

# Report of the seminar on 'Models and methods for ensuring availability of essential medicines in public health facilities'



Organised by  
SATHI

(Support for Advocacy and Training to Health initiatives)

in technical collaboration with  
National Health Systems Resource Centre,  
(NHSRC) New Delhi

24<sup>th</sup> June 2011



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Compiled by

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## Preface

This report is a documentation of the proceedings of the seminar, 'Models and methods for ensuring availability of essential medicines in Public health facilities' organised as part of SATHI's project, 'A Study of budgetary provisions, procurement and supply system concerning essential medicines in selected districts of Maharashtra' on 24<sup>th</sup> June, 2011 in Mumbai.

The seminar focussed on issues of procurement, distribution and financing of medicines in public health systems. Key objectives of this seminar included understanding the medicine procurement and distribution systems in different states, suggesting ways to improve medicine procurement system in Maharashtra by enhancing transparency and effectiveness. The seminar was attended by experts from different fields such as public health professionals, health economists, Government health officials as well as members of civil society organisations.

Important topics covered in this seminar were: Drugs Procurement Practices in Maharashtra State, Making essential drugs and equipment reliably available in the public health system- an example of Tamil Nadu, Method of medicine distribution in Karnataka State, Per capita medicine budget in public health system and Initiatives regarding provision of affordable medicines in Chittorgarh district of Rajasthan.

The presentations during the seminar were informative and the deliberations that followed the presentations brought out several aspects which make procurement and distribution systems more effective and efficient. SATHI is thankful to all participants for making this event a success.

We hope that the report would be useful in furthering advocacy on the issue of improving medicine availability in public health facilities.

Dr. Abhay Shukla  
Co-ordinator,  
SATHI

## List of Abbreviations

A.D.R.	- Adverse Drug Reaction
AIDAN	- All India Drug Action Network
BMC	- Bombay Municipal Corporation
CBM	- Community Based Monitoring of Health Services
CBPP	- Centre on Budget and Policy Priorities
CMHO	- Chief Medical Health Officer
CPA	- Centralized Procurement Agency
CSO	- Civil Society Organisation
DGS&D	- Directorate General of Supplies and Disposals
D.H.S.	- Directorate of Health Services
D.M.E.R.	- Directorate of Medical Education and Research
E.S.I.C.	- Employee's state Insurance Corporation
ED	- Essential Drugs
EDL	- Essential Drug List
EMD	- Earnest Money Deposit
F.D.A.	- Food and Drug Administration
GMP	- Good Manufacturing Practices
I.C. and M.M.	- Inventory Control and Materials Management
I.E.C.	- Information, Education and Communication
IBP	- International Budget Partnership
ICDS	- Integrated Child Development Scheme
IDPMS	- Initiatives for Development through Participation of Marginalized Sections
KSDWLS	- Karnataka State Drug Warehousing and Logistic Society

LOCOST	- Low Cost Standard Therapeutics
MFC	- Medico Friend Circle
MIS	- Management Information System
MRP	- Maximum Retail Price
N.L.E.D.	- National List of Essential Medicines
NHSRC	- National Health Systems Resource Centre
NRHM	- National Rural Health Mission
PHC	- Primary Health Centre
QC	- Quality Control
R.C.	- Rate Contract
RBI	- Reserve Bank of India
RGI	- Registrar General of India
RKS	- Rogi Kalyan Samiti
S.O.P.	- Standard Operating Procedures
SATHI	- Support for Advocacy and training to Health Initiatives
SHSRC	- State Health Systems Resource Centre
TN	- Tamil Nadu
TNMSC	- Tamil Nadu Medical Services Corporation Ltd.
UNOPS	- United Nations Office for Project Services
WHO	- World Health Organisation
ZP	- Zilla Parishad







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## Introduction

Since 2009, SATHI has undertaken a project, which entails study of budgetary provisions, procurement and supply system concerning essential medicines in selected districts of Maharashtra. This work is being financially and technically supported by International Budget Partnership (IBP). As part of this project, SATHI had organised a day long national seminar for discussing models and methods for ensuring availability of essential medicines in Public health facilities on 24th June, 2011, Mumbai. Main objective of the seminar was to bring together experts from different states such as Tamil Nadu, Maharashtra, Gujarat and Rajasthan to understand the medicines procurement practices in different states. The emphasis of the seminar was on the practices that help to enhance transparency and effectiveness in the procurement and distribution process. Experts from different fields such as public health professionals, health economists, Government health officials as well as members of civil society organisations attended the seminar.

This report summarises the discussions as well as key learnings of the seminar. In addition, specific recommendations regarding the improvements required in the state of Maharashtra for enhancing transparency as well as bringing efficiency in the procurement and distribution systems in the state have been separately discussed.

At the outset, Dr. Nilangi Sardeshpande (Associate Coordinator of

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<sup>1</sup> International Budget Partnership (IBP) is an initiative of Centre on Budget and Policy Priorities (CBPP). IBP collaborates with various civil society organisations across the globe to fight poverty and improve governance by reforming government budget systems and influencing budget policies. The partnership initiative of IBP is focused on developing or strengthening the work of over 35 civil society organizations (CSOs) to analyze budgets, monitor government programmes, and increase the positive outcomes of public budgets on poor communities in their countries ([internationalbudget.org](http://internationalbudget.org)).

