Dissertation Title

Functioning of Rajasthan Medical Services Corporation Limited and Patient Satisfaction

A dissertation submitted in partial fulfillment of the requirements for the award of

Post-Graduate Diploma in Health and Hospital Management

by

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International Institute of Health Management Research

New Delhi -110075

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DISSERTATION REPORT

On

Functioning of Rajasthan Medical Services Corporation Limited and Patient Satisfaction

By

Bhawna Sadhwani

Under the guidance of

Prof. Akhilesh Bhargava (Director- SIHFW)

Dr. Preetha GS (Assistant Professor)

Post Graduate Diploma in Hospital and Health Management

2010 –12

International Institute of Health Management Research

New Delhi

Acknowledgement

I would like to thank the staff of **SIHFW, Jaipur** for extending its cooperation and help in the process of understanding various dimension of organization. This dissertation would not have been completed without a substantial support from a great number of people. Although it is not possible to acknowledge each and every person individually, I would like to thank all those who contributed their time and efforts.

At the onset of the report, I would like to acknowledge my sincere thanks to **Dr. Akhilesh Bhargava**, Director, SIHFW and mentor **Nirmala Peter** (Consultant RCH).

I would like to express my gratitude to **Dr. S.S Yadav** (Registrar, SIHFW) for their support and guidance at every step.

I also take this opportunity to express my deep sense of gratitude to my guide and mentor **Dr. Preetha GS**,Assistant Professor, International Institute of Health Management Research, New Delhi for his helpful attitude and valuable suggestions, which helped in shaping and completion of this project.

Finally I also extend my heartfelt gratitude to Dr L.P Singh, Director, **Dr. Rajesh Bhalla**, Dean (Academic and Students Affairs), **Dr. Sanjiv Kumar**, Dean (Research and Publication) IIHMR, New Delhi for providing us a platform to gain enough knowledge and skills in different aspects of Health Management.

Dr. Bhawna Sadhwani
IIHMR, New Delhi,
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ISO 9001 REGISTERED

Director

F-76(1)/SIHFW/Internship/2011-12/391

TO WHOM IT MAY CONCERN

This is to certify that Ms. Bhawana Sadhwani , a student of PGDHHM course from IIHMR-Delhi has successfully completed her internship as management trainee from Feb to April 2012 at SIHFW-Rajasthan.

During her internship she conducted study on "Functioning of RMSCL and Patient satisfaction" under the guidance of me and my team at SIHFW.

Her work is satisfactory and her performance and conduct as a trainee was good..

We wish her good luck for her future assignments

Dr.Akhilesh Bhargava

Director-SIHFW

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Certificate of Approval

The following dissertation titled "**A study on Functioning of RMSCL and Patient Satisfaction**" is hereby approved as a certified study in management carried out and presented in manner satisfactory to warrant its acceptance as a prerequisite for the award of **Post- Graduate Diploma in Health and Hospital Management** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation

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Certificate from Dissertation Advisory Committee

This is to certify that Ms. Bhawana Sadhwani, a student of the **Post- Graduate Diploma in Health and Hospital Management**, has worked under our guidance and supervision.

She is submitting this dissertation titled "Functioning of RMSCL and Patient satisfaction " in partial fulfillment of the requirements for the award of the **Post- Graduate Diploma in Health and Hospital Management**.

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.

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List of Acronyms

ANM	Auxiliary Nurse Midwife
APL	Above Poverty Line
BPL	Below Poverty Line
CHC	Community Health Centre
CMHO	Chief Medical Health Officer
DH	District Hospital
DDC	Drug Distribution Centre
DGS&D	Directorate General of Supply and Distribution
DPC	District Program Coordinator
DDW	District Drug Warehouse
IPD	In-Patient Department
MO	Medical Officer
NDP	National Drug Policy
OPD	Out Patient Department
OPE	Out of Pocket Expenditure
PHC	Primary Health Centre
RMSCL	Rajasthan Medical Services Corporation Limited
SIHFW	State Institute of Health and Family Welfare
TNMSC	Tamil Nadu Medical Service Corporation
WHO	World Health Organization

Executive Summary

Rajasthan Medical Service Corporation Limited (RMSCL) was setup in April, 2011 to provide quality drugs, diagnostic equipments and other health system related item, registered on 4th May, 2011.It is an autonomous agency to procure and supply drugs and medicines to all medical institutions in the state. It has an advantage of economy of scale. It is a specialized agency with expertise in procurement, storage and distribution system. With a primary objective, to deliver Quality Drugs, Medicines, Surgical, Suture items and other medical equipments in time to the Government Medical Institutions and free supply of commonly used drugs to all patients from Oct 02, 2011.

Health care is a dynamic sector which requires considerable amount of interpersonal interaction between the health care providers and the seekers of care. The level of patients' satisfaction is one of the important goals of any health system and serves as an important indicator of the effectiveness of the services provided at the health facility.

Not much work has been done to measure Patient Satisfaction in public sector hospitals of India. Patient Satisfaction is defined in terms of the degree to which the patient's expectations are fulfilled. It is an expression of the gap between the expected and perceived characteristics of a service (Lochoro, 2004). Measuring Patient Satisfaction depends on using the "accurate measures because it comprises of standards that incorporate dimensions of technical, interpersonal, social, and moral aspects of care" (Kane et al., 1997).

As RMSCL is a new launch, it became essential to assess the impact of initiatives in health care facilities, to put forward recommendations to improve health system performance.

The main objective of the study was to determine the patient's satisfaction in terms of free medicines provided to patients at each level (PHC, CHC, and District Hospital) of the health facility in Jaipur District of Rajasthan.

The specific objectives of the study were:

- To know the Functioning of RMSCL.
- To assess level of patients satisfaction at PHC, CHC and District Hospital.

- To identify gaps in patient's satisfaction.
- To identify Impact of RMSCL on OPD.
- To draw a set of recommendations to improve satisfaction level of patients.

Jaipur district was selected for the study, A Cross Sectional; Descriptive Study was done to assess patient satisfaction from free drug distribution.

Sample was selected from three levels of facility i.e from District Hospital, CHC and PHC.

- At District Level - Jaipuria Hospital
- At CHC Level - Sanganer CHC
- At PHC Level - Vatika PHC

- ✓ At district Hospital, Jaipuria was selected as RMSCL was initiated from jaipuria (model hospital) Hospital.
- ✓ CHC and PHC were randomly selected with the help of random number method by using MS-Excel.

Sample size was determined on the basis of average daily OPD load at every health facility. 20% of daily OPD patients were interviewed at each facility level.

- Jaipuria Hospital = 400 patients were interviewed
- Sanganer CHC = 240 patients were interviewed
- Vatika PHC = 80 patients were interviewed

Total OPD Patients Interviewed=720

Out of 720 patients interviewed, 53.1%were females and rest 46.9% were males. Majority among them were unemployed, which includes housewives, pensioners, senior citizens and students. Others were self employed, business, temporary jobs, agriculture and permanent jobs.

The registration counter is the entry point for any person who wants to avail the services of the health facility and no facility providing services to the public can neglect it. Time taken at

registration counter for 63.3% patients was between 10-15 minutes, for 34.3% it was within 5 minutes and for rest patients it was between 15-30 minutes.

Waiting time for doctors is another dimension influencing patient satisfaction. It was10-15 minutes for majority of patients, for rest it was more than 15 minutes and for 0.8% no time taken to visit doctors.

RMSCL main aim is to provide quality and essential medicines to all. Medicines are important part of the treatment. 97.8%went to DDC to **receive medicines**, went to home or to private medical store to receive medicines, as they felt that quality was not maintained, more time is consumed to receive medicines, full medicines are not available. Time taken to receive medicines from DDW was a major concern in patient satisfaction. 63.06% received medicines within 10-15 minutes from DDC, 33.23% receive medicines between 15-30 minutes and rest 3.69% received medicines within 5 minutes. More than 15 minutes time was taken re time was taken due to lack of coordination and long queue among patients receiving medicines at DDC.58.94% receive partial medicines, and only 37.78% receive all medicines written in the prescription slip and rest 3.26 received no medicine.

Accessibility to DDC influence satisfaction levels, According to 50.7% DDC is located at right place, for 44.3% DDC is located at a place that is not able to locate easily and for rest 5% replied that DDC is far away.

It is not only the availability of services that influences the satisfaction of a patient but also the treatment in terms of behavior he/she receives from the service providers whether the person may be doctor, nursing staff or even the support staff. The patients were enquired about their perception on the behavior of the staff available at the health facility for 65.7% patients **behavior of provider** was fine, for 24.3% behavior of provider was good, for 5.3% only patients behavior was very good and for 4.7% patient's behavior of provider was bad.

After the launch of RMSC, **patients visiting the public facility numbers** have been increased, OPD numbers outnumber the IPD patients, as more patients are availing the services accessibility is increased which in turn will improve the health indicators. But on other side according to the providers the numbers of OPD patients have increased due to multiple registrations done by patients on ever visit to health facility.

Organizational Profile

State Institute of Health & Family Welfare (SIHFW) Rajasthan is an apex level autonomous training and research organization in the Health Sector of the State. The institute was established on April 19, 1995 as a registered society (Reg. No.25/Jaipur/1995-96) by the Government of Rajasthan under Societies Registration Act 1958.

SIHFW is the only ISO 9001:2008 certified training institution in health sector. It is the only Institute across the country which has a self financed (partially supported by NRHM).It has Dress Code for staff and faculty. There is an HR manual in place besides a quality manual endorsed by BSCIC. The institute has a virtually paperless office and is energy efficient contributing to safe environment in a modest manner.

Goals:

The process of developing human resources for the health is being augmented by SIHFW through:

- Enhancing the capacity of the HFWTCs in Rajasthan.
- Enhancing the capacity of ANM training centers located in different districts and uses them concurrently for in-service training of health functionaries.
- Conduct training of Trainers (ToT) for different programs.
- Developing Training Program and modules on the basis of Training Need Assessment of the health staff at various levels.
- Contributing to organization development of Medical, Health and Family Welfare of the State Government through operational research.
- Providing consultancy on issues related to health

Mission:

The mission of the institute is committed to improvement in health care through HRD, Health Research, Consultancy, and networking aiming at enhancement in the quality of life.

1. Develop Human Resources for Health (HRH) through capacity building.

2. Organization Development (OD) through operations research.

Governance:

SIHFW Rajasthan is governed by a Governing board chaired by the Health and F.W. Minister. The members on the Board include Principal Health Secretary, Finance Secretary, Secretary (FW), Directors of Medical, Health & Family Welfare, Director, HCM-RIPA, Principal, SMS

Medical College and Director-Indian Institute of Health Management Research (IIHMR). The Director, SIHFW is the Member Secretary. Besides, three renowned and prominent trainers/ consultants/ social workers in the field of health and family welfare are nominated by the State Government.

Executive Council:

Executive Council of SIHFW is chaired by the Principal Health Secretary, Medical & Health Department Government of Rajasthan. Members are all the Directors of Medical Health and Family Welfare Department, Dy. Secretary (Finance-Expenditure) Government of Rajasthan, renowned academician and a faculty member. The Director SIHFW is the Member Secretary.

Funding:

To begin with SIHFW was fully funded by IPP-IX Project till Dec. 2001. Thereafter, UNFPA supported it between 01.01.2002 to 30.06.2003. Subsequently, Institute has been carrying itself through Projects, studies and consultancies on its own.

Functions:

1. Training
2. Consultancy
3. Documentation
4. Recruitments
5. Research
6. Monitoring

Networking:

SIHFW has established formal linkages with IIHMR, IIPS, ASCI, VHAI, FRCH, TISS, PRB, PFI, EPOS, NACO, NIHFW and other institute and welcomes the collaboration with other institutes. The Institute is in the process of making its campus Wi-Fi. Presently all faculty and staff computers are connected through LAN and have broadband facility.

Faculty:

Beside the Director, there are five faculty positions in the institute. The nature of work in the institute demands specialization in Preventive and Social Medicine, Health Management, Pediatrics, Gyn. & Obstetric, and Health Communication. The team of Institute possesses the expertise in providing consultancy for Health Services Research and capacity building in Health Management.

