly. With the the Hon'ble Governor, the approval of Government of Tamil Nadu forwarded the said two bills to Government of India for obtaining assent of the Hon'ble President of India under Articles 254(2) of the Constitution of India. As

the assent of the Hon'ble President of India was withheld, the Government took a policy decision to allocate 85% of State guota MBBS / BDS seats to students who have studied in Tamil Nadu State Board and to allocate the remaining 15% of seats to the students who studied in other boards and the same was incorporated in the prospectus for admission to MBBS/BDS course 2017-18 session through an executive order. But the said order was challenged before the court of law. All legal measures to protect the above said policy have been taken by the Government of Tamil Nadu for the interest / welfare of students of Tamil Nadu. This Government order was guashed by the Hon'ble High Court of Madras in W.P.No.16341 of 2017 and others, orders dated 14.07.2017. Against the above orders of the Hon'ble Court, the Government had filed a writ appeal (W.A.No.838 of 2017) before the Division Bench of Hon'ble High Court of Madras. In its orders dated 31.07.2017, the Hon'ble High Court of Madras has dismissed the writ appeal filed by the Government and upheld the orders of the Single Judge of the Hon'ble Court. Further, the Government had filed a SLP (SLP(C) No.2024020256 of 2017) before the Hon'ble Supreme Court of India. In its orders dated 11.08.2017, the Hon'ble Supreme Court of India has dismissed the SLP filed by the Government and upheld the orders of the Hon'ble High Court of Madras. Finally, based on the directives of Supreme Court of India, dated: 22.08.2017 pronounced in W.P.(C) No.711 of 2017, the admission to MBBS and BDS courses from the year 2017-2018 are made based on NEET marks, adopting existing Rules of Reservation in Tamil Nadu.

In its order dated 18.07.2013 in T.C.(C) No.98 of 2012, the First bench of Hon'ble Supreme Court of India ordered with 2:1 majority held that the Medical Council of India is not empowered under the 1956 Act to actually conduct the NEET. The Government of India has been requested not to review the order of the Hon'ble Supreme Court of India dated 18.07.2013 in T.C.(C) No.98 of 2012. The Medical Council of India has filed Review Petitions (Civil) No.2159 – 2268 of 2013 before the Supreme Court of India against the above judgement. In its order dated 11.04.2016, the Hon'ble Supreme Court Bench has allowed the maintainability of the Review Petition and recalled the earlier judgement of the Supreme Court delivered on 18.07.2013 and directed that the case will be heard afresh. Hence, the Government of Tamil Nadu will continue to oppose NEET as a matter of policy and also through all legal means.

4.8 New Government Medical Colleges and increase of Under Graduate and Post Graduate medical seats:

Six new Government Medical Colleges have been established at Sivagangai, Thiruvannamalai, Omandurar Government Estate, Chennai, ESIC Hospital Coimbatore, Pudukottai and Karur, during the last eight years. On account of strenuous initiatives taken by the State Government, totally 1,350 MBBS seats have been increased in the last eight years. At present, there are 3,350 MBBS seats in the Government Medical Colleges. The details of increase of MBBS seats are furnished below:-

SI. No.	Name of the Government Medical College	No of MBBS seats increased
	New Medical Colleges	
1	Government Sivagangai Medical College, Sivagangai	100
2.	Government Thiruvannamalai Medical College, Thiruvannamalai	100
3.	Government Medical College "Block B" Omandurar Government Estate, Chennai	100
4.	Government Medical College and ESIC Hospital, Coimbatore	100
5.	Government Medical College, Pudukottai	150
6	Government Karur Medical College, Karur	150

Incre	Increase of Seats in Existing Government Medical College		
7.	Government Kilpauk Medical College, Chennai	50	
8	Government Chengalpattu Medical College, Chengalpattu	50	
9.	Government Stanley Medical College, Chennai	100	
10.	Madras Medical College, Chennai	85	
11.	Government Mohan Kumaramangalam Medical College, Salem	25	
12.	Government KAP Viswanatham Medical College, Thiruchirappalli	50	
13	Government Thoothukudi Medical College, Thoothukudi	50	
14	IRT Perundurai Medical College, Erode	40	
15	Madurai Medical College, Madurai	100	

16	Tirunelveli Medical College, Tirunelveli	100
	Total	1,350

For establishing the new Government Medical College at Karur, the Government have already issued orders for an annual intake of 150 MBBS, students and Government have sanctioned a sum of Rs.269.59 crore for the construction of buildings for College / Hospital. The permission of the Medical Council of India / Government of India has been obtained for opening this college and admission of the students from the academic year 2019-2020.

4.9 Amma Master Health Checkup and Amma Women Special Master Health Checkup

Amma Master Health checkup and Amma Women Special Master Health Checkup are functioning in the Government General Hospital, Chennai, since 01-3-2016. The following package of tests are done in the above Schemes with the cost package as tabulated below:-

Package -1 (Rs.1,000)	Package-II (Rs.2,000)	Package-III (Rs.3,000)
complete hemogram, ESR, Urine analyser	Package 1 + Echocardiogram, PSA, thyroid	Package II + Digital Mammogram,
Blood sugar F&PP urea, Creatinine, Uric Acid	Profile and HbA1C	Dexa Scan, Bone profile (Vitamine D, Calcium,
<u>Lipid profiles</u> Total Cholesterol, HDL, LDL, Triglycerides Total Cholesterol / HDL ratio		Phosphorous and PTH)
Liver Function Test Serum billirubin (total and direct) AST, ALT, SAP Total protein and albumin.		

HbsAg	
Blood grouping and typing	
ECG	
X – ray Chest	
USG abdomen	
Pap smear	

Since, public response to Amma Master health Checkup and Amma Women Special Master Health Checkup is exemplary, this health checkup programme has been extended to the Tamil Nadu Government Multi Super Speciality Hospital, Omandurar Government Estate, Chennai and the same is functioning well since 08-06-2018. In order to provide the Amma Master health Checkup and Amma Women Special Master Health Checkup to the people of southern districts, Government granted permission to start these two programmes in the Government Medical College hospitals of Coimbatore, Madurai and Tirunelveli at a cost of Rs.10 crore to each hospital (total cost Rs.30 crore).

In addition to the existing packages under Amma Master Health Checkup, an additional package viz Amma Platinum Plus (Package-IV[Rs.4,000]) has been launched at Tamil Nadu Government Multi Super Speciality Hospital, Omandurar, Chennai which includes all the tests in Package III+ Vision Testing, Glaucoma Testing, Refractory errors testing, retinal testing, colour vision testing, Treadmill, lung function testing.

Chapter -5

MEDICAL AND RURAL HEALTH SERVICES

5.1 The Directorate of Medical and Rural Health Services is providing medical care services through the following grid of hospitals:-

SI. NO.	TYPES OF HOSPITAL	Number
1	District Headquarters Hospital	29
2	Taluk Hospital	206
3	Non- Taluk Hospital	67
4	Women and Children Hospital	7
5	Dispensaries	11
6	Tuberculosis Hospital	2
7	Leprosy Hospital	7
8	Rehabilitation Institution cum Hospital	1

The Taluk Hospitals and Non-Taluk Hospitals are the First Referral Units in the chain of medical services, the District Headquarters Hospitals are the second referral units. Maternal and Child Health has been strengthened by providing Comprehensive Emergency Obstetrics and Newborn Care (CEmONC) units in 104 Government Hospitals, including all District Headquarters Hospitals and Newborn Stabilization Units (NBSUs) in 110 hospitals and Sick New Born Care Units (SNCUs) in 49 hospitals under the Directorate of Medical and Rural Health Services. This Directorate is providing multifarious specialty medical care to the public for the past 95 years.

5.2 Further the medical services like Medicine, Surgery, Obstetrics Gynaecology, and Ophthalmology, E.N.T, Venerology, Orthopaedics, Anaesthesiology, Child Health, Dental, Psychiatry, Ambulance Services, Laboratory Services, Leprosy, Tuberculosis, Diabetology, Cardiology and Non-Communicable Disease (NCD) are available in Secondary Care Hospitals. This Directorate is also responsible for offering the Accident and Emergency Services, Family Welfare and Maternity and Child Health, T.B. Control Programme, Blindness Control Programme, Deafness control Programme and District Mental Health Programme.

5.3 The Directorate of Medical and Rural has introduced Services Health unique monitoring system both in the Directorate as well as at district level. Hospital Management System (HMIS) Information is beina implemented at the Directorate level and Management System Hospital is beina implemented at the secondary level. The information regarding the services offered like Laboratory Services, Nursing, Diet etc., are being shared by the District level with the Directorate, digitally.

5.4 ADMINISTRATIVE STRUCTURE

DIRECTOR OF MEDICAL AND RURAL HEALTH SERVICES

ADDITIONAL DIRECTOR OF MEDICAL AND RURAL HEALTH SERVICES (MEDICAL)-(PLANNING AND DEVELOPMENT)-(INSPECTION)-(TB)-(LEPROSY)-(ADMINISTRATION) JOINT DIRECTOR OF MEDICAL AND RURAL HEALTH SERVICES – (MEDICAL) (CEMONC) (ACT) (NCD)(TB)

FINANCIAL CONTROLLER		
Joint Director of Health Services	 District Headquarters Hospitals Taluk Hospitals Non-Taluk Hospitals Dispensaries Women and Children Hospital TB Hospitals / Clinics Leprosy Hospitals 	

Deputy Director of Medical and Rural Health Services and Family Welfare	`Family Welfare Programme in the District
Deputy Director of Medical Services (TB)	TB Control Programme in the District
Deputy Director of Medical Services (Leprosy)	 Leprosy Control Programme

Ongoing Developmental Activities

5.5. In order to facilitate better health care and to increase efficiency of the Health Services delivered at the secondary care institutions, the Government created the following six additional posts:

- One post of Pharmacist additionally to the Government Hospital, Panruti in Cuddalore District
- One Electrician Grade-II post for the office of the Director of Medical and Rural Health Services.
- Two posts of Assistant Surgeon to the Government Hospital, Kayalpattinam in Thoothukudi District and
- Two Pharmacist posts to the Government Headquarters Hospital, Karaikudi in Sivagangai District.

5.6. Fire safety arrangements and ramp facilities in the District and Taluk / Non - Taluk Hospitals:

It has been decided to provide fire safety arrangements and ramp facilities to all Government Hospitals. Accordingly, Government sanctioned Rs.29.71 crores for providing these facilities to the 158 hospitals, where at present, these facilities are not available. These works are underway.

5.7 Establishment of a 50 bedded Government Non-Taluk Hospital at Emerald in The Nilgiris District:-

50 bedded Government Hospital building at Emerald, The Nilgiris district is coming under the Ithalur Village Panchayat of Kundah Taluk and will cater to around 20,000 population belonging to Ithalur and Mulligoor Village Panchayat and Bikkatty Town Panchayat. Kota and Toda tribes of Kundah will be benefitted. The Government Hospital is coming up on an outlay of Rs.18.99 crores. The upcoming Government Hospital is situated 20 Kms away from the District Head Quarters Hospital.

5.8 Patient Amenities in the Government Hospitals:-

To improve the patient amenities in Government Hospitals, Rs.2.97 crores has been sanctioned for the purchase of 2,287 set of cots, pillow, and mattresses.

5.9 Infrastructure Strengthening:

In order to strengthen the District and Taluk / Non-Taluk Hospitals with additional facilities, the following buildings and equipments have been sanctioned to the secondary care Hospitals:

Buildings:-

- Operation Theatre with 12 bedded Post Operative Ward in Government Hospital, Paramathivelur in Namakkal district at a cost of Rs.1.32 crores and Accident and Emergency Ward at a cost of Rs.3.15 crores.
- Strengthening of Maternal and Child Health wings in District Headquarters Hospitals at Kumbakonam,

Ramanathapuram, Virudhunagar, Kancheepuram and Ooty and Taluk Hospitals at Tirupattur and Jayamkondam at a total cost of Rs.127 crores.

- Upgradation of District Headquarters Hospital, Cheyyar with additional facilities, equipments, and staff at a cost of Rs.12.71 crores.
- Additional wards and equipments to the Government Hospital, Thiruparankundram, Madurai District at a cost of Rs.3.22 crores.

Equipments:

- Equipments have been provided to the Maternal and Child Health wing of the District Headquarters Hospitals at Cuddalore and Tiruppur at a cost of Rs.2 crores.
- As on date 40 CT scan machines have been supplied and are operational. In addition, CT Scan equipments have been sanctioned to the Government Hospitals at Virudhachalam in Cuddalore District, Melur

in Madurai District, Omalur in Salem District, Aranthangi in Pudukkottai District and Udumalpet in Coimbatore District, at a total cost of Rs.8.75 crores.

 9 MRI scan machines have been sanctioned to the Government District Headquarters Hospitals. In addition a sum Rs.6 crores was sanctioned to each of the Government Head Quarters hospitals at Tiruppur and Krishnagiri.

5.10 Pain and Palliative Care Units:

Pain and Palliative Care Units were sanctioned to the 8 District Headquarters Hospitals at Ariyalur, Pennagaram, Nagappattinam, Udhagamandalam, Perambalur, Karaikudi, Periyakulam and Virudhunagar, at a total cost of Rs.1.20 crores and they have been put to use.

5.11 Other Programmes and Responsibilities:

This Directorate is responsible for implementing the Revised National Tuberculosis Programme, District Mental Health Programme, Accident and Trauma Care and important Acts such as Pre-Conception and Pre-Natal Diagnostic Techniques (Prohibition and Sex Selection) Act, 1994, Human Organ Transplantation Act, 1994, Tamil Nadu Clinical Establishment Act, 1997.

This directorate is the link between the primary care under the Public Health wing and tertiary care under the Medical Education Directorate, providing necessary health services within the district itself, in Taluks and District Headquarters.

Chapter - 6

PUBLIC HEALTH AND PREVENTIVE MEDICINE

Public Health and Preventive Medicine organizes the efforts of the society to promote Health and Well being for all through Community Based Approach'

6.1 Health systems with strong Primary Health Care is essential to achieve Universal Health Coverage and health related Sustainable Development Goals of United Nations. Tamil Nadu has the distinction of having been the first State to have a separate Directorate exclusively for Public Health and Primary Care.

of Public Health include Functions prevention and control of diseases and their progression through promotion of healthy lifestyles and healthy habits, promotion of healthy and hygienic environment including safe water and food, health education and community mobilization, empowering the society, particularly women to make healthy decisions, preventive including measures

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immunization, surveillance and monitoring, organizing high quality community based health services and conduct of camps and campaigns like Pulse Polio Immunization, Vitamin A administration for children below five years and deworming.

The Directorate of Public Health and Preventive Medicine of Tamil Nadu, formed during 1923, is engaged in the above said context to reduce the burden of morbidity, mortality and disability in the State.

6.2 The following institutions function under this directorate:

- Health Sub Centres
- Primary Health Centres in Rural areas
- Primary Health Centres in Urban areas
- Community Health Centres and Upgraded Primary Health Centres
- Regional Entomological Teams
- National Filaria Control Units

- Research cum Action Projects
- Filaria and Malaria Clinics
- Leptospirosis Clinics
- Japanese Encephalitis Control Units
- Water Analysis Laboratories in Guindy King Institute campus, Chennai, Coimbatore, Tiruchirapalli and Tirunelveli
- State and District Public Health Laboratories
- Institute of Public Health, Poonamallee
- Health and Family Welfare Training Centres Chennai, Egmore and Madurai
- Health Manpower Development Institutes, Salem and Villupuram
- Regional Institute of Public Health, Thiruvarankulam
- Institute of Vector Control and Zoonoses, Hosur
- Health Visitor Training School, Triplicane
- ANM Training Schools

6.3 Administrative Structure

DIRECTOR			
	Additional Directors		
	Joint Directors (Programmes)		
	Financial Advisor and Chief Accounts Officer Personnel Officer and Joint Director		
	(Financial and Human Resource Management and Administration)		
• •	Deputy Directors of Health Services Regional Entomologists Principals of Regional Training Centres and ANM Schools Health Officers		
• 1 • 1 • 1	Block Medical Officers, Medical Officers Institutional and Field Health Functionaries Village Health Nurses Health Inspectors		

6.4 Across the State, the department has a primary health care network of 1,806 Primary Health Centres (PHCs) in rural areas including 422 Upgraded PHCs, 460 Primary Health Centres in urban areas including Greater Chennai Corporation and 8,713 Health Sub Centres (HSCs) to achieve Health for All.

Tamil Nadu has planned to achieve the health indicators on par with developed nations by 2023 focusing on the components such as maternal anaemia, neo-natal mortality rate and low birth weight. Preventable causes of infant deaths are to be eliminated completely by appropriate interventions to achieve the goals. Government of Tamil Nadu aims to bring down Infant Mortality Rate(IMR) to less than 10 by the year 2023.

6.5 Initiatives for reduction of IMR and MMR:

Timely provision of high-quality emergency obstetric care and routine obstetric and newborn care are the key strategies for reduction of maternal and neonatal morbidity and mortality. **6.6** Along with schemes under the National Health Mission, State specific land mark initiatives are given below.

- Dr.Muthulakshmi Reddy Maternity Benefit Scheme
- Comprehensive Emergency Obstetric and Newborn Care (CEmONC) Services
- Strengthening of Basic Emergency Obstetric and Newborn Care (BEmONC) Services
- Birth Companion Programme
- 24x7 delivery care services in all Primary Health Centres
- Birth Waiting Rooms
- Accessible blood bank and Storage Centres
- Menstrual Hygiene Programme
- Amma Baby Care Kits
- Amma Mahapperu Sanjeevini
- Two nutrition kits for the pregnant women

6.7 Primary Health Care (PHC)

Primary Health Care (PHC) is essential health care made universally available and accessible to individuals in a community, particularly to the people below poverty line.

The Primary Health Care infrastructure in the rural areas consists of a three-tier system namely Health Sub Centre, Primary Health Centre and Community Health Centre.

6.8 Health Sub Centre (HSC)

The Health Sub Centre is the peripheral and first contact point between the public healthcare system and the community. One HSC is established for a population of 5000 in plain areas and 3000 in hilly areas. Each HSC is manned by one Auxiliary Nurse Midwife (ANM) known as Village Health Nurse (VHN) in Tamil Nadu and one Male Health Worker for every three HSCs. The average geographical area covered by a HSC is about 13.49 sq.kms.

8,713 HSCs are functioning in Tamil Nadu. HSCs are the hub for delivering Maternal and Child Health (MCH) and Family Welfare (FW) services to the people in the rural areas. HSCs are supported by Primary Health Centres (PHC), Community Health Centres (CHC), Hospital on Wheels (HoW) and School Health Teams.

6.9 Primary Health Centres

Primary Health Centre (PHC) in rural area is established for a population of about 30,000 in plain areas and 20,000 in hilly areas. Tamil Nadu has 1,806 PHCs in rural areas and 460 PHCs in Urban Areas including Chennai Corporation to cater to the needs of poor. The average geographical area covered by a PHC is about 86.29 sq.kms.

6.10 Community Health Centres (Upgraded Primary Health Centres)

All the 385 blocks in the State have atleast one Upgraded Primary Health Centre with 30 beds, operation theatre, modern diagnostic equipments like Ultra Sonogram, ECG, Semi Auto Analyzer, cell counter, X-Ray and an ambulance. 422 PHCs are functioning as Upgraded PHCs. Five doctors are posted to UG PHCs to provide 24x7 medical services in rural areas. Dental health care services are provided in 341 block level and selected Upgraded PHCs to treat dental ailments. The Government have planned to provide dental health care services in all the upgraded and block level PHCs in a phased manner.

6.11 The Services provided by a Primary Health Centre :

- Outpatient, inpatient services, antenatal care, delivery care and postnatal care, and family welfare services
- 2. Treatment of infectious diseases like diarrhoea, fever and other infectious diseases
- 3. Community Based Maternal and Child Health Services
- 4. Prevention and Control of Communicable Diseases
- 5. Screening of Non-Communicable Diseases namely diabetes, hypertension and cancer and follow up

- School Health Services early identification and early treatment of 4Ds – Birth Defects, Delay in Development, Deficiency and other Diseases. This early intervention helps to improve the quality of life and longevity of the life of the child.
- 7. Implementation of Various National Health Programmes like
 - a. Reproductive and Child Health Programme
 - b. Universal Immunization Programme
 - c. National Family Welfare Programme
 - d. National Anaemia Control Programme
 - e. National Iodine Deficiency Disorder Control Programme
 - f. National Water and Sanitation Programme
 - g. National Vector Borne Diseases Control Programme

- h. National Diarrhoeal Diseases Control Programme
- i. National Tuberculosis Control Programme
- j. National Leprosy Eradication Programme
- k. National AIDS Control Programme
- I. Integrated Disease Surveillance Programme
- m. National Blindness Control Programme
- n. National Programme for Prevention and Control of Fluorosis
- o. National Programme for Prevention and Control of Deafness
- p. National Vitamin A Deficiency Disorder Control Programme
- q. National Tobacco Control Programme
- r. National Rural Health Mission Programmes

- 8. Camps and Campaigns
 - a. Intensified Pulse Polio Immunisation camp
 - b. Mission Indradanush Campaign for improving immunization coverage
 - c. Intensified Diarrhoea Control
 - d. National Deworming Program
 - e. Vitamin 'A' campaign
 - f. Speciality Medical Camps in rural areas
 - g. Fever treatment camps
 - h. School Health Camps
 - i. Health education and awareness campaigns

6.12 Universal Health Coverage (UHC)

UHC seeks to universalise access to essential assured health services to improve coverage and quality of institutional and outreach services with home visits towards achieving health goals under Sustainable Development Goals (SDG). 985 Health Sub Centres are upgraded as Health and Wellness Centres with one additional Village Health Nurse under National Health Mission to provide the following twelve services.

6.13 Health and Wellness Services under UHC

- 1. Care in pregnancy and child-birth.
- 2. Neonatal and infant health care services
- 3. Childhood and adolescent health care services.
- 4. Family planning, Contraceptive Services and all RCH services
- 5. Management of Common Communicable diseases: National Health Programmes
- 6. General Out-patient care for acute simple illnesses and minor ailments
- 7. Screening and Management of Non-Communicable diseases

- 8. Screening and Basic management of Mental health ailments
- 9. Care for Common Ophthalmic and ENT problems
- 10. Basic Dental health care
- 11. Geriatric and palliative health care services
- 12. Trauma Care and Emergency Medical services

6.14 Hospital on Wheels Programme :

Reaching the Unreached is one of the Public Health Care strategies to take health care to the doorsteps of the people especially those working in unorganized sectors like Quarries, brick kilns and other temporary settlements. 416 Mobile Medical Units with laboratory facilities and other diagnostic equipment provide high quality medical care, cover the remote villages and hamlets as per the fixed day, fixed time plan specific for each block in a camp mode. Information Boards about the day and time of visit are permanently displayed at the camp site. In Municipal Corporations 10 MMUs are functioning to cater to the needs of urban poor. With the support of the Labour Welfare Department, 50 Mobile Medical Units will be functioning exclusively for construction workers across the state. Role of Hospital on Wheels is crucial during disasters like floods, cyclones and fever outbreaks.

The performance of MMUs in the past eight years is given below:

Year	Camps Conducted	Beneficiaries
2011-12	1,32,159	60,92,057
2012-13	1,84,098	1,06,99,782
2013-14	1,83,095	1,04,57,225
2014-15	1,87,615	1,19,52,880
2015-16	2,03,998	1,47,47,873
2016-17	2,05,452	1,65,23,783
2017-18	2,05,871	1,70,25,652
2018-19	2,08,229	1,78,14,418
Total	15,10,517	10,53,13,670

6.15 Dr.Muthulakhsmi Reddy Maternity Benefit Scheme:

The financial assistance given under the scheme to improve the health and nutrition status of poor pregnant mothers, has been enhanced from Rs.12,000 to Rs.18,000 per beneficiary with effect from 1st April 2018. Under Government of India's scheme "Pradhan Mantri Matru Vandana Yojana" financial assistance of Rs.5,000 is given for first pregnancy. This is combined with the State scheme. An amount of Rs.4,000 from this assistance is used for providing two "Amma Maternity Nutrition **Kits**" during third and fourth month comprising of iron tonic and nutrition supplements to reduce anaemia amongst the pregnant women and improve birth weights of infants.

Under the State scheme in order to promote family planning, financial assistance is given to higher order birth mothers who adopt permanent family planning methods. Migrant mothers are also given this benefit. On an average, 6.5 lakh women benefit from the scheme every year.

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Performance under the Scheme

Year	Amount Disbursed to Beneficiaries (Rs. in crore)	No. of Beneficiaries
2011-12	515.11	6,73,093
2012-13	639.54	6,70,313
2013-14	652.16	6,63,623
2014-15	658.75	6,65,240
2015-16	621.77	6,35,225
2016-17	609.37	6,49,904
2017-18	640.68	7,14,718
2018-19	895.79	7,06,792
TOTAL	5233.17	53,78,908

6.16 Deworming:

Under this initiative, children in the age group of 1-19 years are given deworming medicine (Tablet Albendazole) through schools and Anganwadi centres.

6.17 Amma Baby Care Kit:

The visionary and pioneering scheme was announced in the floor of the Assembly on 12.08.2014 by the former Hon'ble Chief Minister launched on 08.09.2015. and was This innovative initiative is being implemented with the objective of improving the hygiene of the postnatal mothers and the newborn baby and inculcating hygienic practices among the mothers for self and baby care. The Amma Baby Care kit contains 16 items viz. baby towel, baby dress, baby bed, baby protective net, baby napkin, baby oil, baby shampoo, baby soap, baby soap box, baby nail clipper, baby rattle, baby toy, liquid hand wash, bathing soap, sowbagya sundilehiyam and a kit baq to securely keep all the items. Under this scheme, upto March 2019, 17,70,393 delivered mothers have been given these kits for their babies.

6.18 Amma Arokiya Thittam:

Amma Arokiya Thittam provides an opportunity for people aged above 30 years living in rural areas to have access to basic health checkup on annual basis in a nearby health facility. 25 parameters are screened under this program in 501 PHCs including urban areas. 49.14 lakh people have been screened upto March 2019, since the launch of the scheme in March 2016. People identified with any kind of Non-Communicable Disease during the screening are treated at the Primary Health Centres / Government Hospitals / Medical College Hospitals / Empanelled Hospitals free of cost as applicable under CMCHIS. The scheme is now extended to the urban areas through the selected urban PHCs.

6.19 The Menstrual Hygiene Programme:

High quality sanitary napkins are provided to adolescent girls in rural areas without any cost under this scheme. This programme was launched on 27.03.2012. Designated teachers are responsible for distributing the sanitary napkins in schools. Village Health Nurses along with Anganwadi Workers are responsible for distributing the sanitary napkins to the girls who are not covered in the schools. Under this scheme, 18 packs of sanitary napkins (six pads per pack) in a year, at the rate of three packs for two months for each adolescent girl (10-19 years) are provided. Sanitary Napkins are also given to Post Natal mothers who deliver in Government institutions at the rate of seven packs each (six pads per pack). Additionally, Sanitary Napkins are being given to each women prison inmate and to female inpatients in the Institute of Mental Health, Chennai at the rate of 18 packs (six pads per pack) in a year.

6.20 National Iodine Deficiency Disorders Control Programme (NIDDCP)

Iodine is an essential micro nutrient required daily at 100-150 microgram for normal growth and development. Deficiency of iodine may cause Goitre, low I.Q., Neuromuscular weakness, Endemic cretinism, Still birth, Hypothyroidism, Defect in vision, hearing and speech, Spasticity, Intrauterine death and Mental retardation.

6.21 The State is focusing on the supply of iodized salt in place of common salt and assessing the extent of Iodine Deficiency Disorders and the impact of iodized salt, Laboratory monitoring of iodized salt and urinary

iodine excretion and Health education and publicity. The provisions of the Food Safety and Standards Act, 2006 and Rules, 2011 are being effectively utilized to ensure compliance.

6.22 Grievance Redressal:

2,580 Closed User Group (CUG) mobile connections have been distributed to all the Nodal Officers and District Level Officers in the Health Department for the Real Time Grievance Redressal related to Health care service.

6.23 Facilities for Lactating Mothers:

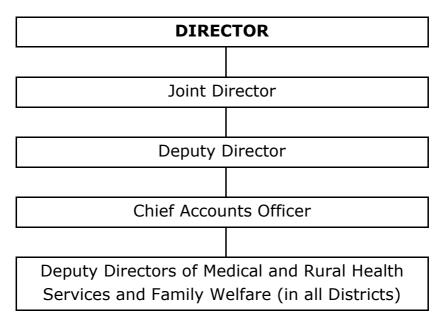
Babies who are breastfed are generally healthier and achieve optimal growth and development compared to those who are fed formula milk. Infants who are not breastfed are at an increased risk of illness that can compromise their growth and raise the risk of death or disability. Breastfed babies receive protection from illness through the mother's milk. With the objective of providing privacy for travelling mothers, breastfeeding rooms are provided in 352 bus stands / terminus, since 03.08.2015.

Chapter - 7

FAMILY WELFARE PROGRAMME

7.1 Tamil Nadu is considered as a pioneer in the implementation of the Family Welfare Programmes in the country. Family Welfare Programme is being implemented since 1956 as people's programme in the State with 100% central assistance. The objective of the programme is to reduce the birth rate to the extent necessary to stabilize the population at a consistent level. Family Welfare services are provided through the Government health facilities as well as through the approved private facilities to the eligible couples to stabilize the the State. population of In view of commendable progress in reducing the birth rate, the focus has been shifted from a "Target approach" to "Community based Needs Assessment Approach" where importance is given to meet the unmet needs for family planning services and improving the Maternal and Child Health services.