SATHI) extended a warm welcome to all participants. In her introductory presentation, she explained the context in which this project was initiated. Considering the inadequate availability of medicines in the public health facilities and also purchase of medicines being one of the major sources of expenditure in public health facilities, SATHI decided to delve into different aspects of this problem in a systematic manner. Hence, a research was planned to assess budgetary provisions, procurement and supply systems concerning essential medicines in Maharashtra. In addition, bimonthly medicine availability was monitored in two select PHCs of Pune district.

As part of the research, procurement practices in few other states such as Tamil Nadu, Rajasthan were also studied. Considering the state wise variations in the procurement and distribution systems, it was realised that there is a need to deliberate upon this important aspect of functioning of public health system and understand the best practices which make the procurement and distribution systems more transparent and efficient. Given the fact that Indian Pharmaceutical Industry is one of the world's largest, ranking 3<sup>rd</sup> in terms of volume and 14<sup>th</sup> in terms of value in the global pharmaceutical market and that Indian medicines meet the world products in quality and are lowest priced in the world, it would be expected that access to essential medicines should not be difficult. However, in reality majority of citizens in India cannot afford these medicines.

With this background, further deliberations took place which focussed on specific aspects of medicine availability such as procurement, distribution and adequate budgetary provisions.



## Session I- Review of drug procurement practices in selected states

### **Chair person: Mr. S. Srinivasan (LOCOST, Baroda)**

After this brief context about the project as well as the seminar, Dr. Nilangi then introduced speakers of the first session, Dr. Suresh Saravdekar (Assistant Director of the Drug Procurement Cell, D.M.E.R., Maharashtra) and Dr. T. Sundararaman (Executive Director, NHSRC). Mr. S. Srinivasan (Managing Trustee of LOCOST, Baroda) chaired this session, 'Review of drug procurement practices in selected states'.

Given Dr. Suresh Saravdekar's extensive experience of working with Government Health System, he was requested to share various aspects of the procurement system currently followed in Maharashtra..

### **○ Drugs Procurement Practices - Maharashtra State**

**-Dr. Suresh Saravdekar**

Dr. Suresh Saravdekar started his presentation by giving statistics related to demographic as well as health infrastructure related indicators, and disease profile of the state of Maharashtra. He stated that the health infrastructure in the state is divided into four main autonomous components. These are:

- D.M.E.R. (Directorate of Medical Education and Research) for 14 medical colleges, 3 dental colleges and hospitals with 500 to 2000 beds each
- State E.S.I.C. (Employee's state Insurance Corporation)
- D.H.S. (Directorate of Health Services) for nearly 30 hospitals with 300 to 400 bed capacity each, tertiary referral centres, district tuberculosis, leprosy and malaria centres
- Directorate of Ayurveda- For 3 medical colleges with bed capacity of 100 to 200 each

General steps that are followed in Maharashtra state for procurement of drugs are-

### **I. Tendering & Contracting-**

The current process of tendering and contracting is complex and comprises of several steps including empanelment of manufacturers and importers, selection and standardisation of supplies, quantification and tendering and contracting for drugs. For empanelment of domestic manufacturers there are strict criteria for maintaining good quality products as well as criteria for financial strength/performance.

#### ***A) Criteria for quality of product:***

- i) Valid Drug license from FDA.
- ii) Valid W.H.O., G.M.P. certificate from FDA.
- iii) Valid performance certificate from FDA.
- iv) I.S.I. certificate for non-drug items
- v) D.C.G.I. permission for new drugs & FDCs

#### ***B) Criteria for financial strength / performance in market:***

- i) The product should be in the open market for at least preceding 3 years.
- ii) Firm should be Profit earning
- iii) Up dated VAT Clearance
- iv) Turnover of the firm

Inspection of production unit is also done by an expert committee of DMER if needed. In case, the medicines are imported in India by a particular company, there are broad criteria for registration of these importers. These are:

- i) Authority letter of the manufacturer for imports.
- ii) Valid import license in form 10 for drugs & medical devices. And IEC code for other products
- iii) Bankers certificate.
- iv) Bill of entries to access that the product is imported in India since last 3 years.
- v) Product should be in use in Country of Origin

Drug approval committee<sup>2</sup> is involved in assessment of need, selection and pooling of supplies and maintaining uniform specifications at state level.

Highlights of current rate contracting process are as follows:

- **Quality-** Quality is assured by including only WHO-GMP Drugs. Three years' market standing for the product and three years performance certificate from FDA is considered while making R.C.
- **Availability-** Multiple suppliers are available for supplying medicines at lowest rate, Good financial Status of these supplier is assessed (Schedule wise turnover is checked).
- **Price-** Prices include expenses up to doorstep delivery of medicines. The rates are compared with other similar R.C. Prices such as BMC, ESIS etc. to check if they are comparable.

Highlights of the overall procurement system are as follows:

- Procurement is done as per need and at the respective hospital level. No centralized purchases are done (Except few "A" category items<sup>3</sup> by DHS)
- WHO/GMP guidelines are followed thus there is no further checking for quality after receipt. Factory inspection or sample inspection is not a routine activity.

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<sup>2</sup> Constitution of Drug Approval Committee:  
Director, Medical Education/ Ayurvedic - Chairman  
Director, Health Services - Member  
Director (Medical), State ESIS Hospitals - Member  
One Member from Civil Hospital (Med. Supr.) - Member  
\* Professor of Surgery - Member  
\* Professor of Pharmacology - Member  
\* Professor of Medicine - Member  
Asst. Director (Purchase), Drug Purchase Cell - Convener  
\* Nominated every two years

<sup>3</sup> A category - Medicines under category A are utilised more & are purchased at state level

## **II. Purchasing-**

According to standard Operating Procedure (SOP), the quantity of medicines ordered is based on three months' requirement. A lead time of one month is given to the suppliers for completing the orders. Stock of medicines required for one month is always maintained.