Campus:

Institute is located in a sprawling campus of 4.4 hectare in the east of the Jaipur city in a scenic and serene area. The constructed area includes 6 training halls, 36 A/C rooms hostel with a 64 cover dining space, 10 faculty rooms, 2 halls equipped with separate work stations for administrative & support staff and 6 staff quarters and 2 guest houses. Overall built-up area is 4621.4 sq.m. The premises are adorned with big beautiful lawns and blooming flowers beckoning the attention of visitors. The plantation has been initiated with a vision to make the campus eco friendly and lush green.

Internship Report

Tasks Assigned to me at SIHFW:

The learning experience has been immense because of the many opportunities given to me where I could as a trainee use my managerial skills and at same time be a useful resource to the Organization. During the first week I was given the opportunity to interact with various staff members and understand the working of the organization. Next I was attended various training which were conducted in SIHFW during the dissertation period and learned the capacity building aspect of health professionals, I have attended weekly organized CME's on different aspect of public health.

The list of the attended training during the dissertation period as follows:

S. No.	Training	Organization	Participating members
1.	ICTC Team Training	RSACS	ICTC In-charge/ Counselor/ Lab. Technician
2.	Review Meeting of Focus District Coordinators and Divisional Coordinators	UNICEF	Focus District Coordinators and Divisional Coordinators
3.	ToT on Supervisory module for delivery of HBPNC	NIPI	DMCHN/ BMCHN/ BCMOs/ MOs/ RO & Consultants - RCH (SIHFW)
4.	Training on Appreciative Inquiry	UNICEF	Free Lancers/SIHFW Staff
5.	Routine Immunization	NIPI	MO-IC

To review the development of the Institute, the timeline from its inception to present was divided into five year intervals.

- **Phase 1: 1995-1999:** SIHFW was established under the India Population Project IX, funded by the World Bank. With the principle of providing a formal institute to provide quality trainings for strengthening the in-service training programmes of all categories of health care providers and by providing technical support to other training institutions in the state.

- **Phase 2: 2000-2004:** In 2001 when IPP ended, SIHFW faced a crisis. The funding for the entire establishment expenditure including salary of the faculty and support staff, office expenses and other contingency expenditure ran dry and the institute had to find alternative sources of funding to function from January 1st, 2002.

- **Phase 3: 2005-2009:** Under the NRHM it was proposed to set up a State Health System Resource Centre. The objectives of the SHSRC were almost same as envisaged in the MOU of SIHFW society of Rajasthan, therefore a proposal was developed, whereby in Rajasthan could be located within SIHFW albeit maintaining its own identity.

- **Phase 4: 2009 to Present:** New reforms were introduced in SIHFW. Staffing pattern as per the recommendations of SHSRC was implemented. As it became a growing organization, employee motivation and retention also became areas of interest to administrators. The focus, which was earlier only on completion of trainings, now included to in-house capacity building and growth.

Major developments during different phases:

- **Phase 1:** SIHFW was assigned the responsibility of developing a training policy for the State in 1997. Training programmes for various cadres were conducted. Technical support and backstopping to Regional Health & Family Welfare Training Centers

located at Jaipur, Ajmer & Jodhpur and 15 District Training Centers & 12 ANM Training Centers was provided. The institute conducted several research assignments for international donors such as UNFPA, UNICEF and CARE India. The institute utilized more than 85 % funds received under IPP-IX. The Institute also contributed in developing Population Policy for the State.

- **Phase 2:** It submitted proposals for short-term and long term sustainability to the Government and requested the State Government to allot funds in the State budget. It was recognized that the Institute had a potential to become self sustainable in due course of time, if it functions at full capacity with full staff contingent and is given complete autonomy to raise and retain funds by organizing trainings and carrying out research & consultancy. A new process of induction of faculty and initiating the training activities from a new end and taking up relevant operational studies for the state was started. SIHFW became a resource center for RCH Projects. UNICEF funded Border District Cluster Strategy provided SIHFW an opportunity to initiate a special project of capacity building of service delivery system in three border districts. For the capacity development, collaborations with agencies like IIHMR and EPOS Health Consultants were formed.

- **Phase 3:** SIHFW got approval of creation of Health System Resource Centers (SHSRC) in Rajasthan. This meant a new lifeline for the institute with new funds and additional posts. The honorarium paid to the trainers was raised from the earlier level. The trainings which were held only in 3 districts, gradually increased and after NRHM an increasing number of districts were covered.

- **Phase 4:** Various new changes were introduced in the Institute. Including:
  - Appointment of a full time director
  - Introduction of an appraisal system
  - Increase in remuneration package
  - New strategies and mission were adopted
  - ISO 9001:2008 certification was obtained

- Became a fully self financed organization
- A documented HR Policy was developed
- A Quality manual endorsed by BSCIC was adopted
- Paperless and energy efficient office
- Staff was covered with Med-claim
- Website Developed (http://sihfwrajasthan.com)
- Uniform was introduced
- Evaluation of trainings was done on regular basis and feedback was obtained.

DISSERTATION REPORT

FUNCTIONING OF RMSCL AND PATIENT SATISFACTION

Background:

Health system strengthening is a central mandate of the National Rural Health Mission. The number of doctors, nurses and paramedical staff in public facilities has increased markedly. So has the utilization of these facilities by the community. However the adequate availability of medicines and other consumables is still not fully ensured in all states. Even while states work to ensure this, expensive diagnostic tests and medicines are still being prescribed by the providers that have to be bought out of pocket by the patients. The program to ensure global accessibility to quality assured and affordable medicines, particularly for the poorest, was initiated by the World Health Organization (WHO) about 25 years ago (Hogerzeil1995). Different intervention strategies can be implemented to address the problems. Bangladesh was the first country to put the principles of the essential drugs concept into practice. In 1982, it introduced a strong National Drug Policy (NDP) and promulgated a Drugs (Control) Ordinance to provide the initial legal instruments for its implementation (Chetley and Rohde 1994).

Central Government of India — Essential drugs concept status

The two main objectives of India's health policy in the pharmaceutical sector have been to ensure the availability of reasonably priced high quality drugs and to promote the growth and development of a vibrant domestic drug industry. In spite of advocacy and evidence of the clear benefits of the essential drugs concept (EDC), India was slow to adopt and initiate a comprehensive essential drugs program. Although much has been achieved over the last two decades, a huge gap remains between the needs for drugs, and their supply and accessibility, especially among poorer populations.

Generic drugs which are the drugs that are usually produced when a branded drug loses its patent, approximately 20 years after the drug patent application was registered, can tremendously increase the availability, affordability and efficient use of medicines. Price appears to be the real difference between most brands and generic drugs since generic drugs are held to the same quality standards for safety and performance as the brand names, yet can

sell for 30-80% less, and in fact on an average, most generic drugs are approximately half the price of their brand name counterparts. However, prices of even the generic drugs are being manipulated by larger drug companies which have been acquiring smaller generic companies, and keeping the generic drugs prices high to discourage their use. These changes result in reducing the price difference between branded and generic products, thus keeping their sale and profits of former intact and letting them earn more even from generic drug sales, leading to disproportionate profiteering by them, while the people may not get the benefit of savings through use of generic drugs despite the end of patent on them. It is extremely important that the generic drugs be protected from price manipulations and also that they be used in public health care system as it would drastically bring down the drug expenditure of government, allowing more money to be spent on other areas of healthcare that would otherwise be neglected with the higher price of medicine.

Estimated Drug Cost (OPD) for Rajasthan per Year

Facilities	Cost(in rupees)
Sub centers & PHC	70,66,09,771
CHC	1,27,30,66,821
District Hospital	2,95,57,58,324
Total Funds Requirement	4,93,54,34,916
Total Population of Rajasthan 2008 (Projected)	6,46,41,000
Total Cost of Drugs(OPD)	4,93,54,34,916
Per Capita Cost	76.35

Streamlining of Procurement & Distribution:

Public sector procurement and distribution of medicines should be limited primarily to those medicines on the EDL, and it must be ensured that only those health workers approved to use certain medicines are actually supplied with them. Delays in procurement and poor logistics lead to non-availability of essential medicines thus in turn promote the use of nonessential medicines and irrational prescribing.

The Tamil Nadu Medical Service Corporation (TNMSC) set up in 1994 is a pioneer in the current drug procurement and distribution system. The strength of TNMSC lies in its centralized drug procurement and distribution system supported by a computerized system of drug management. TNMSC procurement models clearly demonstrates that pooled procurement aimed at quality drugs and a transparent tender system with well defined pre-qualification criteria result not only in substantial reduction in procurement costs(thereby savings) due to economies of scale, but also in a better image and credibility, in addition to enhanced availability of drugs at health facilities.

Today the states of Delhi and Kerala also have this model in place and many states are set to follow. Computerization simplifies and speeds up the complex tasks, increase accuracy, automate repetitive tasks, update and access information quickly, thus helping management information for decision-making. A linkage with all district warehouses with the state office is one of the features of TNMSC that created decentralized demand estimation but without losing the economies of scale of pooled procurement.

The most impressive achievement of TNMSC however is with regard to the logistics. Every district always has a minimum of three months stock. Also, each facility has the same stock level. When the stock falls below the minimum threshold level, messages proceed to the district warehouse from the facility and to the state from the district triggering off an immediate supply. This occurs on a weekly basis. Every facility has an entitlement on quantity of drugs in terms of monetary value and a passbook is maintained where this is tracked. Only when the entitlement is exceeded would it go to an authority for approvals for further purchases/supplies

Introduction:

Rajasthan Medical Service Corporation Limited (RMSCL) was setup in April, 2011 to provide quality drugs, diagnostic equipments and other health system related item, registered on 4th May, 2011.It is an autonomous agency to procure and supply drugs and medicines to all medical institutions in the state. It has an advantage of economy of scale. It is a specialized agency with expertise in procurement, storage and distribution system. With a primary objective, to deliver Quality Drugs, Medicines, Surgical, Suture items and other medical equipments in time to the Government Medical Institutions and free supply of commonly used drugs to all patients from Oct 02, 2011.

The State Govt. has constituted RMSCL for procurement and free distribution of medicines to all patients visiting govt. health institutions through Drug Distribution Centers (DDCs). Drugs and surgical consumables are directly supplied at District Drug Warehouse.

All Health institutions in the state/districts are allocated fixed budget for indent of medicines and surgical consumables viz: Rs.10, 000 for sub centers, 1.5 lakhs for PHCs, 5 lakhs for 30 bedded CHCs, 10 lakhs for 50-70 bedded CHCs, 20 lakhs, 30 lakhs and 40 lakhs for 100, 150 and 200 bedded, district hospitals respectively, 50 lakhs for dental college, 10 crores for medical colleges and associated hospitals and 30 crores for SMS medical college. The provision of additional budget (20%) has been kept in case of any shortfall.

Health institutions are provided with Passbooks to keep track of expenditure on drugs and consumables. One copy of the passbook remains with the institution and the other copy is kept at the district warehouse.

RMSCL procures medicines and consumables from open market through tendering. Upto 25% of total procurement is from Govt. firms/Small scale industries. 419 medicines (200 have been procured in the first stage) and 160 surgical consumables are proposed to be procured in the system. Only generic Medicines are procured in the system. 10% of institution budget can be utilized for making local purchases for items not included in the list or in case of non-availability of listed medicines. Medicines and consumables received at the

warehouse come with test reports. However a secondary random testing is done from govt.lab at Jaipur.

Need of RMSCL:

- **Shortage of drugs and medicines:**

Government health facilities always face challenge of shortage of medicines and abrupt supply of drugs. Only 35 drugs are on rate contract by SSPO and there was no centralized procurement system.

- **Irrational use of Drugs Prescriptions:**

The problem of irrational or inappropriate prescription by doctors, caused by the manipulation of market forces by drug companies, that in its turn it actually contributes to the irrational drugs being marketed and used. The use of too many medicines prescribed per patient (poly-pharmacy); often these result in cross reactions between different drugs prescribed; Inappropriate prescription of antimicrobials, often in inadequate dosage, for non-bacterial infections; Over-prescription of injections when oral formulations would be more appropriate; Failure to prescribe in accordance with clinical guidelines: wrong choice of drugs, or inadequate dosages, or incorrect frequency of administration of drug or improper duration of therapy, or failure to observe drug contraindications; Under-use of life-extending drugs for illnesses such as hypertension, heart disease, asthma, and other chronic illnesses. Usually these are situations where a small dose of the drug has to be taken in a fixed low periodicity, lifelong; Choice of more expensive drugs when less expensive drugs would be equally or more effective; Prescription of drugs which have no use - only for their placebo effect or for impressing the patient or for vested interests in the prescribed drugs; Inadequate consulting time, very short dispensing time and poor communication of information regarding drugs to patient in verbal or written form leading to incorrect use by patients is of great public health concern too. Worldwide more than 50% of all medicines are prescribed, dispensed, or sold inappropriately, while 50% of patients fail to take them correctly. Inappropriate self-medication, often of prescription-only medicines;

- **Unhygienic storage conditions at facility levels**

Due to bulk procurement of drugs at facility levels, unhygienic storage was there and quality of drugs was not maintained.