7.2 Administrative Structure:



7.3 Demographic Indicators:

Tamil Nadu is the seventh most populous State in India. As per 2011 census, the population of Tamil Nadu was 7.21 crore with decadal growth rate of 15.6%. It accounts for 6% of the country's total population. The demographic scenario of the State (SRS) is furnished below:

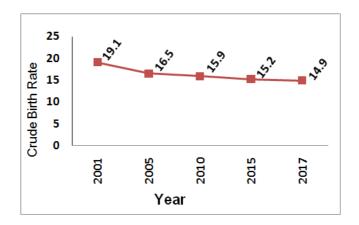
SI. No.	Indicators	Current level
1	Crude Birth Rate (2017)	14.9/1000 population
2	Crude Death Rate (2017)	6.7/1000 population
3	Total Fertility Rate (2016)	1.6
4	Infant Mortality Rate (2017)	16.0/1000 live births
5	Maternal Mortality Ratio (2016-17 State HMIS)	60/1,00,000 live births
6	Natural Growth Rate (2017)	0.83%

Source: Sample Registration System (SRS) – 2017.

7.4 Performance in Family Welfare Outcomes

7.4.1 Crude Birth Rate (CBR):

Crude Birth Rate is the number of live births per 1,000 Population in a year. The current level of Crude Birth Rate (CBR) in Tamil Nadu is 14.9 per 1,000 populations as per the Sample Registration Survey - 2017. The State ranks as the second lowest among the major States in the country.



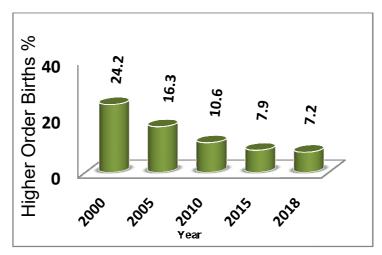
Trends in Crude Birth Rate

7.4.2 Total Fertility Rate (TFR): Total Fertility Rate is the average number of children born to a woman in her reproductive age. The current level of Total Fertility Rate in Tamil Nadu is 1.6 as per the Sample Registration Survey-2016. The State ranks lowest among the major States in the country and below the National level of 2.3. Tamil Nadu is consistently maintaining the TFR as 1.6 for the past three years.

7.4.3 Higher Order Births:

Three and above order of births are termed as Higher Order Births. The Higher Order Birth rate in Tamil Nadu was 7.2% in 2018. In order to reduce Maternal and infant mortality among Higher Order Birth delivered mothers, 120 blocks with more than 10.5% Higher Order Birth rate have been identified and the list of eligible mothers has been prepared through Village Health Nurses. These mothers are given counselling to accept sterilization in the Government health facilities. Special sterilization drives are being conducted in these 120 blocks.

Trends in Higher Order Births:



7.5 Family Welfare Services available in the

State: The following permanent and temporary methods of family welfare services are provided free of cost to the eligible couples in all the Government health facilities.

Permanent Methods

For Male	Conventional Scalpel Vasecto	-	/ and	No
For	Puerperal Sterilization (Tubectomy),			
Female	Mini-Lap and Laparoscopic Sterilization			

Temporary spacing methods

Intra Uterine Contraceptive Device (IUCD)	Copper 'T' 380A (10 years) and 375 (5 years)
Oral contraceptive Pills (OP)	Mala N (hormonal) and Chhaya (non – hormonal) (Centchroman Pills)
Injectable contraceptive	Antara -Depot Medroxy Progestrone Acetate (DMPA)
Contraceptive Condoms	Nirodh
Emergency Contraception	E- Pills

Medical Termination of Pregnancy:

- Manual Vacuum Aspiration (MVA)
- Medical Method of Abortion (MMA)

Facilities providing family welfare services

The Family Welfare Services are provided in the following Centres:

SI. No.	Centres	No. of Centres
1	Primary Health Centres	1,421
2	Community Health Centres (Block)	385
3	Urban Primary Health Centres	460
4	Health Sub-Centres	8,713
5	Rural Family Welfare Centres attached with PHC/CHC	382
6	Post Partum Centres	110
7	Urban Family Welfare Centres	108
8	Voluntary Organisations	27
9	Approved Private Nursing Homes	2,462

7.6 Schemes implemented under the Family Welfare Programme

7.6.1 Male sterilization:

It is an ongoing programme implemented in the State. Special awareness campaigns are conducted towards participation of males to accept No Scalpel Vasectomy (NSV). 385 Camps were conducted in the year 2018-2019. It is proposed to conduct NSV camps in all the 385 Blocks in the State during the year 2019-2020 at a cost of Rs.38.5 lakhs.

7.6.2 Female Sterilization:

In Tamil Nadu, 22 Medical College Hospitals, 31 Government Head Quarters Hospitals, 223 Government hospitals, 376 Primary Health Centres, 26 Health Posts in Municipal Corporations and 2,462 approved private nursing homes are providing female sterilization services. Apart from providing sterilization to delivered mothers, the interval sterilization is also provided to eligible mothers.

7.6.3 Post Partum Intrauterine Contraceptive Device (PPIUCD)

Copper-T inserted to delivered mothers hours, is called post partum within 48 intrauterine contraceptive device insertion. The doctors and staff nurses are trained to insert IUCD during post partum period. Mothers with one child are counselled and IUCD is inserted immediately after delivery. Mothers who have two or more children and not fit for Tubectomy will be counselled to accept the PPIUCD insertion immediately after delivery. In the year 2018-2019 total number of PPIUCD inserted were 2.01 Lakhs. It is proposed to insert 2.4 lakhs PPIUCD during the year 2019-2020. A sum of Rs.150/is paid to service providers per case as incentive and Rs.300/- is paid to the acceptors for accepting PPIUCD.

7.6.4 Injectable contraceptives: Depot Medroxy Progestrone Acetate (DMPA) - Antara:

Injectable contraceptive services are provided to the acceptors through trained doctors and Staff Nurses in all Government health facilities up to Primary Health Centre level. These contraceptive services can be availed by the eligible mothers once in three months in the Government health facilities. In the year 2018-2019 total of ANTARA performance was 39,058 (mothers). It has been proposed to impart training on this contraceptive method to Doctors, Staff Nurses / LHV / ANM during the year 2019-2020 at a total cost of Rs.58.56 lakhs.

7.6.5 Centchroman pills (Chhaya):

Centchroman is a new non hormonal contraceptive pill in the name of Chhaya introduced in all Government health facilities to benefit more women. It is a safe spacing method for both breast feeding and non-breast feeding mothers. The Chhaya performance for the year 2018-2019 was 75,331 (Mothers).

7.6.6 Medical Termination of Pregnancy (MTP) Programme:

Annually 63,000 MTPs are performed in the Government and private institutions, out of which 21,932 MTPs are performed by Manual Vacuum Aspiration (MVA) technique. In order to provide safe abortion services to the needy mothers, the Doctors and Staff Nurses of PHCs and Government Hospitals are imparted training on MVA technique for safe abortion practices. In the year 2018-2019 total number of 52 lady Doctors was trained under MVA technique. It has been proposed to train 300 doctors under the MVA technique during 2019-2020 at a cost of Rs.26.24 lakhs.

7.6.7 Safe abortion practices in all Government health facilities:

In order to strengthen the safe abortion practices in rural and urban areas, all the Government facilities have been made as static centres for providing safe abortion services. This will curtail the maternal deaths due to abortion done by quacks. It will also help in preventing sex selective abortion.

7.7 Strengthening of temporary Family Welfare methods in Tribal Areas:

The tribals practice non-medical methods and unsafe abortion techniques to avoid

which leads to maternal pregnancy complications and maternal mortality. To avoid these practices, Home Delivery of Contraception (HDC) through ASHA/Anganwadi Workers has been initiated to strengthen the practice of temporary methods among the tribal people. temporary methods The of OP, E-pill, centchroman pills, Nirodh and Pregnancy Test Kit (PTK) are being popularized through special campaign in the tribal areas.

7.8 Family Planning Logistic Management Information System (FP-LMIS) Training:

Government of India has developed a web portal FP-LMIS to upload and monitor the supply chain of Family Welfare contraceptives from National level to ASHA level through web based, Mobile based and SMS based services. State Level training was imparted to all the District level officials in 32 Districts and District Level training for Block level staff is going on.

7.9 Information, Education and Communication Activities:

To create awareness among eligible couples to accept permanent and temporary family planning methods the following IEC activities are being conducted:

- World Population Day is celebrated every year on 11th July, in State, District and Block levels to sensitize population crisis, emphasizing small family, gender equality, spacing and increasing the age of marriage.
- No Scalpel Vasectomy (NSV) week is celebrated throughout the State once in a year among community and factory employees for male participation under small family norms
- Family Welfare dramas are conducted at Block level emphasizing small family, gender equality, spacing and increasing the age of marriage.
- iv. Advertisements through FM rainbow radio stations are broadcasted.

- v. Hoardings displaying Family Planning methods are exhibited in Trade fair Exhibitions.
- vi. Hoardings displaying Family Welfare methods are erected in Government Headquarters Hospitals and Government Medical College Hospitals

7.10 Family Planning Indemnity Scheme (FPIS):

The Government of India introduced the Family Planning Indemnity Scheme with effect from 1st April, 2013 with the following insurance benefits for the family welfare sterilization acceptors and service providers:

Death following sterilization in hospital or within 7 days from the date of discharge from the hospital	Rs.2,00,000
Death following sterilization within 8 to 30 days from the date of discharge from the hospital	Rs.50,000
Failure of sterilization leading/not-leading to child birth	Rs.30,000

Cost of treatment up to 60 days arising out of complication from the date of discharge	Actual cost not exceeding Rs.25,000
Indemnity insurance per doctor per facility but not more than 4 cases per Doctor in a year	Up to Rs.2.00 lakhs per case of litigation

7.11 State and District Quality Assurance Committees:

These committees review the deaths, failures and complications arising out of sterilization and recommend for the payment of insurance claims and also give suggestions for improvement of the quality of the services.

7.12 Compensation to Sterilization Acceptors:

Compensation for loss of wages to the sterilization acceptors is paid in the State as detailed below:

Acceptors of male sterilization in public health facilities	Rs.1,100
Acceptors of female sterilization belonging to below poverty line and SC / ST in public health facilities	Rs.600
Acceptors of female sterilization belonging to above poverty line in public health facilities	Rs.250

Tamil In Nadu annually about 3 lakh sterilizations are performed in the Government health facilities and private medical institutions. Government Tamil Nadu encourages participation of approved private nursing homes in providing family welfare services. The family welfare programme is implemented successfully to improve the quality of family welfare services and also to improve the spacing between births thereby contributing to the reduction of IMR and MMR in the State.

Chapter - 8

MEDICAL AND RURAL HEALTH SERVICES

(Employees' State Insurance Scheme)

8.1 The Employees' State Insurance Scheme of Tamil Nadu is a statutory body functioning under ESI Corporation, New Delhi. It has 10 ESI Hospitals and 216 ESI Dispensaries functioning under it. ESI Medical College at Coimbatore has been added to the Government Medical Colleges functioning under Government of Tamil Nadu.

8.2 The administration of ESI Dispensaries in this State is done by 4 Regional Administrative Medical Officers (ESIS) functioning at Chennai, Coimbatore, Madurai and Salem.

8.3 The two ESI Hospitals at K.K. Nagar, Chennai and Tirunelveli are under the direct control of the ESI Corporation, New Delhi. The ESI Hospital, Coimbatore attached to Government Medical College is under the control of the Director of Medical Education and the remaining 7 ESI Hospitals are under the control of the Director of Medical and Rural Health Services (ESIS), Tamil Nadu.

8.4 All the 4 regions have Central Medical Stores (ESIS) to supply drugs and dressings to various ESI Dispensaries. The administrative control of all the personnel comes under the Director (ESIS), Joint Director (ESIS) and Deputy Director (ESIS) functioning from Chennai. In addition to the 4 Regional Administrative Medical Officers (ESIS), there are 7 Medical Superintendents for 7 State run ESI Hospitals viz. Chennai-Ayanavaram, Madurai, Sivakasi, Tiruchirappalli, Salem, Vellore and Hosur.

8.5 The ESI Dispensaries provide primary care and ESI Hospitals provide secondary and tertiary care to the insured persons and their family members. The details of the activities of this Department have been brought out in the Labour and Employment Department Policy Note.

Chapter - 9

INDIAN MEDICINE AND HOMOEOPATHY

9.1 The Indian Systems of Medicine (ISM) are ethnic to our country. The Siddha, Ayurveda and Yoga & Naturopathy Systems of Medicine have been popular modes of health care in this country from the dawn of civilization. Most of the medicines administered under the Indian Systems are prepared from herbal plants grown widely in rural areas. These systems have therefore remained a reliable and economical form of treatment available locally. The axiomatic saying in Tamil "உணவே மருந்து மருந்தே உணவு" rightly depicts the significance of the herbs in our daily food cycle from the time immemorial. The ISM&H synonymous with AYUSH operates on the principle that prevention is better than The Siddha system is the cure. proud contribution of our Tamil ancestors to the world. It is the unique health care system widely practiced across the world wherever Tamils reside. Further, these Indian Systems of Medicine provide relief even for chronic ailments. The world is witnessing a resurgence of

traditional systems of medicine due to the holistic approach to health followed by these treatments. The estimate of World Health Organization reveals that 70% of world population depends on such ethnic system of health care specific to the geographies across the globe. Hence with an avowed intention of taking the benefits of these systems to the doorsteps of the public, the Department of Indian Medicine and Homoeopathy has been rendering its service since 1970.

Administrative Structure

9.2 The Government of Tamil Nadu established the "Department of Indian Medicine and Homoeopathy" which came into existence in 1970, is responsible for teaching as well as for providing health care in five systems of Indian Medicine viz., Siddha, Ayurveda, Unani, Homoeopathy, Yoga & Naturopathy. The Administrative structure of the Department is as follows:

COMMISSIONER / DIRECTOR

- Joint Director
- Joint Director (Ex- Officio)
- Chief Scientific Officer / Director, Research and Development Wing
- Principals of Government Siddha, Ayurveda, Unani and Yoga & Naturopathy, and Homoeopathy Medical Colleges
- State Licensing Authority (Indian Medicine)
- Government Analyst, Drugs Testing Laboratory (Indian Medicine)
- Superintendent, Arignar Anna Government Hospital of Indian Medicine, Chennai
- District Siddha Medical Officers

Government Siddha, Ayurveda, Unani, Yoga & Naturopathy, and Homoeopathy Dispensaries attached to Government Hospitals/ PHCs and ISM wards in Government Hospitals

9.3 The main objectives of the department are:

- Bringing Indian system of Medicine into the mainstream to give holistic health care and taking the benefits of traditional systems to the public by opening ISM wings / Hospitals at various levels in all the districts.
- Improvement of educational institutions in Siddha, Ayurveda, Unani, Yoga & Naturopathy and Homoeopathy to provide students with all the necessary infrastructure for gaining systematic knowledge in the respective system
- Encouraging the processing and manufacture of ISM&H drugs and promote research and development activities in ISM&H
- Developing the existing Government Indian Systems of Medicine and Homoeopathy Medical Colleges and to improve the standard of Medical Education in these systems
- Opening of new Medical Colleges in these systems

- Encouraging the growth of Centre of Excellence in the field of Indian medicine
- Regulation of Drug Manufacturing and Quality Control of Indian System of Medicine to ensure availability of quality drugs to public.
- Establishing life style clinics in Yoga & Naturopathy in all Government Hospitals

ISM Medical treatment

9.4 Details of Government institutions under Indian Medicine and Homoeopathy are as follows

System	No. of medical institutions
Siddha	1,079
Ayurvedha	103
Unani	66
Yoga & Naturopathy	177
Homoeopathy	109
Total	1,534

ISM Medical Education

9.5 Under the control of Indian Medicine and Homoeopathy Department, Under Graduate degree courses (BSMS / BAMS / BNYS / BUMS / BHMS) in the systems of Siddha, Ayurveda, Yoga & Naturopathy, Unani, Homoeopathy and Post Graduate degree courses [M.D (S), M.D (H) and M.D (Y&N)] in the systems of Siddha, Homoeopathy, Yoga & Naturopathy are being imparted in the respective 6 Government Colleges and 27 Private Colleges as follows:

SI. No	Medical System	No. of Government Colleges	No. of Private Colleges
1	Siddha	2	7
2	Ayurveda	1	4
3	Unani	1	0
4	Yoga & Naturopathy	1	7
5	Homoeopathy	1	9
	Total	6	27

The details of Government Medical Colleges functioning under Indian Medicine and Homoeopathy department are as follows:

- Government Siddha Medical College and Hospital, Palayamkottai, Tirunelveli District
- Government Siddha Medical College, Arignar Anna Government Hospital of Indian Medicine (AAGHIM) campus, Arumbakkam, Chennai
- Government Yoga & Naturopathy Medical College, AAGHIM campus, Arumbakkam, Chennai
- Government Homoeopathy Medical College and Hospital, Tirumangalam, Madurai District
- Government Unani Medical College, AAGHIM Campus, Arumbakkam, Chennai
- Government Ayurveda Medical College and Hospital, Kottar, Nagercoil, Kanniyakumari District

9.6 Tamil Nadu has the unique credit of being the only State in the country where

Government Medical Colleges have been established in all the disciplines of Indian Systems of Medicine and Homoeopathy. Number of seats available in the Government Colleges and the Private Colleges for admission to the Under Graduate (UG) and Post Graduate (PG) Courses of ISM&H are given as under:

SI.	2	Details of seats available for admission				
No.	Discipline	Gover	nment	Priva	ate	
		UG	PG	UG	PG	
1.	Siddha	160	94	370		
2.	Ayurveda	60		190		
3.	Unani	60				
4.	Yoga & Naturopathy	60	15	550		
5.	Homoeopathy	50		660	30	
	Total	390	109	1,770	30	

Main Streaming of Indian System of Medicine and Homoeopathy Wings in Government Medical Institutions **9.7** Under the policy of main streaming, at present Indian System of Medicine and Homoeopathy treatment facilities are made available in Allopathy Medical College Hospitals, Multi Super Speciality Hospital, District Headquarters Hospitals, Taluk and Non-Taluk Hospitals and Primary Health Centres (including 475 wings funded under National Rural Health Mission) and 72 AYUSH Wellness Clinics as shown below:-

REGULAR							
Colleges	Siddha	Ayurveda	Unani	Homoeopathy	Yoga & Naturopathy	Total	
	2	1	1	1	1	6	
Major Hospital	3	2	1	1	1	8	
Medical College Hospital	15	3	2	9	25	54	

Multi Super Speciality Hospital. (Omandurar)	-	-	-	-	1	1
District Head Quarters Hospital	31	4	3	20	30	88
Taluk Hospital	191	2	-	8	31	232
Non Taluk Hospital	58	2	4	-	-	64
РНС	406	25	14	6	2	453
Regular Dispensary	13	6	-	5	1	25
Tribal Dispensary	7	-	-	-	-	7
Mobile Dispensary	1	-	-	-	-	1
Rural Dispensary	45	3	-	-	-	48
Total	772	48	25	50	92	987

	NRHM						
Taluk Hospital	4	-	1	-	-	5	
РНС	271	52	39	57	20	439	
Y & N Maternity Clinic (PHC)	-	-	_	-	29	29	
Y & N Maternity Clinic (Taluk Hospital)	-	-	-	-	2	2	
Total	275	52	40	57	51	475	
A	YUSH W	ELLNI	ESS C	LINIC	S		
Hospitals under DME	-	-	-	-	2	2	
Taluk Hospital	4	-	-	1	30	35	
Non Taluk Hospital	2	-	1	-	-	3	

РНС	26	3	-	1	-	30
Regular Dispensary	-	-	-	-	2	2
Total	32	3	1	2	34	72
GRAND	1,079	103	66	109	177	1,534

Paramedical courses

9.8 Two Diploma Courses (viz.) Diploma in Integrated Pharmacy and Diploma in Nursing Therapy are being conducted at Arignar Anna Government Siddha Medical College, Chennai Government Siddha Medical College, and Palayamkottai, Tirunelveli. The courses are of two and half year duration and aim at promoting institutionally the availability of qualified Pharmacists and Nursing Therapists under this system of medicine. The number of seats sanctioned for Diploma Course in Integrated Pharmacy and for Nursing Therapy are as follows

		Number		
SI. No.	Name of the Institution	Diploma in Integrated Pharmacy	Diploma in Nursing Therapy	Total
1.	Government Siddha Medical College, Chennai	50	50	100
2.	Government Siddha Medical College, Palayamkottai, Tirunelveli	50	50	100
	Total	100	100	200

State Drug Licensing Authority for Indian Medicine

9.9 The office of the State Licensing Authority (IM) has started its functioning in Chennai from 29.11.2007 to ensure quality, efficacy and safety of Ayurveda, Siddha and Unani Drugs. The Indian system of Medicines are licensed by the State Licensing Authority (Indian Medicine) as per the Drugs and Cosmetics Act, 1940 and Rules, 1945. The State Licensing Authority is the authority for the grant and renewal of a license for manufacture and sale of Ayurveda, Siddha and Unani (ASU) drugs and also approving authority for institutions for carrying out tests on Ayurveda, Siddha and Unani drugs and raw materials used in their manufacture. The District Siddha Medical Officers of this department are appointed as Drug Inspectors as per the provisions of Drugs and Cosmetics Act, 1940 and Rules, 1945. As per section 22 and Rule 162 of Drugs and Cosmetics Act, 1940 and Rules, 1945, the Drugs Inspectors have power to inspect the premises not less than twice a year, take statutory samples and to prosecution against the initiate erring manufacturers.

Standardization of ISM Drugs and Strengthening of State Drug Testing Laboratory

9.10 The primary function of Drug Testing laboratory (IM) is to test the quality of statutory samples lifted and sent by the Drug Inspector (IM) in discharging of their statutory function under Section 33G of Drugs and Cosmetics Act, 1940. The Laboratory has been conferred with the statutory status. Advanced and modern equipment have been installed in the laboratory for the purpose of Standardization and quality control of ISM Medicine. Government Analyst, Drug Testing laboratory (IM) Tamil Nadu has been notified as Government Analyst for Andaman Nicobar (Union Territory) to discharge the statutory duties as per Section 33F(2) of Drugs & Cosmetics Act, 1940.

The Arignar Anna Government Hospital of Indian Medicine

9.11 The Arignar Anna Government Hospital of Indian Medicine, Chennai was started in the year 1970. The hospital functions with a bed strength of 310. Treatment under all the

systems of Indian Medicine and Homoeopathy (i.e Siddha, Ayurveda, Unani, Homoeopathy and Yoga & Naturopathy) are offered to the general public to take treatment of their choice. During the year 2018 the hospital has treated 4,50,944 out-patients and 54,107 in-patients. A fully automated analyser has been purchased for the use in Bio-Chemistry laboratory at a cost of Rs.8,55,500/- to provide better laboratory services to the patients. A sum of Rs.56.25 Lakh has been allotted under the State Annual Action Plan (SAAP) for the renovation of buildings of out-patient this hospital. The medicines required for the treatment of patients under Siddha, Ayurveda, Unani are being prepared in the pharmacy adjoining the hospital. For the period from 01.01.2018 to 31.12.2018 approximate quantity of 3,541 kg of an Nilavembu Kudineer powder has been processed and distributed to the dispensaries in and around Chennai. Moreover, Dengue awareness camps have been conducted in and around Chennai to prevent the spread of Viral and Dengue Fevers. 437Kg of Nilavembu Powder has been distributed to the public in the form of Nilavembu Kudineer in this campus.

Tamil Nadu Medicinal Plant Farms and Herbal Medicine Corporation Limited (TAMPCOL)

9.12 Tamil Nadu Medicinal Plant Farms Medicine Corporation Limited and Herbal (TAMPCOL) was started on 27th September 1983 with the main objective of manufacturing and supplying Siddha, Ayurveda and Unani medicines. The registered office functions at Anna Hospital campus, Arumbakkam, Chennai factory, functioning its at SIDCO and Pharmaceutical campus, Alathur near Thiruporur, Kancheepuram district, is involved in manufacturing of 124 medicines out of which 77 medicines, 39 are Siddha are Avurveda medicines and 8 are Unani medicines. These supplied medicines are to all institutions functioning under the Commissionerate of Indian Medicine and Homoeopathy, besides other Government Institutions and TAMPCOL's own sales outlets. TAMPCOL as a Nodal Agency, procures and supplies medicines, machinery and equipments to the institutions functioning in this department. During 2018-2019, the corporation has extended a rate rebate of 25% with effect from 28.09.2018 for all Government supplies, which is effecting a savings to the tune of Rs.150.00 lakh. During the year 2018-2019 the Corporation supplied 11 medicines under Amma Magapperu Sanjeevi Kit for pregnant women and under Amma Baby Care Kit, Sowbhagya Sunti Lehiyam supply was continued. For the year 2018-2019 medicine supply was effected to the tune of Rs.2.76 crore to the Tamil Nadu Livestock Development Agency. The above manufacturing and supply activities will be continued in 2019-2020. TAMPCOL will continue its role in production and uninterrupted supply of Nilavembu Kudineer and Kabasura Kudineer in coming financial years also, for the distribution of the same to Hospitals coming under the ambit Indian System of Medicines, AYUSH of Institutions, Corporation / Municipality dispensaries to prevent dengue and Swine flu outbreak.

The corporation has three sales counters at Chennai, Palayamkottai and Nagercoil. Tampcol proposes to establish one more sales counter in the Girivalam route at Thiruvannamalai. A free medical consultancy clinic is being operated at the corporate office building of the corporation with doctors from all streams of Indian System of Medicines namely Siddha, Ayurveda, Unani and Yoga & Naturopathy on rotation basis.

The corporation is in the process of revamping its existing packaging practice for better dispensation of medicines in order to retain the efficiency and hygiene, besides making TAMPCOL's product presence felt in the market. The corporation has recently renovated its buildings located inside the factory premises. Besides, improvised machineries worth Rs.77.49 lakh have purchased for increased been productivity and reducing factory production lead times.

The corporation has initiated the process of establishing an additional production unit in the campus of Pudukottai District Head Quarters Hospital. Further it is also proposed to construct a three storeyed building with each floor admeasuring 3,000 sq. ft to expand the business activities at the land purchased at SIDCO Pharmaceutical Complex at Alathur. With the

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aim of tapping the global market, the Corporation's renowned commercial product viz. Herbal Hair Tonic has been made available in the e-commerce site viz. Amazon. The process of re-launching one more commercial product called "Vigorous" in the market is underway.

9.13 Other Activities:

- International Institute of Yoga & Naturopathy Medical Sciences to be established in Chengalpet, Kancheepuram District in 50 acres of land at a cost of Rs. 92 Crore.
- Siddha, Yoga & Naturopathy integrated AYUSH Hospital with 50 beds is being established at Theni and Thiruvannamalai.
- Awareness programme and distribution of Nilavembu Kudineer and Dengue and Chikunkunniya prevention activities will continue to be carried out.
- A special treatment for weight reduction is conducted in the hospital attached to Government Yoga & Naturopathy Medical College, Chennai, by means of natural

foods, natural herbal treatment, mud bath therapy, hot steam bath therapy, plantain leaf bath etc.

State AYUSH Society

9.14 "State AYUSH Society – Tamil Nadu" is formed to implement the schemes sanctioned to the State under the National AYUSH Mission. The schemes are implemented by the Society, out of the funds received from the Government based on the sharing pattern in the ratio of 60:40. For the year 2018-2019, schemes were approved for an amount of Rs.27.82 crore in the State Annual Action Plan (SAAP) and supplementary SAAP for Rs.12.85 crore totalling Rs.40.67 crore, have been approved

Chapter - 10

FOOD SAFETY AND DRUG DMINISTRATION

10.1 The Food Safety and Standards Act, 2006 is being implemented in the entire country with effect from 05.08.2011 by repealing the Prevention of Food Adulteration Act, 1954 and other seven related food laws. Tamil Nadu Food Safety and Drug Administration Department was formed with effect from 22.12.2011.

10.2 The department is headed by the Commissioner of Food Safety, assisted by the Director and Additional Commissioner of Food Safety, other supportive staff at state level and 32 designated officers at the district level and 584 Food Safety Officers (385 for Blocks and 199 for Urban) to implement the new Act. Six Food Laboratories are functioning at Chennai, Thanjavur, Madurai, Salem, Coimbatore and Palayamkottai for testing of food samples.

Licensing and Registration Certificate

10.3 As per the Food Safety and Standards Act, License or Registration Certificate is being issued to the food business operators

whose annual income is more than Rs.12 lakh through Designated Officer and to the food business operators whose annual income is less than Rs.12 lakh through Food Safety Officers.

Enforcement activities

10.4 Periodical inspections are made by Designated Officers / Food Safety Officers at various manufacturing, transport, storage and retail outlets. Regular surveillance of food products is also done by Food Safety Officers and wherever required, food samples are lifted for analysis and based on the analysis report, legal action are taken.

Prohibition of food products with tobacco & nicotine

10.5 Tobacco use is the foremost cause of cancer disease and prevention globally as well as in India. To prevent various types of cancer caused by consumption of smokeless tobacco, the manufacture, transport, storage, distribution and sale of Gutkha, Panmasala and any other food product containing tobacco or nicotine as ingredient has been prohibited in Tamil Nadu

and necessary Gazette Notification has been issued with effect from 23.05.2013. District Level Surveillance Committee under the Chairmanship of District Collector with District Superintendent of Police, District Revenue Officer, District Excise Officer, Deputy Director of Health Services, Regional Transport Officer, Chief Education Officer, District Social Welfare Officer, Commissioner for Municipalities / Corporations and Designated Officer of Food Safety Department as Members has heen formed to enforce the ban order and monitor its implementation in every district. The ban order is extended every year and the latest notification extending the ban for a period of one year was issued on 23.05.2019. From June 2013 to May 2019, total tonnes of 736.98 (7, 36,980 Kg) of Gutkha and Panmasala to the value of Rs.24.34 crore were seized and destroyed.