While purchasing any medicine, priority is given first to state R.C. If the order cannot be supplied through state R.C., ESIC/BMC/DGS&D R.C.s are referred. In case of failure of this, procurement is done through Haffkine Bio-Pharmaceuticals. If all these options fail, items upto Rs. 50000 per item per year can be purchased locally. Items costing more than Rs. 50000, are purchased by local tendering.

## **III. Warehousing & Storage-**

In warehouses, all medicines are checked for expiry date, location of the factory, country of origin, import license, strength/weight/length, "govt. supply" stamp, batch-wise test report, ISI mark and storage conditions. Quality of medicines supplied is randomly checked at this stage.

## **IV. Inventory Control-**

Inventory control includes control over stocks, payments and regulatory control. It also includes control over use and pilferage. Optimum stock levels are maintained by keeping proper stock books and records of expiry date and Adverse Drug Reaction (A.D.R) of any medicines. A monitoring book is also maintained. The stores are run only by registered pharmacists.

## **V. Monitoring & Evaluation-**

Quality of products supplied is monitored through F.D.A. reports. In case of a substandard report by F.D.A, the product R.C. is cancelled. If four such reports are produced by F.D.A., the whole R. C. is cancelled, the firm is blacklisted and Earnest



Money Deposit<sup>4</sup> (EMD) and Security Deposit are forfeited. Even in case of default in supply by the suppliers, the firm is blacklisted, EMD and Security Deposit Forfeited. Routine penalties of 0.5% per week are issued for late Supply.

The current tendering and contracting process that is followed in the state of Maharashtra has evolved over decades through a historical process. In 1986, Lentin commission<sup>5</sup> presented suggestions for improvement in the procurement system. Following these suggestions, a separate cell for drug purchasing was established in 1992. Another important milestone was achieved in the year 2007 with establishment of Rate Contract (R.C.) cell<sup>6</sup>.

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4 Earnest Money Deposit (EMD) also known as bid security deposit is the deposit for safeguarding against a bidder's withdrawing/ altering its bid during the bid validity period. EMD is obtained from all bidders except those who are registered with Central Purchase Organisation (DGS&D).

5 Lentin commission was established in 1986 to investigate the deaths of 14 patients in J.J. Hospital, Mumbai caused due to administration of adulterated glycerol. The patients died of acute renal failure. Some important recommendations given by this commission were-

- Availability of high quality drugs in government health facilities,
- Quality should not be compromised for price,
- Quoted prices in tenders should not be less than the costs of the raw material,
- Market standing of all firms submitting their tenders should be good (at least 7 to 8 years)
- Batch wise quality control test report should be available,
- Minimum standards of qualification for a person to be a pharmacist.

6 Rate Contract (R.C.) cell is an essential component of Directorate of Medical Education and Research. This cell is mainly concerned with making the drugs available and accessible, maintaining the quality of medicines and other essential surgical items in the Public Health Care System.

In his presentation, Dr. Saravdekar enunciated key aspects of procurement process.

Steps of the procurement process	Key features of the process
a. Tendering process	<ul style="list-style-type: none"> <li>• Only empanelled &amp; evaluated vendors are eligible to bid</li> <li>• Members of two expert committees<sup>7</sup> and one appeal committee<sup>8</sup> are present for maintaining transparency</li> <li>• Negotiation with the vendors for arriving at lowest rates</li> <li>• Currently, there are no separate regional warehouses in Maharashtra, vendors are expected to deliver Medicines and supplies directly to the hospitals. There is a system for a complaint to be lodged by one vendor against other vendor.</li> </ul>

<sup>7</sup> One of the committees is Drug Approval Committee (mentioned previously in the text). The second committee is Tender Approval Committee. Constitution of this committee is as follows:

Director, Medical Education & Research	- Chairman
Director, Health Services	- Vice Chairman
Jt. Commissioner FDA	- Member
Director (Medical), State ESIS Hospitals	- Member
Dy. Secretary, Medical Education & Drugs	- Member
Professor of Surgery	- Member
Professor of Pharmacology	- Member
Professor of Medicine	- Member
Asst. Director (Purchase), Drug Purchase Cell	- Convener

<sup>8</sup> Constitution of grievance committee:

Secretary, Public Health Dept.	- Chairman
Secretary, Medical Education & Drugs	- Member
Commissioner, FDA	- Member
Secretary, Law and Judicial/Representative	- Member
Director, DMER / Director, DHS	- Member
Professor of Pharmacology	- Member
Professor of Surgery	- Member
Professor of Medicine	- Member
Representative of Finance Dept.	- Member
Dy. Secretary, Medical Education & Drugs	- Member Secretary

Steps of the procurement process	Key features of the process
b. Contracting process	<ul style="list-style-type: none"> <li>• Quality- The quality of drugs purchased under the contract is assured as strict WHO/GMP guidelines are followed while tendering and contracting.</li> <li>• Price- The prices are inclusive of all expenses till the drugs and supplies are delivered to health facilities.</li> </ul>
c. Strengths of procurement system in Maharashtra	<ul style="list-style-type: none"> <li>• Rate contracting is done directly with manufacturers</li> <li>• Generic names of the medicines are used</li> <li>• Export quality medicines are procured</li> <li>• Because the medicines are purchased in bulk, the rates are economical</li> <li>• Multiple suppliers are involved. Thus, there is no monopoly.</li> <li>• Vendors are registered and purchases are only done from these empanelled vendors</li> <li>• No additional costs for the establishment and maintenance of regional warehouses and thus, for pre-distribution testing as medicines and supplies are directly transferred to the health facilities<sup>9</sup>.</li> </ul>

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<sup>9</sup> This is true only for hospitals giving tertiary care. For other health facilities, medicines are supplied to health facilities from a district warehouse.