- **Rural Population under debt due to expenditure on health:**

In India there is 40% expenditure on drugs and medicines, Out of 100 IPD patients 40 have to sale their property for major treatment,23% do not seek medical treatment due to lack of Finances. Due to expenditure on drugs 02% becomes BPL from APL.

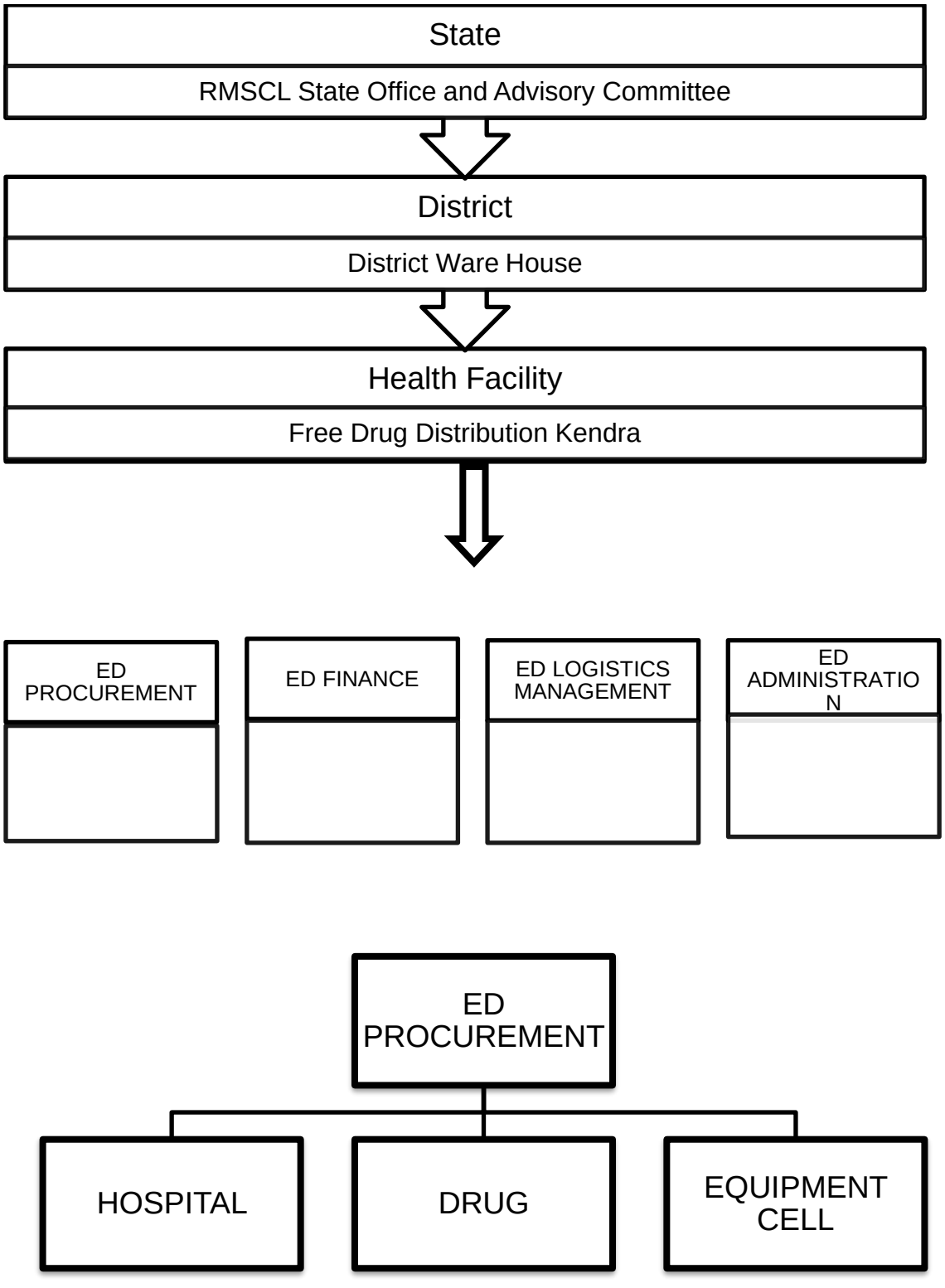
Functioning of RMSCL:

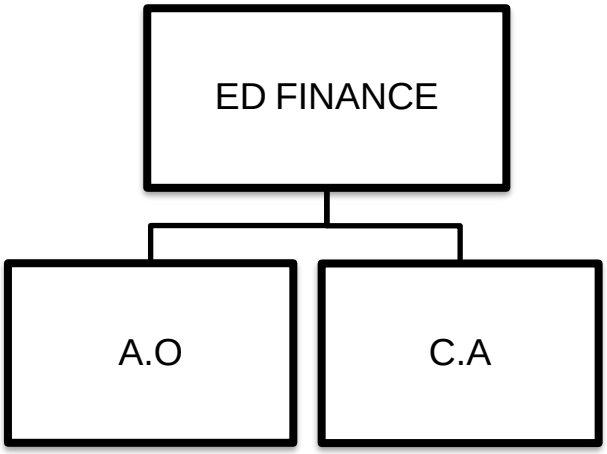
Key Functions of RMSCL:

- Improving management of drug procurement and supply with special emphasis on logistics
- Continuous monitoring of ware house inventory through use of information technology
- Simplify indenting to facilitate order process of facilities at all level
- Preparation of bid document
- Putting up tender bid evaluation
- Ensuring continuous availability of drugs at all government facilities through decentralize system of storage and distribution
- Training and sensitization of all stake holders
- Procurement of high quality of medical equipment
- Facilitate the medical institute in maintenance of equipment
- Empanelment of laboratories, testing of drugs
- Ensuring quality of drugs, medicines, surgical and suture
- Feedback from medical institute ensuring proper distribution centre
- Redressed of grievances in the field regarding non prescription of generic medicines/ non availability of drugs and DDC

RMSC-Structure:

Three tier structure of RMSCL:

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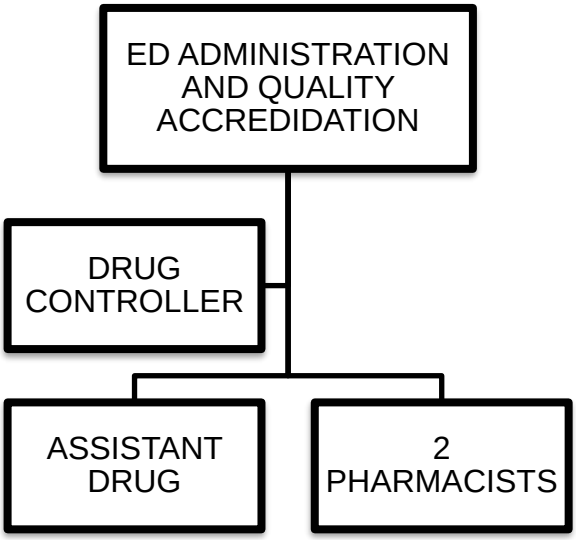
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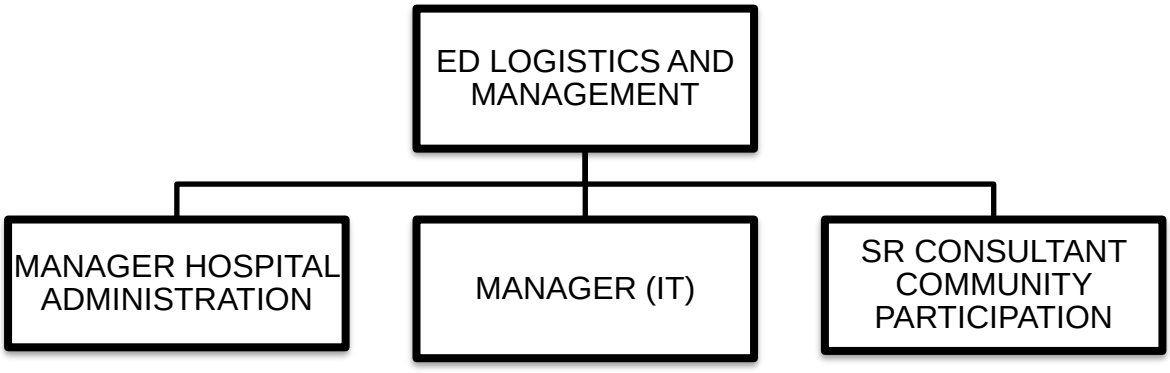
DRUG CONTROLLER
ASSISTANT DRUG
2 PHARMACISTS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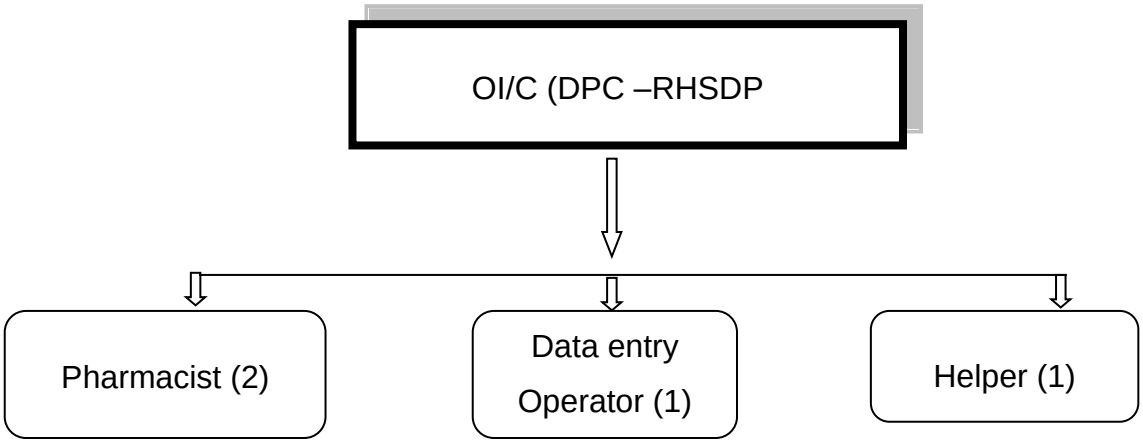
MANAGER HOSPITAL ADMINISTRATION
MANAGER (IT)
SR CONSULTANT COMMUNITY PARTICIPATION

Organ gram at DDW



RMSC Procurement List:

Board of Directors constituted Advisory Committee and advisory constituted Sub Committee to finalize phase I as follows

Medicine = 477

Suture = 72

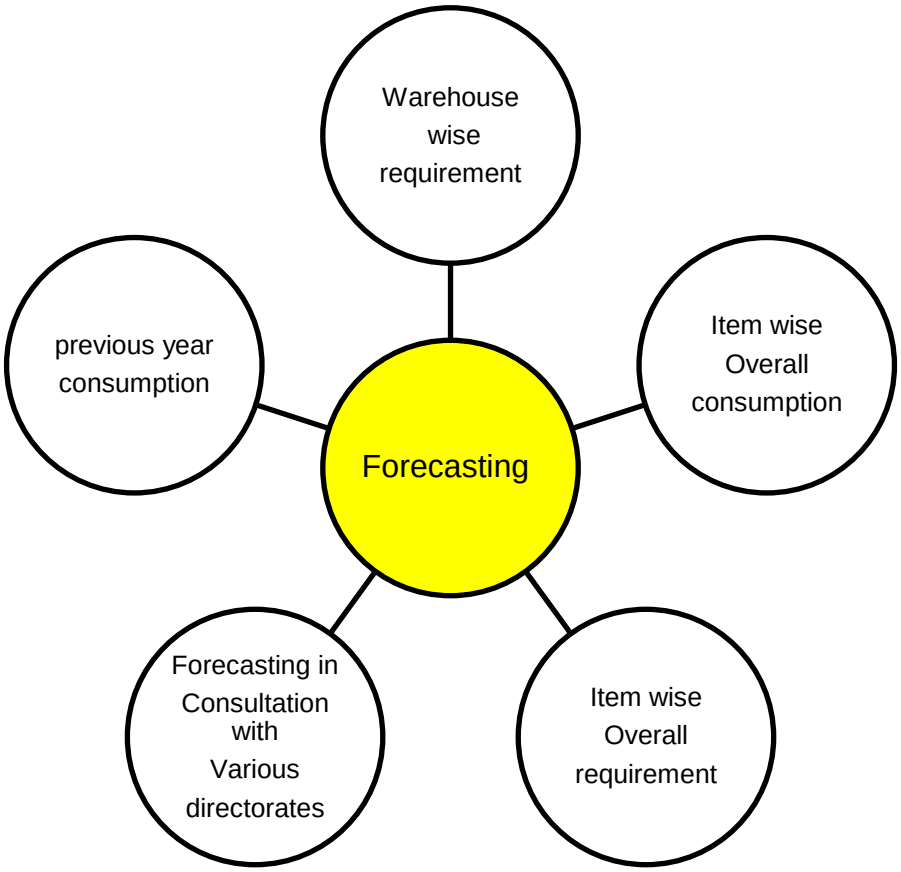
Supplies = 75

Clientele:

