

Profile

How Health Systems Investments can Improve Reproductive Health Services: The Case of Tamil Nadu

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Sundari Ravindran

Achutha Menon Centre for Health Science Studies, Sree Chitra Tirunal Institute for Medical Science and Technology, India

Introduction

Tamil Nadu ranks amongst the high-performing states in India in human development, with high levels of literacy, low fertility and mortality rates and good coverage by health care services. According to the 2001 Census the state had a population of 62.1 million. The literacy rate for the population aged seven years and above was 74 to 82% for males and 65% for females.¹

During 2005 and 2006, more than 60% of the women (or their partners) used contraception. From 2002 to 2005 almost all pregnant women (97%) were covered by antenatal services and 90% of women delivered in a health facility and received postnatal care within two days following delivery. Eighty-one per cent of all children between 12-23 months were fully immunised.²

Tamil Nadu has an extensive public health infrastructure covering the rural and urban areas of the state. Health infrastructure consists of five types of health-care units:

- Health Sub-Centres (HSC)
- Primary Health Centres (PHC)
- Community Health Centres (CHC)
- Dispensaries and
- Hospitals.³

Two major reform initiatives are currently underway in Tamil Nadu: the Tamil Nadu Health System Development Project (TN-HSDP) and the National Rural Health Mission (NRHM). Both initiatives address reproductive and child health as priorities. This profile examines critical aspects of recent reforms which aim to improve components of sexual and reproductive health (SRH) services.

The Tamil Nadu Health Systems Development Project

The objectives of the World Bank-funded TN-HSDP are to improve the effectiveness of the public and private sectors in the health system through four major components:

- Increased access to and utilisation of health services, particularly by poor, disadvantaged and tribal groups;
- Development and pilot testing of effective interventions to address key health challenges;
- Improved health outcomes, access and quality of service delivery through strengthened oversight of the public sector health systems and greater engagement of the non-governmental sector; and
- Increased effectiveness of public sector hospital services, primarily at district and sub-district levels.⁴

Major activities

Major activities under the TN-HSDP include construction and improvement of inpatient facilities in government hospitals and the supply of new equipment, instruments and vehicles to secondary hospitals located in sub-district and district headquarters.⁵

To complement the existing 66 Centres, 32 additional comprehensive emergency obstetric and neonatal care (CEmONC) centres were established in secondary hospitals. The project aimed to have one ambulance in each of the 385 blocks of Tamil Nadu to provide transportation in case of obstetric and other emergencies and accidents. During the first phase, 187 blocks in 15 districts were covered. These ambulance services are run by non-governmental organisations (NGOs) in each block. Each ambulance is staffed by a trained nurse and equipped with life-saving equipment and drugs. The NGO receives Rs.10 000^a a month to cover the driver's salary and fuel expenses. Services are free for those living below the poverty line or those belonging to ethnic minorities. Others are charged a flat rate of Rs.5 per km for a one way trip to hospital. An around-the-clock control room located in the district general hospital receives calls requesting emergency transport and directs the nearest ambulance in the area to collect the patient.

Twelve mobile vans provide medical services to those living

^a R1.00 translates to approximately Rs. 6.41 (Rupee).

in areas far away from health facilities. Each mobile van has a medical officer, two staff nurses and a laboratory technician and is equipped with drugs and essential medical equipment.

Counselling centres for outpatients and inpatients have been set up in district and taluk^b hospitals in all 29 districts of the state. A pilot cervical cancer screening project is currently being implemented in two districts. Prevention of cardiovascular disease, a major cause of morbidity and mortality in Tamil Nadu, is also given priority.⁵

The National Rural Health Mission

The NRHM was launched in 2005 to carry out the 'necessary architectural correction' in the basic health care delivery system. The plan included:

- increasing public expenditure in health;
- reducing regional imbalances in health infrastructure;
- pooling resources;
- integrating organisational structures;
- optimising health manpower;
- decentralising health programmes to district management level;
- community participation and ownership of assets;
- inducting management and financial personnel into the district health system; and
- operationalising community health centres into functional hospitals meeting Indian Public Health Standards in each block of the country.⁶

The main architectural correction was the integration of all major national programmes at the state and district level under one umbrella, functioning through individual sub-committees. All existing state health societies (except the State AIDS Control Society), which included the Reproductive and Child Health project, the tuberculosis control project and the Indian system of medicine programme, were merged into a single State Health Society.

NRHM interventions

NRHM's interventions may be broadly classified as:

- interventions to strengthen the functioning of health facilities, including through promoting community participation; and
- interventions to improve maternal, neonatal and child health.⁷

The NRHM has made funds available to facilities at primary care level. These include annual maintenance grants for provision of water supply, providing and maintaining toilets and other amenities. Additional funds are also available to Patient Welfare Committees, formed in every primary health centre and secondary hospital where the funds are used, at the Committees' discretion, to facilitate better functioning of health facilities and achieving the objectives of the project.

Additional Village Health Nurses (VHNs) have been employed in those health sub-centres serving a population larger than 5 000 or located in remote places.