With the mention of these positive aspects, shortcomings of the current system were also enunciated. At the policy level, following lacunae are observed in the procurement and distribution systems that are currently followed in Maharashtra-

1. The selection of medicines and supplies is not according to national list of essential medicines or health needs of the population.
2. No single person or committee can be held accountable in the current system.
3. Lack of monitoring and evaluation systems
4. Lack of I.E.C. within the system
5. At times, lowest price selection leads to unrealistic pricing
6. Professionalism in pharmacy services is not emphasized

At the level of purchasers the problems in current system are-

- There is a lack of forecasting and planning for epidemics or seasonal changes in current system
- If a supplier's performance is bad, there is no mechanism for giving feedback
- There are delays in payments to the supplier
- There is a delay or least interest in recoveries of penalties
- Random quality checking is not done
- Safety stocks of essential medicines are not maintained
- Purchases are done in excess of requirement and sometimes unwanted medicines are purchased
- There is a high proportion of rush-purchases done in March when the financial year ends
- Suppliers influence purchasers to buy only costly drugs.

At the level of suppliers, main issues in current system of procurement are-

- High competition among suppliers sometimes result into quoting impractically low rates
- The supply of low profit items is irregular

- No offers are received for few low value but essential drugs
- Late payments of suppliers sometimes lead to default in supply

Dr. Saravdekar concluded his presentation by giving recommendations to improve the present system, these were :-

- Preparation of Essential Drugs List based on NLED<sup>10</sup>-2004
- For dissemination of information, List of essential drugs & charts on proper use of drugs should be displayed in O.P.D. of the hospital
- Dissemination of information on S.O.Ps. of purchasing, storage, inventory and control and proper use of medicines
- Training & Education of Pharmacists/Doctors in I.C. & M.M. (Inducting Professionalism)
- Including pharmacists in public hearings, they should be answerable for poor stock of medicines in the PHCs
- Motivation to pharmacists in terms of 'Best performer award if All EDs are made available'
- Scientific forecasting of budget/epidemics/ yearly increased demand
- Define & display staff duty charts/ accountabilities/ responsibilities in health facilities

Dr. Saravdekar summarized by saying that the present system of procurement services in Maharashtra is well defined & organized. Medical superintendent, civil surgeons & deans of all hospitals need support of professional services in respective fields to run the administration effectively and efficiently. (For example, in medical stores, pharmacists with a management degree in materials

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<sup>10</sup> NLED- National List of Essential Drugs- The National Essential Drugs List implies that the drugs included in it are adequate to meet the common contemporary health needs of the general population of the country and general obligation of the health administrators to ensure abundant availability of such drugs in the country. The drugs included in this list are generally safe and effective, and are approved by the Drugs Controller General, India. (National List of Essential Medicines 2003, DGHS, Government of India)

management should be appointed. For budget planning a person with a management degree in finance is needed. For equipment maintenance a person with a master's degree in biomedical engineering is required. For good manpower management a person with a degree in human resources would be a good choice.)

Dr. Saravdekar mentioned that in the state of Maharashtra, integration of allied services and e-governance of health services is proposed. In this new plan it is projected that information about rate contracts, list of essential drugs, stocks of essential drugs in health facilities and lists of blacklisted vendors would be made available for public use on the website. All stores would be monitored online and would be a part of a network. The services that would be included in integrated plan are ICDS, Mid Day Meal, services provided to tribal populations, services related to determinants such as water purification and sanitation.

### **○ Drug Procurement and Logistics: Making essential drugs and equipment reliably available in the public health system**

**-Dr. T. Sundararaman**

Dr. T. Sundararaman is the Executive Director of National Health System Resource Centre (NHSRC), New Delhi, the apex body for technical assistance to the National Rural Health Mission. Dr. T. Sundararaman made a detailed presentation specifying details of the drug procurement system in Tamil Nadu. His presentation included issues in current procurement systems in general and proposed models of procurement and their advantages and disadvantages, procurement system in Tamil Nadu (TN), their MIS and organizational and legal framework of the system.

Dr. Sundararaman started his presentation by delineating issues in current procurement systems in general. The problems faced by current systems of procurement are-

- Inaccurate and delayed quantity estimation

- Delays in tendering, tender decisions, ordering and payment
- Absence of supply chain
- Poor MIS
- Lack of standardization of procedures and documents
- Lack of trained manpower in addition to frequent changes in personnel, No professional procurement cadre, Staff have limited procurement skills, particularly at the lower and middle levels
- Absence of a centralized procurement agency (CPA)
- World Bank recommends procurement through UNOPS and for international tenders and for qualifications that drive out local competition.
- Governments often legitimise procurement through public sector undertakings
- No formal procurement training programme for new entrants
- Lack of proper monitoring, evaluation and information record systems
- Minimal use of IT systems, mostly manual systems, no proper MIS
- Absence of any legal framework or procurement act.
- Lack of coordination in terms of information sharing, knowledge management

Because of these problems in the system, poor outcomes such as irregular supply of drugs, excess supply and wastage in some cases, poor quality of drugs are observed. This further results in poor quality health care and low utilization of public health facilities by users because of unmet needs.