S. No		Counts
1	Medical Colleges attached Hospitals	26
2	District Hospitals	35
3	Satellite Hospital	5
4	Sub Divisional Hospital	13
5	CHC	376
6	PHC	1517
7	SC	11487

8	ESI Hospitals and Dispensaries	198
9	MSUs	5

Forecasting of Requirement



The drugs, medicines, surgical & sutures are procured, based on the need and consumption pattern of the items by the medical institutions. Procurement orders are proposed to be placed to meet out four months need and two months pipeline stock likely to be in transit and under quarantine. Though the procurement is centralized but the suppliers, supply the items directly (f.o.r.) to the District Drugs Warehouses (DDW).The stock of drugs received in DDW is entered in stock register and kept in quarantine till sampling and receipt of test reports.

Monitoring:

A monitoring committee under the chairmanship of collector was constituted; it is for monthly meeting for progress of DDW & DDC & their implementation and they report to Collector & State Govt.

Structure of Committee

- District Magistrate (Chairman)
- CMHO
- PMO
- X-En/A-En - NRHM
- Hospital Manager
- Assistant Registrar Cooperative
- DCO
- DPC-RHSDP (Member Secretary)

E-Aushadi:

On E-Aushadi software, Information will be available regarding

- Indent Information
- Use of drugs at facility level
- Expiry date of drugs lying in stock
- List of sub standard drugs & tendering by online software
- List of drugs given to different facility
- Monitoring of inventory management
- Use of drugs will be ensured by online software

Quality Control:

For quality control, random sampling of drugs is done which are received in DDW & after random sampling; drugs are send to RMSC office for Lab Testing. RMSCL send these samples for testing to recognized labs. If the drugs found substandard, whole batch of drugs is removed by the supplier.

Procurements at District and CHC Level:

These procurements are made on L1 by inviting bids from reputed firms which are shortlisted by a duly constituted committee of officers. Smaller institutions follow the R/c of district hospital. In some cases DGS&D R/C or State R/c are used for procurement.

Tendering Process (Dual Bid):

Technical bid/Financial bid selected through L1-Supply order cum Rate contract (F.O.R.) issued. Drugs are procured directly from the manufacturers. Only those companies that have an annual turnover of above 20 crores and have GMP certificate can participate in the tender.DPC (District Project Coordinator) in charge of the DDW under the overall leadership of CMHO. Drug distribution is controlled through a software E-Aushadhi. All DDWs are connected with central server through the software. The software calculates the cost of drugs/consumables issued to a facility and the cost is entered in the passbook. District monitoring committee under the chairmanship of the District collector holds regular meetings and inspects DDW and DDCs. At block level, monitoring committee under the chairmanship of SDM monitors the working of DDCs

Drug Distribution System:

For procurement of drugs at DDC, an indent is to be sent to MO I/C as per their requirement. Drugs received are maintained in register along with distribution. Drugs to OPD patients will be distributed free of cost.DDC provides drugs only after getting the prescription of Doctor and retains one copy of duplicate prescription after signature of the patient for issued medicines.

Drug distribution system at Sub-Centers:

Sub centers get drugs from respective PHCs. Every Sub Center receives drugs of worth rupees 10,000/- monthly, entered in the respective pass book. Every Sub Center gets Rs. 2500/- to procure racks to keep these drugs (one time cost). The signage's of free drug distribution are placed at Sub Center.ANM gives indent as per requirement to concerned PHC. PHC procures these drugs from DDW.ANM provides drugs to all patients free of cost and maintains the register.

Drug Distribution Centers at PHC:

Drugs are distributed by staff in dispensing room at PHC. Separate register is maintained for BPL & General.

Records:

- Stock register
- Register of utilization
- Pass book of facility & Sub Centers

The Rs. 25000/- is allocated for strengthening of drug store and Rs. 30000/- is allocated for infrastructure of DDC of PHC (one time cost). The Annual budget for PHC is 1.25 lacs, and the drugs of same worth are issued to PHC and entered in the pass book. 24x7 PHCs provide drugs every time in emergency causality room, pregnant woman, infant and surgical & medical emergency and indoor patients.

Drug Distribution Centers at CHC:

At CHC dispensing room is converted into DDC like PHC.24x7 free drug delivery services for emergency cases. Drugs for indoor patients are issued to in charge of ward from store. Additional counter may be opened if OPD is more than 150-200. BPL & General registers will be kept separately.

Drug distribution at Medical College Hospital, DH, Satellite Hospital:

Rs 30,000 are provided for strengthening of existing dispensing rooms in Hospitals. Unused rooms are identified to convert in DDC or Aluminum glass cabin in corridor is constructed for which budget provision of Rs 40000/- was given. Cooperative stores are utilized for Drug distributing centers. Rs 25000/- is paid to confect per shop for free drug distribution. Rs 2.25 lakh is given to confect for construction of new drug distribution center.

Passbook System:

Two pass books are maintained per institution, one with the institutional and another with ware house. On the Fixed Date the Store In charge of the Facility collects the drugs from the DDW. Value is debited on withdrawals by DDW. Institutions are provided only 90% to procure drugs from DDW. Facility In charge can procure drugs amounting of 10% of the total Budget in case of Epidemic/Emergency and Stock out Condition.

Rationale of the Study:

Health care is a dynamic sector which requires considerable amount of interpersonal interaction between the health care providers and the seekers of care. Improving the quality of patient care is a vital and necessary activity. The level of patients' satisfaction is one of the important goals of any health system and serves as an important indicator of the effectiveness of the services provided at the health facility. It is as important as other clinical health measures and is a primary means of measuring the effectiveness of health care delivery.

The satisfaction of patients is a key component in delivering quality health care. It is important to find out whether patients are satisfied with the care provided so that desired changes may be prioritized and then develop plans to improve the quality of services. The data gathered through measuring patient satisfaction reflects care delivered by staff and physicians and can serve as a tool in decision-making. These surveys can be tools for learning; they can give promotion to problem areas and a reference point for making management decisions.

Assessment of patient satisfaction is required to help improve health system performance and promote better governance of the hospital services.

Not much work has been done to measure Patient Satisfaction in public sector hospitals of India. Patient Satisfaction is defined in terms of the degree to which the patient's expectations are fulfilled. It is an expression of the gap between the expected and perceived characteristics of a service (Lochoro, 2004). Measuring Patient Satisfaction depends on using the "accurate measures because it comprises of standards that incorporate dimensions of technical, interpersonal, social, and moral aspects of care" (Kane et al., 1997).

As RMSCL is a new launch, it became essential to assess the impact of initiatives in health care facilities, to propose recommendations to improve health system per formance.

Objectives:

The main objective of the study was to determine the patient's satisfaction in terms of free medicines provided to patients at each level (PHC, CHC, and District Hospital) of the health facility in Jaipur District of Rajasthan.

The specific objectives of the study were:

- To know the Functioning of RMSCL.
- To assess level of patients satisfaction at PHC, CHC and District Hospital.
- To identify gaps in patient's satisfaction.
- To identify Impact of RMSCL on OPD.
- To draw a set of recommendations to improve satisfaction level of patients.

Approach:

To accomplish these objectives, the following approach was adopted.

a) **Study Area**: Jaipur district was selected for the area of study.

b) **Study Design**: A Cross Sectional, Descriptive Study was done to assess patient satisfaction from free drug distribution.

c) **Sample Selection criteria**: Sample was selected from three levels of facility i.e from District Hospital, CHC and PHC.

Selection of facilities was done:-

- At District Level - Jaipuria Hospital
- At CHC Level - Sanganer CHC
- At PHC Level - Vatika PHC

- ✓ At district Hospital, Jaipuria was selected as RMSCL was initiated from jaipuria (model hospital) Hospital.
- ✓ CHC and PHC were randomly selected with the help of random number method by using MS-Excel.

d) Sample Size-

Sample size was determined on the basis of average daily OPD load at every health facility. 20% of daily OPD patients were interviewed at each facility level.

- Jaipuria Hospital = 400 patients were interviewed
- Sanganer CHC = 240 patients were interviewed
- Vatika PHC = 80 patients were interviewed

Total OPD Patients Interviewed=720

e) Study Tools:

- Structured questionnaire for interview OPD patients.
- OPD and IPD records at each health facility

The Patients were interviewed on the following parameters-

- Personal Characteristics
- Name
- Age
- Occupation
- Waiting time
- Accessibility of Services
- Procedure followed to receive medicines from DDC
- Behavior of service providers
- Availability of medicines
- Accessibility to DDC

f) Data Collection:

Data collection for this study was done in March, 2012. Four day visits at each health facility was done to collect pre estimated sample size.

g) Data Entry, Analysis and Report Writing:

Data entry was done from 22-26 Feb. 2012. After the completion of data entry tables were generated for analysis using SPSS 16.0. This was followed by report writing.

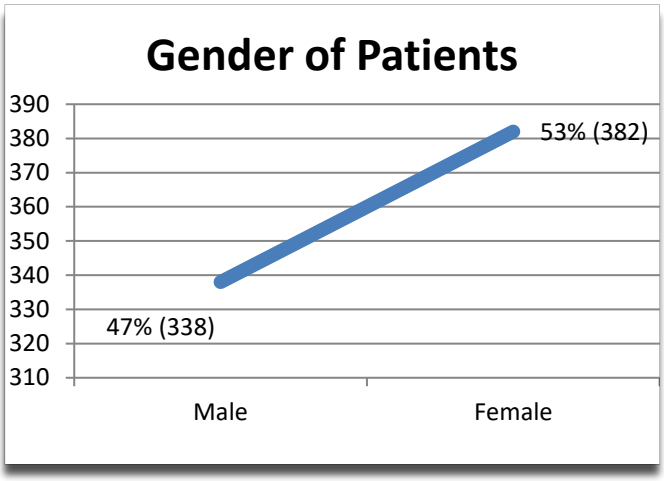
Observation:-

In all, 720 OPD patients were interviewed from Jaipuria District Hospital, CHC Sanganer, and PHC Vatika.

General Profile of Patients-

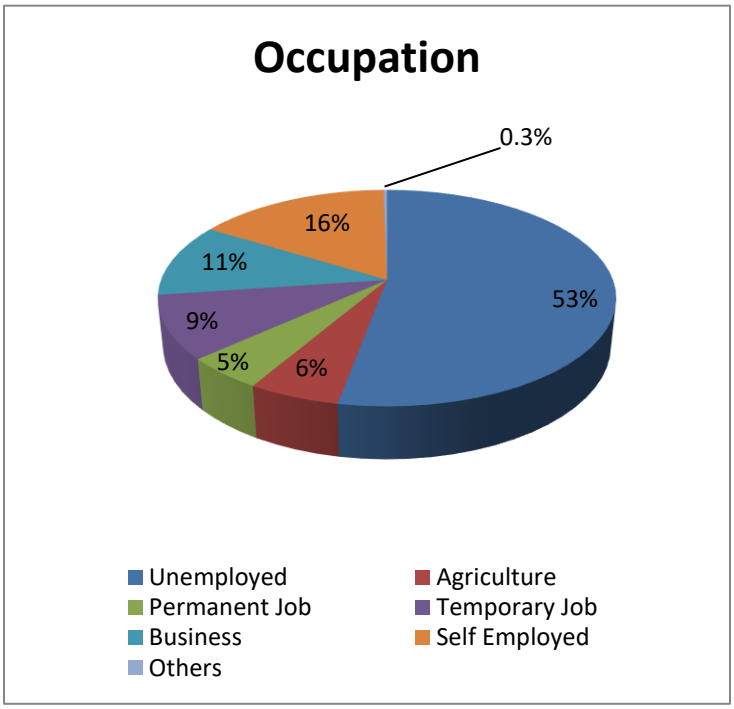
Gender of the Patient

Out of 720 patients interviewed, 382 (53.1%) were females and rest 338 (46.9%) were males.



