

Internship Training

At

International Institute of Health Management Research, New Delhi

**A CASE STUDY ON TAMIL NADU'S PUBLIC HEALTH CADRE AND ITS ROLE
IN PUBLIC HEALTH SYSTEM**

By

Name – Dr. Abha Singh

Enroll No. PG/19/003.

Under the guidance of
Dr. Vinay Tripathi

Post Graduate Diploma in Hospital and Health Management
2019-21



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**International Institute of Health Management Research
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**A CASE STUDY ON TAMIL NADU'S PUBLIC HEALTH CADRE AND ITS ROLE
IN PUBLIC HEALTH SYSTEM**

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Ms. Divya Aggarwal
Associate Dean, Academic and Student Affairs
IIHMR, New Delhi

Dr. Vinay Tripathi
Associate Professor
IIHMR, New Delhi

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This is to certify that the dissertation titled “**A Case Study on Tamil Nadu’s Public Health Cadre and its Role in Public Health System**” and submitted by Dr. Abha Singh Enrollment No.PG/19/003 under the supervision of Dr. Vinay Tripathi and Dr. Manish Priyadarshi for award of PGDM (Hospital & Health Management) of the Institute carried out during the period from 1st March to 31st May, 2021 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

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Name of the Student: Dr. Abha Singh

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Abstract

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International Institute of Health Management Research

New Delhi

INTRODUCTION AND BRIEF ORGANIZATIONAL PROFILE

IIHMR (International Institute of Health Management Research) Delhi, a part of the IIHMR Society, was founded on 18th August 2008, with a mandate to focus on national and international health, catering to the growing needs of the country as well as those of the Asia-Pacific region. The Institute aims to play a major role in promoting and conducting research in policy analysis and formulation, strategy development and effective implementation of policies, training, and capacity development in preparing professionals for the healthcare sector. It conducts and designs policy analysis and reviews. It also undertakes intervention research, evaluation studies and operations research studies. The Institute offers a two-year full-time Postgraduate Diploma with specialization in Hospital Management, Health Management and Healthcare Information Technology. The program is approved by the All-India Council for Technical Education (AICTE) and has been accredited by the National Board of Accreditation (NBA). To meet the educational challenges of the rapidly growing health sector in India, IIHMR Delhi equips its students with a strong managerial and technical foundation for careers in consulting, hospital management, health care systems, healthcare quality management, health insurance and healthcare information technology, business analysis and transformation.

The aesthetically designed and magnificently built campus of IIHMR is in Dwarka, New Delhi. The infrastructure as well as the facilities are at par with international standards and meet all academic and administrative requirements. The well-lit spacious air-conditioned classrooms equipped with audio-visual facilities create an atmosphere conducive to learning. The library of the Institute is equipped with the latest books, journals and magazines of national and international standards that are required for academic as well as research activities. The computer center of the Institute is a state-of-the-art facility and uses technologies to provide a competitive advantage to both its faculty as well as the students in core areas of education and research. Three large, air-conditioned conference halls provide adequate space to host national and international conferences, seminars and workshops within the Institute. Other facilities include individual rooms for the faculty, gymnasium, tennis court, mini-amphitheater, centralized air-conditioning system and a car-parking lot. The Institute also has a spacious and well-equipped cafeteria and a guesthouse for visiting guests and dignitaries.

Our Mission

IIHMR is an institution dedicated to the improvement in standards of health through better management of health care and related programme. It seeks to accomplish this through management research, training, consultation, and institutional networking in a national and global perspective.

Vision

IIHMR is a premier institute in health management education, training, research, program management and consulting in the health sector globally. The institute is known as a learning organization with its core values as quality, accountability, trust, transparency, sharing knowledge and information. The institute aims to contribute to social equity and development through commitment to support programs aiming at poor and deprived population.