Dr. Sundararaman said that an ideal system of procurement would be a system designed with users in view rather than suppliers (as in current systems) with ready availability and assured quality of medicines and competitive costs. Other features of an ideal system would include-

- Equal emphasis on logistics, if not greater, to deliver goods timely at the point of use
- Greater emphasis on quality of medicines

- Total transparency in the organisation that results in competitive prices
- Ordering based on consumption for elimination of wastage
- Effective mechanisms for dealing with issues raised by vendors and users
- Friendly to ethical, quality suppliers

Dr Sundararaman put forward various options for procurement and also enunciated the strengths and weaknesses of some of these options. These are-

To decentralize procurement to districts	<p>The limitations of the decentralised procurement are as follows:</p> <ul style="list-style-type: none"> <li>• Capacities of districts are uneven and generally inadequate. Some districts are unwilling too.</li> <li>• May affect the supply chain management</li> <li>• Cost advantage in bulk procurement would be lost</li> <li>• Diverts district health officers from areas of competence to areas of incompetence- and sets up different considerations for becoming CMHOs.</li> </ul>
To procure through specialized agencies such as UNOPS <sup>11</sup>	<p>Limitations of UNOPS system are-</p> <ul style="list-style-type: none"> <li>• It is an interim solution, not a permanent one</li> <li>• Procurement done by External body is not desirable</li> <li>• There would be no supply chain management</li> <li>• Huge procurements would be done in other ministries without any external agency</li> </ul>

11 UNOPS (United Nations Office for Project Services) is an independent organization working in close association with the UN. It gives assistance to the UN organizations, international financial institutes and governments and NGOs. UNOPS gives assistance in procuring medical supplies and instruments as well as helps in shipping and distributing medicines in developing countries selected by WHO.



In addition to these two models, Dr. Sundararaman briefly mentioned about three other models. These are-

- Strengthening procurement cell in directorate  
Procuring through public sector agencies
- To set up an autonomous agency exclusively for procurement and logistics (i.e. TNMSC model)

The TNMSC model was dealt in details in the following presentation. The procurement corporation is called 'Tamil Nadu Medical Services Corporation Ltd.' (TNMSC) is an autonomous agency for procurement and logistics. It was set up in 1994-95 to provide quality drugs, diagnostic equipments and services most economically to the customers. It is a government company under the Indian Company's Act.. It is a user-driven system. At all levels, there is total autonomy in decision making. The system is responsible and accountable.

Significant features of this system are-

1. It covers about 12000 medical facilities from subcentres to Medical colleges.
2. Overall drug list of 276 drugs as per WHO and surgical items with an annual turnover of Rs. 2.2 billion
3. Management cost is 3% per year
4. Manages over 23 warehouses in TN
5. Blister packing with special logo to avoid misuse
6. Efficient QC systems to eliminate sub-standard items
7. Overall stock control through online computer network
8. An accurate online MIS for monitoring and decision support

Dr. Sunadararaman then listed features of this system which make it so successful. These are-

- **Full autonomy-** The agency is set up under the Indian Companies Act. The board of directors includes a secretary as chairman and program managers as directors. A full time managing director is present. In addition to this, a few independent professional directors are also present. All decisions on procurement are taken by the board without any reference to ministry or health

department. Ministry is responsible for only procurement policy and administration. Ministry decides the essential drugs and supplies list.

- **An excellent distribution system-** District warehouses are established and arrangement is made to move to users. The transactions are cashless (Passbook-based). The objective is that users should have all goods at all times. There are clear criteria of no stock outs and the system should be responsive to changing needs. When a drug or consumable in a district warehouse falls below a three month threshold level, the order is automatically placed by state TNMSC with the rate contracted firm which delivers the supplies within one month to the district warehouse.
- **An excellent quality control system-** For quality management all batches of drugs supplied undergo a quality check. Two samples are sent to two laboratories confidentially. Laboratories are chosen by all India tendering- with pre-finalization inspection of labs. Payment is made only if quality checks are passed. If quality checks fail the batch has to be replaced. If they fail thrice, the firm is black listed. Proper process of black-listing and de-listing is also in place. Manufacturing units are also visited beforehand for a quality check.
- **Transparent Procurement system-** Transparency is an important feature of this system. Procurement is based on calendar. It is over before February and tender process does not take more than a month. Standard documents are required for all processes. The bid is transparent and web-based. Winning bid is known to all.
- An excellent online MIS is present to monitor stock inventory, quality control and prompt payments.
- Forecasting is eliminated by ordering goods that move.

Other necessary features of the TN system include-

- Essential drug list, drug formulary and standard treatment guidelines are in place along with process of periodic revision,

- Promotion of rational drug use amongst doctors backed by prescription audit
- Procurement of infrastructure and services are kept out of the system.

Being an autonomous corporation, TNMSC performs a whole range of functions. These include-

- Procurement of all health sector goods for state.
- Supply chain management up to facility level. The supply chain management is maintained through a network of warehouses at district level.
- Ensuring timely availability of goods to users without any stock outs without any budgetary constraints.
- Standardization – finalization of specifications and standards
- Quality control,
- Timely payment to vendors
- Addressing the concerns of users and vendors effectively- procedures for black-listing, maintenance, condemnation etc in-built.

