Review Article

DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20175310

Essential drug use patterns in primary health care in Tamil Nadu

Sashidharan C., Gopalakrishnan S.*

Department of Community Medicine, Sree Balaji Medical and Hospital, Chrompet, Chennai, India

Received: 12 October 2017 Accepted: 09 November 2017

*Correspondence: Dr. Gopalakrishnan S., E-mail: drsgopal@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Tamil Nadu is one among the few States in India to implement the concept of essential drugs in the health care delivery system. Essential drugs are those that satisfy the health care needs of the majority of the population, meant to treat commonly prevalent diseases, they should therefore be safe, effective and should be available at low cost at all times, in adequate amounts and in the appropriate dosage forms. Essential drugs are critically required for the management of 90-95% of commonly occurring disease conditions in our country. The Tamil Nadu medical services corporation (TNMSC) was established in 1994 by the Tamil Nadu State Government in order to scientifically procure, store and distribute quality drugs based on the Essential drugs concept to all levels of health care delivery system in the State at low cost. This article is meant to identify the benefits of using essential drugs in the health care delivery system in Tamil Nadu.

Keywords: Essential medicines, Primary care, TNMSC

INTRODUCTION

Tamil Nadu is one among the better performing States in the health care services and public health services which is reflected in better health indicators like lower infant mortality rate, maternal mortality rate, fertility rate etc. The State Government has established a wide network of different levels of health care delivery system covering the entire State and thereby helping the people for easy accessibility of better health care services at the three levels of primary, secondary and tertiary care levels.

A brief description of the health infrastructure available in the Tamil Nadu State is detailed in the Table below.

PRIMARY HEALTH CARE

The primary health care concept was introduced as the first step towards achieving "Health for all" by the Alma Ata declaration. The primary health care is "essential health care based on practical, scientifically sound and

socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that community and the country can afford". ¹

Appropriate treatment of commonly occurring diseases and injuries and provision of essential drugs are the two vital components of the primary health care concept

Drug availability has always been a problem in Govt. hospitals, particularly in PHC's which caters largely to the needs of the poorer sections of the population. Even though enough funds were ear-marked for this purpose by the State Government, the actual supply position has always been less than satisfactory. Drug indenting, purchase, storage and distribution were always discriminatory and not based on the actual needs.

There was always shortage and stock out of essential and lifesaving drugs at all levels. Unwanted medicines were dumped, which is often wasted. Cost of drug purchase went up year after year. It was precisely for the above reasons that TNMSC was established in 1994 by the State Government with support from DANIDA health care project.²

Table 1: Health infra-structure in Tamil Nadu: 2014.

Pop	oulation of Tamil Nadu	7,21,47,030 [72.14 million]
Primary level		
1	PHC's	1751
2	Health sub centres	8706
3	Urban primary health centres (UPHC)	134
Secondary level		
1	CHC's/upgraded block PHC's	385
2	Taluk & Non-Taluk hospitals	All (275)
3	District hospital	All districts (32)
Tertiary level		
1	Medical college hospitals	Total 47
2	In government sector	21
3	In private sector	26
Health manpower		
1	Doctors in government service	14960
2	Doctors in private sector	30,000
3	Number of nurses	33063
4	Annual govt. drug budget	>100 crores

TAMIL NADU MEDICAL SERVICES CORPORATION [TNMSC]

The Government of Tamil Nadu during 1994 created the special purpose corporation named Tamil Nadu medical services corporation, with the financial and technical assistance form DANIDA health care project, with the main objective of enhancing the health infrastructure facilities, scientific drug procuring, storage and distribution system based on the essential drugs concept.

Objectives of the TNMSC

- To scientifically procure, store and distribute quality drugs (which are safe and effective) to all the levels of hospitals in State at a low cost.
- For this purpose it established a network of 25 drug warehouses covering all the Districts, which are fully computerized.
- All the warehouses were linked to the HQ in Chennai via hotlines and e-mail.
- A pass book system of budgetary allocation is given to each health institution for drug indenting.

The TNMSC expert committee, prepared an essential medicine list based on the local needs of the State based on the commonly occurring medical conditions.

The essential medicine list is intended³

- To cut down the unnecessary expenditure on Drugs an Essential Medicine list, based on the WHO model was prepared, by an expert committee
- The EDL is meant to cater to the health care needs of the primary, secondary and tertiary level hospitals in the State
- The EDL is updated every year (addition/deletion)
- Drug procurement and distribution is done based on the EDL
- It has helped to save money and time and preventing avoidable wastage
- EDL is now accepted by medical professionals and safe and effective medicines are made available to prescribe and dispense
- The latest INDIA EDL has 348 drugs and TN EDL has 260 drugs formulations,
- which are enough to treat more than 90% of the illness reported

Benefits of implementing the essential medicines in the state

- Efficiency of drug management has improved
- All essential drugs are available throughout the year
- At least 3 months buffer stock is maintained at any point of time
- No expired drugs
- No drug wastage
- No pilferage,
- No stock outs
- High standards of quality control and quality assurance made possible
- Drugs are purchased only from companies who follow GMP & SOP, thereby ensuring safety & efficacy of drugs
- Drugs are specially packed in Strips & Blister packets & marked "Tamil Nadu Government Supply, Not for sale"
- Considerable reduction in cost of drugs procured
- From 100 crores the previous years, the drug budget has been reduced to 80 crores to purchase the same quantity
- The money saved is utilized for purchase of medical equipments and other utilities for hospitals

