

# Towards a Better Health Care Delivery System: The Tamil Nadu model

R. Parthasarathi, S.P. Sinha

Department of Community Medicine, Dhanalakshmi Srinivasan Medical College, Siruvachur, Tamil Nadu, India

## ABSTRACT

The Tamil Nadu model of public health is renowned for its success in providing quality health services at an affordable cost especially to the rural people. Tamil Nadu is the only state with a distinctive public health cadre in the district level and also the first state to enact a Public Health Act in 1939. Tamil Nadu has gained significant ground in the various aspects of health in the last few decades largely because of the significant reforms in its health sector which dates back to 1980s which saw rigorous expansion of rural health infrastructure in the state besides deployment of thousands of multipurpose health workers as village health nurses in rural areas. Effective implementation of Universal Immunization Programme, formation of Tamil Nadu Medical Services Corporation for regulating the drug procurement and promoting generic drugs, early incorporation of indigenous system of medicine into health care service, formulation of a health policy in 2003 by the state with special emphasis on low-income, disadvantaged communities alongside efficient implementation of The Tamil Nadu Health Systems Project (TNHSP) are the major factors which contributed for the success of the state. The importance of good political commitment and leadership in the health gains of the state warrants special mention. Moreover, the economic growth of the state, improved literacy rate, gender equality, and lowered fertility rate in the last few decades and contributions from the private sector have their share in the public health success of the state. In spite of some flaws and challenges, the Tamil Nadu Model remains the prototype health care delivery system in resource-limited settings which can be emulated by other states also toward a better health care delivery system.

**Keywords:** Tamil Nadu model of public health, health care delivery system, primary health care

In the context of health sector reforms, the Tamil Nadu model is frequently cited. Tamil Nadu is often ranked the best among the high-performing states in India, next only to Kerala in terms of various health indicators.<sup>[1]</sup> The state is renowned for its low mortality rates in addition to the effective healthcare infrastructure and health manpower. Tamil Nadu has led the way in various new approaches to enhance the access to good-quality health services at an affordable cost. The Government of Tamil Nadu has a strong commitment toward enhanced performance in the

health sector. The healthcare in the state has improved significantly over the last few decades with more people having increased access to medical care services.

Tamil Nadu is the only state with a distinctive public health cadre in the district level. Tamil Nadu is better organized than most other states in public health infrastructure and also in managing public health threats.<sup>[2]</sup>

This is an open access article distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

**For reprints contact:** reprints@medknow.com

**Cite this article as:** Parthasarathi R, Sinha SP. Towards a better health care delivery system: The Tamil Nadu model. Indian J Community Med 2016;41:302-4.

### Access this article online

#### Quick Response Code:



#### Website:

www.ijcm.org.in

#### DOI:

10.4103/0970-0218.193344

#### Address for correspondence:

Dr. R. Parthasarathi,  
Bargur, Krishnagiri District, Tamil Nadu, India  
E-mail: dr.parthasarathi08@gmail.com

**Received:** 21-04-15, **Accepted:** 04-07-16

It was also the first state to enact a Public Health Act in 1939.<sup>[3]</sup>

Before 1980, Tamil Nadu was not much different from other states in terms of health services. During later part of 1980s and 1990s, there was a significant transformation in health infrastructure and health manpower of the state. The Government of Tamil Nadu implemented the Multipurpose Workers scheme intensively when it was launched by the Central government in the fifth 5-year plan to serve every rural community with a population of 5000 with a multipurpose worker.<sup>[4]</sup> These multipurpose health workers in Tamil Nadu were females in majority as the existing maternity assistants were absorbed and were labelled as village health nurses (VHNs). The role of VHN was to make regular house visits and deliver maternal and child care services including advice for contraception and immunization. The VHN was also assigned the task of enrolling and keeping track of all pregnant women in her service area besides working synergistically with other grass root workers like Anganwadi workers. Thousands of VHNs were trained and deployed proficiently in primary care services in rural areas which yielded significant improvements in antenatal, postnatal care, institutional delivery, immunization, etc.

The Government of India launched an initiative to expand the number of primary health centres and subcentres in the country in the late 1980s. The Government of Tamil Nadu committed itself to this initiative and expanded its rural health infrastructure with rigorous pace. There was a sustained rise in number of primary health centers and subcenters in the state with financial support from the central and state governments and from development partners like DANIDA.<sup>[5]</sup> In 1996/1997, Government of Tamil Nadu decided to provide round the clock services in the primary health centers to offer outpatient services in the evening hours and also to improve the access to women for routine emergency and essential obstetric care, meanwhile the range of services provided by the primary health centers and subcenters were also expanded.<sup>[6]</sup> Also, Tamil Nadu included the practice of indigenous system of medicine in its health care service at a very early stage. By 2005, there was organized and adequate public health infrastructure and health manpower in Tamil Nadu which reflected in the health indicators of the state.