Core Values

The institute is known as a learning organization with the following core values:

Quality

Accountability

Trust

Transparency

Sharing knowledge and information

Thrust Areas

IIHMR is engaged in policy issues, program planning and management and capacity building mainly in the health sector. It undertakes research, training, and consulting activities in the following areas:

- Primary Health Care
- Health and Hospital Management
- Health Economics and Finance
- Population and Reproductive Health
- NGO Management and Networking
- HIV / AIDS Program Management and Evaluation

Research Strength at IIHMR

IIHMR has a pulsating research portfolio that primarily focuses on health systems, with a determination to embrace every component of the system into its research and training. The Institute conducts a diverse range of studies that directly or indirectly have a bearing on different levels of the health system, ranging from programme to community to policy level. The Institute conducts evaluation studies, operations research studies and programme evaluations on different dimensions of the health system for a range of different clients including national and state government organizations, national and international non-government organizations, as well as UN agencies, such as, WHO, UNICEF etc. The key areas of research include reproductive and child health, functioning of health care organizations, non-communicable diseases, health economics, and population-based issues and climate change.

Capabilities

- Management Research, Education and Training
- Planning, Designing and Conducting Management Training for Health Professionals
- Institutional Capacity Development and Networking
- Project Planning and Management
- Operations Research and Evaluation
- Economic and Financial Analysis
- Survey Research
- Social Assessment
- Quality Assurance
- Health Sector Reforms
- Programme Evaluation
- Health Information Technology

**“A Case Study on Tamil Nadu’s Public Health Cadre and
its Role in Public Health System”**

ABSTRACT

Tamil Nadu has two distinct cadres in health service i.e., medical service cadre and Public Health Cadre. It is a rare case of medical administration in the country. This report majorly talks about Public Health System of Tamil Nadu. The Public Health Cadre manages primary health services of the state and works as an administrator. Tamil Nadu is one of the best states of the country in terms of health outcome indicators due to its public health cadre. The state has performed exceptionally well in full child immunization coverage. Percentage of women getting antenatal care and complete postnatal check-ups of Tamil Nadu is much higher than other states. The only state doing equally well is Kerala, but it is pertinent to note that the expenditure of Tamil Nadu is much less than national average and expenditure of Kerala is way more than national average expenditure. Tamil Nadu has done an extremely well in eradicating diseases and sometimes well before the national programs were put in place to deal with them. For example, national program for eradicating guinea worm started in 1994 but the disease was eradicated in Tamil Nadu by 1982 itself. The Directorate of Public Health has emphasized on communicable, rare, emerging, and re-emerging diseases and due to this Tamil Nadu is the sole repositories for exotic infections like plague. No system is perfect, and every existing system has some weaknesses. Tamil Nadu public health cadre has some flaws too such as vacant posts, utilization of workers, remuneration given to the workers etc. This report has talked about the journey and accomplishments of the Tamil Nadu Public Health System. How this system is replicable has been also discussed in the report. ~~Flaws~~ Weaknesses of the system and ways to deal with it has also been explored.

List of abbreviations

TN	Tamil Nadu
PHC	Public Health Centre
GoI	Government of India
NRHM	National Rural Health Mission
AYUSH	Ayurveda, Yoga, Naturopathy, Unani, Siddha, Sowa-Rigpa and Homoeopathy
MO	Medical officer
PHW	Public Health Workforce

INTRODUCTION

Tamil Nadu is larger than many countries with over 72 million population. It has two distinct cadres in health service i.e. Medical service cadre and Public Health Cadre. It is a rare case of medical administration in the country. In 1950, the Central government decided to amalgamate public health services and the medical services. The motive behind this amalgamation was to improve coordination between the two but unfortunately it resulted in marginalization of public health services. In the past decades most state health departments have de-prioritized their public health systems. Tamil Nadu is a rare example of a state as it chose not to amalgamate their public health and medical services.

Tamil Nadu public health system is known for providing quality health services to the rural people and it is the only state to have a separate public health cadre in the district level. In various health indicators, Tamil Nadu is often ranked among the high performing states of the country. Mortality rate in the state is very low. Health manpower and health infrastructure is very effective. A separate directorate of public health and trained professionals in the cadre with firsthand experience of working in both rural and state areas have benefited the functioning of the system.