Warehouse is an important link in the procurement system. In a warehouse, activities such as receipt of purchase orders from head office, receipt of drugs from suppliers, issuing drugs to facilities, sending samples for quality control, stock monitoring and record keeping are performed. A pharmacist (graduate), an assistant pharmacist and a data entry operator manage the work in a warehouse. The work of packing and loading is outsourced.

The rate contracts are issued by March each year for all drugs and supplies on the EDL. The tender documents are standardized. Procurement is done only from manufacturers and no intermediaries. Orders are placed by TNMSC and are responsive to stock position in district warehouse. The suppliers have a deadline of a month. If they fail to supply, they will get penalties. On failing to do that the firms are blacklisted.

The legal framework of TNMSC comes from a transparency act that states standards for all procurements. This act came later than



## Session II- Methods of effective medicine distribution in the public health system

### **Chairperson- Dr. Anant Phadke (SATHI)**

In this session, Ms. Sudha Bhat (IDPMS, Bangalore) was requested to share details of the Karnataka State Drug Warehousing and Logistic Society (KSDWLS), especially regarding medicine distribution as IDPMS has conducted a study on this issue. Dr. Anant Phadke who is associated with Jan Aarogya Abhiyaan Maharashtra and the All India Drug Action Network (AIDAN), chaired the session.

### **○ Method of medicine distribution- Karnataka State Drug Warehousing and Logistic Society**

**-Ms. Sudha Bhat**

In the beginning of her presentation, Ms. Sudha informed that in Karnataka drug procurement and supply was done by government medical stores till few years ago. In 2003, Karnataka State Drug Warehousing and Logistic Society (KSDWLS) akin to TNMSC in Tamil Nadu was formed in the state. Though KSDWLS was set up with the similar objectives and functioning as TNMSC, currently there are significant differences in the functioning of these two organisations. Unlike TNMSC, KSDWLS is not an autonomous body but it has a typical government set up. The state health minister acts as a chairman of KSDWLS and Additional Director who is a member of Karnataka State Administrative department acts as a manager.

There are 14 warehouses in the state for 30 districts (one warehouse for two districts) and the state is planning to move towards having a warehouse per district.

Ms. Sudha then explained the process of drug supply in the state. At the state level, the therapeutic committee first decides the list of drugs to be procured. Then rate contract books are sent to all health institutions in the state. There is a fixed maximum budget decided for health facilities at each level. Accordingly all institutions send their requests to district warehouses and these are further sent to state logistics society. State logistics society then places orders with suppliers. Suppliers supply medicines to district warehouses and they are further picked up by each health institution.

Ms. Sudha also emphasized on the budgetary aspects of the procurement system in Karnataka. She informed that till last financial year, 60 per cent of the finances for drugs in health facilities were coming through district funds and 40 per cent were from state funds. But this year the system is changed in order to reduce the delay between the transfers of funds from state to district level and then further downwards. This year onwards the entire amount is transferred directly from the state funds to the health facilities.

After brief information about procurement and financial systems concerning medicine purchase in the state, Ms Sudha then spoke about the lacunae in the existing system. They are mainly as follows-

- a) **PHCs not linked to district level-** Currently the MIS is available only till district level. There is no mechanism for connecting PHCs to district level. There is no weekly or monthly tracking of drug stock outs. The problem of shortage of drug supply is yet unresolved even after appointment of KSDWLS because of poor management. The medical officers are many times not equipped with proper supply of medicines to cater the patients' medical needs.
- b) **Ineffective local level therapeutic committees-** At block and district level, the therapeutic committees have been appointed for deciding drugs to be ordered based on demands. In reality, 90 to 95 per cent of drugs are commonly supplied in all areas for last few years.

- c) **Lack of autonomy to KSDWLS-** It does not have a flexibility and power that is present in case of TNMSC (A study by SHSRC comparing TNMSC and KSDWLS found that managing director in Tamil Nadu is entrusted with Rs. 5 million where as in Karnataka it is just Rs. 0.1 million. This shows that the system is not autonomous).
- d) **Lack of transparency-** In terms of maintaining transparency, there are no efforts taken in Karnataka. No information is made available to the public.

Few additional points that emerged during the discussion that followed Sudha's presentation were as follows:

Need for approval of ministry for each and every order placed leads to delay in medicine supply. Theoretically, KSDWLS has autonomy to choose which medicines to be ordered, but in reality only the available medicines are given.

□□□



## **Session III- Budget allocations for medicines in public health system**

### **Chairperson- Ravi Duggal (Anusandhan Trust, Mumbai)**

The post lunch session focussed on 'Estimations regarding per capita budget allocations for medicines in public health system'. In this session, Mr. Gautam Chakraborty, an advisor to NHSRC on healthcare financing was invited to share estimates based on recent studies on health expenditure and expenditure on medicines at the national level. . The second presentation was by Dr. Narendra Gupta (Secretary/Treasurer, Prayas, Chittorgarh, Rajasthan). He presented an innovative model in Chittorgarh district of Rajasthan which helped to provide medicines at affordable prices. . The session was chaired by Mr. Ravi Duggal who is currently working as a health financing consultant for IBP and has worked in health financing and budgets for over two decades.

### **○ Per Capita Medicine Budget in Public Health System**

**-Mr. Gautam Chakraborty**

Mr. Gautam started his presentation by clarifying that while calculating per capita medicine budget in public health systems, expenditure done from only state treasury budget is considered. This is because the share of medicine budget from NRHM funds is minimal compared to the state budget.