Complaint Redressal

10.6 The department has created a consumer complaint redressal system to make complaints on unsafe, substandard and mislabled food products using a separate e-mail

address <u>unnavupukar@gmail.com</u> and a whatsapp mobile number 9444042322. Any complaint received is acted upon within 24 / 48 hours and feedback sent to the complainant.

Milk and Milk Products

10.7 To strengthen continuous monitoring and prevent adulteration of milk and milk products, 1357 samples were lifted during the year 2018-2019, legal action initiated in 177 cases. Electronic Milk Adulteration Tester (EMAT) is being used for Surveillance and creating awareness on quality of milk brought by consumers in the districts.

Packaged Drinking Water

10.8 Regular inspection of packaged drinking water units are being done by the Food Safety Officers to ensure the provision of safe and quality packaged drinking water. During the year 2018-2019, 69 samples were lifted and legal action initiated in 76 cases.

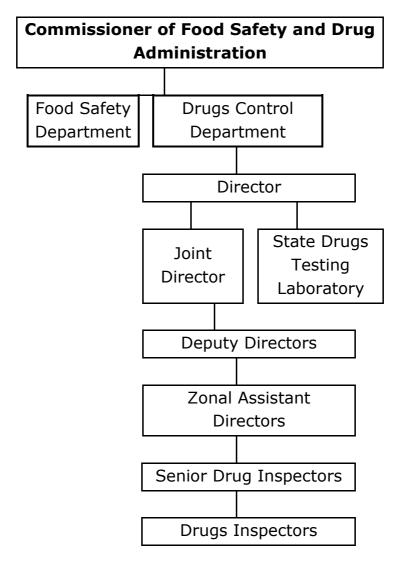
Safe and Nutritious Food at School (SNF@School)

10.9 SNF@schools is a nation-wide campaign launched by Food Safety Standard Authority of India to inculcate the habit of eating safe and eating right among school children. 'Catch them young' is the approach to change behaviours and habits among children and for taking the message of food safety to their homes.

DRUGS CONTROL ADMINISTRATION

10.10 The Drugs Control Department functions as a separate department with Director of Drugs Control as Head of the Department under the Administrative control of "Commissioner of Food Safety and Drugs Administration".

Administrative Structure



10.11 The Drugs Control Administration has the prime mandate of enforcement of the following enactments, all being Central Acts for regulating the manufacture, distribution and sale of drugs and cosmetics:

- Drugs and Cosmetics Act, 1940, Drugs and Cosmetics Rules, 1945 and Medical Devices Rules, 2017.
- (ii) Drugs Price Control Order, 2013.
- (iii) The Drugs and Magic Remedies(Objectionable Advertisement) Act, 1954 and Rules, 1955.

The Officers of this Department are also empowered to act under the Narcotic Drugs and Psychotropic Substances Act, 1985.

10.12 The Director of Drugs Control is the controlling authority and licensing authority for grant of licenses for manufacture (for sale) of Allopathic, Homeopathic Medicines and Cosmetics and the approvals are issued after the Joint Inspection of the officers of the State and Central Governments. He is the Licensing Authority for Blood Banks in Tamil Nadu along

with the Central License Approving Authority of the Government of India.

10.13 Drugs Control Department monitors

- The quality, safety, efficacy and availability of drugs at right prices.
- The quality and safety of cosmetics.
- The misleading advertisements with respect to Drugs and Magic remedies.
- Collection and supply of safe blood and blood components.

10.14 The sanctioned staff strength of the Department in the enforcement and Testing Laboratory is given below:-

ENFORCEMENT

SL. NO.	NAME OF THE POST	NO. OF POSTS
1	Director of Drugs Control	01
2	Joint Director of Drugs Control	01
3	Deputy Director of Drugs Control	03

SL. NO.	NAME OF THE POST	NO. OF POSTS
4	Assistant Director of Drugs Control	15
5	Assistant Director of Drugs Control (Administration)	01
6	Senior Drugs Inspector	15
7	Drugs Inspector	146
8	Legal Adviser	01
9	Assistant Accounts Officer	01
10	Ministerial Staff	117
11	Office Assistant	79
12	Driver	04
13	Telephone Operator	01
	TOTAL	385

Drugs Testing Laboratory

SL. NO.	NAME OF THE POST	NO. OF POSTS
1	Government Analyst	01
2	Deputy Government Analyst	02
3	Senior Analyst	14
4	Junior Analyst	38
5	Junior Administrative Officer	01
6	Technician Grade – I	06
7	Technician Grade – II	04
8	Electrician Grade – I	01
9	Plumber	01
10	Laboratory Attendant	07
11	Animal Attendant	01
12	Ministerial Staff	10
13	Office Assistant	05
14	Sweeper	01
15	Sweeper-cum-Watchman	01
	TOTAL	93

10.15 Functioning of Legal cum Intelligence Wing and Mobile Squad:

A Legal cum Intelligence Wing with a mobile squad is functioning in the Directorate to attend the complaints relating to drugs and cosmetics. It processes legal matters and undertakes special investigations including interstate investigations in association with the Drugs Control department of other States.

10.16 Drugs Testing Laboratory:

Drugs Testing Laboratory attached to this Department undertakes testing of samples drawn by the Drugs Inspectors (other than parenteral drugs) from various retail, wholesale units, manufacturing units and hospitals of private and Government sector. The analysis of parenteral drugs are undertaken by the Drugs testing lab situated at the King Institute of Preventive Medicine, Chennai.

10.17 Number of Licensed Premises as on 31.03.2019

Sa Lice				S	ge	
Retail Licences	Wholesale Licences	Allopathic Drug Homeopathic Drug Cosmetics		Blood Banks	Blood Storage Centers	
38,499	15,522	543	9	170	300	521

10.18 Number of Inspections during 2018-2019

Details	No. of Inspections
Sales Premises	55,170
Manufacturing Premises	1,195
Hospitals and Medical Stores	2,169
Blood Bank	1,148

10.19 Details of Samples drawn, tested and reported as Not of Standard Quality Drugs during 2018-2019

Total No. of Samples drawn	8,988
No. of Samples Tested	10,750
No. of Samples declared as Not of Standard Quality	304

10.20 No. of Sales Licences Suspended during 2018-2019

Total susper		of Re	tail L	icence	30
Total susper		Whole	sale L	icence	34
Total suspe	No nded	. of	Lie	cence	64

10.21 Prosecution for certain contraventions under Drugs and Cosmetics Act, 1940 Drugs Price Control Order during 2018-2019 and Drugs and Magic Remedies (Objectionable Advertisement) Act, 1954 during 2018-2019

SI. No.	Details	No. of cases
1	For the manufacture of Spurious drugs	Our State - 2 Other States - 4 Total - 6
2	For the manufacture of Not of Standard quality drugs	Our State - 22 Other States - 74 Total - 96
3	For the sale of drugs without supervision of Pharmacist	138
4	For the sale of drugs without prescription of Registered Medical Practitioner	259
5	For the stocking/sale of date expired drugs	04

SI. No.	Details	No. of cases
6	Contraventions under Drugs and Cosmetics Act, 1940 and Rules, 1945	378
7	Contraventions under DMR (OA) Act, 1954	5
8	No. of Sanctions issued under Drugs Price Control Order, 2013	2

This Directorate has conducted surprise raids all over the state to check the sale of abortion pills without valid prescription and legal actions have been initiated against 51 dealers for having sold abortion pills without valid prescription under the provisions of Drugs and Cosmetics Act, 1940 and Rules, 1945.

Chapter 11

Tamil Nadu State Health Transport Department

11.1 Tamil Nadu State Health Transport Department is the Department in charge for the maintenance of all the vehicles attached to various Directorates of Health and Family Welfare department plays an important role in providing trouble free logistic support and mobility for execution of various health care programmes.

11.2 Main functions of the department:

- To economically maintain a healthy fleet of vehicles by carrying out regular service and repairs.
- To deliver all the vehicles admitted for repairs at the earliest with minimum downtime and to also ensure that no vehicle – irrespective of the magnitude of required mechanical and body repairs, is retained for more than 30 days.

- To provide professional assistance in the iii) tender evaluation durina made the purchase of new vehicles and while awarding fabrication work in ambulance То and vehicles. test appraise the fabrication work the executed in ambulance and hearse vehicles.
- iv) To use a computerized data base program to regularly assess, monitor and review the performance of each workshop attached to this department, to ensure comprehensive evaluation of the units and to identify and focus on the areas of improvement. To act as a repository for all data related to vehicles.
- v) To make right recommendations to the concerned, on a regular and timely basis for replacement of aged and worn out vehicles and to thereafter quickly dispose the condemned, vehicles through eauction.
- vi) To provide complete solutions to all the problems encountered by the Medical Officers with regard to repairs, maintenance and operation of vehicles and to guide vehicle record maintenance.

11.3 Fleet Maintained:

This department through 7 regional workshops, 9 district workshops, 29 mobile workshops, 4 mini workshops and 1 recondition unit functioning under its administrative control, maintains a total diversified fleet of 2,730 vehicles attached to various directorates of Health and Family Welfare department.

11.4 Special initiatives:

11.4.1 Grievance Redressal Programme:

A grievance redressal programme named HICORP, an acronym for Health department vehicles Information and Complaint Redressal Programme is being implemented by this department. This acts as an one stop solution for the medical officers as well as the drivers in the maintenance and operation of vehicles. The helpline number to which SMS has to be sent to resolve the grievances is 94896 21111. This is the first of its kind 24/7 free of cost grievance redressal programme run by a vehicle maintenance department.

11.4.2 Vehicle Management Database Program

A vehicle management database program has been designed and developed by this department using in-house resources and manpower. The activities of workshops, stores and technical sections of the directorate have been computerized using this program. The performance of each regional / district workshop attached to this department is evaluated every month, using this program and to encourage healthy competition, ranks are awarded to each workshop.

11.4.3 Minimum detention period of Hospital on Wheel vehicles:

Hospital on wheel vehicles equipped with laboratory facilities and medical equipment, are utilized by Primary Health Centres to regularly conduct medical camps in remote areas and also during natural calamities to prevent epidemics. Considering the importance attached to its utility, special emphasis and priority is accorded to the repairs and maintenance of these vehicles. When these type of vehicles are admitted in the workshops, the progress and repairs in each and every vehicle is monitored at different levels to ensure that all repairs including body and engine works are completed at the earliest and the vehicles delivered within twenty days.

11.4.4 Condemnation and quick disposal of aged vehicles:

This department takes all the initiatives in identifying, aged vehicles that are uneconomical to maintain and for its early condemnation and Various stages involved in the disposal. condemnation of a vehicle like preparation of Expert Committee reports, cancellation of numbers registration bv the reaisterina authority, preparation of Condemnation Board reports and disposal of condemned vehicles through e-auction are now taken care and handled by this department thus relieving the medical officers from such vehicle related arduous work and enabling them to focus on public health activities.

Chapter -12

HUMAN RESOURCES AND MEDICAL SERVICES RECRUITMENT BOARD

12.1 Human Resources are the backbone of organisation. Medical Services any Recruitment Board (MRB) plays a crucial role in contributing human resources required for achieving the objectives of health and Family department. With Welfare more than 10 directorates under the control of Health and Family Welfare Department, MRB undertakes recruitment for over 200 categories of post existing in various Government medical institutions throughout the State.

12.2 Formation of Medical Services Recruitment Board:

MRB was formed in 2012 exclusively for the Health and Family Welfare Department with the objective to carry out all direct recruitments in order to fill up vacancies to various categories of posts. The MRB conducts recruitment through a fair procedure by way of open advertisement in the newspapers and receives applications online. In its endeavour to provide qualified personnel, MRB conducts direct recruitment for Doctors, Nurses and Para Medical posts through written examination and following weightage method depending on the category of posts, following communal rotation and rule of reservation in force.

12.3 The Medical Services Recruitment Board has recruited the candidates for the following categories of posts till 31.03.2019 from date of inception.

SI. No.	Name of the Post	No. of candidates selected
1.	Assistant Surgeon (General)	9,344
2.	Assistant Surgeon (Speciality)	1,943
3.	Personnel for Tamil Nadu Government Multi Super Speciality Hospital	72
4.	Assistant Dental Surgeon (General)	59
5.	Assistant Dental Surgeon (Speciality)	67

SI. No.	Name of the Post	No. of candidates selected
6.	Assistant Surgeon (General) (Special Qualifying Examination)	1,151
7.	Assistant Medical Officer (Siddha)	101
8.	Assistant Medical Officer (Homoeopathy)	4
9.	Assistant Medical Officer (Ayurveda)	1
10.	Assistant Medical Officer / Lecturer Grade-II (Yoga & Naturopathy)	73
11.	Nurses	9,533
12.	Senior Lecturer in Optometry	2
13.	Pharmacist	974
14.	Pharmacist (Siddha)	148
15.	Pharmacist (Ayurveda)	38
16.	Pharmacist (Unani)	20
17.	Pharmacist (Homoeopathy)	23

SI. No.	Name of the Post	No. of candidates selected
18.	Village Health Nurse	1,323
19.	Lab. Technician Grade III	890
20.	Radiographer	285
21.	Fitter Grade II	60
22.	Physiotherapist Grade-II	48
23.	ECG Technician	29
24.	Therapeutic Assistant	114
25.	Prosthetic craftsman	33
26.	EEG / EMG Technician	12
27.	Audiometrician	14
28.	Occupational Therapist	18
29.	Dark Room Assistant	227
30.	Plaster Technician Grade-II	87
31.	Heart Lung Hypothermia Machine Technician	7
32.	Anaesthesia Technician	77
	TOTAL	26,777

12.4 Out of 26,777 candidates recruited by Medical Services Recruitment Board since its inception,3,220 candidates have been recruited from 01.04.2018 and 31.03.2019. Now, the recruitment process is under way for filling up of 3,948 vacancies in the following nine Medical and Paramedical categories :

SI. No.	Name of the post	No. of posts
1.	Nurses	2,345
2.	Nurses in Sick Newborn Care Unit	520
3.	Pharmacist	353
4.	Lab Technician Grade-II	524
5.	ECG Technician	9
6.	Physiotherapist Grade - II	77
7.	Radiotherapy Technician	25
8.	Prosthetic Craftsman	50
9.	Ophthalmic Assistant	45
	TOTAL	3,948

12.5 'Walk-in' Selection for Specialities: MRB is recruiting Assistant Surgeon (Speciality) through "Walk-in" selection process following the communal rotation and rule of reservation in force, in order to utilise the services of various speciality doctors to provide better treatment for the public.

12.6 Medical Services Recruitment Board also conducts a special qualifying examination for the temporarily appointed Assistant Surgeon (Speciality) by way of 'walk-in' selection process and non-service Post Graduate who are in service to regularise their services in the Tamil Nadu Medical service.

CHAPTER - 13

TAMIL NADU MEDICAL SERVICES CORPORATION LIMITED

13.1 Tamil Nadu Medical Services Corporation Limited (TNMSC) was formed in the year 1994-1995, as a fully owned Government Company under Companies Act, 1956. TNMSC is 9001:2015 Certified Organization. ISO an Procurement, storage, testing and distribution of drugs and medicines, surgical consumables and sutures to all Government Medical Institutions in the State is a core activity of this Corporation. Procurement of sanitary napkins, baby care and nutritional kits are also undertaken by this Corporation now, besides finalization of rate contracts for larvicides and insecticides.

The Corporation has also established a drug sale counter at Kilpauk Medical College, Chennai for certain specific drugs. Drugs and medicines for veterinary Institutions are also procured and distributed by this Corporation in the same manner. Procurement of equipment and their maintenance for the Government hospitals, providing diagnostics services such as CT, MRI scans, Lithotripsy in the Government Medical Institutions under user charges, extending logistics support to pay wards are the other activities undertaken by this Corporation.

In addition, finalization of rate contracts for medical instruments and appliances, agencies for providing services such as housekeeping, dietary, establishing diagnostics services such as PET CT scan, MRI scan under PPP mode and laboratory services and fixing agencies for collection and disposal of biomedical waste from the Government Medical Institutions are also entrusted to this Corporation.

Involvement and empowerment of the stakeholders in the process of procurement, adopting prompt payment and strict penalty to the suppliers, ensuring transparency in the procurement process are the fundamental policy, consistently followed by this Corporation with which it won the appreciation worldwide.

13.2 Procurement and Distribution of Drugs:

TNMSC is a role model in drug logistics system related to procurement, testing and of drugs, medicines, surgical distribution consumables and sutures. Annual rate contract tenders are finalized for both essential drugs and speciality drugs through procurement from multiple suppliers at competitive rates bv following the most transparent procedures as the provisions of The Tamil Nadu per Transparency in Tenders Act and Rules. 315 druas. essential around 366 surgical consumables and sutures, 538 speciality drugs are procured every year by this Corporation. The essential drug list and speciality drug list are finalized annually through a drug committee comprising of the Directors of Medical Education, Medical and Rural Health Services, Public Health and Preventive Medicine, Drug Control besides Medical specialists from the Government Institutions prior to floating tenders. The size and packing standards of drugs are ensured as per the standards specified in the tender without any alteration/substitution by the suppliers.

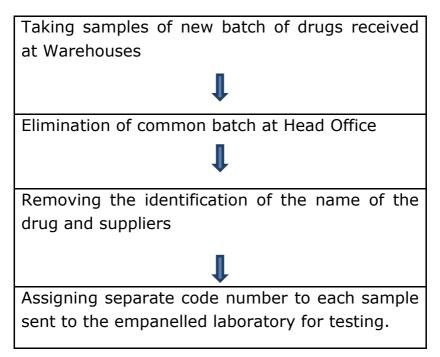
The procurement and stocking quantity of drugs and medicines at the warehouses are on dynamic mode, depending on consumption pattern while ensuring a minimum stock level of 3 months requirement. The Government Medical Institutions are collecting the required drugs and consumables from the district drug warehouses located all over the State through pass books issued for the value allotted by the Directorates. The corporation also procures 225 veterinary drugs annually for the Animal Husbandry Department.

13.3 Quality Assurance System:

every batch of drugs Each and the procured are tested through Empanelled laboratories before being issued to Institutions. In addition, periodic retesting of the stock at Warehouses and at Institutions through the Drug Control Department ensures efficacy of the stock at all levels. Empanelled laboratories which are having National Accreditation Board for Testing and Calibration Laboratories (NABL) accreditation are finalized through annual rate contract. A stringent procedure of the following steps is

adopted by this Corporation to ensure strict quality testing.

Steps Adopted



The selection of particular lab for sending the samples for testing is done by a random selection method through software. The batches that are failed in the testing at empanelled laboratory are retested in Government Analytical Laboratory to ensure statutory provisions before rejection.

13.4 Supply Chain Management:

The supply chain is managed through district drug warehouses, online indents from the institutions and pass book system. Inter Warehouse transfers prior to additional purchase and monitoring of district wise/ state wide stock through the IT network are in place to avoid both nil stock and over stocked situations. Government Medical Institutions in the district are attached to the respective District Drug Warehouses for receiving their requirement of drugs periodically and the drugs are delivered to the institutions through the transport contractors and the cost of transport is met by the Corporation.

13.5 Information Technology (IT) System:

Besides monitoring the inventory and payments through the IT enabled system, the stakeholders and suppliers are provided with username and password to view their transactions and posting of specific information through the website. Real time SMS to all the vendors, stakeholders, linking of CT and MRI scan centres with Head Office for better monitoring of the performance, installing CCTV at the warehouse and scan centres are also done to improve monitoring.

13.6 Consultancy Services:

Consultancy services are provided by the Corporation to the needy states who intend to replicate the drug logistics system followed by TNMSC besides extending the services of procurement and supply of drugs to other States on need basis.

13.7 OTHER SERVICE ACTIVITIES

CT Scanners:

TNMSC is operating 91 CT scanners in 76 centres in various Government Medical Institutions spread all over the State with user charge collection of Rs.500/- per scan plus Rs.300/- for contrast and Rs.3,000/- per scan for 64 slice CT scanner and 128 slice CT scanner.

MRI Scanners:

28 MRI scanners at 27 centres in Government Medical Institutions are operated by

the Corporation with user charge collection of Rs.2,500/- plus Rs.1,500/- for contrast. Teleradiology services for Online Reporting of CT, MRI scans has also been established to ensure quick reporting for benefit of patients. The CT and MRI scan services are free for all families covered under Chief Minister's Comprehensive Health Insurance Scheme (CMCHIS).

Lithotripsy machines:

Four Lithotripsy machines are also operated with user charge collection of Rs.4,000/- to Rs.5,000/- per sitting depending upon number of sittings.

Cath Labs, Linear Accelerator, Cobalt Therapy unit:

The Corporation is planning to take over the operation of 11 cathlabs installed in the year 2017-2018 and 6 cathlabs in the year 2018-2019, 9 Linear Accelerators with CT stimulators and 15 cobalt therapy units being established in the year 2018-2019 in various Government Medical Institutions across the State.

13.8 Providing logistic support to payment wards:

TNMSC Ltd. is providing logistic support as custodian of funds, to the pay wards at GI Bleed and Hepato Biliary Centre in Government Stanley Hospital, Chennai, Maternity wards at Institute of Obstetrics and Gynaecology(IOG) and Kasturba Gandhi Hospital Chennai, pay wards at Rajiv Gandhi Government General Hospital, Chennai.

Chapter – 14

TAMIL NADU URBAN HEALTH CARE PROJECT

14.1 Project Objectives: The objectives of the project are to improve the quality of health services in urban areas thereby improving the health status of people in Tamil Nadu through

- i. Strengthening the capacity of the key hospitals with up-gradation of the facility and equipment and
- ii. Strengthening the capacity of human resources with the focus on Non Communicable Diseases.

This Project will focus on

- Improving the treatment of Non Communicable Diseases by providing advanced treatment for Cardio-vascular diseases, Cancer, Chronic respiratory diseases and Diabetes.
- ii. Improving the existing hospital infrastructure by replacing and recasting

physically deteriorated and functionally out dated existing buildings with a comprehensively designed model "Central Diagnosis Block", the project aims to solve problems which the existing hospital campus has been facing to improve the patient safety and effective hospital management based on a long term Master Plan.

iii. The project intends to use advanced Japanese medical technology to create hybrid operation theatre systems for imaging and intervention. The project also aims to construct international standard operation theatres (OT), intensive care units with 'State of Art' facilities, and includes operation and maintenance of those facilities.

Tamil Nadu Urban Health Care Project has an outlay of Rs.1,634 crore under the Japan International Co-operation Agency (JICA) assistance. The formal agreement for the project was signed by Government of India and JICA on 31st March, 2016. The Project cost of Rs.1,634

crore includes JICA loan component of Rs.1,388 crore (85%) and State share of Rs.245.6 crore (15%). The loan is for a period of 40 years with a grace period of 10 years at an interest rate of 0.3 percent. The project will be implemented over a period of seven years.

The project component includes-

- i. Upgrading tertiary care hospitals with facilities and equipment.
- ii. Strengthening referral hospitals with equipment.
- iii. Strengthening secondary care hospitals with facilities and medical equipment.
- iv. Strengthening Hospital Management.
- v. Strengthening Primary health Care in Non Communicable diseases.

14.2 Locations: The project will be implemented in 17 cities and cover 21 facilities. Under this project, the Government Medical College Hospitals located at Madurai, Kilpauk at Chennai, Coimbatore, Salem, Vellore, Thanjavur, Tirunelveli, Pudukottai, Tiruchirapalli,

Thoothukudi and Kanyakumari are included. Further, six district hospitals of Erode, Tiruppur, Cuddalore, Dindigul, Krishnagiri and Periyakulam and four secondary care hospitals at Avadi, Ammapettai at Salem, Velampalayam at Tiruppur and Kandiyaperi at Tirunelveli will also be strengthened.

14.3 Progress of Project Activities: The Project Management Unit has been established. A consultant firm has been hired to work out the drawings, estimate the cost for the buildings, survey the equipments requirement and prepare the equipment specification. The construction work and procurement of equipments will commence in this financial year.

Chapter-15

Tamil Nadu Health System Reform Programme

15.1 Government of Tamil Nadu has pioneered and implemented the Tamil Nadu Health System Project (TNHSP) at a cost of Rs. 1300 Crore supported by World Bank from the year 2005 to 2015 and significant results have been achieved through this project. In continuation, the Government of Tamil Nadu has decided to implement Tamil Nadu Health System Reform Programme (TNHSRP) supported by World Bank to improve the health system in Tamil Nadu and the Agreement was signed on 04.06.2019.

15.2 The total project cost is INR 2857.003 crore (USD 410 million). Out of this INR 1999.902 crore (USD 287 million) is the World Bank component and INR 857.101 crore (USD 123 million) is the Government of Tamil Nadu component. The project period is for 5 years.

15.3 The objectives of the Project are to improve quality of care, strengthen management of non-communicable diseases including trauma and mental health, and reduce inequities in reproductive and child health services in Tamil Nadu.

15.4 The Project will be implemented across the State with interventions in all Medical College Hospitals, Taluk / Non-Taluk Hospitals, and Primary Health Centres. To achieve the above results, the activities include:

- Interventions for screening, diagnosis, treatment and management of non communicable diseases such as hypertension, diabetes mellitus, cervical and breast cancers including populationbased screening efforts to reach maximum population.
- (ii) Improved mental health programme.
- (iii) Reduction of deaths due to road traffic accidents – improvements to 108 Emergency Ambulance Services – strengthening of Emergency

Departments in the Trauma Care Centres.

(iv) Strengthening of Maternal and Child Health programme especially in the high priority districts.

By implementing this project it is expected that the health care systems in Tamil Nadu will reach a stage comparable to that of developed countries.

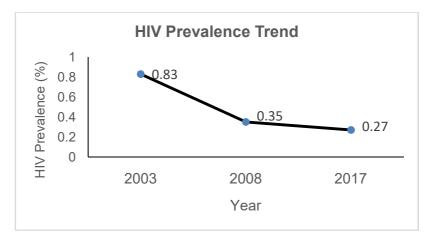
Chapter -16

TAMIL NADU STATE AIDS CONTROL SOCIETY

16.1 Tamil Nadu was the first State in the country to set up an AIDS control Society way back in the year 1994 and set an example for other States to follow.

16.2 TANSACS executes National AIDS Control Program (NACP), which is currently in its fourth phase, implemented as a fully funded project through NACO. TANSACS works under the vision released by National AIDS Control Organization (NACO) through the National Strategic Plan on HIV/AIDS and Sexually Transmitted Infection (STI), 2017-24 towards ending AIDS as a public health threat by 2030. The district level program is monitored by the District AIDS Prevention Control Units (DAPCU).

16.3 The Program components of TANSACS: 1) intensifying and consolidating the prevention services with a focus on High Risk Groups (HRG) and vulnerable groups 2) expanding the information, education and communication (IEC) services 3) provision of comprehensive care, support and treatment services 4) strengthening institutional capacity and strategic information management systems.



16.4 HIV Prevalence in Tamil Nadu:

16.5 The unique initiatives of TANSACS:

- Tamil Nadu Trust For Children Affected With Hiv/Aids (known as OVC Trust),
- Transgender Welfare Society with the help of the Social Welfare Development.
- Supply Chain Management system (SCM) for drugs and kits

• Extensive data analysis and evidencebased block level intensive interventions to enhance the treatment.

16.6 Integrated Counselling and Testing Centres (ICTC):

- During 2018-2019, the HIV counselling and testing services had been given to 34,57,183 Nos. of General clients and 12,52,871 Nos. of Antenatal Mothers (ANC)
- There are 2,618 centres that offer counselling and testing services.
 - 377 Stand Alone ICTC's in Government Medical College Hospitals, District Head Quarters Hospitals and Government Hospitals functions with the support of NACO.
 - 403 SA-ICTC's, 1,555 Facility Integrated counselling and testing centers functioning in Block Primary Health Centres, additional PHC's and Community Health Centers under the

support of the National Health Mission (NHM).

- 188 ICTC's under Public Private Partnership (PPP) to strengthen Elimination of Mother to Child Transmission (EMTCT) coverage.
- 15 Mobile ICTC Vans in Coimbatore, Dindigul, Dharmapuri, Erode, Kanyakumari, Krishnagiri, The Nilgiris, Namakkal, Salem, Sivagangai, Theni, Tiruvannamalai, Tiruchirapalli, Virudhunagar and Vellore districts to extend counselling and testing services to the remote and inaccessible areas.
- 80 numbers of counselling and testing facilities have been established with the help of NGO's for Community Based Screening (CBS)

16.7 Elimination of Mother to Child transmission of HIV and Syphilis (EMTCT)

- The Government of TamilNadu is committed to eliminate HIV and Syphilis amongst newborns through universal screening of pregnant women for HIV and Syphilis as an essential component of the Antenatal Care (ANC) service package.
- The Flimination of Mother child to Transmission (EMTCT) services are being implemented in close collaboration with Maternal and Child Health (MCH) programme of the National Health Mission (NHM) to scale up prevention and care the ante-natal among interventions mothers through primary prevention, family planning, voluntary counselling, testing, lifelong confidential Anti-Retroviral Therapy (ART) and counselling on infant feeding practices.
- "Early Infant Diagnosis (EID)" programme is implemented in the State through ICTC's.

- Under EMTCT new regimen (ARV prophylaxis), all babies born to HIV positive mothers are initiated with Nevirapine syrup upto 6 or 12 weeks from birth.
- All identified HIV positive mothers and infected infants are being provided with lifelong ART and follow-up counselling services.

16.8 EMTCT Achiever's Award 2018

- Tamil Nadu State AIDS Control Society (TANSACS) has received EMTCT Achiever's Award 2018 during the National workshop held at National AIDS Control Organization (NACO)
- 16.9 Sexually Transmitted Infection / Reproductive Tract Infection (STI/RTI) Services:

Designated STI/RTI Clinics:

 TANSACS has established 216 DSRCs in Government Medical College Hospitals, District Head Quarters Hospitals and Government Hospitals as Suga Vazhvu Maiyam.