Tamil Nadu has made a significant progress in Health facilities. In last seven years of National Health Mission and National Rural Health Mission, Quantity and Quality of Human resources in public facilities has increased widely. The contractual recruitment has been limited to staff nurses, AYUSH medical officers and Dentists only. Staff nurses are hired on contractual basis and get regularized depending on the vacancies. No Medical Officer is hired on contractual basis and their salary is shared by central government and state government. This gives sense of security to the employees.

Public health cadre has its own budget and directorate. Public Health Cadre manages primary health services of the state and works as an administrator. A dedicated cadre is value for money, and it can control epidemic or outbreak of any disease. Public Health Cadre can also be helpful in disaster management. In states where public health is a state subject, condition of public health is somewhat better there. Public Health system is run by many functionaries from grass root to administration level. Apart from States like Tamil Nadu and Maharashtra these are not organized separately and

systematically, with trained public health cadre. Public Health Act and separate directorate for public health ensures independence, effectiveness, and efficiency.

Tamil Nadu is one of the best states of the country in terms of health outcome indicators. The state has performed exceptionally well in full child immunization coverage. The percentage of women getting antenatal care and complete postnatal check-ups of Tamil Nadu is much higher than other states. The only state doing equally well is Kerala, but it is pertinent to note that the expenditure of Tamil Nadu is much less than national average and expenditure of Kerala is way more than national average expenditure.

Mortality rate (Under 5) has fell 53% between 1992 and 1993 in Tamil Nadu, whereas the national fall was only 32%. From 1982-1986, the maternal mortality rate in Tamil Nadu was 319 deaths per 100000 live births, whereas national figure was 555. It further improved by 2004 and reached 111 deaths. Decline in infant mortality rate, under five mortality rates and maternity mortality rates depicts that the country is making significant progress in Public Health. National Health Mission, government's flagship program has helped to increase the access to key health indicators. Still the public health is not in very good shape and face various challenges. Many health programs have failed to cope up with the increasing economy. Despite having a decline in child malnutrition rates, most number of malnourished children are found in India

Research Questions

What is the current status of public health cadre and their role in Public health system of Tamil Nadu?

Objective

- To review the origin of Public Health Cadre in the state. (Tamil Nadu)
- To review the process of recruitment and selection of public health cadre in Tamil Nadu.
- To examine the impact of public health cadre on the health status of Tamil Nadu

Methodology

The methodology used to write this report is secondary research. Various scholarly articles and reports by the government were reviewed to collect the data and further that data was analyzed. Search engine used for the research was Jstor and government reports were accessed through their websites on google. The inclusion criteria for this report were public health sector in India with special focus on public health system of Tamil Nadu. Exclusion criteria for this report was data pertaining to Medical Health Cadre.

Keywords- Tamil Nadu, Public health workforce, Directorate of Public Health, Public Health Centers, National Health Mission, National Rural Health Mission

Literature search

Methodology

- **Study Type:** Descriptive study will conduct to understand the activities and identify the role of Public Health Cadre in Tamil Nadu's Public Health System
- **Location of Study:** Delhi
- **Duration of Study:** Two months in total will be required for complete study and to form the report after the analysis.