Occupation of the Patient:

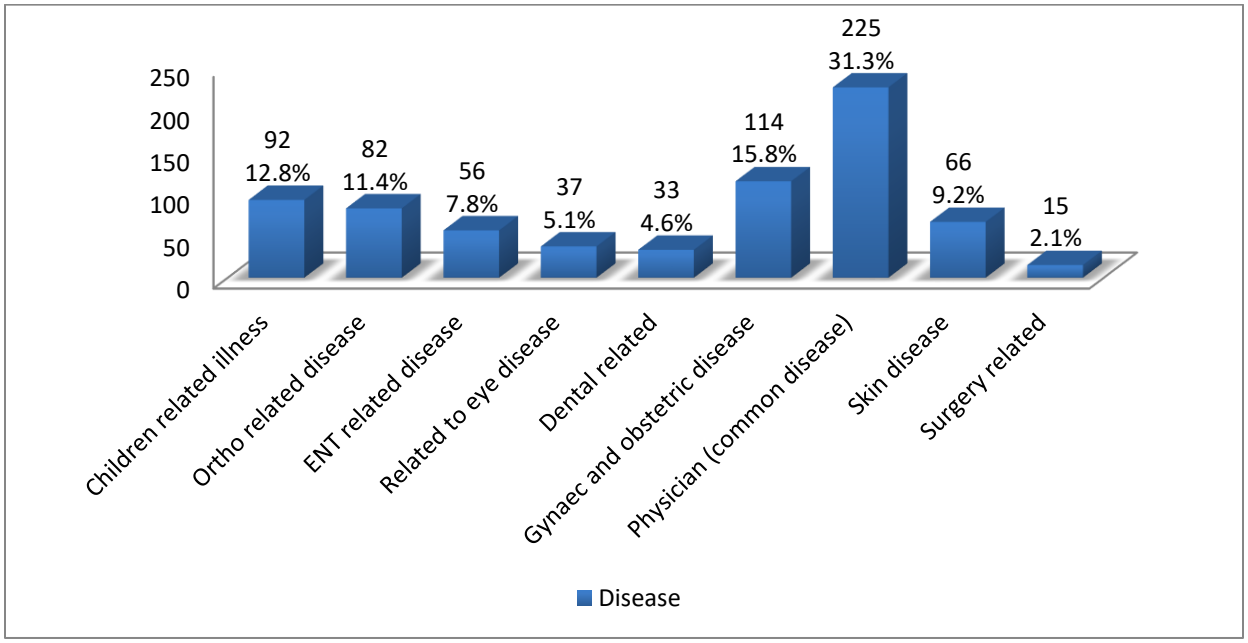
Out of 720 patients interviewed majority of the patients were unemployed i.e. 381 out of 720 were unemployed (52.9%) which includes housewives, pensioners, senior citizens and students. 115 out of 720 (16%) were self employed and rest have business (11%), temporary jobs (9.4%), agriculture (5.6%) and permanent jobs (4.9%).



Category of the Patients:

From 720 patients interviewed, 473 patients (65.3%) belong to APL category and 247 (34.3%) belong to BPL category.

Disease of the Patients:

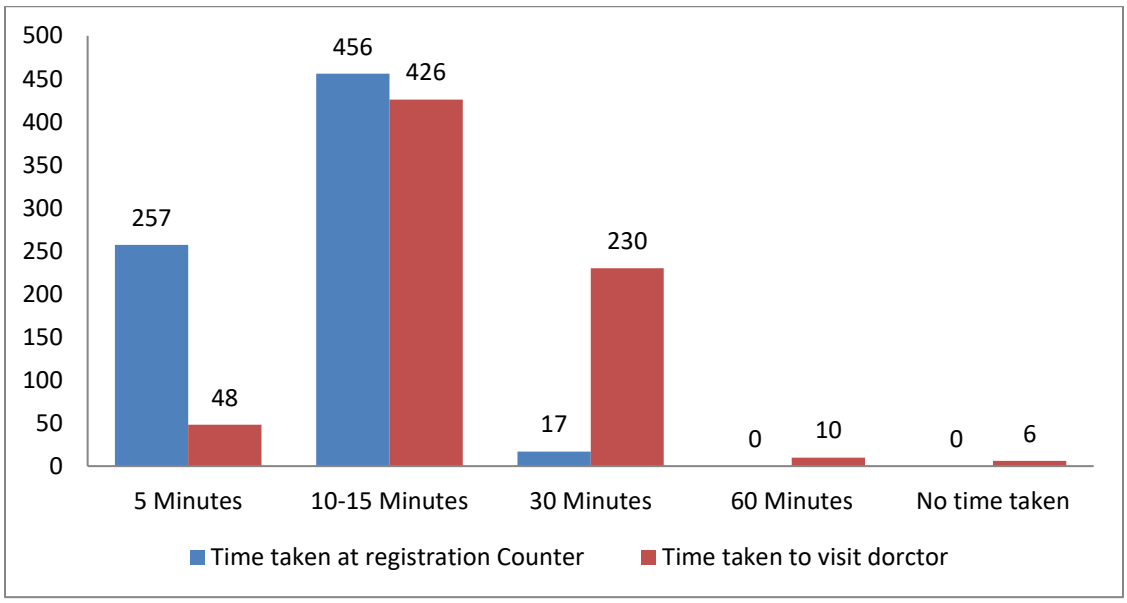


Among all the patients interviewed majority suffered from physician related diseases 225 out of 720 (31.2%), 114 out of 720 (15.8%) suffered from gynaec and obstetric diseases,92 out of 720 (12.8%) children related diseases, 82 out of 720 (11.4%) ortho related diseases,66 out of 720 (9.2%) skin diseases, 56 out of 720 (7.8%) ENT related diseases, 37 out of 720 (5.1%) eye disease, 33 out of 720 (4.6%) dental related and 15 out of 720 (2.1%) surgery related disease

Time to Come in Hospital:

Majority of the patients interviewed visited the hospital in the morning hours from 9am to 1pm 382 out of 720 (53.1%) and rest in 338 out of 720 (46.9%) in the evening time from 4pm to 6pm.Patient load in morning was high in the health facilities propotianate to OPD timings. But approx equal number of patients were interviewed in the morning and evening OPD.

Time Taken at Registration Counter and to visit doctor



Time taken at registration counter for 456 out of 720 patients (63.3%) patients was between 10-15 minutes, for 257 out of 720 patients (34.3%) it was within 5 minutes and for rest 17 patients it was between 15-30 minutes.

Waiting time for 426 out of 720 patients interviewed (59.2%) was 10-15 minutes, 230 out of 720 patients (31.9%) was 30 minutes , 48 out of 720 patients (6.7%) was 5 minutes, 10 out of 720 patients (1.4%) was 60 minutes and for rest (.8%) of the patients no time was taken to wait for doctor.

Time Taken by Doctor for Checkup:

Time taken by doctor for check up of majority of patients 684 out of 720 (95%) was within 5 minutes and for rest of the patients 5% it was between5-10minutes.

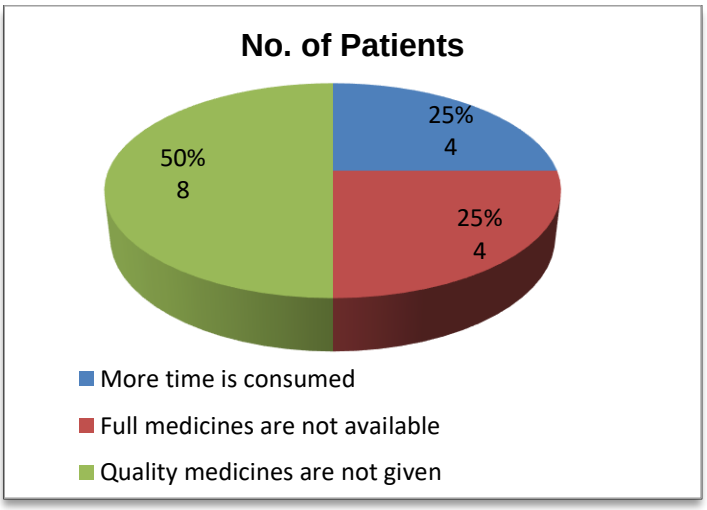
	Frequency	Percent
0-5 minute	684	95.0
5-10 minute	36	5.0
Total	720	100.0

Patients Gone to DDC to receive medicine:

704 out of 720 patients (97.8%) went to DDC to receive medicines, rest 16 out of 720 (2.2%) either went to home or to private medical store to receive medicines.

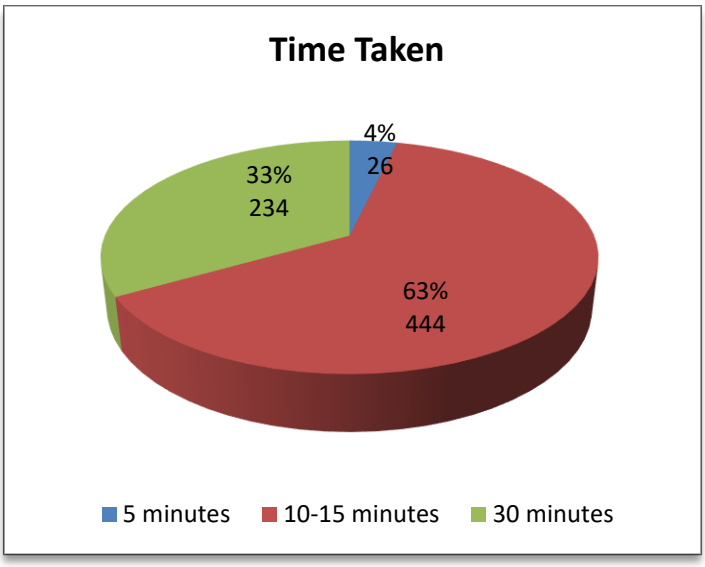
Reason why Patients not go to DDC to Receive Medicine:

2.2% patient's i.e. 16 out of 720 patients did not go to DDC to receive medicines as 8 out of 16 (50%) felt that quality was not maintained, 4 out of 16 (25%) of the patients felt that more time is consumed to receive medicines and rest 25% felt that full medicines are not available, so they do not take medicines from DDC.



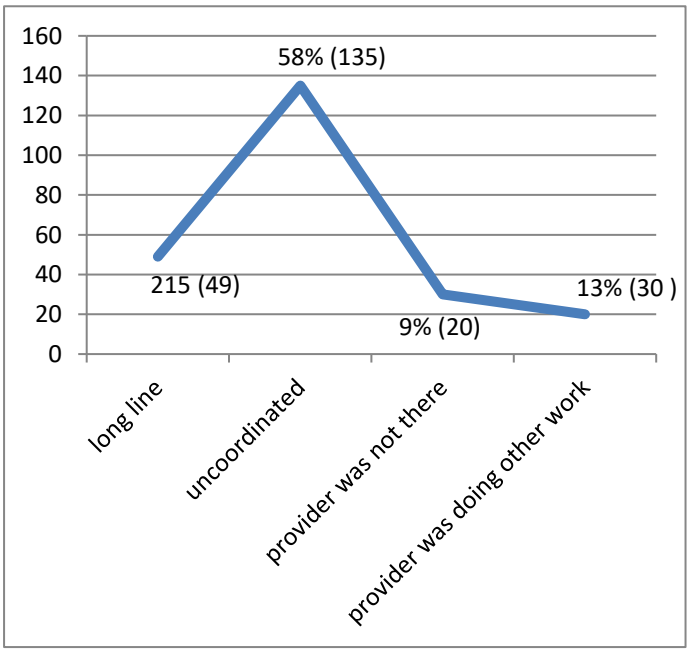
Time taken to Receive Medicines:

Time taken to receive medicines from DDW ,444 Out of 704 patients (63.06%) receive medicines within 10-15 minutes from DDC, 234 out of 704 (33.23%) patients receive medicines between 15-30 minutes and rest 26 out of 704 patients (3.69%) receive medicines within 5 minutes.