- It follows Syndromic Case Management System through colour coded drug kits and all out patient attendees are screened for Syphilis and HIV.
- Once in three months, all High Risk Groups are screened for STI and tested for syphilis.
- One trained STI Counsellor working in the Designated STI/RTI Clinic for counselling on STI/RTI and HIV-transmission, Prevention, Partner Treatment, Risk Reduction and Condom Promotion.
- As a routine practice, the Medical Officers are being trained on Syndromic Case Management by TANSACS at regional levels.
- Data related to DSRC are being reported at SIMS & SCM routinely.

16.10 Targeted intervention:

- The Targeted Intervention (TI) is being implemented through the Non-Governmental Organization (NGO) / Community Based Organization (CBO).
- The Targeted Intervention (TI) aims to bring behavioural changes among high risk groups (HRGs) namely, Female Sex Workers (FSW), Men who have Sex with Men (MSM), Injecting Drug Users (IDU), Truckers, Migrants and Transgender (TG) in the State, who are at risk of contracting HIV infection.
- In Tamil Nadu, 85 NGOs/CBOs are functioning covering the needs of HIV testing and counselling services for HRG's across the State.

16.11 Link Workers Scheme

 Link Workers Scheme (LWS) is implemented in 15 districts to provide prevention to care continuum of services to rural based High Risk Groups, vulnerable population and bridge population (Truckers/Migrants).

 In each of these districts, 100 villages are selected based on the epidemiological profile and HIV related services were provided through ICTCs in the nearby area.

16.12 Community Based HIV Screening

 Community Based Screening for HIV is being implemented for attaining the Global goal of ending HIV/AIDS by 2030. TANSACS is conducting CBS through TI and LWS NGOs/CBOs through training, guiding and establishing counselling and testing services on the field for better community participation.

16.13 HIV & TB intervention in all type of Prisons, Swadhar and Ujjawala homes

 Tamil Nadu State AIDS Control Society has entered into MoU on September 2018 with Prison Department, Social Defence Department and Social Welfare Department for implementing HIV & TB intervention in Prisons, Swadhar and Ujjawala Homes to provide HIV, TB, STI, Viral hepatitis infection related services.

 In continuation, TANSACS is regularly screening all inmates of Prisons, Swadhar and Ujjawala Homes of Tamil Nadu and positive clients are being treated and given regular follow-up services.

16.14 Condom Promotion

 As condoms are the most effective tool for prevention of HIV and STI infection among high risk and the general population, free condoms are being distributed to people through STI clinics, ICTC, ART Centres and other outreach programmes implemented by NGOs/CBOs through Targeted Interventions and Link Workers Scheme.

16.15 Blood Safety:

 In order to meet out the requirements of Blood and Blood Components for the needy patients, there are 297 Blood Banks out of which 89 State Government Blood Banks, 9 Central Government Blood Banks 199 Private and Blood Banks are functioning in Tamil Nadu. In addition to these Blood Banks, 527 Blood Storage Centres (Government 383 and Private 144) are also functioning to provide adequate, safe and quality blood and blood components. Voluntary Non-remunerative Blood Donation camps are organized throughout the State with the help of Colleges, Institutions and other charity groups and 94% of total blood needs are matched through these camps. Out of 89 Government Blood Banks, 38 Government Blood Banks are equipped with Blood Component Separation Units.

16.16 Information, Education and Communication (IEC):

 Information, Education and Communication (IEC) are one of the components of the National AIDS Control Programme (NACP).

- TANSACS creates awareness and provides information through Website, Mobile App, FM Radio, Television, Newspapers, Hoardings, Wall Painting, Posters, Pamphlets, Social Media and Outdoor events.
- Mobile IEC vans create awareness campaigns and promotion of IEC, demand generation for testing services among the general population.
- Active IEC campaigns have resulted in the reduction of stigma and discrimination attached to HIV/AIDS.

16.17 Greater Involvement for the People Living with HIV/AIDS (GIPA):

TANSACS has involved the People Living with HIV / AIDS (PLHIVs) and Community Based Organizations (CBOs) as one of the partners in implementing the programme at the district level and the same is also being monitored by them as follows:-

ensuring service facilities at the grass root level.

- planning the programme at District level related to prevention to Care continuum of services.
- Tamil Nadu State AIDS Control Society (TANSACS) Governing / Executive and Grievances Redressal Committee as members.

16.18 Hello + Helpline-1800 419 1800:

- To enlighten the callers with required information about HIV/AIDS and STI.
- To clear doubts about HIV/AIDS and STI.
- To clear the myths, misconceptions pertaining to HIV/AIDS and STI.
- To share the callers on the available informations on service centres in the respective district.

16.19 Legal Aid Clinic (LAC):

 In association with Tamil Nadu State Legal Services Authority (TNSLSA), this Legal Aid Clinic (LAC) is implemented in all districts. ART senior counsellors attend the legal and non-legal issues of People Living with HIV/AIDS (PLHIVs) and High Risk Groups (HRGs).

16.20 Red Ribbon Club (RRC):

- As a pioneer in the nation, TANSACS established Red Ribbon Clubs (RRC) in the year 2005 to create awareness and to raise the risk perception and behavioural changes among the youth.
- 2,179 Red Ribbon Clubs are functioning in Arts and Science, Polytechnic, Engineering, Medical, B.Ed., Colleges and Teacher Training Institutions in the State.

16.21 Care, Support and Treatment:

- Life-long free Care, Support and Treatment services to HIV Positive people is provided through ART centers attached to Government health facilities.
- Routine investigations, CD 4 tests and viral load testing are performed at these centres. ARV drugs, opportunistic

infection drugs, various counselling services, referral and linkage services are rendered through ART centres.

- Currently, around 1,18,000 PLHIVs are taking free treatment through 55 ART centers. In addition, 174 Link ART centers act as drug dispensing units closer to their homes.
- Apart from this, 31 Care and Support Centers provide services like tracking of treatment defaulters, psycho-social support and linkage to various benefit schemes.

16.22 Monitoring and Evaluation:

(i) Strategic Information and Management System (SIMS):

SIMS is an integrated web-based reporting system, used for data management and decision making with monthly reporting from all the programme components comprising ICTC, TI, Blood Banks, STI/RTI, IEC, Laboratories and DAPCU. TANSACS receives all the reports through this system.

(ii) PLHIV – ART Linkage System (PALS):

PALS line list is a reporting cum tracking tool which collects, retains and updates individualized details of all HIV Positive clients (Pregnant women & General clients).

Each SA-ICTC or ART centre shall maintain their respective HIV positive line list which will contain all the details of the HIV positive clients tested at their centers or have registered at their centre for ICTC/ART services.

(iii) HIV Sentinel Surveillance (HSS):

- HIV Sentinel Surveillance (HSS) is carried out biennially all over the country to study the disease prevalence from pregnant women and High Risk Groups (HRGs).
- In Tamil Nadu for the year 2018-19, the prisons are newly included in the HIV Sentinel Surveillance.
- HSS is being conducted at 71 ANC sites, 3 prison sites and 44 HRG sites are carried out from 1st January 2019.

(iv) District AIDS Prevention and Control Unit (DAPCU):

- To ensure effective planning of the HIV program activities in accordance with the epidemiological profile of the district and to establish proper linkages with the NHM and programs implemented by other allied departments, NGOs/CBOs and to work in close coordination with the district administration, 29 Districts AIDS Prevention and Control Units (DAPCU) are in function covering entire Tamil Nadu.
- Out of 29 DAPCUs, the NACO, New Delhi is supporting financial assistance to 27 DAPCUs, rest of 2 DAPCUs namely Ariyalur and Tiruppur districts are being supported by the State Government of Tamilnadu.

16.23 INTEGRATING SOCIAL BENEFITS:

"**Tamilnadu Trust for Children Affected by AIDS**": -The Government of Tamil Nadu has established trust by providing a corpus fund of Rs.9.5 crore for financial assistance to the Orphan and Vulnerable Children and to support their nutritional and educational needs.

- During the financial year (2018-2019), Rs.94.80 lakhs accrued interest amount was distributed to 3,736 children directly into their bank accounts via DAPCU.
- A monthly pension amount of Rs.1,000/- is being provided under the Hon'ble Chief Minister's Uzhavar Pathukappu Thittam' to 8100 PLHIVs holding farmers card. This scheme is further extended to the children of infected farmers.
- Free bus passes are issued to PLHIVs to attend ART centres every month.
- Top priority is given to PLHIVs to access the various schemes as furnished below:
 - i. Widow Pension
 - ii. Old Age Pension Schemes
 - iii. Antyodaya Anna Yojana (AAY) Scheme
 - iv. Hon'ble Chief Minister's Solar Powered Green House Scheme.

Chapter -17

National Health Mission – Tamil Nadu

17.1 The National Rural Health Mission (NRHM), Tamil Nadu was constituted in April 2005 with a goal to provide accessible, affordable and guality health care to the rural population in the State, especially the vulnerable group. The National Urban Health Mission (NUHM) was launched as a sub-mission in 2013 to provide primary health care services for the Urban poor. As an unified mission, NRHM and NUHM are now functioning as 'National Health Mission'(NHM), The various health societies including National Leprosy Eradication Programme, Tuberculosis Control Programme, Blindness Control Programme etc. have been integrated to pool the resources available for effective implementation of various programmes under 'State Health Society'.

The key features to achieve the goal of NHM include creation of a fully functional public health delivery system which is accountable to the community, human resources management, community involvement, decentralization, rigorous monitoring & evaluation against standards, convergence of health related programs at the level of villages and flexible financing for improving the health indicators of the State.

The NHM funding between the Central and State Governments is currently in the ratio of 60:40. The successful implementation of various innovative initiatives of the State Government along with the initiatives of National Health Mission has resulted in a vast expansion of activities and overall improvement of all health indicators in the State.

The focus areas under NHM include:

- Reproductive and Child Health Programme.
- Family Welfare Programme.
- Tuberculosis Control Programme
- Tamil Nadu Accident and Emergency Care Initiative (TAEI)
- Non-Communicable Diseases
 Programme

- Universal Health Coverage Programme
- Tribal Health Programme
- Vector Borne Disease Control Programme
- Integrated Disease Control Programme.
- National Blindness Control Programme.
- National Leprosy Eradication Programme
- Indian System of Medicine and Homoeopathy.

17.2 While Tamil Nadu has already achieved the Millennium Development Goals - 2015 set by the United Nation and the National targets far ahead of most other States, it is also striving to achieve the Sustainable Development Goals (SDG) by the year 2030.

17.3 The report on India; Health of Nation States, The India State-Level Disease Burden Initiative, 2017 reveals that for every 100 deaths occurring in Tamil Nadu, 69.2% of the mortality is due to Non-Communicable Diseases

(NCD), including deaths due to Cardio Vascular Diseases (CVDs), self-harm injuries and transport accidents.

For the prevention and control of NCDs, the implementation of Universal Health Coverage Programme, Population Based Screening of NCDs, Community Based Palliative Care Program are some of the key focus area with a futuristic vision.

The Government has initiated various suicide prevention strategies, such as telecounselling for suicide attempt survivors through psychologists placed in the 104 Health Helpline Centres and Community Based Screening for depression.

In the area of injuries and transport accidents, the work of the Tamil Nadu Accident and Emergency Care Initiative (TAEI) has expanded its activities to cover setting up of exclusive Emergency Departments across the State, provision of additional Human Resources (HR) and establishment of a Multi-Disciplinary Critical Care Units (MDCCU).

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MATERNAL HEALTH

17.4.1 Reproductive, Maternal, Newborn, Child Health and Adolescent Health (RMNCH+A) Services:

RMNCH+A services mainly focuses on Reproductive, Maternal, Newborn, Child Health and Adolescent Health (RMNCH+A) services including institutional delivery, emergency obstetric care, safe abortions, family planning services and adolescent health services in the State.

17.4.2 Janani Suraksha Yojana:

Janani Suraksha Yojana aims at reducing out-of-pocket expenses during delivery. This scheme entitles women for accessing Maternal and Child Health services with a financial assistance of Rs.700/- and Rs.600/- in rural and urban areas respectively. During the year 2018-2019, under this scheme 4,19,743 pregnant women have benefitted through Direct Bank Transfer / e-Payment.

17.4.3 Janani Sishu Suraksha Karyakram (JSSK):

Under JSSK programme, there is an entitlement of free drugs, free referral transport, diagnostics including diet during the duration of stay at Government Health facilities for every pregnant women and sick neonate up to one year of age. About, 5,63,732 mothers have benefitted in the year 2018-2019, with free drugs, diet and consumables. About, 3,64,269 pregnant mothers have been transferred from home to health facility (including inter facility transfer) and 2,71,765 delivered mothers have been dropped back from health facility to home.

17.4.4 Comprehensive Emergency Obstetrics and Neonatal Care Centres (CEmONC):

Tamil Nadu is the only State having 65 percent of institutional deliveries occurring in Government health facilities. Also, analysis of Government institutional delivery data shows there is a clear shift of mother's preference towards higher facility with 24x7 LSCS, Blood

bank, SNCU services which will ensure safe delivery and care of the New born. Having this fore thought, Government of Tamil Nadu has established 126 CEmONC centers in Medical College Hospitals, District Hospitals and well performing Taluk/ Non-taluk Hospitals. Strengthening of the CEmONC centers with additional infrastructure, Human Resources, Equipment and Blood Bank facilities has resulted in reduction of maternal mortality rate 60 per 1 lakh live birth in the year 2018-2019 (HMIS, 2018). NHM plays a key role in support of CEmONC centers by allocating Rs.20 Crores for District Hospitals and Rs.12 Crores for upgrading CEMONC services in Medical College Hospitals. CEMONC operational cost is provided to these institutions, which helps to meet out any contingency in the upkeep of equipment, consumables, essential drugs, etc. This is evidenced by lowest Out-of-pocket Expenditure for normal deliveries in Public Health facilities among all States in India as per NSSO 71st Survey.

CEmONC Performance: From 2014 -2015 to 2018-2019

Details	2014-15	2015-16	2016-17	2017-18	2018-19
Total Maternal Admission	2,79,571	4,59,587	5,73,954	4,95,360	6,26,324
Deliveries	1,70,879	2,78,124	3,21,622	3,14,408	3,47,656
LSCS	90,113	1,45,351	1,68,282	1,61,396	1,84,295
Blood Trans- fusion for OG cases	52,083	1,22,273	1,23,981	1,20,542	1,24,705
Scan for OG Cases	3,02,545	4,93,013	5,30,476	5,08,301	6,23,046
Neonatal Admissions	1,03,344	1,40,525	1,28,085	1,19,316	1,34,554

'LaQshya' initiative has been taken up at all levels of care to improve the quality and standard of care in labour wards and in operation theatres. This initiative will improve the quality of care for delivering mothers and will further reduce maternal deaths. Modified Emergency Obstetric Warning System (MEOWS) has been introduced in Government Hospitals for early definitive management or timely referral to higher centre. This reduces the delay in referral of pregnant women there by reducing maternal deaths.

17.4.5 Provision of Specialist Services (Hiring of Specialists for MCH Care):

In order to bridge the gap in paucity of human resources, retired / private specialist (Obstetricians, Pediatricians and Anesthetist) are being hired to provide MCH services in the primary and secondary care institutions. During the year 2018-2019, about 62,976 deliveries were performed by hiring specialists in the State.

17.4.6 Anaemia Mukt Bharat Scheme; Control of Anaemia among children and mothers:

It has been observed that, 44% of pregnant women and 56% of lactating mother are anaemic in Tamil Nadu as per NFHS 4 survey

reports. Ministry of Health and Family Welfare, under Anaemia Mukt Bharat Scheme has targeted to reduce the prevalence of Anaemia by 3 % per year between 2018 to 2022. Both prophylactic and therapeutic dose of Iron and Folic acid tablets are being provided to the antenatal mothers. The detailed guideline for Iron and Folic acid tablets supplementation for lactating mothers for 180 days has been issued. During the year 2018-2019, 10,38,589 antenatal mothers provided with Iron and Folic acid tablets. 1,59,446 pregnant mothers diagnosed with maternal anaemia provided with Injection Iron Sucrose. During 2018-2019, 16,64,870 children in the age group of 6 to 9 years provided with Pink Iron and Folic Acid tablets under Junior Weekly Iron and Folic Acid Supplementation (WIFS) programme.

17.4.7 Control of Gestational Diabetes:

In order to control the maternal and newborn complications of Gestational Diabetes, pregnant mothers have been tested with Glucose Challenge Test, diagnosed and treated. 11,05,157 Glucogse Challenge Tests for pregnant mothers have been tested during the year

2018-2019, of which 15,075 mothers have been diagnosed as positive for Gestational Diabetes Mellitus.

17.4.8 Blood Bank and Blood Storage Services:

NHM provides budgetary support to TANSACS for Blood Transfusion Services. For the year 2019-2020, Rs 375 lakhs have been approved for provision of blood bags to the Blood Banks and also salary support to 403 ICTC Counselors and 403 Lab Technicians.

17.4.9 Maternal and Child Health Centres (MCHCs):

The 42 Community Health Centres have been identified at 1 per Health Unit District to function as Level-II MCHCs. These centres are being strengthened with additional inputs to provide Emergency Obstetric Care and Safe Abortion Services, New Born Stabilization services and poison management etc.

17.4.10 Feeding and Dietary Charges:

Under this scheme, antenatal mothers and postnatal mothers are being provided with necessary diet at the PHCs while coming for antenatal check-up and delivery. Post Natal diet is also being provided to mothers delivered in secondary and tertiary care health institutions. During the year 2018-2019, 6,30,904 antenatal mothers and 4,89,190 postnatal mothers were provided with diet in Government health facilities.

17.4.11 High Risk Mother Observation:

High risk camps are conducted at the rate of one camp per block per month to identify high risk mothers and referring them to higher facilities in time. They are shifted to the nearby District Headquarters Hospital or Medical College Hospital at the onset of labour pain or immediately on the onset of the complication. During the year 2018-2019, 32,978 High Risk mothers have benefitted under this scheme at 385 High Risk Observation Centres.

17.4.12 Training for Medical officers:

a. Life Saving Anesthetic Skills:

In order to provide skilled man power for safe confinement, 24 weeks intensive training programme are being provided to 48 MBBS Medical Officers per year in Life Saving Anaesthetic Skills including Training in Obstetric Anesthesia and in Cardio-pulmonary/ cerebral resuscitation in 11 Government Medical College Institutions. So far, 618 MBBS Medical Officers undergone this training. About, 70,129 Caesarean sections and 2,96,646 other surgeries (from 2007 to March- 2019) were performed by these trained anesthetists.

b. Emergency Obstetric Care Training (EMOC):

In order to reduce the burden on the Obstetricians in the Secondary Government Hospitals, a 25-week intensive training programmein 5 Government Medical College Institutions is being provided to 12 MBBS Medical Officers per year for managing high risk mothers. Till date, 136 MBBS Medical Officers have been trained. 8,748 Caesarean sections and 27,515 other surgeries (from 2007 to March- 2019) were performed by these trained EMOC doctors.

17.4.13 Interventions to reduce Higher Order Birth (HOB):

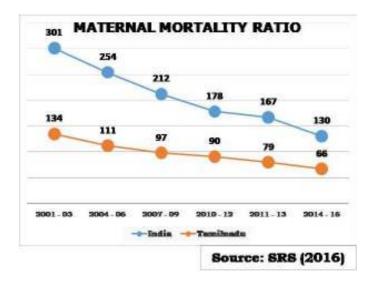
has already Tamil Nadu achieved replacement level in Total Fertility Rate (TFR) of However, Higher Order Birth 1.6. (HOB) amounting for 7.2% of total births contributes to 25.4% of maternal deaths. From April 2018 to March 2019, in 120 HOB blocks, 20,277 mothers have undergone permanent sterilization, 7,351 underaone mothers have Intra Uterine Contraceptive Device (IUCD) insertion, 2,719 mothers were given Injectable Contraceptives (Antara) and 2,412 mothers were given Oral Contraceptive Pills (Chhaya). Totally, 32,759 mothers been benefitted. Abortion have techniques such as Medical Method of Abortion (MMA) and Manual Vacuum Aspiration (MVA) is made available across the State from Block PHC onwards. This results in reduction of illegal abortion and associated deaths.

17.4.14 Pre-Conception and Pre-Natal Diagnostic Techniques (PCPNDT) (Prohibition of Sex Selection) Act 1994:

The PCPNDT Act is strictly implemented to maintain sex ratio at birth uniformly in all Stringent punishments districts. are beina imposed on deviant scan centers. Valid Scan licenses are mandatory even for Centre Government institutions including PHC, CHC, GH and Medical College Hospitals. Under this act, till now 6,835 scan centres have been registered in our State. Periodical review is carried out for assessing the progress and trends in sex ratio at birth. Till date, 140 cases have been filed against scan centers for violating the PCPNDT Act and out of which, judgment delivered for 119 cases and 21 cases are still under trial.

17.4.15 Maternal Mortality Ratio:

The Government is keen on promoting the health of pregnant mothers. Tamil Nadu is the only State in India implementing Dr. Muthulakshmi Reddy Maternal Benefit Scheme, providing financial assistance of Rs.12,000 since 2011 to pregnant mothers compensating for the loss of wages during pregnancy. This has now been increased to Rs. 18,000 including two nutrition kits worth Rs. 4,000 have been introduced. As per SDG Goal, MMR should be brought to less than 70 per 1 lakh live births by the year 2030. However, Tamil Nadu has already reached the SDG Goal for the year 2030 in 2014-2016 itself by reaching the figure of 66 per one lakh live births compared to 130 for India. As per the HMIS data, currently MMR is 60 per lakh (HMIS 2018-2019). The graph showing significant decline in MMR is mentioned below:



Special strategies to tackle key issues contributing to Maternal Death

SI. No.	Problem	Name of the Activity	Special strategy
1	7.2% of HOB contributes to 25.4% of Maternal deaths	120 HOB block strategy	Additional sterilization camps, interval IUCD promotion, Injectable contraceptive
2	maternal deaths is contributed by heart disease	Reintroduction of Inj. Benzathine Penicillin for Rheumatic heart disease identified children through RBSK upto 18 years	Penicillin is made available from Block PHCs for Rheumatic heart disease

SI. No.	Problem	Name of the Activity	Special strategy
3	of mothers more than	mothers more than 30 years	More than 30 years Antenatal mothers are booked as high risk mother and regular follow up is being done
4	One in four maternal deaths are antenatal, of which 6% is due to sepsis caused by faulty abortion methods	 Promotion of Post-Partum Intrauterine Contracep- tive Device(PPIU CD) upto PHC level Provision of MVA services upto Block PHCs level involving PHC doctors 	Strict monitoring and supervision for implementa- tion of the above activities in the field level is being done by JDHS and DDHS.

SI. No.	Problem	Name of the Activity	Special strategy
		 Provision of MMA drugs & injectable contracep- tives upto Block PHCs level 	
		4. Antara, an Injectable contracep- tive and New Oral Contracep- tive pill named Chhaya have been recently introduced.	

SI. No.	Problem	Name of the Activity	Special strategy
		5. Door step delivery of contracep- tives through ASHAs/ VHNs	
		 Strong legal action against untrained quacks 	
5	Registered Visitors, Migrant mothers and Unregister ed mothers tracking	 Pre- registration of Visitor mother through PICME 	 Revamped PICME 2.0 is rolled out for the entire state where there is a provision for Visitor

SI. No.	Problem	Name of the Activity	Special strategy
		2. Civil Registration System (CRS) - PICME 2.0 linkage	mother registration in Common Service Centre / Online / 102 Call Centre for self- registration similar to pre- registration of Antenatal mothers. Hence, registration and tracking of Visitor mother has improved

SI. No.	Problem	Name of the Activity	Special strategy
			2. It is now made mandatory that all antenatal mothers are to be registered in PICME 2.0 for getting birth certificate of the child.

Strengthening of the ongoing programs

SI. No.	Causes of Maternal Mortality	Ongoing Scheme
1	Anaemia Control	 i. Annual deworming, Weekly Iron and Folic Acid Supplementation (WIFS) tablets for all adolescent girls to prevent anaemia, since they are the future mothers ii. Oral Iron and Folic Acid (IFA) to Antenatal and Post-natal mothers, Iron sucrose injections are provided at all PHCs iii. Blood transfusions for severely anaemic mothers through 289 functional Blood Storage centres at CHCs/SDH.

SI. No.	Causes of Maternal Mortality		Ongoing Scheme
		iv. ∨. ∨i.	770 Voluntary Blood donation camps are held in all 385 blocks twice a year. Supplementary feeding through ICDS. Amma Nutrition Kit introduced for all Antenatal mothers during 3 rd and 5 th month of gestation under Dr.MRMBS scheme
2	Hypertension complicating pregnancy	i. ii.	Early identification at sub centre level itself with high risk mother's follow-up and prescription of Tablet- Labetalol to decrease Blood Pressure. Standard Protocols to identify and treat

SI. No.	Causes of Maternal Mortality	Ongoing Scheme	
		111.	hypertension during pregnancy through injection-Magnesium Sulphate adopted from PHC level itself Functional 75 Obstetric HDUs (High Dependency Unit) with facilities to treat any complications arising due to hypertension complicating pregnancy.
3	Post-Partum Hemorrhage	i. ii.	Continuous care of the delivered mothers so that early post partum hemorrhage can be identified and replacement done immediately. Availability of Anti-

SI. No.	Causes of Maternal Mortality		Ongoing Scheme
			Shock Garments and Misoprostol tablet available even at PHCs.
4	Sepsis	i.	Running water supply and promotion of simple hand washing techniques is ensured at all delivery points.
		ii.	Amma Baby Care kit provided to all new born babies to prevent sepsis.
		iii.	Revised Treatment protocols with Higher Antibiotics.
		i∨.	Disinfection and fumigation of labour rooms

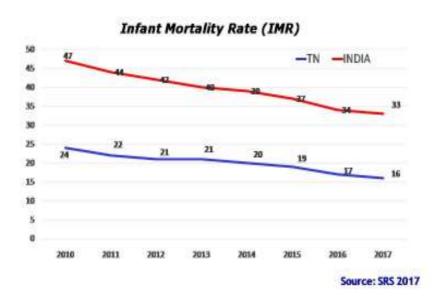
SI. No.	Causes of Maternal Mortality	Ongoing Scheme	
5	Heart Disease complicating pregnancy	 Early identification and corrective surgeries during school health visits / adolescent period through RBSK programme. 	
		 ii. Early corrective surgeries done free of cost through Chief Minister's Comprehensive Health Insurance Scheme in private empanelled hospitals and in tertiary care institutions. 	
		 Early identification and referral for mothers with heart disease for follow up and safe delivery of such mothers in apex tertiary care institutions. 	

SI. No.	Causes of Maternal Mortality	Ongoing Scheme
6	Maternal death audit	 i. Tamil Nadu is the first State to have a Government order for implementation of Maternal Death Audit at district level ii. Maternal death audit is done at four levels; 1)Community based audit by PHC team 2)Special Maternal Death Audit at District level 3)District Level Audit by the District Collector 4)State Level Audit by MD, NHM / MCH Commissioner every month through Video Conference.

CHILD HEALTH

17.5.1 New born baby care services:

The Infant Mortality Rate (IMR) often serves as a key development indicator, reflecting the combined effects of health interventions and the socio-cultural environment. The IMR of Tamil Nadu is second only to Kerala. As per SRS report 2017, the IMR has reduced from 17 to 16 per 1,000 live births.



Trend of IMR for India and Tamil Nadu

Year	India	Tamil Nadu
1980	114	93
1990	80	59
2000	68	51
2001	66	49
2002	63	44
2003	60	43
2004	58	41
2005	58	37
2006	57	37
2007	55	35
2008	53	31
2009	50	28
2010	47	24
2011	44	22
2012	42	21
2013	40	21
2014	39	20
2015	37	19
2016	34	17
2017	33	16

Source: Sample Registration System (SRS) Bulletins (2017)

Interventions to reduce neonatal mortality rate is ensured through focus on New Born Care from perinatal to immediate post-natal care is given below;

• Special New Born Care Units (SNCU):

Quality new born care is provided through a dedicated network of 73 Special New Born Care Units established at Medical College hospitals / District Head Quarters Hospitals / Taluk & Non-Taluk Hospitals with additional equipment, cutting edge technology (BIPAP/CPAP) and standardized protocols.

• Newborn Stabilization Units:

156 Newborn stabilization units established at secondary and Primary health care level

• Home based Young care (HBYC) at the community level is implemented through VHN, ASHA's and Anganwadi workers.

Due to the effective implementation of the above protocols, there is a drastic reduction in the neonatal mortality rate from 39 (SRS 2001) to 12 (SRS 2017) thereby achieving the SDG Goal.

17.5.2 Community based newborn baby care:

Sick newborns discharged from SNCU are being followed up by VHN/AWW /ASHA till the baby's first birthday. Awareness generation to identify early danger signals in newborns, promotion of exclusive breast feeding and improving infant and young child feeding practices are being done continuously by the field staff and in campaign mode during Poshan Abhiyaan sessions (Nutrition Month in Pakhwada September), Poshan (Nutrition Fortnight in March) and Village Health and Nutrition days.

17.5.3 Nutrition Rehabilitation Centres:

Under-nutrition remains a significant cause of morbidity and mortality in children under five years of age. Nutrition Rehabilitation Center (NRC) is a health facility where children with Severe Acute Malnutrition (SAM) are admitted and managed. This has been scaled up from 2 NRCs initially to 6 NRCs. During the year 2018-2019, 691 children treated in these NRCs.