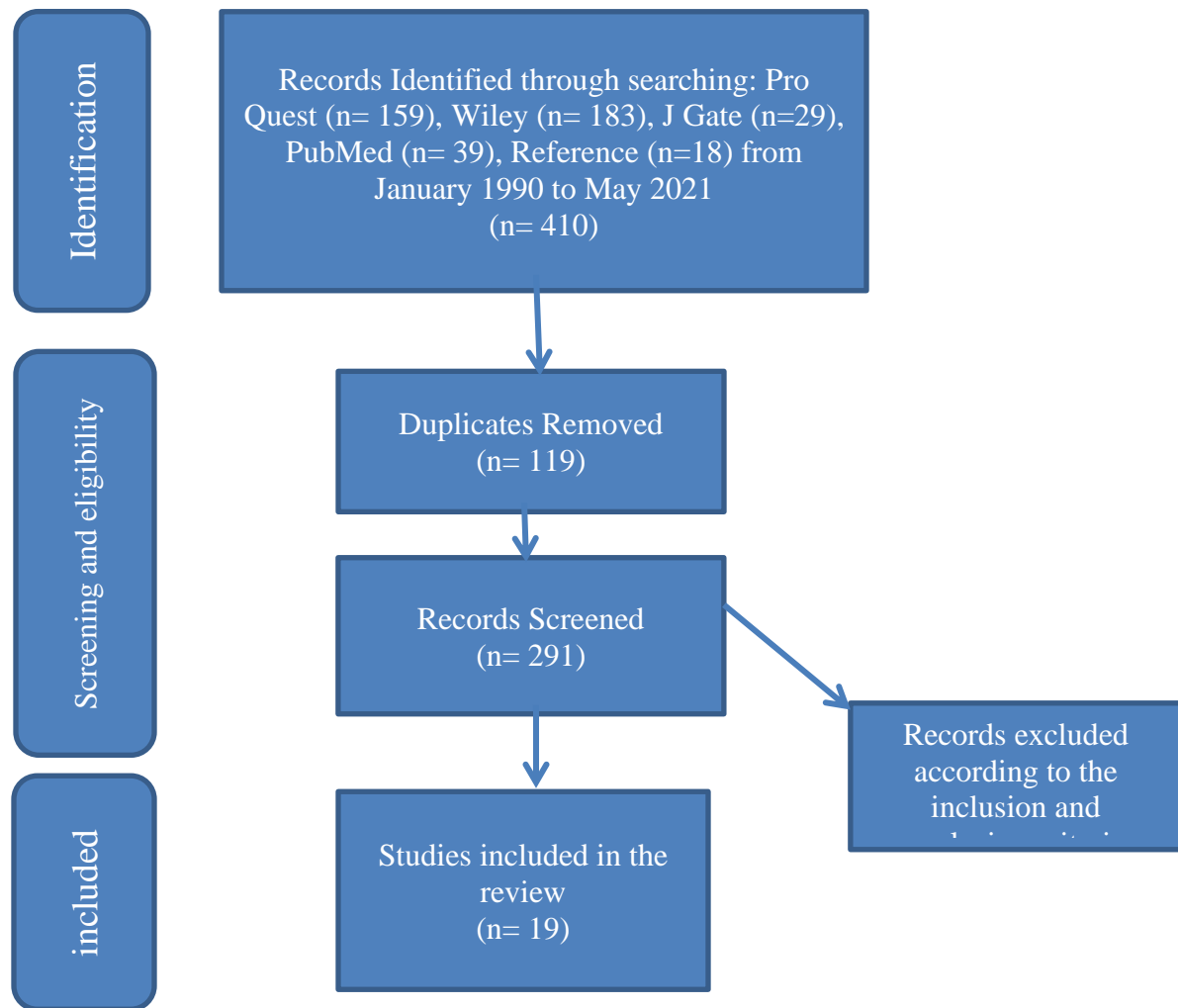


Fig 1: PRISMA flow diagram

Summary- Literature Review

“Das Gupta, Monica; Desikachari, B.R.; Somanathan, T.V.; Padmanaban, P.. 2009. How to Improve Public Health Systems : Lessons from Tamil Nadu. Policy Research working paper ; no. WPS 5073.

The authors have talked about how by separation of public health and medical services permits the state to gain services from both. This paper has also elaborated how a separate directorate of public health and trained professionals in the cadre with firsthand experience of working in both rural and state areas have benefited the functioning of the system. The authors have also described how separate budget and legislative underpinning avoids administrative hurdles in the system. The authors have discussed how this system helps in eradicating diseases and work for avoiding their resurgence, they have beautifully explained it with the example of plague and how there is a dedicated team for that even if the last season was in the early 1960s. As any other public health system there is a need of improvement and the authors have indicated how aspect of Health officers can be improved. How other states can replicate this system as their administrative foundation is similar as to those of most states and how it is economically viable to replicate has also been discussed in the paper.