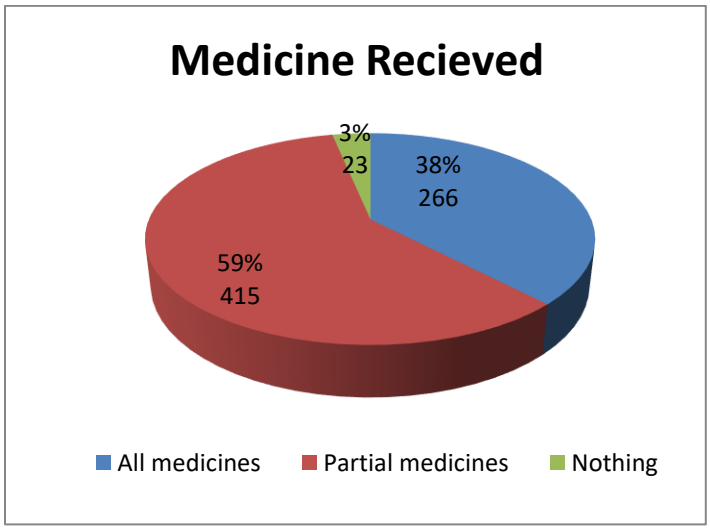
Reason why more time was taken to receive medicines:

More than 15 minutes time was taken by 234 out of 704 patients (32.5%), more time was taken because of lack of coordination by 135 out of 234 patients (57.69), for 49 out of 234 patients (20.94%) more time was taken because of long line to collect drugs at DDC, 30 out of 234(12.82%) complained provider was not there and for 20 out of 234 (8.54%) more time was taken as provider was doing other work.



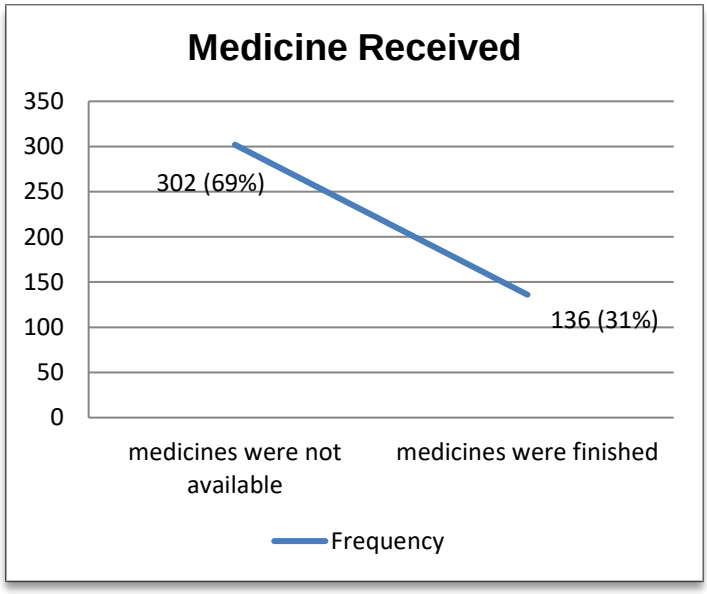
Medicines received from DDC:

Out of 704 patients who receive medicines, 415 out of 704 (58.94%) receive partial medicines, 266 out of 704 patients (37.78%) receive all medicines written in the prescription slip and rest 23 out of 704 (3.26) received no medicines written in the prescription slip.



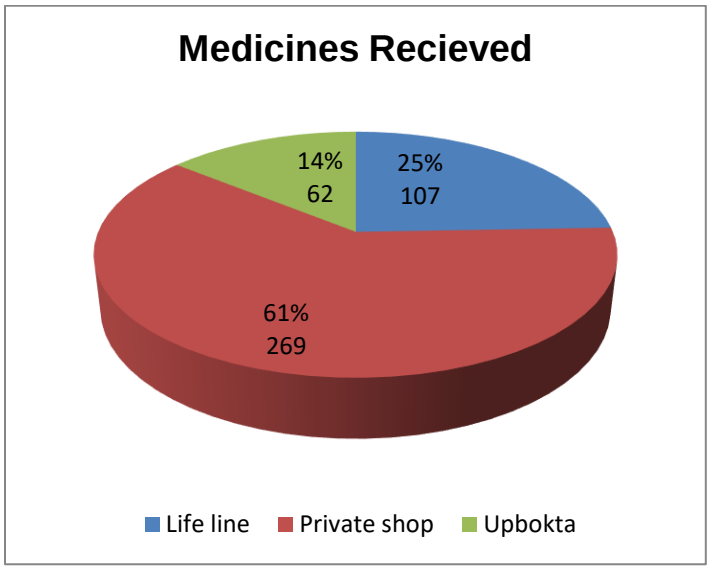
Reason for fewer medicines received:

Out of 704 patients 438 patients (62.21%) received partial medicines or no medicines at all written in the prescription slip, from 438 patients 302 (68.94%) did not receive medicines as medicines were not available at DDC, and rest 136 out of 438 (31.05%) did not receive medicines as medicines were finished.



Rest of the medicines received from:

From 438 patients who received either partial or no medicines, rest of the medicines for 269 out of 438 patients (61.41%) purchased medicines from private providers 107 out of 438 patients (24.42%) purchased medicines from life line store an rest 62 out of 438 (14.15%) received medicines from upbokta store.



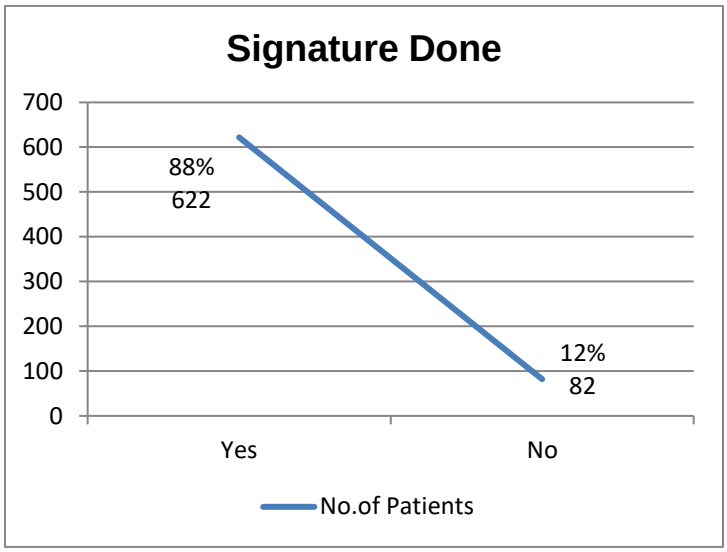
Doctor prescribed medicine on carbon copy slip:

	Frequency	Percent
yes	720	100.0

Out of 720 patients interviewed all the prescriptions written by doctor were on carbon copy slip.

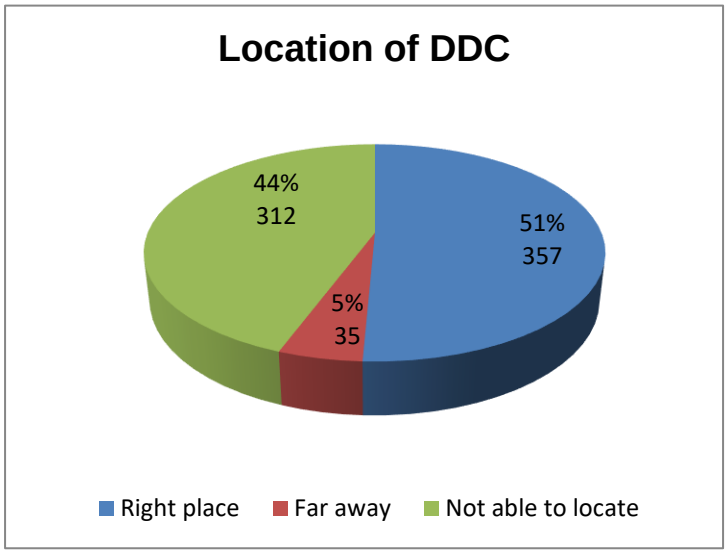
Signature done on Duplicate Copy after receiving medicines:

Signature on the duplicate copy of the prescription slip were done by 622 patients out of 702 (88.35%) patients who received medicines, and rest 82 out of 702 (11.36%) did not signature on duplicate copy after receiving medicines as they were not told to do the signature.



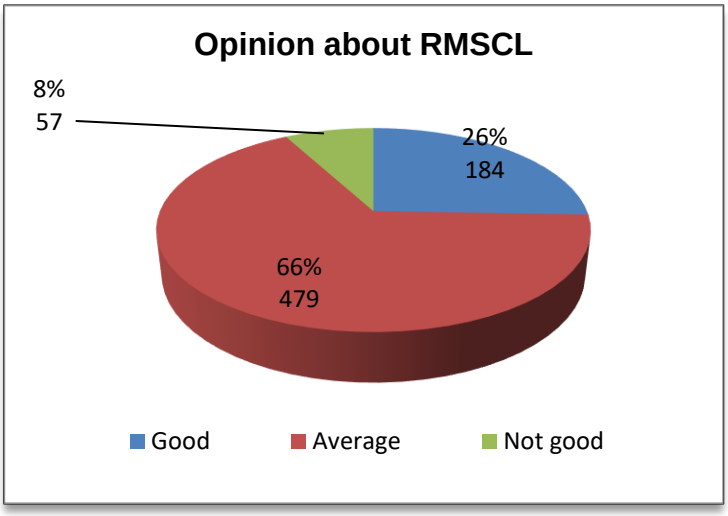
DDC located on right place according to the comfort of patients:

Out of 704 patients who received medicines 357 out of 704 patients (50.7) replied that DDC is located at right place,312 out of 704 patients (44.3%) replied that DDC is located at a place that is not able to locate easily and rest 35 patients out of 704 patients (5%) replied that DDC is far away.



Opinion about RMSCL:

Opinion of patients about RMSCL, 479 out of 720 (66.5%) replied that RMSCL is an average scheme, 184 out of 720 (25.6%) replied that RMSCL is a good scheme and rest 57 out of 720 (7.9%) replied that RMSCL is not good scheme



Reasons why RMSCL is Not Good:

Less Medicines Provided		No Recovery		Cheap Medicines Available		Less Days Medicines		More Time to Collect		Not Reliable	
Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
379	52.6	49	6.8	138	19.2	220	30.6	208	28.9	114	15.8
341	47.4	671	93.2	582	80.8	500	69.4	512	71.1	606	84.2
720	100.0	720	100.0	720	100.0	720	100.0	720	100.0	720	100.0

*(Multiple responses)

From 720 patients interviewed, 379 out of 720 (52.6%) were not satisfied from RMSC as all medicines are not given, according to 49 out of 720 (6.8%) recovery from the drugs provided

was not there, according to 138 out of 720 (19.2%) only cheap medicines are given through this scheme, according to220 out of 720 (30.6%) less days medicines are given, according to 208 out of 720 (28.9%) more time was taken, according to 114 out of 720 (15.8%) treatment is not reliable

Benefits of RMSCL:

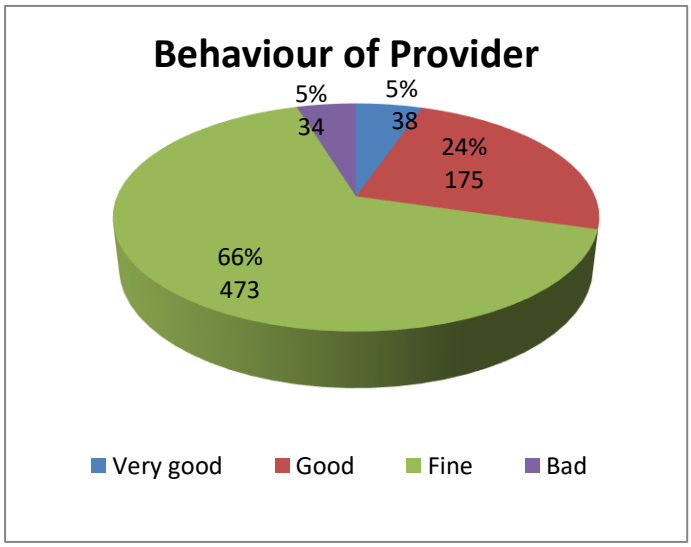
Free Medicines		Quality Medicines		Time saved		Check up and medicines		Treatment Possible		OPE Reduced	
Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
659	91.5	28	3.9	52	7.2	97	13.5	101	14.0	132	18.3
61	8.5	692	96.1	668	92.8	623	86.5	619	86.0	588	81.7
720	100.0	720	100.0	720	100.0	720	100.0	720	100.0	720	100.0

*(Multiple responses)

Out of 720 patients interviewed659 out of 720 (91.5%) felt RMSCL is good scheme as free medicines are provided, 28 out of 720 (3.9%) felt that quality medicines are provided, 52 out of 720 (7.2%) felt it is good scheme as time is saved, 97 out of 720 (13.5%) felt that check up and medicines both are provided at single place, for 101 out of 720 (14.0%) believed it is good scheme as now treatment is possible for them and for 132 out of 720 (18.3%) it is a good scheme as Out of Pocket Expenditure is reduced.