17.5.4 Infant Death Audit:

The conduct of Infant Death Audit helps to find out the causes and the specific circumstances that led to Infant Death. The current system of conduct of Infant Death Audit at the districts by District Collector and periodic review by the Expert Committee at the State through Video Conference has provided valuable learning's for reduction of Infant Mortality in the State.

17.5.5 Rashtriya Bal Swasthya Karyakram:

Rashtriya Swasthya Bal Karyakram (RBSK), is an innovative and ambitious initiative, which envisages Child Health Screening and Interventions for care, support Early and treatment. The programme aims at early detection and management of a set of 30 health conditions prevalent in children less than 18 years of age. Children in the age group from birth to eighteen years including the newborn and those attending Anganwadi Centres and Government / Government-aided schools are benefitted through this programme. Children who require surgical intervention like corrective surgeries for Congenital Heart Diseases, Cleft Lip, Cleft Palate, Club Foot, Congenital Cataract, Cochlear implantation for congenital deafness and treatment for Autism disorders are covered under the Chief Minister's Comprehensive Health Insurance Scheme (CMCHIS).

At present, there are 805 RBSK teams in the State, 770 in rural areas and 35 RBSK teams in urban areas. GPS has been installed in all 805 RBSK vehicles and daily movement of the vehicles as per tour plan is being monitored at the State and district level. To ensure the continuum of care for the children screened by the RBSK team with treatment at the District Early Intervention Centres, a mobile based application is used.

During the year 2018-2019, about, 1.21 Crores children screened in schools and Anganwadi centres. 6,44,175 children identified with disease conditions and 5,19,288 children were referred and treatment provided for the same at secondary and tertiary care institutions. Till date, 16,380 children (from April 2015 to March-2019) identified for surgeries and of

224

which 13,894 children managed surgically. Under Kannoli Kappom Thittam (KKT), children in 12,888 schools screened and of which 1,78,413 children identified with refractive errors and provided with free spectacles.

17.5.6 District Early Intervention Centre (DEIC):

DEIC are functioning at 34 facilities (13 District Headquarters Hospitals and 21 Medical College Hospitals) aiming at early detection and intervention so as to minimize disabilities of the children diagnosed with health conditions. DEIC has the required facilities for providing social, educational, vocational and economic rehabilitation services provided by a 12-member team headed by a dedicated DEIC Pediatrician. All 34 DEIC facilities have been empanelled under CMCHIS. During the year 2018-2019, 1,82,038 children managed in 34 DEICs.

17.5.7 Block Early Intervention Centres (BEIC):

The children diagnosed with disease conditions (Developmental delay / Neuro

muscular disorder) and managed at DEICs, require daily interventions, but unable to reach the DEICs regularly due to distance and other reasons such as loss of wages for the parents. Hence, an early intervention centre is being established at block level to continue the intervention services. One BEIC per Health Unit District, i.e 42 centers established in coordination with School Education Department. The Specialists from DEIC will be visiting the BEICs once in 15 days for monitoring and supportive supervision. This ensures continuum of care and increased accessibility and good follow up.

17.6.1 Rashtriya Kishor Swasthya Karyakram (RKSK):

In order to respond to the needs of adolescent health and development in a holistic manner, Rashtriya Kishor Swasthya Karyakram is functioning since January 2014 with six strategic priorities namely nutrition, sexual and reproductive health, Non Communicable Diseases, substance misuse, injuries to violence and mental health. This activity is being implemented in Tamil Nadu covering overall of 8,447 villages in 19 districts, with implementation through Village Health Nutrition and Sanitation Committee (VHSNC). Peer educators in these 19 districts selected @ 4 per Village Panchayat / Town Panchayat (VHSNC) and trained on adolescent health.

Presently, 33,788 peer educators are functioning in the State. During the year 2018-2019, in 432 Adolescent Friendly Health Clinics (AFHCS), 3,03,882 adolescents have benefitted with clinical services and counseling services.

17.6.2 Weekly Iron Folic Acid Supplementation (WIFS):

This programme involves distribution of one Iron and Folic Acid (IFA) tablet once a week to all adolescent girls and boys (10 to 19 years of age), both in school and out of school along with bi-annual de-worming (February and August every year). During the year 2018-2019, 48,80,758 adolescents received weekly IFA tablets and deworming Albendazole tablets.

TRIBAL HEALTH

17.7.1 Tribal Health Services of Accredited Social Health Activists (ASHAs) in Tribal areas:

To augment the services of VHN, 2650 ASHAs are engaged in tribal / hilly / remote and difficult PHC area. Since, the ASHAs are from the same tribal community, they motivate the tribal mothers for antenatal checkups in Health Sub-Centres and Primary Health Centres, which results in promoting institutional safe delivery.

17.7.2 Birth waiting room in 17 tribal PHCs:

Though four-wheeler 108 Emergency Ambulance services are available in the hilly terrain areas, the long and arduous journey for the pregnant tribal mothers for safe confinement warrants her to be admitted in the Birth Waiting Rooms (BWR) of the PHCs well in advance, i.e. two weeks before the Expected Date of Delivery for safe delivery under institutional care. Now, BWR has been established in 17 foothills of 16 districts with provision of free nutritious meal for antenatal mother & her companion during their entire period of stay. If referral to a CEmONC centre is required, it is being done well in advance. During the year 2018-2019, 2,851 mothers have utilized the Birth Waiting Rooms.

17.7.3 Tribal Mobile Outreach Services:

To augment the Mobile Outreach Services in tribal areas additional 20 Mobile Medical Units are being operationalized through NGOs in tribal blocks of 13 districts. This mobile outreach team with one Medical Officer / Staff Nurse / Lab Technician conducts Minor Ailment Clinic, Antenatal screening, Non-Communicable Disease screening, lab tests and distributes free drugs. In addition to above treatment, the team screens 10th & 12th standard tribal & non-tribal children and drop-outs above the age of 14 for Haemoglobinopathy traits. During the year 2018-19, about, 3,15,000 out-patients have been treated in tribal villages by 20 Mobile Medical Units.

17.7.4 Referral Services in Tribal Districts:

To reach inaccessible tribal areas, the State has a well-established Emergency Referral

Transport System established through TN-EMRI with four wheeler drive vehicles suitably equipped as ambulances at 76 identified points in tribal / hilly areas.

17.7.5 Tribal Counselors:

Tribal Counselors have been placed in the 10 Government Hospitals in the tribal districts. These counselors function as health activists in the institution who create awareness on health and its determinants. They motivate the community towards healthy living practices.

17.7.6 Haemoglobinopathies:

Tamil Nadu is the first State among the South-Indian States to implement this program for early detection of Haemoglobinopathies like Sickle Cell anaemia, Thalassemia among the tribal population. The timely identification and genetic counseling will prevent the transmission of the carrier from parent to children which breaks the propagation of the disease. NHM along with line departments has implemented screening of Haemoglobinopathies (Sickle Cell Anaemia & Thalassemia) in adolescent children studying in 10th, 12th standard and unmarried school dropouts above the age of 14 in 30 selected tribal blocks in 13 Districts since November 2017. The programme is being implemented at a cost of Rs 216.00 lakhs in Dharmapuri, Salem, Krishnagiri, Namakkal, Coimbatore, Tiruvannamalai, Nilairis, Villupuram, Vellore, Tiruchirapalli, Dindigul, Erode and Kanyakumari districts. During the year 2018-2019, 10,042 children screened for the disease with a positivity rate of 8.7%. It is now planned to extend the programme to screen antenatal mothers also. With the successful implementation of the programme, the incidence of genetic trait will be reduced and the future generations will become free from Haemoglobinopathies.

17.7.7 Establishment of Day Care Centres for Haemophilia & Haemoglobinopathies patients in 5 Government Medical College Hospitals of Tamil Nadu:

The prevalence of inherited bleeding disorders like Haemophilia A & B, in India is 0.9

per 1 lakh population. (Source: Indian Journal of Medical Research). Five Regional Day Care Centres for treatment of these children with blood transfusions and Chelation therapy is being established at Institute of Child Health and Hospital for Children, Chennai-8 (Nodal Centre), Government Mohan Kumaramangalam Medical College Hospital, Salem, Government Medical College Hospital, Dharmapuri, Government Rajaji Hospital, Madurai and Government Medical College Hospital, Theni.

17.8 Infrastructure Strengthening:

Infrastructure of the health institutions plays a key role in delivering effective services to public. Since, its advent, NHM extends crucial support for primary, secondary and tertiary health care. In order to execute the construction works (new & renovations) effectively, timely and in a patient-friendly manner as well as to meet the requirements of health institutions, exclusive divisions under Public Works Division (PWD) named as "PWD: Medical Works Division" had been established. From the year 2005 till March 2019, 444 PHCs, 315 Upgraded Primary Health Centers (UGPHCs), 628 First Referral Units (FRUs), and 27 Maternal and Child Health (MCH) wings under NHM and 66 buildings for Training centers have been constructed. This includes 8 MCH buildings and Upgradation of 3 CemONC centres which are under construction at a cost of Rs.134.50 Crores. Thus, effective strengthening of infrastructure in health institutions enables the provision of quality health care services to common public in Government health facilities.

17.9 Untied Funds:

Flexi pool funds are available with the in charge Medical Officer for completion of minor civil work, minor repair works of equipment, consumables, and upkeep of facilities and improvement of patient amenities. This reduces the Out Of Pocket Expenditure (OOPE) of the poor people approaching the public health facilities and improves the patient satisfaction. This provision is available across all Government Health facilities.

17.10 Village Health, Water Sanitation and Nutrition Committee (VHSNC):

For ensuring community participation, effective communication and for prevention of diseases, VHSNC is constituted with VHN, Local Panchayat President and representative of SHGs. Every VHSNC is entitled to an annual untied grant of Rs. 10,000. This fund is jointly operated by Panchayat President and VHN. There are about 15,015 VHSNCs in Tamil Nadu which proactively monitors the access of healthcare services and schemes to the marginalized sections of the village. It plays the role as a forum for grievance re-dressal on community level issues related to health, nutrition and sanitation.

17.11 Mobile Medical Units (MMUs):

Tamil Nadu is the only State having nearly 2,270 PHCs in rural and urban areas. To ensure the concept of follow up NCD patients, high risk mothers, TB & Leprosy cases, RBSK operated cases and NCD drug distribution, 416 Mobile Medical Units with GPS have been introduced with a Fixed Tour Program (FTP) to 40 villages

per month. The camps are being conducted in Anganwadi centres / Health Sub-Centres (HSCs). The Fixed Tour Programme of the MMU unit is being hosted in the district website. During the year 2018 –2019, about, 1.78 Crores beneficiaries have benefitted in 2,08,229 camps from these 416 Mobile Medical Units.

17.12 DNB Programme in District Hospitals:

District hospitals are on par with tertiary hospitals in terms of service delivery. care However, qualified human resources are a major constraint in secondary care hospitals. To improve the services in secondarv care hospitals, DNB courses were initiated. Presently, 40 accredited DNB seats approved in 10 Secondary Care hospitals and 2 Medical college hospitals. Tamil Nadu one among the 2 states which got accredited with 5 Emergency Medicine seats in Government Pudukottai Medical College Hospital, Government Omandurar Medical College Hospital and Government Headquarters Hospital, Erode.

17.13.1 Oral Health Care Services in PHCs:

Oral diseases are a major public health problem and their burden is on the rise in Tamil Nadu. To address this issue, NHM initiated preventive and curative oral health services by supporting and establishing 389 dental units across the State. These dental units are set up with dental equipment, drugs and consumables with the support of dentists and dental assistants providing general and specialty dental services across the state.

17.13.2 Oral Pre-Cancer Screening Programme:

Oral Cancer ranks among the top three types of cancer in India. "Oral Pre-Cancer Screening Programme" was launched in August 2016 for early identification and intervention of patients with pre-cancer lesions and conditions. From August 2016 to March 2019, about, 53,81,457 persons screened, out of which 16,106 were suspected for lesions and of which 217 were diagnosed with cancer.

17.14 Dialysis Program:

Among the Non-Communicable Diseases, the End Stage Renal Disease (ESRD) continues to be a rising burden for the State. Health policies focusing on intervention and allocation of more resources for the management of ESRD imperative patients are in Tamil Nadu. Strengthening of district hospitals has been a key priority so that people can receive affordable and accessible dialysis treatment. A total of 755 dialysis machines are installed in secondary and tertiary health care settings across the state. During the year 2018-2019, about, 2,66,963 cycles have been done and 3,988 patients have undergone dialysis.

17.15 National Quality Assurance Standards (NQAS) Programme in Government Health Facilities:

NQAS programme is being implemented in secondary care and primary care facilities to improve the quality of healthcare services in Government Facilities. Every Hospital to get certified under NQAS will be assessed at three levels on NQAS checklists i.e. Internal Assessment, State Assessment and National Level External Assessment. During the year 2018-2019, the State has achieved NQAS National certification for 13 District Headquarters Hospitals (highest in the country), 5 Community Health Centres and 11 Primary Health Centres.

17.16 Mera Aspataal:

Mera Aspataal (My Hospital) is an initiative to capture patient feedback for the services received at the hospital through user-friendly multiple channels such as Short Message Service (SMS), Outbound Dialling (OBD) mobile application and web portal. Parameters on which the patient satisfaction is measured are Staff behavior, Cleanliness, Cost of treatment, Quality of treatment and other reasons. Under this programme, 31 District Headquarters Hospitals have been registered in the state. "Mera Aspataal" will help the government to take appropriate decisions for enhancing the guality of healthcare delivery across public facilities. Tamil Nadu is the leading state in Patient Satisfaction Index.

17.17 Kayakalp Award Scheme (Cleanliness Drive and Award) undertaken in Public Health Facilities:

Kayakalp Award Scheme which demonstrates high levels of cleanliness, hygiene and infection control being implemented in District Hospitals, Taluk & Non-Taluk Hospitals, Community Health Centres and Primary Health Centres across the State.

In 2018-19, Kayakalp award programme activity implemented in all hospitals in the state and following facilities were awarded as below:

1. Under the Directorate of Medical and Rural Services, Health Government Headquarters Hospital (GHQH), (1st prize Rs.50 lakh), Pennagaram Headquarters Government Hospital (GHQH), Usilampatti (2nd prize Rs.20 lakh) and 22 Government Headquarters Hospitals (GHQHs) (Commendation Award Rs.3 lakhs each) have been awarded Kayakalp awards.

- Government Hospital, Pallapatti (1st prize Rs.15 lakh), Government Hospital, Aravakurichi (2nd prize Rs.10 lakh) and 70 Government Hospitals (including Taluk and Non-Taluk Hospitals) received Commendation award of Rs.1 lakh each.
- Under the Directorate of Public Health and Preventive Medicine, Community Health Center – Morappur received 1st prize Rs.15 lakhs, Community Health Center – Andakulam received 2nd prize Rs.10 lakhs and 154 Community Health Centers received Commendation award of Rs.1 lakh each.
- Further, 31 Primary Health Centres received 1st prize Rs.2 lakhs in each of 31 Districts and 187 PHCs received Commendation award of Rs. 50,000 each.
- 5. During the year 2018-2019, 27 Urban Primary Health Centres (UPHCs) in Rest of Tamil Nadu, 21 UPHCs and 5 Urban Community Health Centres (UCHCs) of Greater Chennai Corporation (GCC) were awarded with cash prize of Rs. 70.00 lakhs and Rs.68.50 lakhs respectively.

17.18 Labour Room and Maternity Operation Theatre Quality Improvement initiative (LaQshya):

LaQshya Certification aims at improving the quality of care to the pregnant mothers in Labour Rooms and Maternity Operation Theatres. 188 Government Health Institutions including Medical College Hospitals, Government Hospitals and Upgraded Primary Health Centres have been identified for implementation of LaQshya process in the State.

In 2018-2019, 13 Secondary Care Government Hospitals have achieved LaQshya National Certification.

National Urban Health Mission

17.19.1 National Urban Health Mission (NUHM):

The goal of National Urban Health Mission is to "improve the health status of the urban population in general, particularly of the poor and other disadvantaged sections, by facilitating equitable access to quality healthcare through a revamped public health system, partnerships, community based mechanism with the active involvement of the urban local bodies".As per 2011 census, 59 lakhs (17% of the urban population) live in urban slums.

According to the GOI guidelines, Government of Tamil Nadu have established 71 new Urban Primary Health Centres(UPHCs) and strengthened 349 existing Urban Primary Health Centres (total of 420 UPHCs) in 12 Corporations including Greater Chennai Corporation and 75 Municipalities having more than 50,000 population.

Abstract			
SI. No.	GCC & Rest Of Tamil Nadu	No. of UPHCs	
1	Greater Chennai Corporation	140	
2	Rest Of TN – Corporations	154	
3	Rest Of TN-Districts	126	
	Total	420	

NUHM endeavors to achieve its goal through the following approach:

- Need-based city specific urban health care system to meet the diverse health care needs of the urban poor and other vulnerable sections.
- Partnership with community and local bodies for a more proactive involvement in planning, implementation, and monitoring of health activities.
- Ensuring the availability of resources for providing essential primary health care to urban poor.

In addition to providing comprehensive primary health care services, NUHM provides special services namely,

- 1. Special Outreach Camp (SOC)
- 2. Urban Health Nutrition Days (UHNDs)
- 3. Urban Rashtriya Bal SwasthyaKaryakram (RBSK)
- 4. Urban Polyclinics
- 5. Urban Mobile Medical Units (MMU)

1. Special Outreach Camp (SOC):

Outreach camps conducted in UPHC service area especially hard to reach vulnerable areas (such as slums, migrant hamlets). 8,821 camps conducted during the year 2018-2019 and 13,11,449 individuals have benefited from these camps.

2. Urban Health Nutrition Day (UHN Day):

UHN days are conducted by Urban Health Nurse @ 1 UHN day/UHN/month. 18,093 UHN days have conducted and 3,66,779 Adolescent girls and mothers during 2018-2019 have benefited.

3. Urban Rashtriya Bal Swasthya Karyakram(RBSK):

Under this programme, children in the age group from birth to eighteen years including the newborn are screened for 4 D' such as Defects at birth, Deficiencies, Diseases and Developmental delays including disabilities by a total of 35 teams, 20 teams in Salem, Madurai, Coimbatore, Tiruppur, Tiruchirappalli, Tirunelveli, Vellore and Dindigul Corporations and 15 teams in Greater Chennai Corporation. During 2018-2019, 5,47,661 children screened in schools and Anganwadi centres, and 69,758 children were identified with disease conditions and 44,491 children referred to secondary and tertiary care institutions.

4. Urban Polyclinics:

To provide comprehensive specialty care to the urban poor, the concept of "Polyclinic -Specialist Outpatient Clinic" implemented in 96 UPHCs as evening OP from 4.30 to 8.30 pm in a full-fledged manner. In these centres, specialty services such as General Medicine, Paediatric Ophthalmology, Medicine, Dental, ENT, Gynecology, Obstetrics and Dermatology, Psychiatry, Orthopedics and Physiotherapy services are provided on specific days. During the year 2018-19, 3,40,188 individuals benefited from this specialty clinic and the same is being monitored by a web-based application.

5. Urban Mobile Medical Units:

10 units have been approved by Government of India under NUHM (5 for Greater

Chennai Corporation and 1 each for Coimbatore, Madurai, Tiruchirappalli, Tiruppur and Salem corporations) to reach the unreached population of the slum, migrant population and the workers of unorganized sector at a total cost of Rs.270 lakhs.

17.19.2 National Quality Assurance Standard (NQAS) Programme:

NQAS programme was launched in January 2015 with the aim to improve the quality of healthcare services in Public Health Facilities. During the year, 2018-2019, 119 facilities have completed their internal assessment and 40 facilities have scored 70% in the assessment. Based on the analysis, further steps will be taken and a target of 5% of facilities (UPHCs) has been fixed for undergoing National Certification for the forthcoming year.

17.19.3 Universal Health Coverage (UHC) Programme in Urban Health:

Universal Health Coverage (UHC) is being expanded into urban area by transforming the UPHC to Health and Wellness Centre. Till date, 214 UPHC in Rest of Tamil Nadu has been branded as Health Wellness Centres and 12 set of Comprehensive Primary Health Care Services under UHC are being provided.

17.20 Mental Health Program:

According to the report on Mental Health Survey, 2016 by National institute of Mental Health and Neuro sciences (NIMHANS), mental illness including Self-harm is the 3rd leading cause of Disability Adjusted Life Years (DALYs) lost and depressive disorders as the 13th leading cause of DALYs lost in the State of Tamil Nadu, which contributes to a total of 6.8% of total DALYs lost in 2016. It should also be noted that 25% of suicide and violence related deaths happen in 15- 39 years' age group contributing to the top 10 causes of death by age group among both sexes in 2016.

District Mental Health Programme (DMHP) is implemented in all 32 District Headquarters Hospitals and in all Medical College Hospitals. The services provided are Out-patient and Inpatient Services, Awareness campaign and Training. In order to improve the field activities, an additional psychiatrist engaged to carry out the Outreach activities and conduct Satellite clinics so as to increase detection, treatment and follow up of cases in the community. During April 2018 to March 2019, 6,65,386 patients managed under DMHP.

The Institute of Mental Health, Chennai, is the State Nodal Centre for implementing the District Mental Health Programme. The State has constituted a State Mental Health Authority (SMHA), as per G.O.(Ms) No.178 H&FW (EAP I-2) Dept., dated. 14.05.2018

Functions of SMHA:

- Mental Health Review Board are being established to cover all the districts to enhance monitoring of mental health institutions
- Registration of mental health professionals and health facilities including those implementing the DMHP.

- To monitor admission, treatment and discharge of mentally-ill patients as stipulated in the act.
- To advise on improvement of mental health services.

In order to address this alarming rise in mental health issues, the following special initiatives have been taken;

- 1. Institutional Screening for mental health disorders is being done by utilizing the services of trained NCD Staff Nurses in all the health care facilities in the State.
- Community Based Screening for mental health disorders have been incorporated into the Population Based Screening Program for NCDs by Women Health Volunteers / ASHAs through an incentive model.
- 3. Follow up of all suicide attempted victims with mental health counselling at least with one visit in the nearby PHC by the Satellite Clinic

- Ensuring free drug availability up to PHC level for which Rs.4 lakhs have been allotted for all 32 districts for procurement of mental health drugs.
- 5. Utilization of services of RBSK medical Officers for early identification of mental diseases among school children.
- 6. Provision of counselling services for suicide attempted victims by a trained Psychologist from Institute of Mental Health, Chennai.
- 7. De-addiction centres have been established in Cuddalore, Kancheepuram and Tiruppur.

Performance (April 2018 - March 2019)

No of OP cases	No of IP cases	Total
5,137	1,021	6,158

 Self-harm cases reported through Tamil Nadu Accident and Emergency Care Initiative (TAEI) Centres will be counselled for a period of 18 months with the consent of the patient.

Performance (October 2018 - March 2019)

SI. No.	Institutions	Number of Self- harm cases reported in TAEI App	Total Number of cases counselled with consent forms
1	Government Medical College Hospitals	32,125	8,723
2	District Headquarters Hospitals	23,315	8,676
3	Taluk& Non- Taluk Hospitals	10,885	4,303
	Total	66,325	21,702

 Establishment of Emergency Care and Recovery Centres with 50 beds cater to the needs of wandering mentally-ill. The centre provides treatment, shelter rehabilitation, vocational training and reintegration services through NGO's in 7 districts of Vellore, Villupuram, Theni, Tiruvannamalai, Tiruppur, Chennai, Pudukkottai, Dharmapuri, Karur and Tirunelveli.

Performance of ECRC (October 2018 to March 2019)

Total No of patients admitted at ECRC	Total No of patients re-united with family
277	109

 Mentally ill patients are shifted through Retrieval Vehicles for mentally-ill (1 per district).

Performance of Retrieval Vehicles for mentally-ill (October 2018 to March 2019)		
Total No of patients shifted through Retrieval Vehicles for mentally-ill	201	

- 11. Linkage of DMHP with NGOs in 10 districts namely The Nilgiris, Thiruvallur, Coimbatore, Thanjavur, Trichy, Perambalur, Kancheepuram, Cuddalore, Thiruvanamalai and Villupuram. The role of NGO includes;
 - To perform door-door survey to screen mental ill patients.
 - Capacity building.
 - To create awareness about mental illness in the community.
 - To enhance social entitlement for mentally ill patients.
- 12. For providing quality mental health services State Mental Health Policy is to be published shortly by Government of Tamil Nadu.

New Initiatives 2019-2020

ESSENTIAL DIAGNOSTICS SERVICES SYSTEM (EDSS)

17.21 The Government of Tamil Nadu is already providing free drugs at all levels through TNMSC. То reduce the Out-of-pocket expenditure for the poor, it is not only necessary to ensure availability of free drugs but also ensure free diagnostic services to them. This year, the key focus area is to establish the Essential Diagnostics Services System across the state with a sole aim to provide quick, prompt and hassle-free laboratory services. Hence, it is planned to strengthen all the laboratories across the state by ensuring the availability of an appropriate 'Assured Diagnostic Test Menu' at each level of health care delivery through a Hub & Spoke Model along with a well-equipped Information Laboratory Management and System (LIMS), at a budget of Rs. 273.14 Crores over 3 years. This system will ensure a quality & evidence based diagnosis at the shortest possible time for appropriate treatment for the patients.

17.22 Health IT Program of the State:

The State has conceptualized a robust IT platform with population as denominator to establish a continuum of care from community to referral units. As a first step, Health IT standards were drafted and 3 modules namely Master Registry Module, OP Module and Drug inventory module were developed using these standards. About, 6.7 Crores of member information in electronic form from Public Distribution System (e-PDS) has been used as a baseline and the data is updated from HSC to State level through Master Registry Module.

17.23 Tamil Nadu State Mental Healthcare Policy and Implementation Framework:

Tamil Nadu has already implemented the District Mental Health Programme in all districts. Now, along the lines of the National Mental Health Policy of India, 2014, Rights of Persons with Disabilities Act, 2016 and Mental Healthcare Act, 2017, National Health Mission, Tamil Nadu has drafted the "State Mental Healthcare Policy and Implementation Framework" in consultation with various stakeholders with the following vision;

"To promote mental health, prevent mental illness, enable recovery from mental illness, promote de-stigmatization and desegregation, and ensure socio-economic inclusion of persons affected by mental illness by providing accessible, affordable and quality health and social care to all persons through their lifespan, within a rights based framework"

This policy also aspires to achieve the following two targets in Tamil Nadu;

- 1. Coverage of Mental Health Services to be increased by 20% by 2025
- 2. Suicide Rate to be reduced by 10% by 2025

Upon approval of the policy, necessary efforts will be initiated to improve mental healthcare in the State of Tamil Nadu in order to achieve the above targets.

17.24 Tamil Nadu State Palliative Care Policy:

Palliative care aims to improve the quality of life of the patients suffering with chronic life threatening illnesses like cancer, stroke, etc. For this, National Programme for Palliative Care has been implemented in all districts of Tamil Nadu with provision of institution and communitybased services. However, to provide a holistic approach to the programme and to integrate community and institutional care, National Health Mission, Tamil Nadu in consultation with various experts in the field of palliative care has drafted Tamil Nadu State Palliative Care Policy. Upon approval of the policy, necessary efforts and strategies will be implemented to ensure quality of life of patients and care givers and better survival index of those suffering from life threatening illness and requiring palliative care services.

17.25 Strategic Document for TB-Free Tamil Nadu by 2025:

The Revised National Tuberculosis Control Programme (RNTCP) was started in the year 1997 and is being implemented throughout the state of Tamil Nadu since the year 2002. The programme is being implemented considering the key objectives as laid out by Government with both diagnosis and treatment at free of cost for all patients.

Now, the State has drafted the Strategic Document for TB-Free Tamil Nadu by 2025, which clearly spells out key strategies to achieve "TB-Free Tamil Nadu by 2025." The strategies are aimed at achieving the notification rates for each year from 2019 based on the projections, to move towards TB elimination levels by 2025. They have been developed based on the four principles of the National Strategic Plan (NSP) 2017-2025 namely, 'Detect-Treat-Prevent -Build'. Tamil Nadu, by implementing the key strategies as per Strategic Document will be able to achieve the goal of 'TB-free by 2025'.

Health Management Information System (HMIS)

17.26 The use of Information Technology in health services will definitely improve the quality of health care services provided to the

patients at the hospitals. The Government of Tamil Nadu implemented Health Management Information system (HMIS) in the Government hospitals of the State to improve the quality of health care services. The implementation of HMIS has three components;

- Hospital Management System (HMS): This is used to help in day to day hospital functions in 311 Hospitals (263 Secondary Care & 48 Tertiary Care). The software helps in registration of patients, prescription of drugs, distribution of diet and other hospital functions. This is one of the world's largest medical databases in the world.
- Management Information System (MIS): This is used for Monitoring and Administrative purposes in 2267 Primary Health Centres (PHC's) (1806 Rural PHCs and 460 Urban PHCs) and 309 Secondary Care hospitals (31 Head Quarters Hospitals, 204 Taluk Hospitals & 74 Non Taluk Hospitals) and all Government Medical College Hospitals.

3. College Management System (CMS) and University automation system (UAS): This is used by all Government Medical College Hospitals and TN Dr MGR Medical University for admission, allocation of registration number, hall ticket, mark sheet preparation, publication of results, award of certificates to allotment of seat in Convocation Hall for all students under the University Automation System.

17.27.1 Tamil Nadu State Blindness Control Society

The Government of India, in order to reduce the prevention of preventable blindness from 1.4% among population, launched the to 0.3% National Programme for Control of Blindness (NPCB) in the year 1976, as a 100% centrally sponsored programme. The implementation of programme was subsequently the said decentralized in 1994-95 with formation of District Blindness Control Society in each District of the State. In Tamil Nadu, Tamil Nadu State Blindness Control Society (TNSBCS) was formed on 01.04.1996 as a separate entity to give

thrust to the goal by planning, execution and monitoring at the District Level.