Parthasarathi, R., & Sinha, S. P. (2016). Towards a Better Health Care Delivery System: The Tamil Nadu model. Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine, 41(4), 302–304. <https://doi.org/10.4103/0970-0218.193344>

In this paper authors have discussed the major reforms in Tamil Nadu public health system which has laid down the foundation of this competent cadre. This paper has also discussed how other factors have impacted the health system of Tamil Nadu both in positive and Negative manner. Authors have also described how the Government of Tamil Nadu has availed all the opportunities to improve their public health service.

National Health Systems Resource Centre Report on Tamil Nadu Public Health Workforce – Issues and Challenges

This report was prepared by National Health Research Centre of India. This report mainly focuses on issues and challenges that are faced by public health workforce. This report has talked about lack in filling the vacant posts at every level of the cadre. Situation of contractual AYUSH doctors and contractual dentists has also been discussed in the report. This report has also questioned the policy

flaws pertaining to remuneration given to Grade IV staff workers and providing residence to doctors and staff in the public health centers.

Kumar, S., Bothra, V., & Mairembam, D. S. (2016). A Dedicated Public Health Cadre: Urgent and Critical to Improve Health in India. *Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine*, 41(4), 253–255. <https://doi.org/10.4103/0970-0218.193336>

This paper has discussed the importance of dedicated public health cadre. This a case study on Tamil Nadu This article has talked about how Tamil Nadu has shown best indicators of public health due to the dedicated cadre. The economic viability and the capability to control an epidemic outbreak of the public health system has also been discussed in the paper. Road Map for a successful public health system has also been devised in the paper. The importance of public health system in disaster management has been discussed by the authors. Authors have also discussed progress in public health sector of India.

Priya R, Chikersal A. Developing a public health cadre in 21st century India: Addressing gaps in technical, administrative, and social dimensions of public health services. *Indian J Public Health* 2013; 57:219-24

This paper has briefly explained the working structure of public health system. The authors have talked about how a good public health system can be established in the country. In order to substantiate their claims, they have given example of Tamil Nadu. At the end authors have talked about how education and public health courses are important for establishing a competent public health system.

“Das Gupta, Monica; Dasgupta, Rajib; Kugananthan, P.; Rao, Vijayendra; Somanathan, T.V.; Tewari, K.N.. 2017. *Flies Without Borders: Lessons from Chennai on Improving India's Municipal Public Health Services. Policy Research Working Paper;No. 8197. World Bank, Washington, DC. © World Bank.*

This paper has discussed the key obstacles in improving the municipal public health and how it can be dealt with, This paper has pointed out unequal allocation of resources and how negative impact on public health can be mitigated by the lessons from Chennai. Authors have also discussed the poor

government arrangements which impair the accountability. How management by professional managerial and technical cadres can improve the situation health is also elaborated by the authors.

RESULTS

In 1922, a dedicated directorate was established for public health in the State health Department. There are three key directorates in the state health department which comes under health secretary i.e., Directorates of Public Health, of Medical Services, and of Medical Education. These steps avoid dominance of medical specialists over public health specialists which is very common in the other states of the country. The Directorate of Public Health consists of a professional cadre of trained public health managers. These managers are promoted to directorate after gaining a long working experience of planning and oversight of health services in both rural and urban areas of the state. Other technical staff such as entomologists and statisticians are also hired in the Directorate, they are promoted to state level positions after obtaining a strong hands-on experience in the district level. This means the Directorate of Public Health in Tamil Nadu is run by a highly experienced staff with they have deep understandings of how these services should be run.

Before 1980, Tamil Nadu was not very ahead of the other states of the country in terms of health services. In the late 1980s and early 1990s there were very impactful changes in the health system of the state. The central government launched multipurpose Worker's scheme and the Tamil Nadu government intensively implemented it. State Government dissolved the existing maternity assistants and labelled them as village health nurses due to which many multipurpose health workers in the state were females. The duty of these village health burses was to visit houses and provide childcare service and maternal services. The sensitization about contraception and immunization was also included in the childcare services.

In the late 1980s, initiative to expand the number of primary health centers was launched by the central government, The Government of Tamil Nadu encased this opportunity and expanded the rural health infrastructure of the state with rigorous pace. Central government and state government were providing financial support to the primary health centres and sub centres and there was a significant rise of these centres in the state. Development partners like DANIDA were also providing support to these centres. The Government of Tamil Nadu decided to provide 24 hours service in these health centres in 1996-97.