Behavior of Provider:

According to 473 out of 720 (65.7%) patients behavior of provider was fine, for 175 out of 720 (24.3%) patients behavior of provider was good, for 38 out of 720 (5.3%) patients behavior was very good and for 34 out of 720 (4.7%) patient's behavior of provider was bad



Medicines Received and Patient Satisfaction:

		What is your opinion about RMSCL			
		Good	Average	Not good	Total
Did you received all medicine written in prescription from DDC	All	149	116	1	266
	Partial	35	355	25	415
	Nothing	0	8	15	23
	Total	184	479	41	704

It was observed that there is relation between patients receiving full medicines and their satisfaction level, through above table it is verified that that according to patients who received full medicines their satisfaction level whereas patients who received nothing their satisfaction level with RMSCL is negligible.

DDC Location and Patient Satisfaction:

		Is DDC located on right place according to comfort of the patient			
		Right Place	Far Away	Not Able to Locate	Total
What is your opinion about RMSCL	Good	135	8	41	184
	Average	208	27	244	479
	Not Good	14	0	27	41
Total		357	35	312	704

From the above table, it is found that there is a relation between DDC location and patients views about RMSCL, it is clear that patients who find DDC location at right place, they felt that the scheme is 135 out of 184 patients, according to patients who felt that DDC is at a place not able to locate, majority of them felt the scheme average.

Time Taken and Patient Satisfaction:

		What is your opinion about RMSCL			
		Good	Average	Not Good	Total
How much time was taken to receive medicines	5 minutes	17	9	0	26
	10-15 minutes	111	308	25	444
	30 minutes	56	162	16	234
Total		184	479	41	704

Patient's opinion about RMSCL also depends on how much time was taken to receive medicines, patients who took 5 minutes to receive medicines majority of them felt 17 out of 26 that the scheme was good. Patients who took 10-15 minutes, majority of them felt that the

scheme was average and the patients who took 30 minutes and more among them there were 6.83% people who disliked the scheme.

Medicines received and Behavior of Drug Distributor:

		How did drug distributor behaved with you				
		Very Good	Good	Fine	Bad	Total
Did you received all medicine written in prescription from DDC	All	34	98	128	6	266
	Partial	4	77	324	10	415
	Nothing	0	0	13	10	23
Total		38	175	465	26	704

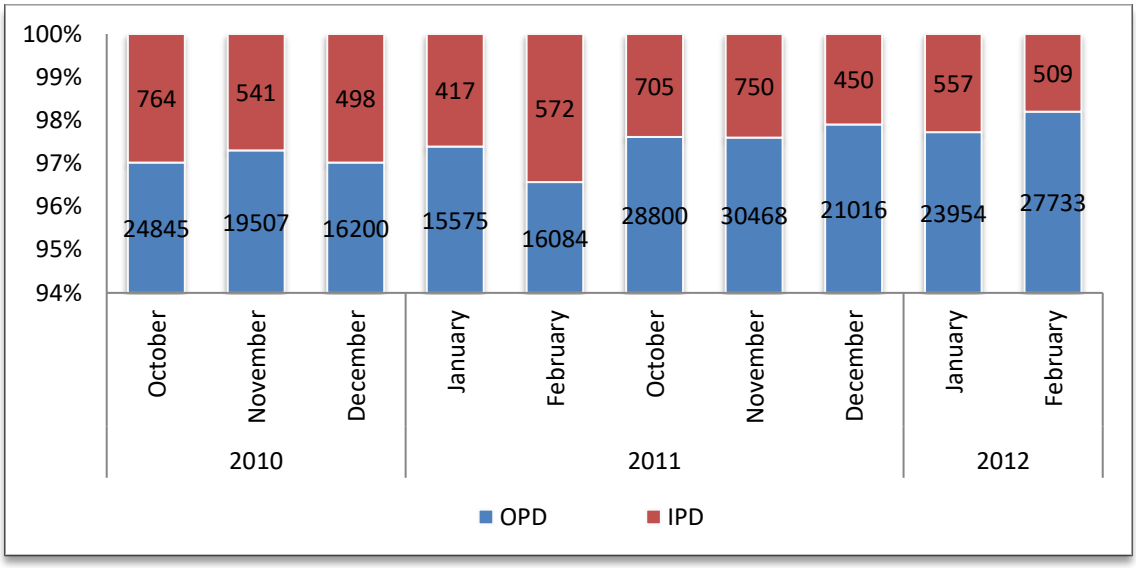
From the above table it is clear that there is relation between the medicines received and the behavior of the provider, the patients who received full medicines 12.78% of them replied that the behavior of provider was very good whereas patients who got no medicines from DDC, none of them replied that the behavior of the provider was very good, some of them replied that the behavior was either fine or bad.

DDC Location and Behavior of Drug Distributor:

		How did drug distributor behaved with you				
		Very Good	Good	Fine	Bad	Total
Is DDC located on right place according to comfort of the patient	Right Place	36	114	197	10	357
	Far Away	0	9	26	0	35
	Not able to Locate	2	52	242	16	312
Total		38	175	465	26	704

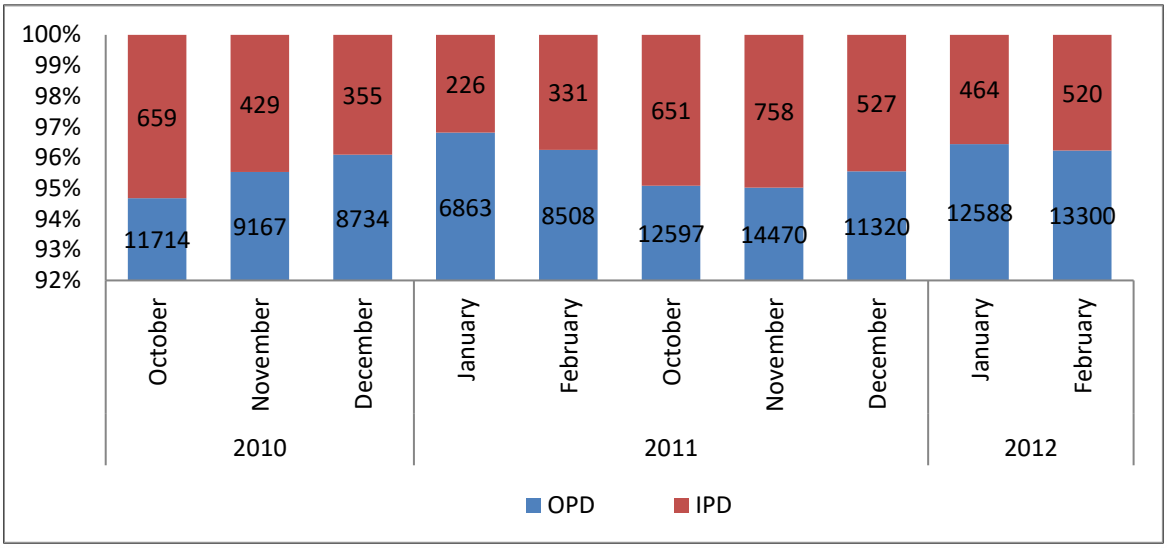
There is a relation determined between location of the DDC and the behavior of the provider, according to patients who think DDC is located at right place 36 out of them replied that the behavior of the provider was very good, whereas patients who think DDC is located far away none of them replied that the behavior of the provider was very good.

Impact of RMSCL on number of OPD patients in Jaipuria Hospital:



From the above graph it is clear that number of OPD as well as IPD patients have been increased after launch of RMSC, before RMSCL in 2010 October November December the number of OPD patients are 24845, 19507, 16200 and after RMSCL number of OPD patients in the respective months increased to 28800, 30468, 21016.There was considerable difference in number of OPD patients after RMSCL, whereas there was slight difference or sometimes no difference in the number of IPD patients.IPD patients in the month of October, November, December before RMSCL was 764,541,498 and after RMSCL was 705,750,450.

Impact of RMSCL on number of OPD patients in Jaipuria Hospital:



From the above graph it is clear that number of OPD as well as IPD patients have been increased after launch of RMSC, before RMSCL in 2010 October November December the number of OPD patients are 11714, 9167, 8734 and after RMSCL number of OPD patients in the respective months increased to12597, 14470, 11320.There was considerable difference in number of OPD patients after RMSCL, whereas there was slight difference or sometimes no difference in the number of IPD patients.IPD patients in October November and December before RMSCL were 659,429, 355 and after RMSCL was 651,758, 527.

Observations on State Drug Procurement and Distribution:

It was observed that the drugs and consumables supplied to the health facilities from allocated budget were grossly inadequate leading to shortage of essential items in the hospitals.

Medical Officers /Providers views:

According to medical officers-

- There is percent rise in OPD but it is not real increase, it is due to the fact that after every visit new slip with new registration number was issued to the patients.
- Real patients don't come to the hospital as they find after RMSCL treatment is substandard with no recovery.
- Patients don't value medicines and throw them, as they feel that they are ineffective. Perception of patients is biggest problem as they don't value drugs and feels that they are of low quality.
- The situation of public hospitals in some time would resemble the condition of public school.
- Due to free distribution of drugs waiting time is increased as the number of patients has been increased.
- Drugs have been procured from the blacklisted companies so as to clear their stocks which have been produced.
- Pilferage of drugs is also a problem which has been observed.
- Antifungal and some antibiotics are not provided at PHC, CHC.
- Manpower at the periphery is not available, as distribution needs manpower.
- Usually patients insist to write medicines that are available outside and not in DDC.

Recommendations from Medical Officers:

- Cooperative stores and life line drug store should be available at PHC level.
- Perception of patients towards free distribution of drugs should be changed.
- Only indoor patients should be provided drugs free of cost as they can be monitored .For outdoor patients there should be some kind of token money, so that their perception is changed.
- There should be some cap regulating the prices of essential life saving drugs at the medical stores.
- To avoid pilferage, Not for Sale should be written in dark and on every tablet.
- Capsule coating should be changed at intervals so that patients are convinced that different medicines are given, and not the same treatment is followed.

DDW Staff views:

- As it is a new scheme in Rajasthan, set up is still not according to the guidelines provided. Still temperature maintenance guidelines are not followed.
- Records were not fully maintained, passbook system was yet not followed in many cases.
- To procure drugs usually nursing staff come from the facility instead of pharmacist, due to lack of manpower.
- There are two DDW, one each to supply drugs to Jaipur 1 and Jaipur 2, both DDW are not equally equipped.
- Fluctuating requirements by the facilities disturbs supply chain.

Recommendations by DDW Staff:

Pharmacists should come on the specified dates with justified requirements to procure drugs.

Pharmacists Views:

- Work load had been increased; have to go to DDW to procure drugs and then distribute to the sub centers.

- Doctors usually write broad spectrum antibiotics instead of first line antibiotics initially, which ruin patient immunity and even the distribution pattern is affected.

Recommendations of the Pharmacists:

- Appointment of Pharmacist's.
- Distribution from DDW to the facility should be the responsibility of the DDW staff.
- Prescription audits at regular intervals.

Findings:

For the study on Patient Satisfaction from RMSCL

- Out of 720 patients interviewed, 53.1%were females and rest 46.9% were males.
- Majority among them were unemployed, which includes housewives, pensioners, senior citizens and students. Others were self employed, business, temporary jobs, agriculture and permanent jobs.