One hundred mobile medical units have been operationalised to visit remote villages on fixed days, of which villagers are informed well in advance. Each unit consists of medical and paramedical staff and includes laboratory facilities. The Health Management Information System (HMIS) has been strengthened with the provision of computers and internet facilities. Data collected by VHNs on all families residing in their catchment areas is transmitted to the PHC, through E-Moding, and thereafter to the district and state.

Village Health and Sanitation Committees have been formed in every village with a population of up to 1 500. Committee members include representatives of local government, women's groups and other village-level officials. These committees have been given grants of Rs. 10 000 that are used for household surveys, health camps and sanitation drives.

Improvements and innovations

Historically, maternal health and family planning have been the only components of sexual and reproductive health services that have received consistent attention by health policy makers in Tamil Nadu. Interventions related to other sexual and reproductive health components have been minimal.

Several interventions have been initiated to improve access to maternal health and family welfare services, i.e. expanding coverage of basic pregnancy-related care, promoting institutional deliveries, expanding access to and quality of Basic and Comprehensive Emergency Obstetric and Neonatal care, and maternal death audits. The DANIDA-assisted Tamil Nadu Area Health Care Project enhanced access to domiciliary services in rural areas by improving mobility of VHNs who were trained to ride a two-wheeler cycle or moped. Training to ride two-wheelers was subsequently made part of the VHNs' regular training programme.⁸

In order to meet the challenge of improving institutional deliveries the existing institutional model, which consisted of 24-hour delivery services in some PHCs staffed by three medical officers, was strengthened with three additional staff nurses, two cleaners and a driver. The nurses are required to

^b A taluk hospital is a secondary hospital at sub-district level.

be skilled in conducting normal deliveries and refer complications after providing obstetric first-aid for haemorrhaging, premature labour or new-born complications. This attempt was extremely successful and the project was scaled up to cover 780 Primary Health Centres.⁸

Encouraged by the success in increasing institutional deliveries through 24-hour PHCs, the government decided to upgrade some of these PHCs into Basic Emergency Obstetric and Neonatal Care (BEmONC) centres. The idea is that every woman will have access to a BEmONC centre within a 7.5 km radius of her home. In 2007 there were 385 BEmONC centres in Tamil Nadu.⁹ These centres are equipped to provide services for normal deliveries, stabilisation of obstetric and newborn emergencies and referrals, manual vacuums for termination of pregnancy and also tubectomies. Each centre also has a blood storage facility.

Steps have also been taken to have one CEmONC centre within 10 kms of travel for every woman, open around-the-clock, equipped with an operating theatre where emergency caesarean sections (C-sections) can be performed, and a blood bank that has both storage and collection facilities. The CEmONC centre is meant to have a separate Emergency Room for obstetric and new born cases, in addition to the Emergency Room for general cases.⁹ Each CEmONC centre is staffed by four obstetric and gynaecology specialists, four paediatric specialists, two general surgeons and two anaesthetists.^{8,9} An indicator for their effective performance is the number and proportion of C-sections performed during the night. A CEmONC centre is certified on the basis of the following:

- availability of paramedical staff;
- functioning equipment;
- availability of drugs;
- implementation of infection control protocols;
- use of emergency treatment protocols; and
- availability of around-the-clock care.⁹

Yet another intervention to guarantee access to emergency obstetric care in secondary hospitals for those who have reached the facility is ensured supply of blood of all groups throughout the year. Regular blood donation camps are conducted in all PHCs and blood is stored in secondary and tertiary care hospitals. An area-wide directory of blood donors is available for each PHC area and is used in case of blood requirement in emergencies.⁷ Free emergency transportation to the nearest CEmONC centre for women developing complications during delivery is made available through a control room set up in each district under the TN-HSDP.⁹

The programme allows for private sector anaesthetists and obstetricians to attend to specific cases. This has increased the proportion of C-sections conducted in secondary hospitals and is believed to have contributed to a further decrease in the maternal mortality ratio, which has decreased by 36% between 2001 and 2005.⁸ A training programme of 24-weeks' duration on life saving anaesthetic skills is offered to doctors from secondary hospitals and upgraded PHCs.

The NRHM has also allocated funds for improving the quality of delivery and emergency obstetric care available in tertiary care hospitals. Fourteen medical college hospitals in the state have each been allotted Rs. 50 lakhs^c for providing amenities such as linen, waiting rooms, toys for children, inverters for uninterrupted power supply, solar heaters and cleaning facilities.⁷

Family Health Clinics are conducted in 385 BEmONC centres three days a week. The BEmONC centres have attempted to bring about a convergence of the Reproductive and Child Health and the HIV programmes by including Voluntary Counselling and Testing Centres for HIV within the Family Health Clinics, and include the services of a professional counsellor and a laboratory technician. Nevirapine is also administered through these facilities to prevent mother-to-child transmission of HIV.⁹

Conclusion

The government of Tamil Nadu has made sustained investments for many decades in health infrastructure, capacity building of personnel and in improving organisational and managerial efficiency. A noteworthy feature is that, where innovations are introduced, there is always a pilot phase for experimenting and learning before the innovation is widely implemented. While Tamil Nadu's achievements to date are commendable, the focus has been predominantly on maternal health and family planning. Several gaps still remain in providing a comprehensive range of sexual and reproductive health services.

c 1 lakh = 100 000 Rupees (approximately R15 567)

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