17.27.2 The TNSBCS is represented by the District Blindness Control Society (DBCS) in all districts of Tamil Nadu, where the Collector of person and the the District is the Chair executed by the programme is District Programme Manager (DPM), а Senior Ophthalmologist from the District Head Quarters Hospital or Government Medical College Hospital, as the case may be. The Tamil Nadu State Blindness Control Society has been brought under the control of the Mission National Health Mission since Director, 01.04.2007 and is a part of Non-Communicable Diseases programme.

17.27.3 The Cataract being the main reason for avoidable blindness, accounts for more than 60% of blindness. Under NPCB, the cataract operations are done at free of cost both in Government hospitals and private hospitals through NGOs and a grant-in-aid of Rs.2,000/- per operation is allowed to NGOs with effect from 01.04.2018.

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17.27.4 The development of strong eye-care facility supported by well-trained doctors is the necessity to fight the avoidable blindness. Therefore, districts are being chosen every year to build a dedicated eye ward, at a cost of Rs. One Crore and there are 4 such facilities across the State. Recently, a dedicated Eye block has been built to in Government Hospital, Vaniyambadi of Vellore District and Virudhachalam of Cuddalore District. Regular trainings to Ophthalmic Surgeon in various subspecialties are also given using latest techniques in various centres established in Government and NGO sectors.

17.27.5 Achievements in the year 2018-2019

- a. 3,33,203 persons were operated for cataract conditions
- b. A pilot project under assistance of Queen Elizabeth Trust and Indian Institute of Public Health, Hyderabad to screen complication of Diabetes such as Diabetic Retinopathy initiated at Block PHC level in Tirunelveli

District and also extended to 3 more districts of Vellore, Cuddalore and Salem.

- c. A project to screen for Retinopathy of Prematurity disease in new born children commenced in 73 Special New Born Care Units.
- d. New Eye Banks started and functioning in Thanjavur, Tiruchirappalli and Cuddalore.
- e. Tamil Nadu stands first in Eye Donation in India with more than 11,000 eye donations per year under Hospital Cornea Retrieval Programme.
- f. During 2018-19, equipment for eye units were supplied to Government health facilities at a cost of Rs.4.68 Crores.
- g. Comprehensive Hi-tech Computerized eye clinic is to be started in all Medical Colleges & District Head Quarters Hospital (in 54 Places) at a cost of Rs.357.85 Lakhs.
- h. New Eye Operation Theatre and ward is being constructed in 5 district and taluk hospitals namely Tiruppur, Palani, Tiruchendur, Tindivanam and Cuddalore.

NON-COMMUNICABLE DISEASE PREVENTION, CONTROL AND TREATMENT

17.28.1 Non-Communicable Diseases (NCD) are on the rise and emerging as leading cause of morbidity and mortality in the community. NCDs pose a challenge in both urban and rural areas due to changing life style pattern which is associated with NCD related risk factors.

The Global Burden of Diseases (GBD) report 2016 alerts that the NCDs constitute 69.2 % of the mortality from various diseases in Tamil Nadu with Cardiovascular diseases alone constituting 36.1 % of the mortality. With regard to the Disability adjusted life Years (DALYs), 65.3 % is due to NCDs of which the major cause is Cardio Vascular Diseases.

Hence, the State of Tamil Nadu took up the flagship program to address NCDs under the erstwhile Tamil Nadu Health Systems Project (TNHSP). The Non-Communicable Diseases Intervention Programme supported by TNHSP, was the first of its kind on a very large scale in India, across in 2,516 Government health facilities in the Primary / Secondary / Tertiary levels of health care. Under the programme, screening, treatment and follow-up services are provided for Hypertension, Diabetes Mellitus, Cervical and Breast Cancer to all individuals aged 30 years and above attending any Government Health facility in the State. In case of Hypertension and Diabetes Mellitus, besides the regular drug treatment and follow-up, the focus is on counseling individuals on 'Life Style Modification'. With closure of the World Bank supported TNHSP on 15 September, 2015, the Non Communicable Diseases intervention program is continued and sustained under National Health Mission (NHM) through the National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) in 2,600 health facilities in the State.

17.28.2 Performance under Facility Based or Opportunistic Screening for NCDs

17.28.2.1 Cardio Vascular Diseases (CVD) Prevention and Control Programme:

During July, 2012 to April 2019, 6,35,19,388 individuals were screened for hypertension and 54,50,646 were found to be positive. Those identified with hypertension are put on treatment and follow-up. To augment the follow up services, Intensive Care Units (ICUs) in 29 District Headquarter Hospitals and two College Hospitals Medical have been strengthened under NPCDCS.

17.28.2.2 Prevention and Treatment of Diabetes Mellitus:

Among 5,14,59,143 individuals screened for Diabetes Mellitus during the period from July 2012 to April 2019, 22,37,596 patients detected to be positive. The patients identified with diabetes are put on treatment and followed up.

17.28.2.3 Prevention and Treatment of Cervical Cancer

From July 2012 to April 2019, VIA Screening test for Cervical cancer was performed for 2,02,27,193 women and among them 5,53,467 women were detected positive. The women found to be positive in the screening test are being followed up.

17.28.2.4 Prevention and Treatment of Breast Cancer

From July 2012 to April 2019, 2,49,41,368 women were screened with Clinical Breast Examination (CBE). Among the women screened, 2,54,776 were detected with any abnormality or lump in the breast. The CBE positive women referred to higher institutions for further evaluation and follow-up as per the protocol.

17.29 Strengthening of Cancer Care at State and District Level

Adyar Cancer Institute in Chennai is functioning as State Level Higher Treatment Centre for Cancer. Four Regional Cancer Centres are being established in Government Rajaji Hospital Madurai, Government Coimbatore Medical College Hospital, Government Tirunelveli Medical College Hospital and Government Thanjavur Medical College Hospital at a total cost of Rs.60 Crores. Under strengthening of cancer care activities, replacement of 10 Old Cobalt-60 units with new Cobalt-60 units, supply of 4 new Cobalt-60 units and supply of high end 9 Linear Accelerator units to Government health institutions is under process.

17.30 District Level Day Care Chemotherapy Centres

Day care chemotherapy centres are functional in District Headquarter Hospital in all districts except in Tiruvannamalai, Karur and Pudukkottai which are functional in Government Medical College Hospitals.

The treatment decision for the confirmed cancer patients will be decided in tumour board at tertiary care hospital and the first chemo cycle also would be given there. Then, the follow-up or maintenance chemotherapy which involves more cycles will be given at District Headquarters hospital under supervision of one physician and staff nurse in each district trained in Day Care Chemotherapy. This will amply benefit cancer patients who find it most inconvenient to report to the same tertiary care institution for the maintenance chemotherapy and also incur lot of Out-of-Pocket Expenditure (OOPE) or get lost to follow-up in the absence of such programme.

17.31 Free Pathology Services

The people in certain districts opt for tests in private pathology laboratories incurring heavy Out-of-pocket Expenditure (OOPE) and also face inordinate delay in receiving reports from the Medical colleges Government in the neighbouring districts. Hence, under the 'Free Pathology Service' initiative, histo-pathology laboratories are being established in district headquarter hospitals of Cuddalore, Dindigul, Nilgiris, Nagapattinam, Namakkal, Perambalur, Ramanathapuram, Tiruppur, Tiruvallur and Virudhunagar, where there are no medical colleges.

17.32 Population based NCD Screening and Follow up

Under NPCDCS program, Population based NCD screening is another specific intervention implemented in Tamil Nadu. The key person responsible for this is a field functionary who is Accredited an Social Health Activist (ASHA) /Women Health Volunteer (WHV)/ Anganwadi worker (AWW) vested with responsibility to make house-to-house visits and carry out enumeration, create awareness on NCDs and risk factors, screen for hypertension using a digital blood pressure apparatus and for Diabetes Mellitus by a Glucometer for all those aged 30 years and above. The field functionary is being paid performance based incentives for her field level activities.

The individuals aged 30 years and above suspected with hypertension / diabetes at the household level get referred to the nearest PHC for confirmation and further follow up. Women in addition are motivated to attend nearest PHC for Cervical and Breast cancer screening. The field level functionaries will also do house to house enquiry of symptoms of Oral cancer, TB, Leprosy and Mental Health. Besides the survey, the field functionary also carries out a risk assessment using Community Based Assessment Checklist (CBAC) for those in 18-29 years' age group.

Population based NCD screening is currently under way in 5 districts (Pudukottai, Perambalur, Krishnagiri, Karur & Ramanathapuram) 3 Corporations and (Tirunelveli, Coimbatore and Chennai) by involving Women Health Volunteers identified through Tamil Nadu Corporation for Development of Women (TNCDW)

From May 2018 to April 2019, out of the 10.6 Lakhs (45%) families enumerated in these districts, 26 Lakhs (58.9%) were screened for Hypertension and 25.6 Lakhs (55.7%) for Diabetes. Among those screened, 2.3 Lakhs (9.1%) and 1.8 Lakhs (7.9%) were suspected for Hypertension and Diabetes respectively and referred to PHCs for confirmation and treatment. The field functionaries have referred 2.4 Lakhs (11%) women for screening of cervical cancer and 2.3 Lakhs (10%) for screening of Breast

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cancer at the PHCs. A total of 32,840 (0.8%) individuals were referred for screening of Oral Cancer.

Currently from March 2019, the program is up-scaled and integrated with the Health & Wellness Centres (HWCs) in the State in 35 UHC blocks covering 834 HSCs by involving 708 WHVs and 126 existing ASHAs. The program will also be up-scaled to the entire aspirational district of Virudhunagar by involving 205 more WHVs and to all the remaining 8 Corporations.

17.33 Universal Health Coverage: Health and Wellness Centres

Universal Health Coverage (UHC) project has been piloted successfully in 3 pilot blocks of Veppur, Shoolagiri and Viralimalai in 3 Health Unit Districts (HUDs) of Perambalur, Krishnagiri and Pudukottai respectively covering 67 HSCs and 17 PHCs (including block PHCs) since 2016. In 2017-2018, the program was up-scaled to all remaining HUDs at a total cost of 2474.07 lakhs.

UHC aims to provide equitable, affordable and quality health services. The full spectrum

includes health promotion, prevention and treatment, rehabilitation and palliative care. The Sub-Centre strengthening is the pillar for the UHC program.

In the year (2018-2019), it was proposed to transform 985 Health Sub-Centres, 716 Additional PHCs and 214 Urban PHCs into Health& Wellness Centres (HWCs) at a cost of Rs. 9,357.47 lakhs (rural & urban) and the work is in progress.

The program is being implemented through the State Programme Management Unit (SPMU), Universal Health Coverage (UHC) & Maternal Child Health (MCH) established at the Directorate of Public Health and Preventive Medicine.

The HWCs will provide a set of 12 comprehensive services including Preventive, Promotive, curative Rehabilitative and Palliative care.

The primary level activities in the proposed HWC will be led by the team of a Mid-Level Health Provider (MLHP) after completion of a 6 months' certificate course on community healthcare through the Tamil Nadu Dr. M.G.R. Medical University. Village Health Nurses (VHNs) will be the Mid-level healthcare provider (MLHP) at HSC level and Staff Nurses (SNs)/Auxiliary Nurse Midwives (ANMs) will be the healthcare provider at PHC level between 4 pm and 9 am under the supervisory control of the PHC Medical Officer.

The HWCs could be the window of opportunity for strengthening the primary health care systems in context of Tamil Nadu.

17.34 National Program for Palliative Care (NPPC)

Palliative care primarily aims to relieve suffering and improve quality of life of adults and children affected by life-threatening and lifelimiting illness. This involves inclusion of their family members as a part of care giving services.

Potential beneficiaries of the program include patients suffering from cancer, Cardiac Failure, COPD, Chronic Kidney Disease, mental retardation, hemiplegia, paraplegia, congenital mental and physical disabilities, Alzheimer's, Parkinson's, chronic disability in the elderly etc. For children, the major disease categories which require palliative care include cancer, HIV, progressive non-malignant conditions, congenital anomalies etc. It is estimated that 7% of the population of Tamil Nadu require palliative care. The Palliative Care Services with a two pronged approach of Institutional and Community Based Services is being implemented in Tamil Nadu as detailed below:

In the Phase I (2016-2017), palliative care services have been established at eight District Headquarter Hospitals of Cuddalore, Dindigul, Krishnagiri, Tiruvallur, Ramanathapuram, Thoothukudi, Tiruppur and Namakkal and two College Hospitals Medical of Thiruvarur, Tiruvannamalai by placing a trained palliative care doctor and staff nurses. More than 3,800 patients have already benefitted from this service at these institutions from September 2017 to March 2019.

In Phase II, it has been up scaled to next 10 District Head Quarters Hospitals of Kanchipuram, Coimbatore, Villupuram, Vellore, Thanjavur, Erode, Trichy, Salem, Tirunelveli and Kanyakumari. From August 2018 to March 2019, 1,690 patients have been benefitted.

In Phase III (2018-2019), the program has been implemented in rest of the 12 districts Head at 8 Government District Quarters Hospitals of Arivalur, Dharmapuri, Nagapattinam, Nilgiris, Perambalur, Sivagangai, Theni, Virudhunagar and 4 Government Medical College Hospitals of Karur, Pudukkottai & Medicine), Madurai (Thoppur, Thoracic Government Royapettah Hospital in Chennai District. Oral Morphine is made available in all the districts of Tamil Nadu.

Further, Community Based Palliative Care Services are being implemented at block level in phased manner to provide home-care services. Trained staff nurse designated as 'Community Palliative Care Nurse' at 1 per block are providing Palliative care nursing services to those who are bed-ridden and approaching last days of their life in home setting. This service would reduce the physical difficulties of the

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severely debilitated patients in accessing a health care facility. Presently, 140 staff nurses are trained in Community Based Palliative Care Services

From June 2018 up to April 2019, Community Based Palliative Care Services have been implemented in 113 blocks in 25 HUDs with 29,034 beneficiaries across the state.

17.35 NCD Mobile App:

An NCD mobile app has been developed with the help of National Informatics Centre (NIC) to upload the data to improve the quality of NCD screening for Diabetes, Hypertension, Cervical and Breast Cancer. 2,832 NCD staff nurses in the state have been provided with a tablet computer.

17.36 Health Technology Assessment:

Health Technology Assessment (HTA) is a method to evaluate cost effectiveness of various health technologies such as devices, medicines, vaccines and help health systems for making evidence based policy decision. Now, a Health Technology Assessment is being conducted in Tamil Nadu on the screening of Type 2 Diabetes and Hypertension by ICMR – National Institute of Research in Tuberculosis (NIRT) with NHM, TN.

17.37 Occupational Health Services for Unorganized sector workers

According to International Labour Organization (ILO), in every 15 seconds, a worker dies from a work-related accident or disease. In India, formal Occupational Health Services are available for the Organized Sector employees which are only 10% of the total workforce. The health care needs of the remaining 90% of workforce in un-organized sector are largely unattended.

In Tamil Nadu, the un-organized sector workforce is 93% of the total workforce (Census 2011). They suffer from various occupationinduced diseases like Silicosis, Asbestosis, Deafness, Irritant Dermatitis, Spondylosis etc. apart from several work-related illnesses. Most workers do not seek medical treatment from a health facility as they cannot afford to sacrifice a day's wages. Since most of the occupationinduced diseases result in irreversible damage, timely screening, prevention and early treatment is the way forward.

Since October 2018, National Health Mission, Tamil Nadu along with Directorate of Public Health and Preventive Medicine has initiated Occupational Health Services through its Mobile Medical Units (MMUs) in 64 blocks in the State across 32 districts. The MMUs visit the unorganized sector areas, and screen for 5 major disorders namely Respiratory, Auditory, Ocular, Skin and Musculoskeletal disease and refer to district level hospital apart from providing primary care onsite whenever necessary. From October 2018 to March 2019, un-organized sector workers 55,965 were screened, of whom 4,251 workers were referred to district level hospital for further investigations and treatment.

As per G.O.(Ms) No.65, Labour and Employment (I2) Department, dated; 30.05.2019, Government have issued orders for procurement of 50 Mobile Health Clinics for providing Occupational Health Services for construction workers. This activity is funded by Department of Labour and Employment and implemented through NHM-TN.

Geriatric Care

epidemiological 17.38 The and demographic transition as a byproduct of significant achievements in vital health indicators has made Tamil Nadu an 'Ageing Society' in which 10.4% of its population is above 60 years of age against the national average of 8.6% (Census 2011); thus becoming the third state in India with highest share of elderly. The elderly suffers from various degenerative disorders that render them dependent and vulnerable.

To cater to the health care needs of this significant and increasing group, Government of Tamil Nadu through National Health Mission, Tamil Nadu has already taken initiatives by establishing elderly-friendly healthcare facilities at various levels of care under National Program for Health Care of Elderly (NPHCE).

17.39 Institutions providing Elderly Care at various levels under NPHCE:

1. National Centre for Ageing, Chennai:

A joint venture of Government of India and Government of Tamil Nadu, this 200 bedded institute is of national importance and currently under development at King Institute of Preventive Medicine, Guindy, Chennai spreading over 8.64 acres of land at an estimated total cost of Rs.126.87 Crores.

Regional Geriatric Centre (RGC), Rajiv Gandhi Government General Hospital, Chennai

The Department of Geriatric Medicine, Rajiv Gandhi Government General Hospital, Chennai would serve as the Regional Geriatric Centre and provides tertiary level of care, training of health professionals and research.

3. District Level Hospitals:

Government of Tamil Nadu has approved the establishment of Geriatric units in 18 Government Medical College Hospitals of Coimbatore, Salem, Trichy, Madurai, Tirunelveli, Thanjavur, Vellore, Villupuram, Dharmapuri, Kanchipuram (Chingelpet), Kanniyakumari, Karur, Pudukkottai, Sivagangai, Theni, Thiruvarur, Thoothukudi, Thiruvannamalai and 13 Government District Headquarters Hospitals of Ariyalur, Cuddalore, Dindigul, Erode, Krishnagiri, Namakkal, Nagapattinam, Ramnad, Tiruvallur, Tiruppur, Perambalur, Virudunagar and The Nilgiris with required man power.

The following facilities are made available in each district level hospital under NPHCE:

- 1. Exclusive 'Geriatric OP' for elderly patients on all days of the week.
- Separate 'Q' for elderly at OP Ticket issue counter, Pharmacy, Laboratory and Radiology.
- 3. Twenty bedded elderly-friendly ward with anti-skid floor, side-rails and western toilets with adjacent grab bars.
- 4. Physiotherapy unit for elderly patients.
- 5. Intensive-Care facilities- Four ICU cots and One Ventilator reserved for elderly.

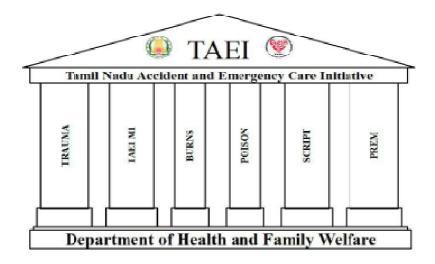
The details of elderly patients that have availed services from April 2018 – March 2019 under NPHCE is presented in the table below:

Number of Elderly persons attended Geriatric OPD	7,30,826
Number of Elderly persons admitted in geriatric wards	39,220
Number of Elderly persons given rehabilitation services	80,338
Number of Laboratory tests performed for the elderly	9,50,416

17.40 Tamil Nadu Accident and Emergency Care Initiative

Introduction

The Government of Tamil Nadu has recognized the alarmingly rise in morbidity and mortality due to emergency conditions and has been implementing the Tamil Nadu Accident and Emergency Care Initiative (TAEI) with the aim of strengthening Emergency Care Services in the State across all levels of health care.



17.40.1 Aim of TAEI

To establish a sustainable model of Emergency Care Service Delivery in the State.

Objectives of TAEI

- i. To reduce the trauma morbidity and mortality in the State by half by the year 2023.
- ii. To reduce the Myocardial Infarction related morbidity and mortality by 1/3rd by the year 2023.

- iii. To reduce Burn Injury related morbidity and mortality by 1/3rd by the year 2023.
- iv. To reduce the Self-harm and Poison related morbidity and mortality by half by 2/3rd by the year 2023.
- v. To reduce the Cerebro-vascular accidents morbidity and mortality by $^{1}/_{3}^{rd}$ by the year 2023.
- vi. To reduce the Pediatric Emergency related morbidity and mortality by half by the year 2023.

17.40.2 Key Concepts of TAEI

TAEI introduces a few key concepts and paradigm shifts in patient care in Tamil Nadu Emergency Care System. The patient care demarcated into various clearly defined stages and steps with fixed time norms, easy to implement protocols and guidelines, check lists and standardization of registers.

Emergency Department (ED) is being created in all hospitals, by reorganizing the

existing casualty with Emergency Room (ER), Multi-Disciplinary Critical Care Units (MDCCU), Emergency Operation Theater, CT / MRI Scan, Mobile X-ray facilities in the ER premises.

The TAEI-ER model incorporates key features like concept of Triage, Pre-arrival intimation, Hospital Call out protocols, Trauma Nurse Coordinator in all shifts, Resuscitation bay, Red, Yellow and Green zones, Protocol based treatment, Focused Assessment with Sonography in Trauma machine (E-Fast), Point of Care Testing (POCT), Uniform for all health care work force and e MLC.

Critical Case Review under TAEI Critical Case Review has been planned like the maternal death audit to improve the quality of care in ER.

Currently, App Based Reporting is being carried out in all TAEI centres and data pertaining to trauma cases are being collected on a real time basis. Fourteen Trauma Care fields are displayed in dash board everyday at 6pm, to get a clear picture on burden of trauma in the State. Efforts towards Trauma Care Registry and the Injury Surveillance Centre are being taken up.

17.41. Achievements of TAEI from 2017 to 2019

- 80 TAEI centers have been established i. which across the State includes 25 Government Medical College hospitals and hospitals, 31 allied District its Headquarters Hospitals and 24 Government Taluk hospitals located in Strategic locations along the highways.
- Under "Stroke Care and Rapid Intervention ii. Plasminogen with activator and Thrombectomy" (SCRIPT), the mapping of Spokes Hub and has been done. designating all 23 Government Medical colleges as Hubs and 55 Government District Headquarter, Taluk & Non-Taluk hospitals. Installation of CT Scan facility completed in all Hub hospitals.
- iii. Under TAEI Myocardial Infarction Program, geographical mapping has been completed, designating hospitals with Cath

Labs as Hubs and hospitals capable of thrombolysing as Spokes. Currently there are 18 hubs and 154 spokes identified. Networking within the MI clusters is being carried out through protocol based management and STEMI alerts are given through Pre-arrival Intimation to the linked Hub hospital.

- iv. New Cath labs are being installed in 9 Medical College Hospitals under the TAEI MI program. At present, these Cath Labs are offering office hour Primary PCI to the patients presenting with STEMI. Round the clock Primary PCI has been initiated in Rajiv Gandhi Government General Hospital, Chennai and soon the other Hub hospitals will start functioning as round the Clock hubs.
- v. In order to ensure effective implementation of the TAEI Skill Grading training, 'hands on' sessions and skill stations for the ED health care workers have been planned at the 5 Regional Training Centers (RTC). They are:

- 1. Government General Hospital, (RGGGH) Chennai.
- 2. Government Rajaji Hospital, Madurai.
- 3. Government Mohan Kumaramangalam Medical College Hospital, Salem.
- 4. Government Vellore Medical College Hospital, Vellore.
- 5. Government Head Quarters Hospital, Cuddalore
- vi. Achievements in training :
 - a. In TAEI ED Training, a total of 484 nurses, 367 doctors and 575 first responders trained in ED Skills and Management.
 - b. Under SCRIPT program, 150 doctors, 60 nurses and 23 technicians trained at Rajiv Gandhi Government General Hospital, Chennai from all the Hubs and Spokes.
 - c. Under TAEI Myocardial Infarction(MI) program, Trainer of Trainer (TOT)

completed for 60 doctors and 20 Nurses in the State. The MI Kit training provided to 10 doctors and 30 Emergency Management Technicians. Regional level trainings at each Hub hospitals has been planned.

- d. In Pediatric Emergency Management (PREM) Protocols, a total of 11 doctors and 29 nurses trained across the State, for a period of 1-3 months of posting at ICH ED.
- vii. Reduction of response time of Ambulances;

Dynamic allocation of ambulances has been done by the 108 EMRI Ambulance Services after which there has been a significant reduction in average response time of the State from 15.04 minutes in 2017 to 13.48 minutes in 2018. The average response time in the city has decreased further from 11 minutes to 8.36 minutes. viii. In the year 2018-19, Government General Hospital Chennai, Government Vellore Medical College Hospital, Government Krishnagiri District Headquarters Hospital and Government Kancheepuram District Headquarters hospital were awarded at Level for their Excellence State in organizing and functioning of the Emergency Services under Tamil Nadu Accident and Emergency Care Initiative program.

CHAPTER - 18

CHIEF MINISTER'S COMPREHENSIVE HEALTH INSURANCE SCHEME

18.1 Government of Tamil Nadu with the objective of ensuring universal health coverage implementing the Chief Minister's is Comprehensive Health Insurance Scheme (CMCHIS) since 11.01.2012. The scheme covers 1.58 crore families whose annual income is less than Rs.72,000. In view of the enormous public benefit due to the successful implementation of the scheme for five years, the scheme was continued further for five years starting from 11.01.2017. The Government of Tamil Nadu has integrated the Government of India's Pradhan Mantri Jan Aarogya Yojana(PMJAY) along with CMCHIS in the State from 23.9.2018. United Insurance Company Limited India is implementing the scheme.

18.2 The salient features of CMCHIS being continued from 11.01.2017 are as follows:-

- Sum insured After integration with PMJAY all the beneficiary families will get enhanced coverage upto Rs.5.00 lakh per year / per family.
- Procedures -1,027 medical and surgical treatment procedures, 154 specialized procedures, 154 follow up procedures, 38 standalone diagnostic procedures, 424 PMJAY procedures and 8 high end procedures are covered under this scheme
- Migrant labourers certified by Labour Department who reside for more than six months in the State are included under the scheme.
- Orphans as defined by the State Government are also covered under the scheme.
- CMCHIS health insurance card is used for claims processing and the same can be downloaded and printed from CMCHIS website.
- The Aadhaar linking with CMCHIS is being carried out.

- The scheme mandates NABH entry-level accreditation/NQAS for all empanelled hospitals including the Government Hospitals.
- Minimal Electronic Health Record are available for beneficiaries from website.
- At present, 977 hospitals (244 Government Hospitals and 733 Private Hospitals) are empanelled under the scheme.

18.3 Grievance Redressal:

There is a well established grievance redressal mechanism, including online tracking and SMS acknowledgement. Public can also contact 24 x 7 toll free No.1800 425 3993 for any details of the scheme and to register complaints. A State and District Monitoring and Grievance Committee are available to redress grievances.

18.4 Performance :

Since 11.01.2012 to 31.03.2019, 34.76 lakhs beneficiaries have availed of treatment worth Rs.5,800.35 crores. Of these 15.34 lakh patients got treated in Government hospitals at

a cost of Rs.2,129.78 crores. (including diagnostic procedures)

18.5 Speciality wise authorization issued for surgery are given in the table below:

Speciality wise authorization issued (11.01.2012 to 31.03.2019)

SI. No.	Speciality	No. of claims	Amount Rs. in lakh.
1	Nephrology	5,87,903	49,090.38
2	Medical Oncology	4,05,722	21,461.90
3	ENT	1,64,567	21,775.06
4	Genitourinary Surgery	1,58,914	35,798.10
5	General Surgery	1,54,305	32,602.63
6	Orthopedic Trauma	1,46,289	34,859.32
7	Cardiothoracic Surgeries	1,32,154	1,09,763.06
8	Neonatology	1,27,482	19,032.50
9	Radiation Oncology	1,13,191	25,869.57

SI. No.	Speciality	No. of claims	Amount Rs. in lakh.
10	Ophthalmology Surgeries	1,10,810	13,575.05
11	Gynaecology Obstetric Surgery	96,959	18,130.95
12	General Medicine	89,876	14,003.30
13	Hepatology	76,020	5,607.52
14	Cardiology	68,355	18,556.24
15	Neurosurgery	57,736	22,815.87
16	Neurology	56,015	9,647.30
17	Surgical Oncology	51,702	13,156.93
18	Plastic Surgery	49,050	10,664.46
19	Paediatric Intensive Care	46,572	5,586.94
20	Replacement	38,715	26,263.53
21	Vascular Surgeries	34,239	8,798.41
22	Interventional Cardiology	32,391	21,780.83

SI. No.	Speciality	No. of claims	Amount Rs. in lakh.
23	Surgical Gastro Enterology	14,221	5,305.60
24	Pulmonlogy	14,212	2,519.11
25	Paediatric Surgeries	13,861	3,773.85
26	Gastroenterology	12,545	2,295.93
27	Follow Up Procedures	11,118	198.98
28	Spine	11,087	3,963.82
29	Interventional Radiology	9,137	4,064.96
30	Paediatrics	7,988	877.75
31	Rheumatology	6,970	610.15
32	Poly Trauma	5,544	1,052.25
33	Hematology	4,413	942.67
34	Dermatology	3,431	413.46
35	Psychiatry	3,421	204.75
36	OFMS	2,723	320.92

SI. No.	Speciality	No. of claims	Amount Rs. in lakh.
37	Endocrinology	2,427	389.68
38	PMR	1,142	708.53
39	Transplantation	448	673.39
40	Thoracic Medicine	324	33.04
41	Endocrine Surgery	255	55.93
42	Chest Surgery	246	95.65
43	Bariatric Surgery	107	180.04
44	STEMI	77	10.93
45	Infectious Diseases - General Medicine	7	0.70
46	Diagnostics	7,58,926	16,301.39
	TOTAL	36,83,597	5,83,833.33

18.6 A corpus fund has been created by Government to mete out high cost procedures like Liver Transplantation, Renal Transplantation, Heart and Lung transplantation including post transplantation Immunosuppressant Therapy,

Bone Transplantation, Marrow Cochlear Implantation, Auditory Brain Stem Implantation Cell Transplantation. and Stem All the beneficiaries for such high-end procedures are approved by an Expert Committee. To recoup the corpus fund, 27% of the insurance claims earned by the Government Hospitals under the scheme are transferred to the Corpus Fund.