- The registration counter is the entry point for any person who wants to avail the services of the health facility and no facility providing services to the public can neglect it. Time taken at **registration counter** for 63.3% patients was between 10-15 minutes, for 34.3% it was within 5 minutes and for rest patients it was between 15-30 minutes.
- Waiting time for doctors is another dimension influencing patient satisfaction. It was10-15 minutes for majority of patients, for rest it was more than 15 minutes and for 0.8% no time taken to visit doctors.
- RMSCL main aim is to provide quality and essential medicines to all. Medicines are important part of the treatment. 97.8%went to DDC to **receive medicines**, went to home or to private medical store to receive medicines, as they felt that quality was not maintained, more time is consumed to receive medicines, full medicines are not available.
- Time taken to receive medicines from DDW was a major concern in patient satisfaction. 63.06% received medicines within 10-15 minutes from DDC, 33.23% receive medicines between 15-30 minutes and rest 3.69% received medicines within 5 minutes.

- More than 15 minutes time was taken re time was taken due to lack of coordination and long que among patients receiving medicines at DDC.
- 58.94% receive partial medicines, and only 37.78% receive all medicines written in the prescription slip and rest 3.26 received no medicine.
- **Accessibility to DDC** influence satisfaction levels, According to 50.7% DDC is located at right place, for 44.3% DDC is located at a place that is not able to locate easily and for rest 5% replied that DDC is far away.
- It is not only the availability of services that influences the satisfaction of a patient but also the treatment in terms of behavior he/she receives from the service providers whether the person may be doctor, nursing staff or even the support staff. The patients were enquired about their perception on the behavior of the staff available at the health facility for 65.7% patients **behavior of provider** was fine, for 24.3% behavior of provider was good, for 5.3% only patients behavior was very good and for 4.7% patient's behavior of provider was bad.
- After the launch of RMSC, **patients visiting the public facility numbers** have been increased, OPD numbers outnumber the IPD patients, as more patients are availing the services accessibility is increased which in turn will improve the health indicators. But on other side according to the providers the numbers of OPD patients have increased due to multiple registrations done by patients on ever visit to health facility.

Conclusion:

RMSCL was set up to deliver Quality Drugs, Medicines, Surgical, Suture items and other medical equipments in time to the Government Medical Institutions and free supply of commonly used drugs to all patients from Oct 02, 2011. RMSCL is a big initiative taken by government of Rajasthan, which if implemented properly would benefit each and everybody health, but it needs commitments and intersectorial coordination to accomplish it.

RMSCL provide quality and essential medicines free of cost to every individual from government health facility, but the scheme is not yet fully implemented according to the laid guidelines.

DDW were not set up according to the laid guidelines, temperature was not maintained as required, arrangements of medicines in racks was improper. There was shortage of some essential drugs due to improper forecasting at the state level which cause insufficient supply at health facilities.

Health facilities have insufficient supply of essential drugs, and stock was not maintained accordingly, which in turn leads to dissatisfaction among patients due to partial availability of medicines written in prescription. Only 33% received full medicines. Patients have to purchase drugs from private providers which increases their out of pocket expenditure.

RMSCL is a model adopted from TNMSCL, through which stock is maintained through software and quality is assured by random sampling of drugs.

Patients were dissatisfied as they were not able to locate the DDW in the health facility, in one health facility there were six DDW and patients were often confused from where to procure the drugs. Dissatisfaction due long waiting time at DDW was also a major concern.

There was a relation established between partial medicines or no medicines received and the satisfaction level of patients, the patients who receive full medicines were fully satisfied with

RMSCL, similar was seen in case of waiting hours , more waiting hours leads to dissatisfaction among patients.

Patients perceive the medicines received at DDC were substandard and throw them, or go to private providers.

Doctors usually prescribe third line antibiotics, when first line antibiotics are required by which immunity of patients is compromised.

Recommendations:

- Allocation of amount for PHCs, CHCs, and District Hospitals etc. should be upwardly revised after discussion with the facility in charge.
- Prescription audit should be done at regular intervals for regular monitoring the efficacy of the scheme.
- Proper supply chain management should be administrated.
- Recruitment of pharmacist, so that work load is distributed.
- Proper maintenances of records should be there at DDW and at facility. Expiry drug register should be maintained.
- DDW should be maintained according to the laid guidelines so that quality medicines are delivered.
- DDW temperature should be regulated so that quality drugs are delivered to the patients.
- Provider Perception is also a major concern they are still resistant to change, so doctors and pharmacists should be motivated to prescribe generic drugs.
- Up till now Patients Perception about RMSCL is not clear so proper means of awareness should be given to the patients so that patients take benefit of the scheme.
- At DDC level, number of drug distribution counters should be more so that long waiting time is avoided but proper sigh ages should be placed so that patients are not confused of the directions.
- Forecasting at the facility level should be done properly so that only required medicines taken from warehouse.
- Not for sale should be written on every tablet so that pilferage is not there.
- Procurement orders should be placed to meet out 4 months need and 2 months pipeline stock according to the laid guideline.
- Awareness regarding the quality of medicines should be provided to the patients.
- Doctors should be motivated to prescribe generic drugs.
- Stock should be maintained properly at warehouse and facility level.

Limitations of the Study

- Only one facility at each level was selected to make inference.
- Number of patients at each facility was not equal, which might have affected the study results.
- As the scheme is launched on 2 Oct, 2011 full implementation is not there

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Annexure

jksxh gsrq iz'ukoyh

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Ø-la-	fooj.k	
1	jksxh dk uke	
2	irk	
3	vk;q	
4	fyax	iq:"k----------1 efgyk----------2
5	tkfr	lkekU;----------1 vuqlqfpr tkfr----------2 vuqlqfpr tu tkfr----------3 vks-ch-lh----------4

		vU; ¼Li"V djsa½----------5
6	jksxh fdl Js.kh ls lEcU/k j[krk gSA	ch-ih-,y----------1 ,-ih-,y----------2 iSa'kulZ----------3- vU; ¼Li"V djsa½----------4
7	jksxh dk O;olk; D;k gS \	dksbZ dk;Z ugha----------1 d`f"k----------2 LFkkbZ lsok----------3 vLFkk;h lsok----------4 O;kolkf;d dk;Z----------5 Lojkstxkj----------6 fooj.k ns----------7

8	vki fdl chekjh dk bZykt djokus vk;s gks \	cPpksa ls lEca/kh jksx----------1 gM~Mh jksx lEca/kh----------2 ukd] dku] xyk jksx----------3 us= jksx lEc/kh----------4 nar fpfdRlky----------5 izlwfr / L=h lEca/kh----------6 lkekU; fpfdRlk----------7 Ropk lEca/kh----------8 'kY; fpfdRlk----------9 vU; ¼crk;sa½----------10
9	vki vLirky esa vki fdrus cts vk;s \	9am &1pm----------1 4 pm & 6 pm----------

		----------2 bejtsalh---------- ----------3
10	vLirky igqapus ds ckn vki loZizFke dgka x;s \	Lokxr@iathdj.k dkmUVj---------- ----------1 MkWDVj d{k---------- ----------2 iz;ksx'kkyk---------- ----------3 vU; ¼Li"V djsa½---------- ----------4
11	Lokxr @ iathdj.k dkmUVj ij fdruk le; yxk \	5 fefuV---------- ----------1 10 ls 15 fefuV---------- ----------2 30 fefuV---------- ----------3 60 fefuV---------- ----------4 ,d ?kaVs ls vf/kd---------- ----------5 iathdj.k ugh djok;k ---------- ----------6

12	iathdj.k djokus ds i'pkr MkWDVj ds fy;s fdruh nsj bartkj djuk iM+k \	5 fefuV----------1 10 ls 15 fefuV----------2 30 fefuV----------3 60 fefuV----------4 ,d ?kaVs ls vf/kd----------5 le; ugha yxk----------6
13	MkWDVj us vkidks ns[kus @ tkap djus esa fdruk le; fy;k\	0&5 feuV----------1 5&10 feuV----------2 10&15 feuV----------3 15 ls T;knk----------4
14	MkWDVj dks fn[kkus ds ckn vki dgka x;s \	iz;ksx'kkyk----------1 nok forj.k dsUnz----------2

		?kj----------3 vU; ¼Li"V djsa½----------4
15	D;k vkius nok forj.k dsUnz ls nok izkIr dh gS \	gkj----------1 ugha----------2
16	;fn ugh arks dkj.k crk;sa \	T;knk le; yxrk gS----------1 iwjh nok ugh feyrh gS----------2 nok dh xq.koRrk lgh ugh gS----------3 vU; ¼Li"V djsa½----------4
17	vkidks nokbZ izkIr djus esa fdruk le; yxk \	5 fefuV----------1 10 ls 15 fefuV----------

		----------2 30 fefuV---------- ----------3 60 fefuV---------- ----------4 ,d ?kaVs ls vf/kd---------- ----------5 le; ugha yxk---------- ----------6
18	vkidks nok forj.k dsUnz ij vf/kd le; D;ksa yxk \ ¼15 fefuV ls vf/kd le; yxus ij½	yach ykbu Fkh ---------- ----------1 vO;ofLFkr Fkk ---------- ----------2 QkesZflLV ugha Fkk---------- ----------3 QkesZflLV dqN vkSj dke dj jgk Fkk-- --------4 vU; ¼Li"V djsa½---------- ----------5
19	D;k vkidks nok forj.k dsUnz ls lHkh nokbZ;ka feyh	iwjh nok feyh---------- ----------1 vkaf'kd feyh---------- ----------2 fcYdqy ugh feyh----------

		----------3 vU; ¼Li"V djsa½---------- ----------4
20	nok ugh feyus ds D;k dkj.k gS \	nok miyC/k ugh Fkh---------- ----------1 nok [kRe gks xbZ---------- ----------2 vU; ¼Li"V djsa½---------- ----------3
21	iw.kZ nok ugha feyus dh fLFkfr esa ckdh lHkh nokbZ;kj dgkj ls izkIr dh	ykbZQ ykbZu---------- ----------1 futh 'kkWi---------- ----------2 vU;---------- ----------3
22	D;k MkWDVj us dkczZu dkWih okyh iphZ ij nokbZ fy[kh \	gkj---------- ----------1 ugha---------- ----------2
23	D;k vkius nokbZ izkIr djus ds ckn ,d dkczZu dkWih nok forj.k dsUnz ij tek djkbZ \	gkj---------- ----------1 ugha----------

		----------2
24	D;k nokbZ izkIr djus ds ckn vkius MqIyhdsV iphZ ij gLrk{kj fd;s \	gkj---------- ----------1 ugha---------- ----------2
25	D;k nok forj.k dsUnz jksxh dh lqfo/kk ds vk/kkj ij lgh txg ij fLFkr gS \	lgh txg ij gS---------- ----------1 nwj gS---------- ----------2 irk ugha yxrk---------- ----------3 vU;---------- ----------4
26	D;k fofHkUu Js.kh ds ch-ih-,y- ejhtksa gsrq vyx ls nok forj.k dsUnz dh O;oLFkk gSa \	gkj ugha efgyk 1 2 ofj"B ukxfjd 1 2 fodykax 1 2 xEHkhj ejht 1 2 vU; ¼Li"V djsa½ 1 2
27	fu%'kqYd nok ;kstuk ds ckjs esa vkidh D;k jk; gS \	cgqr vPNh---------- ----------1 larks"kizn----------

		----------2 vPNh ugha---------- ----------3
28	;kstuk vPNh D;ksa ugha gSa	lkjh nok ugha feyrh ¾ 1 bu nok ls dksbZ Qk;nk ugha gksrk ¾ 2 flQZ lLrh nok feyrh gS ¾ 3 de fnu dh nok feyrh gS ¾ 4 le; T;knk yxrk gS ¾ 5 vU; ¼Li"V djsa½ ¾ 6
29	;kstuk ds D;k Qk;ns gSa	Ýh nok feyrh gS ¾ 1 nok ykHknk;d gS ¾ 2 le; cprk gS ¾ 3 ,d lkFk lkjk dke gks tkrk gS ¾ 4 mipkj laHko gS ¾ 5 vU; ¾ 6
30	nokbZ nsus okys O;fDr dk O;ogkj vkils dSlk Fkk\	cgqr vPNk ¾1 vPNk ¾ 2 Bhd ¾ 3 [kjkc ¾ 4