The major focus behind providing round the clock service was improve essential obstetric care and giving access to routine emergency services.

Tamil Nadu also decided to include indigenous system of medicine in health system, and they had adequate and organized public healthcare and health manpower ready by 2005. Tamil Nadu has done tremendous work in immunization. The universal immunization program was carried out very efficiently with the help of the competent health system. 85% of the rural population and 91% of the urban population was fully immunized in the state by late 1990s.

In 2003, a health policy was developed by the Government of Tamil Nadu to tackle key health challenges, to combat non-communicable diseases and accidents, to make public health care service more effective and to strengthen management of health system. The focus of the policy was to uplift the health status of the general population. To improve the health status of the population belonging to lower socioeconomic strata Tamil Nadu Health System Project (TNHSP) was implemented. This project was approved by the World Bank in 2005 and is still giving good results in the state.

The competent public health system is a result of a good political. In 1995, Tamil Nadu Medical Services corporation (TNMSC) was formed by the state. It is an autonomous body which works in regulating distribution and procurement of drugs, It also promotes use of generic drugs at affordable cost. They procure drugs through open tenders and supply them directly to district warehouses. Computer system keeps the track of movement of the stock of the drugs from the warehouse to the medical centres. This reform by the Government of Tamil Nadu ensured reliable and good quality drugs at reasonable price.

The Private sector has seen a rise in Tamil Nadu after LPG policies by the central government in 1991 and it has also contributed to the public health sector of Tamil Nadu. There are many examples of public private partnership in contracting of diagnostic facilities, Health education campaigns and logistic support from many corporate houses.

Public Health Cadre manages primary health services of the state and works as an administrator. One can join this cadre after completing their medical graduation, after that they are given chance to complete Diploma from Madras Medical College within 4 years. They get regularized once they complete their diploma and they are promoted to deputy director position. Deputy Director has 3 stages of working, first as a head of primary health services of a district, secondly as a head of training institutes then faculty of community medicine in medical colleges. With MD medicine they have choice

to pursue career in Medical College or join the field postings again, where they can become Joint Director, Additional Director and Director.

The State of Tamil Nadu has adopted policy for co-location of ISM wings in both Public Health Cadre and Medical Cadre. Under National Rural Health Management, service of AYUSH practitioners has been sought on contractual basis. They are appointed as Medical Officers (Contractual) and work for three days a week. Remuneration of 3000 per week is paid to them. AYUSH Medical officers conduct School Health Program and MMU activities.

The Government of Tamil Nadu deploys HR in all facilities rationally. 2-3 Medical Officers are deployed in all Public Health Centers, which consists of 6-10 beds. Dentists are hires in all public health centers on contractual basis. They must work half day on all 6 working days of the week. They are paid remuneration of 3000 per week. Government is working on a plan to utilize their service in dental screening and school health program for which they will be paid additionally. People of Tamil Nadu having diploma in public health are placed in ICDS department which results in better convergence.

There are specified positions in both Public Health Cadre and Medical Cadre, when there is a vacancy, preference is given based on seniority. There is no policy in place to ensure retention of Contractual doctors.

Sometimes Tamil Nadu has eradicated diseases long ahead of national efforts, National eradication program for eradicating Guineaworm started in 1994 and Tamil Nadu had eradicated it by 1982. Its efforts to prevent resurgence of diseases that can manifest again. A good example of this is state plague surveillance unit in the area close to borders of Andhra Pradesh and Karnataka as that place is known for having plague foci among wild rodents. This is even though last episode of plague in the southern states was in the 1960s. When there was a plague outbreak in western India in 1994, the only team that had on-hand experience to tackle with the plague was in Tamil Nadu and they were sent to control the situation. In contrast to this state, such as Maharashtra abolished their plague control unit in 1987 as there was no new case for decades and after the earthquake in 1993 the plague outbreak was there, and it escalated as there was no specified team that had experience to deal with it. Plague surveillance was re-established in Himachal Pradesh and Maharashtra in 2002 and 1994, respectively. Meanwhile the Tamil Nadu state Plague Surveillance Institute has been expanded to cover other vector-borne and zoonotic diseases and gives practical training to public health professionals and entomologists.