18.7 So far, 7,588 beneficiaries (as on 31.03.2019) have been approved for these high end surgeries from the Corpus Fund as per the following details:

SI. No	Nature of Surgical procedure	Number of beneficiaries authorized	Amount
1	Liver Transplantation	456	95,41,00,000
2	Renal Transplantation	2,473	95,65,85,860
3	Cochlear Implantation	3,770	277,60,98,800
4	Bone Marrow Transplantation and Stem Cell Transplantation	780	69,56,72,368

5	Heart transplantation	77	16,27,50,000
6	Heart and Lung transplantation	12	3,79,50,000
7	Lung transplantation	5	1,97,50,000
8	Auditory Brain Stem Implantation	15	2,73,61,800
	TOTAL	7,588	563,02,68,828

18.8 Medical Camps and Special Medical Camps:

From January 2012 to March 2019, 42,181 health camps and 1,086 mega health camps were conducted and about 64,36,394 persons were screened in both Government and Private empanelled hospitals.

18.9 Integration of Pradhan Mantri Jan Arogya Yojana (PMJAY) with the ongoing CMCHIS:

Under PMJAY Government of India pays 60% of the premium for 77.70 lakh families based on Socio Economic and Caste Census (SECC) data.

Chapter - 19

108- Emergency Ambulance Services

"108" Ambulance Service is 19.1 beina operated in Tamil Nadu through a single Toll Free number and the services are available free to the public. This program is 24x7 implemented through а Public Private Partnership between Government of Tamil Nadu and GVK EMRI. Each ambulance with a Pilot (driver) has one fully trained Emergency Medical Technician (EMT) who provides pre-hospital care to the patient.

19.2 Ambulance Deployment:

Within the districts of the State, based on criteria like population, accident prone areas, hilly terrain and remote areas which are difficult to reach, the 108 ambulances are stationed. Presently, 940 ambulances are in operation covering all the districts providing Basic Life Support (BLS), Advanced Life Support (ALS) and Neo natal care. There are 76 four wheel drive (4WD) ambulances for difficult terrain and hilly areas and 41 First Responders (Bike Ambulance) for densely populated areas.

19.3 District Wise Distribution of Ambulances:

	Ambulances					
Districts	ALS	BLS	Neo- natal	4WD	Total	FR Bikes
Ariyalur	1	16	1	0	18	0
Chennai	2	35	4	1	42	13
Coimbatore	2	31	2	4	39	3
Cuddalore	3	33	2	0	38	1
Dharmapuri	0	17	2	4	23	0
Dindigul	2	20	2	5	29	1
Erode	1	22	2	7	32	1
Kancheepuram	5	54	2	0	61	3
Kanyakumari	1	9	2	1	13	0
Karur	1	14	1	0	16	0
Krishnagiri	1	16	2	7	26	1
Madurai	3	25	3	0	31	2
Nagapattinam	2	17	2	1	22	0
Namakkal	1	18	2	3	24	0
Perambalur	1	10	1	1	13	0
Pudukottai	2	20	2	0	24	1

	Ambulances					
Districts	ALS	BLS	Neo- natal	4WD	Total	FR Bikes
Ramanathapuram	2	18	2	0	22	0
Salem	3	27	2	6	38	2
Sivagangai	2	15	2	0	19	1
Thanjavur	1	22	1	0	24	2
The Nilgiris	2	6	1	20	29	0
Theni	1	13	2	3	19	1
Thiruvallur	1	41	2	0	45	1
Thiruvannamalai	2	29	2	4	37	1
Thiruvarur	1	15	1	0	17	0
Thoothukudi	2	15	3	0	20	0
Tiruchirappalli	2	25	2	2	31	2
Tirunelveli	3	26	2	0	31	1
Tiruppur	2	19	2	0	23	1
Vellore	2	45	4	5	56	1
Villupuram	3	47	3	2	55	2
Virudhunagar	2	15	2	0	19	0
Total	60	735	65	76	936	41
V.V.I.P Convoy	y 04 940					

Type of Emergencies	Percentage
Pregnancy related	24.97
Road traffic accident	18.83
Acute abdominal pain	8.95
Cardiac related	6.05
Poisoning	4.95
Respiratory	4.66
Injured in assault	3.50
Epilepsy	2.86
Neonatal	1.41
Suicide	0.47
Others	23.35
Total	100.00

19.4 Categories of Medical Emergencies:

19.5 Highlights for the year 2018-2019

- 81,642 lives in very critical condition were saved
- 88.8 % of cases admitted at Government Hospitals

- 62,562 Medical emergencies attended in tribal areas
- 21,518 Neonatal cases were handled

19.6 Beneficiaries details and other details under this Service

Parameters	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019
Total (A+B+C) Beneficiaries	8,85,452	9,57,991	10,50,998	12,87,445	13,01,546
(A) Pregnant Mothers	2,33,109	2,32,408	2,40,827	3,22,868	3,24,932
(B)RTA	1,80,578	1,91,988	2,19,310	2,28,549	2,45,049
(C) Other Emergency	4,71,765	5,33,595	5,90,861	7,36,028	7,31,565
Tribal related	26,910	31,935	45,103	64,457	62,562
Total neo natal cases transported	20,376	21,788	20,584	20,343	21,518
Critical lives saved	84,170	78,311	97,845	72,344	81,642

19.7 Neonatal Ambulances:

For the first time in the Country, neonatal emergencies were brought under the purview of public EMS in Tamil Nadu in June, 2011. These exclusively available ambulances are for handling emergencies of Newborn babies (0-28 days) who need to be transferred from a Primary / Secondary care hospital to a Tertiary care hospital having Neonatal Intensive Care units (NICU). These ambulances are equipped with life saving equipments like Transport Syringe Pump to Incubator and handle emergencies. In addition, for transit care specially trained Emergency Medical Technicians are available. 21,518 babies have utilized this specialty service last year. Currently 65 ambulances are in operation in all the districts.

19.8 Four Wheel Drive:

Four Wheel Drive ambulances were introduced for Hilly / Difficult terrain areas where the normal ambulances cannot travel or take a long time to reach the emergency site. At present 76 vehicles are in operation.

19.9 Bike Ambulance Service:

Bike Ambulances help in reducing response time to reach the patient in congested areas and help in providing first-aid services instantly till arrival of the regular ambulance. The First Aid Kit is comprehensive, portable and easy to handle at scene. It contains stand for portable oxygen cylinder, blinkers, revolving lights and siren. Other accessories such as safety knee guards, helmets, gloves, mobile, GPS and headsets are stocked. So far 38,095 numbers of cases are transported through this service since launch.

19.10 Source of Funding and Expenditure:

The 108 Ambulance Service is funded by the State Government and NHM provides 20% of the operational cost based on the number of Ambulances. NHM also provides Rs.250/- per case for Antenatal, Neonatal and Tribal cases. The expenditure for the year 2018-2019 is Rs.194.19 crore.

19.11 Monitoring:

At the District level, the District Monitoring Committee headed by the District Collector reviews the performance of the 108 ambulance service and at the State level performance is reviewed by Secretary, Health and Family Welfare and the Project Director, TNHSP. The State level Advisory Committee headed by the Chief Secretary to Government also reviews the performance once in 6 months. Apart from this, programme officers and field the level functionaries periodically inspect the ambulances and provide suggestions for improvements.

19.12 Emergency Care Centre (ECC)

Emergency critical care centres have been established in Tambaram, Padiyanallur, Injambakkam and Mahabalipuram to stabilize the cases, in case of long distance travel in highways. At these centres, the road traffic victims are stabilized and referred to Medical College Hospital for expert management. This three bedded centre has the management facility with advance life saving equipments like ventilator, defibrillator with multi Para monitor, essential life saving medicines with 4 emergency care trained Medical Officers and Nurses who work on shift basis. So far, 4,427 cases in Tambaram centre, 4,030 cases in Padiyanallur centre, 3,216 cases in Injambakkam and 1,139 cases in Mahabalipuram centre have been stabilized. Also under road safety Management Cell (RSMC), work is in progress for establishment of similar ECC in 10 Government Hospitals situated in the National Highways and 5 Mobile Trauma care Units.

19.13 Free Hearse Service:

The Indian Red Cross Society is running the programme under the MOU with Tamil Nadu Health System Project. Under this programme the deceased are transported to the place of funeral or home free of cost irrespective of the distance within the State. The attenders of the deceased or the Chief Medical Officer of the Government hospital can contact the Central Response Centre by dialling 155377 which is functioning round the clock. This service also renders support during major accidents, natural calamities and disasters by transporting the deceased to the Government Hospitals for autopsy and then to their destination. So far, 6,35,569 cases have been transported through this service since launch. The cases requiring transportation beyond 300 kms are arranged through railways. Presently, the number of vehicles is 153 which will be increased to 180 this year.

Chapter - 20

COMMUNICABLE DISEASES

20.1 Tamil Nadu is the front runner in prevention, control and treatment of communicable diseases. Promotion of environmental sanitation, immunization and early identification and treatment of cases are the key strategies followed. Infectious diseases are mainly transmitted through water, food, air, fomites and vectors like mosquitoes. Integrated Surveillance Disease Programme (IDSP) monitors the occurrence of communicable diseases on 24x7 basis. Occurrence of infectious diseases are notified to the concerned local bodies, PHCs for organizing control measures. Cases from neighbouring states are also notified through IDSP. State level, district level and block level Rapid Response Teams are formed to organise control measures on war footing.

20.2 Vaccine Preventable Diseases:

Vaccines for Vaccine Preventable Diseases (VPDs) namely Diphtheria, Pertussis, Tetanus, Poliomyelitis, Tuberculosis, Hepatitis B, Haemophilus Influenzae B, Measles, Rubella and Japanese Encephalitis and Rota viral diarrhea are provided under the Universal Immunisation Programme in Tamil Nadu. Expanded Programme of Immunisation was launched in 1978. The programme was renamed as Universal Immunisation Programme in 1985.

20.3 Annually, around 12 lakh pregnant mothers are immunized with Tetanus diphtheria (Td vaccine) injection for prevention of diphtheria and Tetanus infection during delivery.

20.4 Pulse Polio Immunization (PPI)

immunization Sustained coverage and Pulse Polio Immunization campaigns conducted the year 1995-96 have successfully from eliminated the dreaded disease from the State. The state is polio free since 2004. During 2019, one round of pulse polio immunization campaign was conducted on 10.03.2019. The World Health Organisation certified the eradication of Polio virus type-2 signifying a milestone in eradication of Poliomyelitis and type-3 is under certification. As an endgame strategic step, Government introduced bivalent OPV and injectable polio vaccine in the immunization schedule. Vaccine Preventable Diseases surveillance including Acute Flaccid Paralysis surveillance is carried out to monitor the occurrence of Vaccine Preventable Diseases.

20.5 Japanese Encephalitis Vaccination

Japanese Encephalitis (JE) is transmitted by Culex mosquitoes breeding in rice fields and similar water collections. Children below 15 years of age are commonly affected by JE. In Cuddalore, Villupuram, Virudhunagar, Madurai, Tiruvarur, Tiruchirapalli, Perambalur, Ariyalur, Thanjavur, Tiruvannamalai, Pudukottai, Karur and Tiruvallur districts JE vaccine is administered.

20.6 Special Mission Indradhanush

The Ministry of Health and Family Welfare (MoHFW) Government of India, launched Special Intensified Mission Indradhanush to cover the left-out children for immunization. Under this special initiative all the districts in Tamil Nadu are covered in four phases.

20.7 Measles-Rubella Vaccine

Measles-Rubella (MR) vaccination was started from 6th February 2017. In the campaign, over 1.7 crore targeted children between 9 completed months and 15 years were vaccinated irrespective of previous immunization status or history of measles/rubella disease. MR vaccine is a safe vaccine.

20.8 Rota Virus vaccine

Diarrhoeal diseases are the leading cause for childhood mortality globally as well as in India. Hon'ble Chief Minister launched the introduction of Rota virus vaccination programme in Salem on 17.09.2017. Three doses are administered at the age of 6 weeks, 10 weeks and 14 weeks.

20.9 National Vector Borne Disease Control

Malaria, filaria, dengue, chikungunya and Japanese encephalitis are the major communicable diseases under the National Vector Borne Diseases Control.

20.10 Dengue

Dengue viral infection transmitted by Aedes mosquitoes is the most rapidly spreading mosquito borne viral disease of mankind with 30-fold increase in global incidence in the last five decades. It is a major public health concern throughout the tropical and sub-tropical regions of the world. Almost half of the world's population lives in countries where dengue is endemic.

department, The Public Health in coordination with the local bodies and other departments regularly undertake elimination of vector breeding places, like artificial containers, where fresh water can stagnate, such as broken utensils, discarded tyres, plastic waste cups and broken bottles which are critical for the control of Aedes mosquitoes and spread of dengue fever. Laboratory Testing facilities are available in 125 centres in the State. The State which had reported 23,294 dengue cases in 2017 was reduced to 4,486 with 13 deaths in 2018. During the current year, from January to June, 1,101 cases with zero death are reported. Daily

surveillance is carried out and now the disease is fully under control.

20.11 Chikungunya

Chikungunya is caused by a virus and transmitted to humans by Aedes mosquitoes. There is a decline in Chikungunya cases due to the control measures taken by the Government. The prevention and control measures against Chikungunya are carried out in an integrated manner with the Dengue control measures. 282 cases were reported during 2018 and in the current year from January to June, 154 cases have been reported.

20.12 Malaria

Though in the recent years, Dengue has been the main Public Health concern, Malaria also continues to remain a public health issue. Malaria is a parasitic disease caused by parasites Plasmodium known as vivax (P.vivax), Plasmodium falciparum (P.falciparum), *malariae* (*P.malariae*) Plasmodium and *Plasmodium ovale (P.ovale).* It is transmitted by the infective bite of Anopheles mosquito.

Humans get affected after 10 to 14 days of being bitten by an infective mosquito. The two types of parasites of human malaria, P. vivax, and P. falciparum, are commonly reported from India. Infection with *P.falciparum* is the of Malaria. The complicated form National Malaria Control Programme (NMCP) is implemented in the State from 1953 and the programme has been expanded in the following years and now Tamil Nadu is well on the road of Malaria Elimination by 2022. India aims to eliminate malaria by 2027.

Though the number of cases has shown a steady decline, still it is reported in few urban and rural areas in Tamil Nadu viz., Chennai, Ramanathapuram, Thoothukudi, Dharmapuri and Kanniyakumari Districts. Two rounds of Indoor Residual Spray are being carried out during June and September of every year in Malaria endemic villages to prevent Malaria transmission due to monsoon. The total number of positive cases recorded last year in the State was 3,787. In the current year from January to June 681 malaria cases have been reported.

20.13 Filaria

Lymphatic filariasis is transmitted by Culex mosquitoes breeding in dirty water. National Control Programme Filarial is under implementation in the State from 1957 with control activities now being carried out in 43 urban areas. 25 Control Units and 44 Night Clinics are presently functioning. 25,545 Lymphatic filariasis cases have been recorded in this State. Morbidity Management kits are also issued to these patients for foot care. Transmission Assessment Survey had been completed in all the 20 Filaria endemic districts. Government is providing financial assistance to the Grade IV Filaria patients at the rate of Rs.1,000/- per month. 8,023 patients have been benefitted by this scheme at a total expenditure of Rs.9.62 crore.

20.14 Integrated Approach to Mosquito Borne Diseases Control

The following measures are taken to control fever which is transmitted by mosquitoes.

• Daily fever surveillance

- Entomological surveillance to find out the vector density and initiate necessary control measures.
- Monitoring of dengue virus infection in Aedes mosquitoes and JE virus in Culex mosquitoes.
- Comprehensive measures for mosquito control, water quality improvement and environmental sanitation are carried out by local bodies with the technical support of public health department.
- Health education through schools/ colleges, short films screened in cinema theatres, miking, distribution of pamphlets
- Medical camps for treating fever cases.
- State level officials from Public Health Department, Municipal Administration, Rural Development and Panchayat Raj inspect various districts and monitor the daily fever situation and control measures.

20.15 Coordination with Neighboring States

Inter-state meetings in border districts, sharing of information on the occurrence of cases and organizing control measures.

24 Hours Control Room:

24x7 Control Room is functioning in the Office of Directorate of Public Health and Preventive Medicine to monitor the occurrence of infectious diseases reported by public, media and other sources. Public can get the necessary information from this control room by dialling to 044-24350496, 044-24334811 and Mobile No.94443 40496 and 87544 48477.

20.16 Acute Encephalitis Syndrome

Acute Encephalitis Syndrome (AES) is caused by various micro organisms. AES Surveillance information is collected from all major government and private hospitals on daily basis. After the reported incidence of Nipah virus infection in Kerala during May 2018 and 2019 and, Tamil Nadu Government has stepped up AES surveillance especially in the border districts through the Public Health Department along with Animal Husbandry and Forest Departments.

20.17 Leptospirosis

Leptospirosis is one of the serious zoonotic diseases which require timely diagnosis, treatment and control measures. A State Level Reference Laboratory is functioning at State Headquarters to provide laboratory confirmation and training. Leptospirosis testing facilities are also available in all District Public Health Laboratories and TANUVAS, Madhavaram, Chennai. 693 cases were recorded in the year 2018. During the current year, from January to June, 335 cases are reported.

20.18 A H1N1 Disease (Swine Flu)

Influenza Like Illness (ILI) surveillance is carried out on daily basis through IDSP. Swine Flu is one of the types of Influenza fever spreads through airborne route and hands. Apart from awareness and focus on hand washing, the Public Health Department has stocked adequate quantity of Cap. Oseltamivir. All the health care personnel involved in swine flu control operations are immunized annually.

20.19 National Leprosy Eradication Programme

Leprosy The National Eradication Programme (NLEP) is a centrally sponsored Health Scheme of the Ministry of Health and Family Welfare, Government of India. While the NLEP strategies and plans are formulated centrally, the programme is implemented by the States / UTs. Leprosy is a chronic infectious disease caused by Mycobacterium leprae. It usually affects the skin and peripheral nerves, but has a wide range of clinical manifestations. The disease is characterized by long incubation period generally five to seven years and is classified as pauci-bacillary or multi-bacillary, depending on the bacillary load. Leprosy was a leading cause of permanent physical disability. Timely diagnosis and treatment of cases, before nerve damage has occurred, is the most effective way of preventing disability due to leprosy.

20.20 Milestones in NLEP

 1955 –Launch of National Leprosy Control Programme (NLCP)

- 1983 –Launch of National Leprosy Eradication Programme
- 1983 Introduction of Multidrug therapy (MDT) in Phases
- 2005 Elimination of Leprosy at National Level
- 2012 Special action plan for 209 high endemic districts in 16 States/UTs

20.21 In Tamil Nadu National Leprosv Eradication Programme (NLEP) was launched during the year 1983. The main objective of this scheme is to identify the cases early and cure them completely with Multi-Drug Therapy (MDT). The prevalence rate of Leprosy in 1983 was 118 per 10,000 population. In 2005, the prevalence of leprosy was declined to less than 10,000 population and the State one per leprosy elimination achieved status. The prevalence rate is 0.39 per 10,000 population as on March 2019.

Re-constructive Surgery has been done to 116 patients in 2018-2019 and special varieties of footwears were given to 10,047 patients.

12,719 persons with ulcers were given Self-Care kits. At present, 7,327 persons affected with Leprosy are receiving pension of Rs.1,000/- per month other than those already availing the pensions under the Old Aged Pensions Scheme.

20.22 Epidemic Control Activities at the State and District Level :

The State level Epidemic Monitoring Committee and the Public health disease surveillance unit. coordinates with all departments and the stakeholders for effective monitoring and control. At the district level, the committee functions under District Collectors. The District Collector holds regular reviews to ensure the prevention and control of communicable diseases at the field level to reduce its spread and contain epidemic outbreak. They are involved in prevention of the other public health challenges like outbreak of acute diarrhoeal diseases by taking effective steps such as - ensuring regular cleaning of water tanks, testing samples, preventing sewage contamination and effective solid waste management practices etc. Sustained anti-larval

measures, improving environmental sanitation and public hygiene in districts through effective coordination with the local bodies, other line departments and involving the communities have been the cornerstone in the effective prevention and control strategy adopted by the State against communicable diseases.

20.23 Integrated Disease Surveillance Programme (IDSP):

Integrated Disease Surveillance Programme (IDSP) was launched as a Project with World Bank assistance in November 2004 to detect and respond to disease outbreaks quickly. The project was further extended upto March 2012. Currently, IDSP is implemented as a Programme by NHM with Government of India support. Surveillance units were established in the State and District level that are reporting to the Central Surveillance Unit (CSU) functioning in the National Centre for Disease Control, New Delhi.

• Weekly disease surveillance data on epidemic prone communicable diseases are collected from reporting units such as Health Sub Centres (HSCs), Primary Health Centres (PHCs), Community Health Centres(CHCs), Hospitals including Government and Private Sector Hospitals Medical Colleges. The and data are collected on 'S' syndromic; 'P' probable and 'L' laboratory formats using standard case definitions. Early Warning Signal (EWS) is generated whenever there is rising trend of illnesses or any clustering of cases from Government and Private Institutions. EWS is sent to the periphery for the early intervention and control of any eventual outbreak.

had Government of India launched • Integrated Health Information Platform replacing the IDSP program from the year 2019. The Integrated Health Information Platform (IHIP) is a web-enabled electronic information system that is embedded with applicable of all Government India's standards, Information e-Governance Technology (IT), data & metadata to provide State-of-the-Art standards single operating picture with geospatial information managing for disease outbreaks and related resources.

20.24 Surveillance of Epidemic Prone Infectious Diseases – Communicable Disease Surveillance Portal (CDSP)

A Web based surveillance on epidemic infectious disease notification prone System in 12 Corporations of Tamil Nadu (Communicable Disease Surveillance Portal - CDSP) was established in 2018 under Tamil Nadu Innovative Initiatives. The objective of the project is to simplify and automate with near real time data collection on disease information and to give automated alerts and communicate the same for necessary public health Information using Geographic action System. This has the potential to be expanded to all the districts of Tamil Nadu. The IHIP and CDSP will synergize and strenathen the dvnamic disease surveillance in Tamil Nadu.

20.25 District Public Health Laboratories (DPHL) under IDSP

Laboratory services are an essential component of disease surveillance, epidemiological surveys and operational research. The DPHL are the backbone of the laboratory network in Integrated Disease Surveillance Program (IDSP) for the prevention and control of epidemic prone diseases. The laboratory has an important role in improving the quality of health by rendering appropriate diagnosis thereby decreasing the morbidity and mortality in the community. 31 District laboratories and one state laboratory at the Directorate of Public Health and Preventive Medicine, Chennai are presently functioning.

20.26 International Health Regulations (2005)

The IHR (2005) aims to prevent, protect against, control and respond to the international spread of disease while avoiding unnecessary interference with international traffic and trade. The IHR (2005) are also designed to reduce the risk of disease spread at international airports, ports and ground crossings. The IHR (2005) establish a set of rules to support the global outbreak alert and response system and to require countries to improve international surveillance and reporting mechanisms for public health events and to strengthen their national surveillance and response capacities. This makes the IHR (2005) central to ensuring global public security. The IHR (2005) is health an international law which helps the countries to work together to save lives and livelihoods caused by the international spread of diseases and other health risk and came into effect since 15thJune 2007 and are binding on 194 countries across the Globe, covering all WHO Member States / Countries including India. The IHR (2005) require Countries to notify WHO of all events that may constitute a public health emergency of international concern and to requests for verification respond to of information regarding such events. This enables WHO appropriate to technical ensure collaboration for effective prevention of such emergencies or containment of outbreaks and, under certain defined circumstances, inform

other States of the public health risks, where action is necessary on their part.

20.27 Specific Diseases under the IHR (2005)

Under the IHR (2005), all cases of these four diseases must be automatically notified to WHO.

- i. Smallpox,
- ii. Poliomyelitis due to wild-type poliovirus,
- iii. SARS and
- iv. Cases of human influenza caused by a new subtype.

Vaccination against Yellow Fever is required for any traveller leaving an area where the WHO has determined that a risk of Yellow Fever transmission is present. In Tamil Nadu, two international vaccination centres have been established one at King Institute of Preventive Medicine and Research, Guindy, Chennai which functions on Tuesday and Friday and another at Port Health Organization, Chennai which functions on Monday and Wednesday. Airport and Seaport screening for the international travelers are regularly being done to monitor the spread of diseases notified by WHO as Public Health Emergency of International concern. Regular mosquito control measures are also being undertaken in the Airport and Seaport to prevent and control the spread of vector borne diseases.

20.28 Community Hygiene and Sanitation Campaign

An effective interdepartmental coordination between the relevant stakeholders has also been put in place to nip the spread of communicable diseases in the bud along with equal emphasis on creating awareness on personal and community hygiene practices. In this campaign, the main areas of thrust are

- Hand washing / Hand Hygiene
- Respiratory Hygiene
- Personal/Reproductive Hygiene
- Deworming
- Environmental Sanitation solid and liquid waste management
- Effective inter-departmental coordination

• Encouraging stakeholder participation to make it into a public movement

20.29 Hygiene is the most important component in the prevention and control of diseases spread through Air / Fomite, Water, Food, Vector and Zoonotic causes. Simple messages are spread through these campaigns on the need to wash hands regularly to prevent diseases like Swine Flu, keep the surrounding environment clean to prevent breeding of mosquitoes and to prevent mosquito borne diseases.

20.30 Water Analysis Laboratories - Water Quality Monitoring:

The Water Analysis Laboratories, established in Chennai, Coimbatore, Tiruchirapalli and Tirunelveli collect and examine water samples from various protected water sources to control pollution and contamination of drinking water. These laboratories also assist the Tamil Nadu Pollution Control Board in examining samples of industrial wastes and conducting field surveys to ensure the prevention and control of environmental and industrial water pollution. Additionally, the local bodies, TWAD and CMWSSB also independently do such testing at their levels also.

20.31 One Health Initiative

Tamil Nadu is the first State in India which started adopting the "One Health Initiative". Under this, human, animal and environmental health are discussed under one umbrella with a view to share disease intelligence especially on Zoonotic and Vector Borne issues. It would gradually be expanded to research to supplement the efforts in respective fields.

Chapter - 21

REVISED NATIONAL TUBERCULOSIS CONTROL PROGRAMME

21.1 The Revised National Tuberculosis Control Programme (RNTCP) was started in the year 1997 and is implemented throughout the State of Tamil Nadu since the year 2002. With both diagnosis and treatment has RNTCP become free of cost for all patients and there is no waiting period for patients seeking treatment and TB drugs now. The programme has come up with a National Strategic Plan 2017-2025 to leverage its full potential and to propose transformational changes in the TB care service delivery. Tamil Nadu is the first State to implement nutritional support through Direct Benefit Transfer (DBT) under Nikshay Poshan Yojana (NPY) in the country from April 2018.

Objectives	Baseline	Target		
Objectives	2015	2020	2023	2025
To reduce estimated TB Incidence rate (per 100,000 population)	217	142	77	44
To reduce estimated mortality due to TB (per 100,000 population)	32	15	6	3
To achieve zero catastrophic cost for affected families due to TB	35%	0%	0%	0%

The objectives of the RNTCP are:

21.2 The RNTCP aims at diagnosing and caring for TB cases both in the public as well as in the private sector. The Drug Sensitive TB (DSTB) is treated using Fixed Drug Combinations (FDCs) through Directly Observed Treatment (DOT) strategy which could be institutional, community based, family DOT or ICT based depending on the patient preferences. There are provisions to make RNTCP FDCs available to private providers, if the patients and provider prefer the same. The Programmatic Management of Drug Resistant TB (PMDT) is

being implemented in the State since 2009, also aims at early diagnosis of Drug resistance TB cases and treating them with appropriate regimen.

21.3 The infrastructure and the facilities available in the State under the programme are as follows:

State TB Training & Demonstration Centre (STDC)	1
District TB Centres (DTCs)	35
TB Units (TU)	461
Designated Microscopy Centres (DMCs)	1,984
Intermediate Reference Laboratory (IRL)	2 (Chennai, Madurai)
Culture & Drug Sensitivity (C&DST) Labs (excluding IRL)	2 (Trichy Medical College & Christian Medical College, Vellore)

Liquid Culture Laboratories for 2 nd line DST	2 (Chennai IRL, Madurai IRL)
Cartridge Based Nucleic Acid Amplification Testing (CBNAAT) Labs	68 + 2 (Mobile)
Nodal Drug Resistant TB Centre (DRTBC) (MDR TB Wards)	7 Nodal DRTB Centres
District Drug Resistant TB Centre (DDRTBC) (MDR TB Wards)	24

21.4 Monitoring, Notification regarding number of cases diagnosed, number of cases treated:

 All Patients registered are now being monitored online using the web portal Nikshay. Notification of TB cases diagnosed/treated by the private sector is also ensured through this portal. So far 22,960 private health facilities are registered in Nikshay.

- In 2018, 1,04,055 TB patients were notified in Nikshay web portal
- Drug logistics are monitored & managed using the web portal **Nikshay Aushadhi**.