Mr. Gautam reemphasised that a major proportion of out of pocket expenditure for health services availed from public health facilities is on purchase of medicines. In terms of state expenditure on drugs, there are significant differences in per capita allocations for medicines across

states, for e.g. Kerala (Rs. 46 per capita) and Tamil Nadu (Rs. 31 per capita) on one hand and all other states on the other where they are still struggling to achieve the preset target of Rs. 15 per capita.

Key findings related to expenditure on medicines in Maharashtra were as follows:

- The calculation done based on data from NHSRC, RBI bulletin and RGI data shows that in Maharashtra, the per capita medicine budget has reduced from Rs.12.3 per capita in 2006-07 to Rs.11.9 per capita in 2008-09.
- The correlation of per capita medicine budget with per capita state health budget in Maharashtra shows that per capita medicine budget is decreasing with increase in overall state health budget (coefficient of correlation is -0.76). This correlation for overall India is positive (+0.81) which means that proportion of budget on medicine as percentage of total health budget is also increasing with increasing health budget. From correlation calculations, it is seen that in Maharashtra, rise in health budget and lowering of fund allocations for medicines is happening simultaneously.

Mr. Gautam then tried to establish a relation between the duration of procurement cycle and drug budget. The examples of Bihar, Rajasthan and Tamil Nadu show an inverse relation between these two. As the procurement cycle shortens, the per capita drug budget increases. Higher drug expenditure might be achieved by lowering the duration of procurement cycle.

The procurement cycle is determined based on various factors. These include:

- Institutional mechanisms that determine degree of autonomy
- Demand estimation that determines the rational basis for demand generation and periodicity
- Tendering process
- Supply chain management that determines quantity & periodicity
- Quality control

Mr. Gautam concluded by saying that while looking ahead from here instead of Rs. 45 per capita to be spent on drugs as suggested by WHO, we can first have a bench mark of Rs. 20 per capita for all states to begin with. For a population of 1.2 billion, this would come out to be Rs. 24 billion annually. Mr. Gautam suggested that this budget should be equally divided into central and state budgets.

**○ Recent policy initiatives regarding provision of free medicines in Rajasthan and their budgetary implications**

**-Dr. Narendra Gupta**

Dr. Narendra Gupta shared the experience of Chittorgarh district in Rajasthan where innovative strategies were employed to make affordable medicines available to public.. The initiative was started by the district administration. Besides making medicines affordable and reducing out of pocket expenditures on medicines, the initiative also promoted use of rational medicines. The strategy included adopting a transparent open tendering system for procurement, bringing down the costs of medicines so that they are affordable, making available almost all commonly prescribed drugs at low cost, ensuring good quality control and monitoring, establishing a chain of drug shops from district level to the PHC level and wherever possible up to subcentres, convincing doctors to prescribe generic drugs, checking prescriptions for irrational drugs, persuading pharmacists to sell generic drugs below the MRP.

Following steps were taken to ensure the availability of medicines at affordable costs.

- The state government sent various circulars to all government doctors regarding prescribing generic medicines.
- Many doctors were not even aware of the huge margins of drug companies. Awareness was created among these doctors regarding the problems faced by the poor people in purchasing medicines at excessive rates.
- The reputed drug companies that produced generic versions of

the drugs along with combination drugs were contacted and their generic versions were bought.

- Government medical shops were established. The shops sold medicines with 20 per cent margin which was enough for making profits and expanding the business further.

The experiment made significant difference in out of pocket expenditure on medicines for patients. In Chittorgarh, people have now accepted generic medicines. There is an improvement in terms of cooperation from doctors and awareness among them. Government of Rajasthan has now decided to provide free treatment to everyone from 2<sup>nd</sup> October, 2011. The Rajasthan Medical Supply Corporation has been established keeping in view TNMSC model. 28 district warehouses are established for 33 districts. All these efforts are also being supported by appropriate legal amendments.

Though this model is successful in one of the districts, there are limitations to its sustainability is as it is difficult to monitor and regulate prescriptions of doctors for a long time. Secondly, drug shops cannot be monitored regularly to see if the medicines are sold at recommended prices.

Dr. Narendra Gupta concluded his talk by saying that Chittorgarh experiment has taught us few lessons. Generic medicines can be acceptable to general population and even doctors can be convinced to change their prescription behaviour but most importantly, the government has to provide free medicines to everybody.

*The concluding session* was about modifications required in the present procurement system of Maharashtra. On the basis of the discussions that took place in the seminar, following recommendations in the procurement and distribution system were proposed -



## Concluding Session

### **Suggestions for improvement in Maharashtra's Procurement system**

In Maharashtra setting up of an autonomous system of procurement similar to the TNMSC model is an overdue measure. Autonomy, demand-sensitive supply system, and transparency are the core requirements for adequate availability of medicines in the public health facilities and not only bulk procurement of medicines from manufacturers. Pending this overhaul of the Maharashtra's medicine procurement and distribution system, following concrete measures were suggested towards forming a system which ensures adequate supply of medicines to the needy patients in the Public Health System.