The progress of Tamil Nadu in the field of immunization deserves special mention. The Universal Immunization Programme of 1986 was implemented efficiently by the competent health system of Tamil Nadu in full force. The state ranked first in the country in terms of number of children immunized. Moreover, there was very little inequity in immunization rates in terms of income and

geographical location. By the late 1990s, about 85% of the rural and 91% of the urban children were fully immunized in the state.<sup>[2]</sup> The state has reported more than 95% immunization coverage over the years under NRHM: National Rural Health Mission on a consistent basis.<sup>[7]</sup>

Another milestone worthy of mentioning is that in 2003, the Government of Tamil Nadu developed a health policy to address the key health challenges, strengthen management of health systems, and increase the effectiveness of public sector health care services and also to combat noncommunicable diseases and accidents. The policy focused on improving the health status of the general population, with special emphasis on low-income, disadvantaged and tribal communities, over the next 2 decades. The Tamil Nadu Health Systems Project (TNHSP) was implemented by the Health and Family Welfare Department of the state to lend support to the health policy and focus on improving the health status of people belonging to the lower socioeconomic strata. In 2005, the World Bank approved the Tamil Nadu Health Systems Project and even today the project performs proficiently in the state.<sup>[8]</sup>

The importance of good political commitment and leadership in the health gains of the state cannot be overlooked. Moreover, the health policies and health expenditure by the Government of Tamil Nadu is focussed more toward improving primary health care services especially targeting the rural, poor, and disadvantaged communities. The reforms in the health sector like bottom-up planning for immunization campaigns, flexibility, decentralization, and delegation of authority to district level officials to conduct maternal death reviews and implement local solutions were much effective in Tamil Nadu than other states.<sup>[9]</sup>

Another major reform in the health sector of Tamil Nadu was the formation of Tamil Nadu medical services Corporation (TNMSC) in 1995, an autonomous body regulating the drug procurement and distribution alongside promoting the rational use of generic drugs at an affordable cost.<sup>[10]</sup> TNMSC procures drugs through open tender process from various suppliers and drugs are delivered by suppliers directly to district warehouses. Further, there are efficient quality control mechanisms in place obliging the drug companies to conform to drug standards. The records of drug procurement and utilisation are kept up-to-date in all health facilities besides the computer system for tracking the movement of stocks between warehouses and health facilities.<sup>[11]</sup> All these measures have ensured the reliable supply of good-quality drugs at a low price to all Government health facilities which in turn led to increased patient satisfaction and greater utilization of public health facilities.

The private sector in Tamil Nadu also has expanded rapidly since 1990 and has contributed to the improved health indicators of the state. There have been many ventures of joint public-private partnerships like in Health education campaigns, contracting of diagnostic facilities, financial and logistics support from many private corporate bodies.

In addition to all the above factors outlined above, Tamil Nadu has experienced a swift growth in all the allied sectors alongside a rapid industrialization which resulted in a significant economic growth of the state. Tamil Nadu is ranked third among all the states in terms of per capita income levels.<sup>[2]</sup> Moreover, there has been improved literacy rate, gender equality, and lowered fertility rate in the last few decades which have their share in the public health success of the state.<sup>[12]</sup>

Although the Tamil Nadu model has gained substantial ground in the field of public health, it is not without flaws and challenges like alarmingly increasing private sector deepening the rich-poor gap in the access to health, persistence of high levels of malnutrition, anemia, and the ever-increasing expectation and demands for public health services from the general public. Nevertheless, this model remains a prototype health care delivery system appropriate for the resource-limited settings of the developing countries.<sup>[13]</sup>

This low cost, high access, well-structured Tamil Nadu Health model can be emulated by other states also because the administrative structure and finances are essentially the same like any other state with similar cadres of medical and non-medical staff.<sup>[9]</sup> The differences in Tamil Nadu is that (a) it separates the medical officers into public health and medical tracks, (b) requires those in public health track to secure a public health qualification, (c) orients their work toward managing public health services while those in medical tracks are involved in hospital care, and (d) greater authority is vested on the medical officer in-charge of the rural health facility for providing health services to the people.<sup>[2]</sup>

It is beyond doubt that there has to be a major transformation in the health infrastructure and manpower before a state plans to revamp its health system in the footprints of Tamil Nadu. Even after this transformation, the health gains will not be instantaneous as it entails at least a decade to garner the expected results. To conclude, the Tamil Nadu model is the acceptable, affordable, feasible, and fruitful solution which can be reproduced by other states towards a better health care delivery system.