21.5 Programmatic Management of Drug Resistant TB (PMDT):

- DR-TB wards have been created for programmatic management of Drug Resistance TB (DR-TB). Extremely Drug Resistance TB cases are managed at Nodal DR-TB Centres established at GHTM, Tambaram – Kanchipuram District, Chennai, Coimbatore, Madurai, Tirunelveli, Thanjavur and Vellore.
- Specialised lab diagnostic services such as Solid Culture Test (LJ-Lowenstein Jensen Medium), Liquid Culture Test (MGIT – Mycobacterium Growth Indicator Test), Line Probe Assay (LPA) are done at Intermediate Reference Laboratory (IRL) and Culture and Drug Sensitivity Test (C&DST) Labs.

 New TB drugs namely Bedaquiline for Adult TB patients and Delamanid for pediatric TB patients have been introduced in our state for the first time in the country for DR-TB patients. As on 31st, March 2019, in Tamil Nadu there are 276 eligible patients being treated with Bedaquiline.

21.6 TB – HIV Services: All the presumptive TB cases and registered TB patients are being screened for HIV. All the HIV-TB co-infected patients are started on TB treatment and referred to ART Centres for Anti Retro Viral Treatment and CPT (Cotrimoxazole Prophylaxis Treatment).

YEAR	HIV TESTED	HIV-TB COINFECTED	СРТ	ART
2018	75,662	3,047	3,550	3,531
2019				
(upto	20,111	780	767	769
March)				

21.7 Paediatric Services (Diagnosis and Chemoprophylaxis):

- Fixed Drug Combinations (FDCs) for Paediatric cases, depending on weight bands are available under the programme.
- Any child contact of a microbiologically confirmed TB case between the ages of six months to six years is given Isoniazid Prophylactic Therapy (IPT) to decrease the risk of TB disease.

21.8 Nutrition Support through Direct Benefit Transfer (DBT):

- As nutritional status is an important component for recovery from TB, the Government has decided to give Rs.500/monthly for all TB patients taking treatment in both public and private sectors. This money will be transferred directly to their bank account.
- Monetary incentives for private service providers are given in two installments, first installment at the time of notification and the second at the time of outcome

declaration. Incentive for treatment supporter is also being given as DBT.

21.9 Involvement of private sector for increasing case detection:

- In 2018, the project "Joint Effort for Elimination of TB" (JEET) was launched to engage the private service providers to notify the TB patients.
- As a part of Patient Provider Support Agency (PPSA) "Zero TB Chennai Project -2023" has been initiated in Greater Chennai Corporation along with NGO notifying, Partners for providina treatment, investigation, counselling, nutritional support and follow-up services for the patients treated in the private sector. In addition to this, 21 districts have been covered under PPSA Lite (one coordinator for three districts).

21.10 New Initiatives:

 As the incidence of TB cases in Tamil Nadu is showing a steady decrease, "TB Free Tamil Nadu – 2025" Strategy in all districts based on the four pillars of national strategic plan, namely "Detect – Treat – Prevent – Build" (DTPB), has been initiated.

- Active Case Finding (ACF) was conducted in all the districts of Tamil Nadu using two mobile CBNAAT vans.
- Screening of inmates of prisons and other closed settings like Swadhar and Ujjwala homes for both TB & HIV.

21.11 Government Welfare Schemes for persons affected by T.B.

- Tamil Nadu Government provides financial support of Rs.1,000/- per month to the T.B affected persons who possess Farmers Protection card.
- Tamil Nadu is taking necessary steps to eliminate T.B by the year 2025 well ahead of target year 2030.

Chapter – 22

NATIONAL TOBACCO CONTROL PROGRAMME

22.1 The National Tobacco Control Programme (NTCP) was launched by the Ministry of Health and Family Welfare, Government of India in 2007-2008, during the 11th five year plan, with the following objectives: to bring about greater awareness about the harmful effects of tobacco use and Tobacco Control Laws and to facilitate effective implementation of the Tobacco Control Laws. The National Tobacco Control Cell (NTCC) at the Ministry of Health and Family Welfare is responsible for overall policy formulation, planning, implementation, monitoring and evaluation of the different activities envisaged under the National Tobacco Control Programme (NTCP).

22.2 The interventions under the National Tobacco Control Programme have been largely

planned at the primordial and primary levels of prevention. The main thrust areas for the National Tobacco Control Programme are as follows:

- Training of health and social workers, NGOs, School Teachers, Enforcement Officers and others.
- ii) Information, Education andCommunication (IEC) activities.
- iii) School Programmes.
- iv) Monitoring Tobacco Control Laws.
- v) Co-ordination with Panchayat Raj Institutions for village level activities.
- vi) Setting-up and strengthening of cessation facilities including provision of pharmacological treatment facilities at district level.

Implementation of the Programme in Tamil Nadu

22.3 The National Tobacco Control Programme is implemented in Tamil Nadu since 2003. The State Tobacco Control Cell is functioning under the Director of Public Health and Preventive Medicine since 2007. The District Tobacco Control Cell has been formed in all the districts and functioning under supervision of the Deputy Director of Health Services.

22.4 Tamil Nadu is the first State in India to collect maximum fine amount from the violators of the Cigarette and Other Tobacco Products Act (COTPA), 2003. From 2nd October, 2008 to 22nd May, 2019, 2,07,114 persons were fined and Rs.3.23 crore has been collected from the violators of COTPA, 2003. Enforcement squad is formed at State, District, Block and Village Level to monitor the violations under the COTPA, 2003. Officials from Government Departments such as Police, Education, Railway, Airport, Health, etc., and Non-Government organizations such as civil societies, self-help

group, youth club, police boys club, etc., were trained on tobacco control.

In Tamil Nadu, 12,798 schools and 1,344 colleges were declared as "Tobacco Free Educational Institutions" under specified criteria. 684 Medical Officers, 148 NCD Staff Nurses, 53 ICTC Counsellors 178 youth Health volunteers trained tobacco were on cessation methodologies for setting up of tobacco cessation clinic / centres in their Hospitals / Primary Health Centres. Mass IEC campaigns such as celebration of World No Tobacco Day, Rally, IEC on Wheels, Human Chain, Signature campaign, distribution of pamphlets etc., has been held on regular basis to educate public about ill-effects of tobacco.

Chapter – 23

The Tamil Nadu Dr.M.G.R Medical University

23.1 The Tamil Nadu Dr.M.G.R Medical University is one of the largest Medical Universities in India. The University was established by the Tamil Nadu Dr.M.G.R Medical University Chennai, Act 1987 and started functioning from July 1988.

23.2 This is the only Health Sciences University in Tamil Nadu capable of granting affiliation to new institutions under Government or Self-financing establishments in Medical, Dental, AYUSH, Pharmacy, Nursing, Physiotherapy, Occupational therapy and various Allied Health Sciences Educational Streams, awarding degrees.

23.3 Various departments of the university have had good performance records over the last year. The HIV Testing Laboratory in the Department of Experimental Medicine has been accredited by NABL (National Accreditation Board for Laboratories) with validity till May

2021. The Department NRL has been identified as one of the HIV sentinel surveillance testing centres. Apart from routine laboratory tests, the Department and its laboratory are part of the External Quality Assurance programme of NACO and have scored 100% in Proficiency Testing.

23.4 The Department of Transfusion Medicine runs the M.D. Immuno Haematology and Blood Transfusion programme with an The annual intake of five candidates. department, which is also a NACO recognised 'Regional Training Centre' for Blood transfusion Services, has conducted more than 80 Blood Donation Motivation Programmes and around 60 Voluntary Blood donation Camps in the academic year 2018-2019. The department's Advanced Immuno Haematology Laboratory has been able to resolve 71 discrepant samples.

23.5 The Department of Epidemiology has been vividly active during the academic year. In an enthusiastic attempt to set the bar of standard well above the average, the department has trained over 2600 participants in 15 training workshops in Research Methods, Scientific Medical Writing and Health Statistics Software. With two externally funded projects related to Improvement of Maternal Health and Infant Health, the department is involved in several projects including that of Needs Assessment for Capacity Building in Cardio-Pulmonary Resuscitation. The Department runs two Masters programmes, one in Public Health and the other in Epidemiology.

23.6 The Department of Immunology is an ICMR Nodal Centre for Zika, dengue and Chikungunya virus testing. The Department conducts regular training programmes and does regular quantitative analysis of Hepatitis viruses.

23.7 The Department of Medical Genetics offers diagnostic services, conducts capacity building workshops and pursues applicative research. The department runs special clinics at the Institute of Child Health, Egmore and at Kasturba Gandhi Hospital, Triplicane. The department was awarded the European Cytogenetic Association Fellowship in France.

This is the first time that anyone from India wins this award. Apart from winning prizes at Paed Endo 2019, Myocon 2018 and ENRICH 2018, the department has been able to publish its research work in peer reviewed International and National journals.

23.8 The Department of Siddha has a recognized Drugs Standardisation Laboratory. Siddha out-patient clinics are run in the University campus itself and the department conducts Research Methodology workshops for AYUSH postgraduate students.

23.9 All departments are involved in periodic conduct of continuing education programmes. 21 such continuing educational programmes and 27 workshops have been conducted in the academic year 2018-2019.

23.10 The University campus houses the main University Administrative building, Blood Bank, Auditorium, Guest House and Canteen. The University offers students a conducive atmosphere for learning by providing easy

access in the library and also accommodating an Own Books Reading Hall in the campus.

23.11 The Regional Medical Library provides information in electronic format in Virtual Library. It also offers online access to International journals through e-consortium to students and faculty of affiliated colleges. The auditorium has a seating capacity of 950 and is designed like an Amphitheatre.

23.12 The University has established University Research Council & Center for CME accreditation, so that the graduates are properly trained in order to meet International Standards. Meritorious students in all fields of Medicine, Dentistry, AYUSH and Allied Health Sciences are awarded Endowment Gold and Silver medals.

23.13 The quasi-academic and administrative workload of the Tamil Nadu Dr. M.G.R. Medical University is also huge and timebound. On an average, over 7800 eligibility certificates to various candidates are issued annually. In the first quarter of the academic year 2019-2020, around 1000 eligibility

certificates have already been issued. About 1500 to 2000 migration certificates are issued annually. The university currently has 99,345 students spread across its affiliated institutions.

23.14 With over 600 institutions of medical, dental, AYUSH, pharmacy, nursing, and various other Allied Health streams under its fold, the Tamil Nadu Dr. M.G.R. Medical University has set itself the twin objectives of Quality Education and Applicative Research.

23.15 This university addresses the factor of Ouality Education by several measures. One such measure is to ensure high guality examination and evaluation. Stringent and fool-proof methods are adopted in all processes of the examination right from the level of setting questions to the time of publication of results. We have implemented the system of on-screen evaluation avoid any mishandling to or tampering of answer scripts. The system ensures a quick and efficient evaluation process. The system has been refined and fine tuned further, from the time of its original inception

and as a result, has anchored itself in academic excellence. Consequent to such robust refinement, this university has been requested by other universities and academic bodies around the country to help in the setting up of similar systems in their respective consoles.

23.16 The sector of Medical and related education is ever expanding and thereby calls for not only academic accreditations but also educational research. Measures are beina undertaken to strengthen the research programmes of the university and the affiliated institutions. The TN Dr. M.G.R. Medical University has been conducting several allied health science programmes. Integrating the spirit of an allied health programme and that of health awareness, a new programme on health journalism been designed. has This new programme will attempt to train ambitious young aspirants in the art and craft of health journalism and health promotion journalism. Activities ranging from the creation of a book with an exclusive style to the designing of

empathetic health reports will form part of this programme.

23.17 Intellectual plagiarism is a problem of the emerging world. With more and more technological advancement, it becomes easier to plagiarise than to install measures to curb it. We have dedicated ourselves to resolve this issue. The university is set to embark on a project to not just ensure protection but provide appropriate recognition of intellectual property. Such a measure will not only fortify existing research avenues but also open the doors for newer and better focussed projects.

23.18 In addition to being a medical or Health Sciences University, the TN Dr MGR Medical University also strives to be a health promotion University. Plans and proposals in this regard are in the pipeline. In a bid to create adequate and appropriate awareness about various disease-control and health promotion measures, the university is already conducting awareness programmes in various schools and colleges. The initiative will be further extended

to have regular interactive programmes on topics of health care interest. As of now, these interactive programmes are proposed to be held fortnightly at the Guindy campus of the university utilising the expertise and services of various speciality exponents in the University and the affiliated institutions.

23.19 Efforts are under way to start appropriate joint programmes in Medical law, Legal medicine and genetic technology in coordination with certain other universities of the State.

23.20 Overall, the University is positively contributing to the growth of Health Sciences Education, while upholding the highest ethical and professional standards.

Chapter - 24

CERTAIN IMPORTANT ACTS

24.1 The Tamil Nadu Clinical Establishments (Regulation) Act, 1997:

The Government of Tamil Nadu, as a pioneer State to other States and the Central Government had enacted Tamil Nadu Private Clinical Establishment (Regulation) Act, 1997 in order to regulate and control Private Hospitals, and Nursina Homes Other Clinical establishments in the State of Tamil Nadu. However this Act was not brought into force due to non-framing of the Rules. Meanwhile, the Government of India has enacted the Clinical Establishment (Registration and Regulation) Act, 2010 and sent draft model State Rule to all State Governments, including this Government for consideration and adoption. Since Tamil Nadu has already enacted the Tamil Nadu Private Clinical Establishment (Regulation) Act, 1997, it was decided to constitute a Committee comprising of eminent persons to examine the salient features of above two Acts and submit its recommendations to the Government.

Accordingly, a Committee was constituted and the Committee submitted its report to the Government. Based on the recommendations of the said Committee, the Tamil Nadu Act of 1997 has been suitably amended by enacting two legislations Tamil Nadu viz. Clinical Establishment (Regulations) Amendment Act, 2018 and the Tamil Nadu Clinical Establishment (Regulation) Rules, 2018 to bring all the clinical including establishments the clinical establishments maintained by the Government and the Local Bodies under the purview of the said Tamil Nadu Act. As per the Act, all Clinical Establishments have to apply for registration and registration certificates, after following the procedures laid down in the Act and Rules, are being issued.

24.2 Pre-Conception and Pre-Natal Diagnostic Techniques (Prohibition of Sex Selection) Act, 1994:

Pre-Conception and Pre Natal Diagnostic Techniques (Prohibition of Sex Selection) Act, 1994 is being implemented effectively in this State to curtail the highly adverse sex ratio and to prevent female foeticide. For effective implementation of the Act, State, District and Sub District level Advisory Committees have been constituted. Under the Act, all such organizations involving in the Pre-Natal Techniques Diagnostic should register themselves with the Appropriate Authorities. Under the Act, 6,853 Scan Centres have been registered so far and cases have been filed against 140 centres for the violation of the Act. Out of 140 cases filed, judgement has been delivered in 109 cases and remaining 31 cases are under trail. Surprise check of the Scan Centres and MTP Centres has been conducted, where the Juvenile Sex Ratio is below the State level of 946.

24.3 Transplantation of Human Organ Act, 1994:

The Transplantation of Human Organ Act, 1994 was enacted by the Government of India to eradicate the menace of human organs trade and to regulate the removal, storage and transplantation of human organ for the therapeutic purpose. In Tamil Nadu, transplantation of human organs is being done only in the hospitals registered for this purpose under this Act. The Director of Medical and Rural Health Services who is the State Appropriate Authority under the Act, issues the registration certificate to the applying hospital based on the inspection report furnished by the team of appointed for this purpose. The specialists hospitals which are registered under this Act conduct alone Human can Organ Transplantation. In Tamil Nadu, 130 hospitals are registered under this Act for performing renal, heart, liver, lungs and heart valves transplantations.

24.4 Deceased Organ Transplant Programme:

Tamil Nadu continues to be the leader in organ donation in the country. Tamil Nadu was one of the first States to start the programme way back in 1995, after a resolution was passed in the Tamil Nadu State Assembly to adopt the Central Act. It has had an organ sharing network since 2000. The present Deceased Organ Transplant Programme has been implemented in the State of Tamil Nadu from 16.09.2008 and a "Premier" State in the country, with ten times higher than the average rate of other States. The Government of Tamil Nadu has formed Transplant Authority of Tamil Nadu (TRANSTAN), under the Chairmanship of the Hon'ble Chief Minister which enables extension of more effective implementation of the scheme. It was registered as Society in 2015 to give it functional necessary and operational independence on the lines of the Tamil Nadu Medical Services Corporation (TNMSC) and Tamil Nadu State AIDS Control Society (TANSACS). Tamil Nadu ranks number in the one of the implementation Deceased Organ Transplant Programme. The State has bagged awards consecutively for four years from 2015 to 2018.

24.5 Since the establishment of the programme, 1,243 donors have donated the organs. The details of Donors and Organs donated in Tamil Nadu are given below:

	From October 2008 to April 2019
Donors	1,243
Heart	504
Lung	401
Liver	1,152
Kidney	2,250
Pancreas	25
Small Bowel	3
Hands	2
Total Major Organs	4,338
Skin	718
Corneas	1,886
Heart Valves	794
Blood Vessels	2
Bone	37
Spine Bone & Disc Tissue	21
Abdominal Flap	1
TOTAL	7,197

24.6 Tamil Nadu Public Health Act, 1939 :

Tamil Nadu is the first State in the country to enact a law for public health namely Tamil Nadu Public Health Act, 1939. The Act has been amended in 1941, 1944 and 1958 and the Act was modified in 1970. The main focus of the Public Health Act, 1939 is on environmental health, communicable disease control, food hygiene and maternity and child health Since newer challenges such as measures. emerging and re-emerging diseases, increasing industries in food production, emerging social issues like Gender issues, adolescents, geriatric issues, increasing environmental hazards layer depletion, weaning greenery, Ozone bio-degradation, environmental radiation, pollution due to change in life style have emerged, the Public Health Act needs a relook and the Government is taking action to amend the Act. Tamil Nadu, to its credit also had the first Act in the country for food adulteration i.e. the Tamil Nadu Prevention of Food Adulteration Act, 1918, till the Act was repealed by the Central Act, 1954. It has since been enacted as the Food Safety and Standards Act, 2006 and Rules, 2011 and has replaced the Prevention of Food Adulteration Act, 1954.

24.7 Civil Registration System: Prior to the introduction of Registration of Births and Deaths Act, 1969 by the Government of India, registration of births and deaths in Tamil Nadu was carried out under the provisions of Madras Panchayats Act, 1899 in rural areas, the Madras Districts Municipalities Act, 1920 in the Municipalities and in selected Town Panchayats and the Madras City Municipal Act, 1919 in Chennai Corporation. The Registration of Births and Deaths has been made compulsory at the place of occurrence under the Central Act, 18 of 1969. With the implementation of Tamil Nadu Registration of Birth and Death Rules, 2000 with effect from 01.01.2000 and in accordance with the provisions of Section 30(2)(b) of the Registration of Births and Deaths Act, 1969, the registration of birth and death should be done within 21 days of its occurrence for registration. However, provisions are made in the Act and rules to register the events beyond 21 days also. After 21 days but within 30 days, the events can be registered with late fee. After 30 days but within a period of one year, the events can be registered with a written permission of the

prescribed authorities along with late fee. For the events which have not been registered within one year of its occurrence, only the Executive Magistrate not below the rank of Revenue Divisional Officer is empowered to grant permission to register. Further, the child's name once registered cannot be changed. For all births / deaths which are registered within 21 days, one copy of birth / death certificate is issued at free of cost to the informant. As per the Act, the birth or death can be registered at the place of occurrence and not in the native place or at the place of burial.

The Registration of Birth and Death Act, 18 of 1969 came into force in Tamil Nadu from 01.04.1970. As per the Act, all births and deaths have to be reported compulsorily for registration at the place of occurrence within 21 days of their occurrence. The Registration work is governed by Tamil Nadu Registration of Birth and Death Rules, 2000. The Birth and Death registration activity is carried out by Birth and Registrars of Death various departments in 32 Revenue Districts through 16,501 Registration Units. At present the level

of registration has attained 100% in Birth and CRS Common Software developed by Death. this department is successfully functioning from 01.01.2018 onwards. A total of 9,01,822 births and a total of 5,31,138 deaths have been registered in the CRS common software during the year 2018 and the birth/death certificates are generated in the above software by the Birth and Death Registrars of all connected In order to issue free birth departments. certificate to the mother before discharge from the Government Medical Institution and to issue free death certificate to the relatives / persons who accompany the deceased, the Government have ordered for the appointment of Multi Purpose Health Supervisor (Male) as Birth and Death Registrars for all Govt. District Head Quarters Hospital, Taluk/Non-Taluk Hospital, Government Medical College Hospital, ESI Hospitals and Women and Children Hospitals Village Panchayats, situated in Town Panchayats, Municipalities and Corporations (other than Chennai). Through CRS common software Birth and Death certificates are issued free of cost.

24.8 Medical Certification of Cause of Death:

The Medical Certification of Cause of Death (MCCD) procedure is a part of Civil Registration System and was introduced in seven selected Municipalities and Chennai Corporation during 1969 and later it was extended to all Municipalities and Corporations from 1980. Further, it was extended throughout the State from 1984. Regular trainings are given to every year to improve Doctors Medical Certification of cause of death. In order to capture cause of death, the software developed by NCDIR (ICMR), Bengaluru e-Mor is to be piloted shortly.

24.9 Cigarettes and Other Tobacco Products Act (COTPA), 2003

In order to discourage tobacco use and protect the youth and masses from the harmful effects of tobacco usage and Second Hand Smoke (SHS), Government of India enacted "Cigarettes and other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, (COTPA) in 2003". The Act imposes progressive restriction on all tobacco products to reduce their demand and supply. The law is applicable to all tobacco products and extends to whole of India. The specific provisions of the COTPA include:

- i. Section 4: Prohibition of smoking in public places
- ii. Section 5: Prohibition of direct and indirect advertisement, promotion and sponsorship of cigarette and other tobacco products.
- Section 6(a): Prohibition of sale of cigarette and other tobacco products to a person below the age of eighteen years.
- iv. Section 6(b): Prohibition of sale of tobacco products within a radius of 100 yards of educational institutions.
- v. Section 7: Mandatory depiction of Statutory warnings (including pictorial warnings on tobacco packs).
- vi. Section 7(5): Display of tar and nicotine contents on tobacco packs.

Chapter - 25

RESEARCH AND TRAINING

25.1 Government of India has created a new Department (Department of Health Research) under the Ministry of Health and Family Welfare to promote health research activities and three schemes namely, Establishment of Multi-Disciplinary Research Units, Establishment of Network Laboratories for managing epidemics and natural calamities and Establishment of Model Rural Health Research Units have been launched. State has always promoted health research and allowed concurrent studies on its programmes with a view to keep improving the scheme outputs and ultimately outcomes in the health sector.

25.2 Multi-Disciplinary Research Units (MDRUs):

has been This scheme approved to Multi-disciplinary Research establish Units (MRUs) in State Government run Medical Colleges during 12th plan, with a view to create a dedicated infrastructure for research in Government Medical Colleges with special focus on Non-Communicable Diseases. Five MDRUs have been sanctioned to Tamil Nadu for Madras Medical College, Tirunelveli Medical College, Coimbatore Medical College, Dr.ALM Post Graduate Institute of Basic Medical Sciences, Taramani and Chengalpattu Medical College.

25.3 Objectives of the MDRUs are:

- Encourage and strengthen an environment of research in Medical Colleges.
- Bridge the gap in the infrastructure which inhibits health research in the Medical Colleges by assisting them to establish multi- disciplinary research facilities, with a view to improve the health research and health services.
- To ensure the geographical spread of health research infrastructure, in order to cover un-served and under-served Medical Colleges and other institutions.
- To improve the overall health status of the population by creating evidence-based application of diagnostic procedures / processes / methods.

25.4 Establishment of Network of Research Laboratories for Managing Epidemics and Natural Calamities -Viral Research Diagnostic Laboratory (VRDL):

are being established These labs at Medical Madurai College and Government Medical College, Theni. The scheme entails establishment of labs in the State Government Medical Colleges for timely diagnosis and management of viral epidemics and new viral infection at a cost of about Rs.1.44 crore for equipment and civil works / renovation of building each under the scheme. In addition, recurring expenditure of Rs.30 lakh per annum, comprising expenses on staffing, consumables and contingencies and training is also provided. With a view to provide diagnostic facilities for viral diseases within the district using State funds, Molecular Virology Lab has been established in the Madras Medical College and Government Medical Colleges of Madurai, Coimbatore and Tirunelveli at a cost of Rs.125 lakh each.

25.5 Model Rural Health Research Unit:

Such a unit has been established at Government Primary Health Centre, Kallur, Tirunelveli district and linked to Tirunelveli Medical College, Tirunelveli in order to serve as model for transferring the technology to State health personnel working for the rural masses for early diagnosis and management of various diseases for the benefit of rural population.

Public Health

25.6 Tamil Nadu is currently undertaking many innovative initiatives through State, National and International collaborations.

- An innovative project with the funding support of the State Planning Commission under TANII, has been launched for Surveillance of Acute Encephalitis Syndromes in District Public Health Laboratories, Medical College Hospitals and King Institute of Preventive Medicine, Guindy.
- ii) Centre for Disease Control (CDC) India Funding Projects.

- Tiruvallur District has been taken as model district for disease control in collaboration with National Institute of Epidemiology (NIE) with funding support of CDC India.
- Anti-Microbial Resistance (AMR) Programme through Global Health Security Agenda (GHSA) in two districts (Kancheepuram and Tirunelveli) with funding support from CDC India.
- Acute Febrile Illness pilot Project in Krishnagiri and The Nilgiris district with funding support from CDC, India.
- Global Food Borne Diseases Prevention Network scheme in two districts viz. Kancheepuram and Cuddalore through funding from NCDC.

These Programmes are continuing.

 The Tamil Nadu Dr. M.G.R. Medical University and the Government Medical Colleges also serve as base where the teaching staff also engage in publishing research papers which are topical in Nature and useful for furthering the cause of Medicine.

25.7 Training and Continuing Health Education Programme:

Continuing education, In-service training Pre-service training programmes and are organized for the Health Officers, Medical Officers, Nurses and other paramedical staff through eight Regional Training Institutes (RTI) namely Institute of Public Health, Poonamallee, Health and Family Welfare Training Centres (HFWTC) at Egmore and Madurai, Health Manpower Development Institutes at Villupuram and Salem, Institute of Vector Control and Zoonoses, Hosur and Regional Institute of Public Health, Thiruvarankulam, Pudukottai and HFWTC, Gandhigram, Dindigul. The Institute of Public Health, Poonamallee is recognised as a National Collaborative Training Centre with National Institute of Health and Family Welfare, New Delhi. During the year April 2018 - March 2019, 26,831 Medical, Para Medical Staff and other Staff were trained in these Institutions.

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The Training programmes organised by the National Health Mission, Capacity Building Trainings in Skilled Birth Attendance (SBA), Emergency Obstetric Care (EmOnC, six months training), Life Saving Anaesthesia Skills (LSASsix months training), Skill lab programmes, Integrated Management of Neonatal and Childhood Illness, Immunization, Integrated Disease Surveillance and Control Programme (IDSP), Computer Training and other NHM training programmes are organized in these training institutes. Ultra sonogram training is given to doctors working in the Primary Health Centres for detection of congenital deformities during pregnancy in Public Private Partnership mode. Presently, there are 11 Auxiliary Nurse Midwifery (ANM) Training and Schools functioning in the State and they have been permitted to train 60 candidates each from 2018 onwards. These training schools conduct two year ANM course. The Anganwadi workers from department ICDS and candidates from Government Service Homes are being selected for this course. During the year 2018-2019, 660 candidates have been selected and they are undergoing ANM training course in these Institutions.

25.8 The Director of Public Health and Preventive Medicine (DPH&PM), is the Chairman for Board of Examination for ANM Training Course run by Private Institutions. Accordingly, 36 Private Trusts / Institutions have been permitted to start ANM Training Schools for the academic year 2017-2018 and 2018-2019. The DPH&PM, is also Chairman for Board ∩f Examination for Multi Purpose Health Worker (Male) / Health Inspector / Sanitary Inspector Training Course run by Private Institutions. Accordingly, 54 Private Trusts / Institutions have been permitted to start MPHW(M) / Health Inspector /Sanitary Inspector Course Training Institutes for the academic year 2017-2018 and 2018-2019.

25.9Multi Purpose Health Workers (Male) Training Course:

One month in-service training was given to 296 Multi Purpose Health Workers (Male) working in this department in a phased manner at the Regional Training Institutes at Madurai and Hosur. Further, 40 Laboratory Technicians Grade-III were given Multi Purpose Health Worker training at the Regional Training Institute at Hosur. Besides this, one year Multi Purpose Health Worker (Male) Training was given to 6 candidates from National Leprosy Eradication Programme. Apart from this, 10 Sanitary Supervisors from Municipal Administration Department are undergoing one year Sanitary Inspector Training course at Institute of Public Health, Poonamallee.

25.10 Universal Health Care Coverage:

Under Universal Health care Coverage, it is planned to provide one month training to 803 Staff Nurses in 4 Training Institutes and 2 days training to 918 Staff Nurses in 10 Training Institutes. 6 months certificate course in Community Health Care for Village Health Nurses with supportive guidance and affiliation of The Tamil Nadu Dr. MGR Medical University, Chennai has been started from January, 2019 onwards in 10 Training Institutes. 420 VHNs / ANMs have undergone Mid-Level Health Care Provider (MLHP) Training in 7 Training Institutes. **25.11** Tamil Nadu is implementing several land mark schemes and has State of Art facilities, robust public private partnership, well qualified human resources, fore runner in implementing Maternal, Child Care and Family Welfare services which enabled the State in being ranked among the top three States in the Healthy State - Progressive India report released by the NITI Aayog. All these efforts will continue to be implemented to achieve the health indicators on par with developed countries as indicated in the Vision 2023 document.

Tamil Nadu Health and Family Welfare Department is committed to ensure top quality health care services to the people of the State and strives to attain highest inter-national standards.

Dr. C. VIJAYABASKAR

Minister for Health and Family Welfare