1. There is an urgent need to prepare Essential Drugs List for the state. This list could be a modified version of NLED-2004. Currently Rate Contract is done for around 1800 products when there are only 350 medicines in Ministry of Health's List of Essential Medicines. It is essential to follow Essential drug list as many of the drugs which are being procured at present are irrational. This would save time and money in medicine procurement.
2. Need to make the procurement agency autonomous
3. Need for trained staff (like professional managers) who can manage procurement and logistics and regular training to Pharmacists/Doctors
4. Need to set up e-tendering system for procurement of medicines and equipment

5. List of blacklisted vendors should be displayed on the website
6. All the different sources of budget for purchase of medicines should be clubbed and there should be a single source of medicine purchase.
7. Tender evaluation report including name of medicine, its rate and name of selected manufacturer/supplier should be put up on the Health department's website.
8. State should formulate its own customized procurement manual defining the process clearly.
9. A State monitoring / review committee should be constituted to oversee medicine procurement.. The committee should include civil society representatives and public health experts, and should have the mandate to regularly monitor the system for procurement of drugs.

### **Suggestions for improvement in the Distribution system**

1. The computerized system of drug management linking the Primary health centers in a District should be put in place so that idle stock of medicines can be transferred to those PHCs/RHs where there is shortage.
2. Information regarding medicine stock in every PHC as well as details of purchase orders including quantity and name of medicines ordered, quantity and name of medicines supplied and name of manufacturer/supplier should be available on the official web site.
3. Supply of drugs from ZP should be strictly based on actual requirements in the PHC. Hence medicine requirement from respective facility needs to be pooled properly.

### **Suggestions regarding increasing budgetary allocations**

1. At present, budget towards drugs is only 11% of the total health budget, which should be doubled compared to the present allocated amount.
2. Payments to the manufacturers/supplier should be made on time to help ensure timely and effective delivery of medicines by them.

NRHM should ensure some kind of monitoring system over local purchase of medicines and on RKS fund utilization.



*Annexure 1*

**Schedule of the seminar**

<b>Time</b>	<b>Session</b>	
10.00 -10.30	Introduction – About the project and the seminar	Dr. Nilangi Sardeshpande
Review of drug procurement practices in selected states Chairperson- Chinu Srinivasan (LOCOST, Baroda)		
10.30 -11.15	Maharashtra	Dr. Saravdekar (R.C. Cell, Maharashtra)
	Tamil Nadu	Dr. Sundararaman (NHSRC, New Delhi)
11.15 -11.45	Discussion and Remarks by the chairperson	
Methods of effective medicine distribution in the public health system Chairperson- Dr. Anant Phadke		
11.45 -12.45	Method of medicine distribution- Karnataka Drug Logistics society	Ms. Sudha Bhat (IDPMS, Bangalore)
12.45 -1.15	Discussion and Remarks by the chairperson	
<b>1.15-2.15</b>	<b>Lunch</b>	
Estimations regarding Per capita budget allocations for medicines in public health system Chair person- Ravi Duggal (Anusandhan Trust, Mumbai)		
2.15 - 3.00	Presentation I	Mr. Gautam Chakravorty (NHSRC, New Delhi)
	Presentation II	Dr. Narendra Gupta (Prayas, Rajasthan)
3.00 - 3.30	Discussion and Remarks by the chairperson	
<b>3.30 - 3.45</b>	<b>Tea</b>	
Streamlining the medicine procurement and distribution system in Maharashtra Chairperson- Dr. Sundararaman		
3.45 - 4.30	Recommendations from JAA reg. modifications in the procurement and distribution system	Dr. Anant Phadke (SATHI, Pune)
4.30 - 5.00	Discussion and Remarks by the chairperson	
5.00 - 5.20	Summing up	Dr. Abhay Shukla
5.20 - 5.30	Vote of thanks	Ms. Shweta Marathe



## Breif Profile of presenters and chairpersons

### Profile of chairpersons

- **Mr. S. Srinivasan**  
**Mr. S. Srinivasan** is the editor of MFC bulletin, as well as Managing trustee of Locost, which is a public, non-profit charitable trust that produces low cost drugs. He is also associated with AIDAN- All India Drug Action Network.
- **Dr. Anant Phadke**  
Dr. Anant Phadke is the Co-convenor of the Jan Aarogya Abhiyan, Maharashtra. He is an active member of Medico-Friend Circle and a founder member of the All India Drug Action Network (AIDAN) and Lok Vidnyan Sanghatana.
- **Mr. Ravi Duggal**  
Mr. Ravi Duggal has contributed to the areas of political economy of health and health financing through institutions like CEHAT, FRCH for nearly three decades. He now works as an independent consultant undertaking research, advocacy and training on issues like health systems and health sector reforms, health financing and budgets, health and human rights, reproductive health, governance and accountability mechanisms.

## Profile of presenters

- **Dr. Suresh Saravdekar**  
Dr. Saravdekar is the Assistant Director of Rate Contract (R.C.) cell of Directorate of Medical Education and Research (D.M.E.R.) for the state of Maharashtra.
- **Dr. T. Sundararaman**  
Dr. T. Sundararaman is the Executive Director of National Health System Resource Centre (NHSRC), New Delhi, the apex body for technical assistance to the National Rural Health Mission. He is a founder member of the All India People's Science Network (AIPSN) and the Bharat Gyan Vigyan Samiti (BGVS).
- **Ms. Sudha Bhat**  
Ms. Sudha Bhat is working as Deputy Director with IDPMS and is involved in budget analysis work from past three years.
- **Mr. Gautam Chakraborty**  
Mr. Gautam Chakraborty has been trained as a financial analyst and is currently healthcare financing advisor at NHSRC, New Delhi.
- **Dr. Narendra Gupta**  
Dr. Narendra Gupta is a medical graduate. He is the Secretary/ Treasurer of Prayas, Chittorgarh. He is also associated with Medico Friends Circle (MFC) and Jan Swasthya Abhiyaan (JSA).