## Financial support and sponsorship

No support available in the form of grants or aid.

## Conflicts of interest

There are no conflicts of interest.

## References

1. National Family Health Survey (NFHS-3) India. 2005-06. Tamilnadu [Internet]. Mumbai International Institute for Population Sciences (IIPS) and Macro International; 2008. Available from: [http://rchiips.org/nfhs/NFHS-3%20Data/TamilNadu\\_report.pdf](http://rchiips.org/nfhs/NFHS-3%20Data/TamilNadu_report.pdf). [Last accessed 2014 Aug 20].
2. Balabanova D, Mckee M, Mills A. "Good health at low cost" 25 years on What Makes a Successful Health System? [Internet]. London: London School of Hygiene 2011;159- 92. Available from: [http://www.searo.who.int/entity/health\\_planning\\_financing/documents/Goodhealthatlowcost.pdf](http://www.searo.who.int/entity/health_planning_financing/documents/Goodhealthatlowcost.pdf). [Last accessed 2014 Aug 20].
3. Gupta MD. Public Health in India: An Overview [Internet]. World Bank Policy Research Working Paper 3787; 2005. Available from: <http://crossasia-repository.ub.uni-heidelberg.de/3570/1/Public%20Health%20India%20Overview.pdf>. [Last accessed 2014 Aug 20].
4. Bhowmick PK. Rural and tribal development practices in India, 1st Edition. New Delhi: MD Publications Pvt. Ltd, 1994. p. 212-13.
5. Varatharajan D, Anandan DWA. Re-activating primary health centres through industrial partnership in Tamilnadu is it a sustainable model of partnership? [Internet]. eSocialSciences; 2009. Report No.: id: 2346. Available from: <https://ideas.repec.org/p/ess/wpaper/id2346.html>. [Last accessed 2015 Oct 7].
6. Malaney P, Health sector reform in Tamil Nadu: Understanding the role of the public sector [Internet]. Center for International Development Harvard University; 2000. Available from: [http://www.cid.harvard.edu/archive/india/pdfs/healthsector\\_malaney0100.pdf](http://www.cid.harvard.edu/archive/india/pdfs/healthsector_malaney0100.pdf). [Last accessed 2014 Aug 20].
7. State Health Society-Tamil Nadu: National Rural Health Mission [Internet]. Available from: <http://www.nrhmtn.gov.in/immunization.html>. [Last accessed 2014 Aug 20].
8. Tamil Nadu Health Systems Project. Department of Health and Family Welfare, Government of Tamil Nadu, [Internet] 2005. Available from: <http://www.tnhsp.org/project>. [Last accessed 2014 Aug 20].
9. Das Gupta M, Desikachari BR, Shukla R, Somanathan TV, Padmanaban P, Datta KK. *et al.* How Might India's Public Health Systems Be Strengthened? Lessons from Tamil Nadu [Internet]. Economic and Political Weekly 2010. Available from: <http://www.indiaenvironmentportal.org.in/files/Public%20Health%20Systems.pdf>. [Last accessed 2014 Aug 20].
10. Tamil Nadu Medical Services Corporation Limited. Government of Tamil Nadu [Internet]. Available from: <http://www.tnmsc.com/tnmsc/new/index.php>. [Last accessed 2014 Aug 20].
11. Das Gupta M, Desikachari BR, Somanathan TV, Padmanaban P. How to Improve Public Health Systems Lessons from Tamil Nadu [Internet]. The World Bank Development Research Group Human Development and Public, Services Team; 2009. Available from: <https://openknowledge.worldbank.org/bitstream/handle/10986/4265/WPS5073.pdf?>. [Last accessed 2014 Aug20].
12. Singh VP, Tatambhotla A, Rao KR, Chokshi M. Replicating Tamil Nadu's Drug Procurement Model. Economic Political Weekly 2012;29:26-9.
13. Balabanova D, Mills A, Conteh L, Akkazieva B, Banteyerga H, Dash U. Good health at low cost 25 years on: lessons for the future of health systems strengthening. Laet 2013;381:2118-33.