One of the greatest strength Tamil Nadu's public health management is also depicted by their routine work to contain endemic diseases such as malaria. Multi-prolonged efforts are included in controlling

Malaria, including (1) control of vector breeding (2) containing adult mosquitoes (3) timely detection and treatment (4) personal protective measures and (5) raising awareness amongst the community to curb the spread.

Tamil Nadu is one of the best states of the country in terms of health outcome indicators. The state has performed exceptionally well in full child immunization coverage. Percentage of women getting antenatal care and complete postnatal check-ups of Tamil Nadu is much higher than other states. The only state doing equally well is Kerala, but it is pertinent to note that the expenditure of Tamil Nadu is much less than national average and expenditure of Kerala is way more than national average expenditure.

Discussion

Tamil Nadu has made a significant progress in Health facilities. In last 7 years of National Health Mission and National Rural Health Mission, Quantity and Quality of Human resources in public facilities has increased widely. The contractual recruitment has been limited to staff nurses, AYUSH medical officers and Dentists only. Staff nurses are hired on contractual basis and get regularized depending on the vacancies. No Medical Officer is hired on contractual basis and their salary is shared by central government and state government. This gives sense of security to the employees.

Tamil Nadu has done an outstanding job in eradicating diseases. Sometimes Tamil Nadu has eradicated the diseases way before than the start of National Program. National Program for eradicating guinea worm started in 1994 and it was eradicated in the state by 1982. Directorate of Public Health has emphasized on communicable, rare, emerging, and re-emerging diseases and due to this Tamil Nadu is the sole repositories for exotic infections like plague.

The other states can easily replicate Tamil Nadu's public health system as its administrative function is like those of most other states. An IAS officer heads the Tamil Nadu's health department and medical officers are appointed at state and district level. The difference between the health system and Tamil Nadu and most of the states are firstly, they separate medical officers into public health department and medical department. Secondly, medical officers in public health department are required to obtain additional qualification other than their medical degrees and lastly, they emphasise more on managing population wide health services. The funds required to train officers of public health cadre is not very huge. This public health cadre consists of less than 1% of the total government doctors in Tamil Nadu. This means if the other state wants to replicate then they will have train only a small fraction of the medical officers. Gujarat has already started training their medical officers for the public health system. No system is flawless and similarly Tamil Nadu public health cadre has some flaws which have been discussed in this report and the state is making significant efforts to get away with the lacunas such as contractual hiring of Dentists and AYUSH doctors. Remuneration of Grade IV staff and incentivizing the hiring of the cadre.

Limitation of the public health system

There are many vacant positions for Medical Officers and nurses in both the directorates. About 25% positions for Deputy Directors are also vacant. Tamil Nadu is suffering from acute shortage of grade IV staff

The hospitals where capacity is more than 200 beds, the tasks of grade IV staff are outsourced to external agencies. In hospitals where the capacity is less than 200 beds, the tasks are conducted on contractual basis. Monetary incentives given to cleaning staff and security staff needs revision as it is 1000 rupees per month only, which is very less.

A key area that needs to be worked upon is the management of health inspectors, they are the grassroots environmental health workers. They are poorly utilized which cause demoralization. The Health Inspector was kept up till 1992, but after that only 6 months training or no training at all is given. The central government also encouraged to accommodate people who were hired for other posts such as smallpox and leprosy. The qualification for other posts were lower than the Health Inspectors and they received no additional training.

Recommendation

1. Modification has to made Health Policy regarding the role and responsibility of the Health workforce.
2. Tamil Nadu's Public health system is a replicable system as its administrative function is like those of most other states.
3. A segregated Public health cadre could ensure an effective health services.
4. The health workforce working under the public health system should obtain additional qualification.
5. Separate budget must allocate for the functioning of Public Health Cadre
6. Incorporating and hiring the doctors from AYUSH and dentistry could help in leveraging the vacant positions.

Conflict of interest – The writer has no conflict of interest

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