Essential drugs concept has helped to revolutionise the functioning of the in public health and medical services scenario in the State in the following ways.⁴

- The model list of essential drugs sparked off a revolution in international public health
- It was first met with surprise and opposition in some quarters and with enthusiasm in others.
- Some physicians accustomed to choosing from thousands of brands of drugs, saw the essential drugs policy as a threat to their freedom to prescribe

 Large pharmaceutical companies feared that limited list of drugs and price competition from manufacturers of drugs without a brand name would reduce their profits and would make it difficult for the industry to invest in research and development of new pharmaceutical products

Limiting the number of essential medicine list brings more advantages to public health and medical services⁵

- There is less risk of duplication; confusion and mistakes;
- Storing and distributing the drugs is made easier;
- Prescribers, dispensers and patients can also remember more easily the therapeutic effects and the adverse reactions.
- Due to the various advantages, the essential drugs concept was built into the declaration of Alma Ata in 1978, which identified access to essential drugs as a basic element in "Primary Health Care" for bringing "Health for All"

ESSENTIAL MEDICINES IN TAMIL NADU, INDIA

Essential drugs are those that satisfy the health care needs of the majority of the population, meant to treat commonly prevalent diseases, they should therefore be safe, effective and should be available at low costs at all times, in adequate amounts and in the appropriate dosage forms.²

Essential drugs are critically required for the management of 90-95% of common and important disease conditions in our country. These medicines must meet with high standards of quality, safety and efficacy and should be available at an affordable cost.

CONCEPT OF ESSENTIAL DRUGS

The concept of essential drugs was introduced by WHO in 1977. Based on this the Govt. of India published a National Essential drug list adopted by an expert committee based on the following observations. It is found that there are more than 60,000 drugs formulations available in the market. Actually 90% of the commonly prevalent diseases can be treated with less than 10% of the drugs available in the market.

The Tamil Nadu medical services corporation (TNMSC) was established in 1994 by the State Government in order to scientifically procure, store and distribute quality drugs based on the essential drugs concept to all levels of health care delivery system in the State at low cost.³

The TNMSC had constituted an expert committee to prepare an Essential drugs list based on the WHO model list.

- The essential drugs list is meant to cater the health care needs of the primary, secondary and tertiary level hospitals in the State.
- The essential drug list is updated every year.
- Drug procurement, storage and distribution is done based on the drug essential list.
- Essential drug list has helped to save money and time and in preventing avoidable wastage.
- The latest essential drug list has 270 drug formulations, which are enough to treat more than 90% of the illness reported.
- Essential drug list is now accepted by medical professionals and safe and effective medicines are made available to prescribe and dispense.

BENEFITS OF ESSENTIAL MEDICINES CONCEPT IMPLEMENTATION IN TAMIL NADU

By implementing the essential drugs concept in Tamil Nadu, the efficiency of drug management had improved. All essential drugs are available throughout the year. At least 3 months buffer stock is maintained at any point of time. There is no more expired drugs, no drug wastage, no pilferage and stock outs. High standards of quality control and quality assurance is made possible.⁶

The essential drugs are purchased only from pharmaceutical companies who follow the good manufacturing practices stipulated by the drugs control authorities and TNMSC, thereby ensuring safety and efficacy of drugs. Drugs are specially packed in strips and blister packets and marked "Tamil Nadu Government Supply-Not for Sale."

CONCLUSION

The activities following the implementation of essential drugs concept resulted in considerable reduction in the cost of drug procured. From about Rs.100 crores the drug budget has been reduced to Rs. 80 crores per annum to purchase the same quantity of drugs. The money thus saved is utilized for purchase of medical equipment's like CT scans for each District hospitals, ultra-sonogram machines, ECG machines, X-ray machines, pulse oxymeters, ventilators and other utilities for the hospital services. This helped to improve the quality of health care provided through our hospitals at an affordable cost for the patient as well as the government.

Funding: No funding sources Conflict of interest: None declared Ethical approval: Not required

REFERENCES

 Declaration of Alma-Ata International Conference on Primary Health Care, Alma-Ata, USSR, 6-12 September 1978. Available at: http://www.who.int /hpr/NPH/docs/declaration_almaata.pdf. Accessed on 10 October 2016.

- 2. Gopalakrishnan S. Essential Drugs in Tamil Nadu. STANLEY Times. 2003;4(3):1-2.
- TNMSC Essential Drugs Manuel. Tamil Nadu 3. Medical Services Corporation, Chennai, 2014.
- Gosh AK, De A, Bala NN. Current problems and 4. future aspects of pharmacovigilance in India. Int J Pharm Biol Sci. 2011;2:15-28.
- WHO Expert Committee. The use of essential drugs. World Health Organ Tech Rep Ser. 2000;895:1-61.
- Levy LM. Advantages and disadvantages of an essential drugs programme. Cent Afr J Med. 1996;42:218-9.

Cite this article as: Sashidharan C, Gopalakrishnan S. Essential drug use patterns in primary health care in Tamil Nadu. Int J Community Med Public Health 2017;4:4389-92.