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MANUAL ON MANAGEMENT
OF
DISTRICT HOSPITALS, PERIPHERAL UNITS
AND
RURAL HOSPITALS

MINISTRY OF HEALTH & WOMEN'S AFFAIRS
SRI LANKA.
1994

Dr ~~Sumanaweera~~
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FOREWORD

The Health Care Delivery System of Sri Lanka was restructured for attaining the social goal of "Health for all by the year 2000", through the strategy of Primary Health Care. The wide network of District Hospitals, Peripheral Units and Rural Hospitals form the Primary referral level of this system.

These Institutions mainly cater to the health needs of the rural population which comprise 80 percent of the total population. Thus, it is incumbent on the Government to ensure efficient and effective management of these Institutions.

Guidelines for the management of these Institutions are provided in Part 11 of the Manual of the Department of Health Services. Revision of this Manual was undertaken recently and the revised Manual would provide the Health Professionals as well as others associated with Health Institutions, the necessary skills and knowledge for better management of these Institutions, thereby providing a better Health Service to the Rural Population of this country.

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INTRODUCTION

Manual of Management Part 11, deals with the management of the curative services of the Department of Health Services. It was first published almost four decades ago and has not been revised and updated since its first publication. With the restructuring of the Health Care Delivery System to reach the social goal of HEALTH FOR ALL by 2000 A.D. through Primary Health Care, not only the staffing pattern, functions and activities, but the entire profile of these medical institutions has changed. Hence, the urgent need to revise and update Part 11 of Manual of Management was seriously considered and it was in fact with this in view that in 1990, a revised manual for Central Dispensaries and Maternity Homes, which represent the first level on the restructured three tiered system of institutions, was published.

The Manual of Management for Rural Hospitals, Peripheral Units and District Hospitals is the second instalment of the revision of Part 11 of the Manual. These hospitals constitute the first level providing inpatient curative facilities in the Health System of the country. Hospitals essentially being a part of the community have also, to reach into the community, for preventive and promotive care.

In 1991, there were 365 institutions falling into these three categories forming a well planned network of Primary level institutions serving all parts of the island. Although facilities and resources at these institutions are adequately available round the clock, there is a strong tendency amongst the general public to bypass these and seek treatment at higher level institutions. i.e. secondary and tertiary care institutions, leading to overcrowding, lowering of quality of care and a whole host of other related problems at these institutions. The average occupancy rate for the year 1991, was 55% for Rural Hospitals, 66% for Peripheral Units and 62% for District Hospitals.

Thus, there is a need to motivate the community to utilize the first the level of inpatient care services without by-passing and it becomes more important especially in the light of present government strategy to devolve power to the Divisional Secretarial level to provide comprehensive services to the people at grass root level. Under this scheme, it is also planned to upgrade one District Hospital / Peripheral Unit / Rural Hospital per Divisional Secretarial area to provide good quality inpatient as well as outpatient care.

This Manual is the result of an effort by a group of experts on hospital management. While emphasizing the service and management angles, undoubtedly leading to good quality technical care, i.e. diagnostic and therapeutic, it has not lost sight of the art of care of the patient. This is related to behavior of the providers of care, and communication with the patients. It is in view of this, a chapter in the all important subject of medical ethics, has also been included in this volume.

An expert prepared each chapter and presented it to a National Consultative Meeting for discussion and finalization. My gratitude is due to Prof. T.R. Anand - WHO Short Term Consultant on Hospital Management, Prof. T.J. Ramaiah, WHO Long Term Consultant in Management, Dr. C.D. Herat, National Long Term Consultant on Hospital Management, the Directorate and all the experts who contributed to the success of this Manual. Sponsorship by the W.H.O. is greatly appreciated.

It is fervently hoped that, management level staff attached to these hospitals, will make use of the Manual as a day to day guide to provide comprehensive, good quality care to the community.

Dr. Reggie Perera
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Editor

CONTENTS

LIST OF ABBREVIATIONS

AMP	-	Assistant Medical Practitioner
APH	-	Ante Partum Haemorrhage
ALC	-	Anti Leprosy Campaign
AOC	-	Amoebae, Ova, Cysts
DPDHS	-	Deputy Provincial Director of Health Services
DDGPHS	-	Deputy Director General of Public Health Services
DNDQAL	-	Director National Drug Quality Assurance Laboratory
DMTS	-	Director Medical Technology and Supplies
DDHS	-	Divisional Director of Health Services
DH	-	District Hospital
DC	-	Differential Count
ESR	-	Erythrocytic Sedimentation Rate
ECG	-	Electrocardiograph
IV	-	Intravenous
IMMR	-	Indoor Morbidity and Mortality Register
LSCS	-	Lower Segment Caesarian Section
LRT	-	Ligation and Resection of Tubes
MO	-	Medical Officer
MOH	-	Medical Officer of Health
MOIC	-	Medical Officer In Charge
MRI	-	Medical Research Institute
MLR	-	Medico Legal Report
OPD	-	Out Patient Department
PHI	-	Public Health Inspector
PMR	-	Post Mortem Report
PPH	-	Post Partum Haemorrhage
PET	-	Preeclamptic Toxaemia
PDHS	-	Provincial Director of Health Services
PU	-	Peripheral Unit
PC	-	Provincial Council
RH	-	Rural Hospital
RDHS	-	Regional Director of Health Services
RE	-	Regional Epidemiologist
RMP	-	Registered Medical Practitioner
SDTT	-	School Dental Therapists
STD	-	Sexually Transmitted Diseases

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CLINICAL SERVICES

CHAPTER 1

STRUCTURE AND FUNCTIONS

1.1 THE CONCEPT OF "COMMUNITY HOSPITAL"

Hospital is a unique human institution. It is a residential establishment which provides short term, and long term medical care consisting of observational, diagnostic, therapeutic and rehabilitative services.

However, the criticism levelled against the hospital is that it exists in splendid isolation in the community acquiring the euphemism "an ivory tower of disease". It consumes a large proportion of the health budget. It is not people oriented. Its proceedings and styles are inflexible and expensive. It tends to overlook the culture and social aspects of illness and it traditionally treats only the disease but not the patient as a whole. The treatment is not only expensive but is also intrinsically resistant to change.

According to modern thinking, a hospital shall not function in isolation. It must be part of the social and medical systems and must provide a complete and a comprehensive health care for the population.

Commitment to the goal of Health for All by the Year 2000 A.D. through primary health care strategy necessitates integrating preventive and curative care services. In the light of Primary Health Care concept, the hospital should be a flexible institution capable of adapting its resources to the total health care needs of the community. Devolution of power to the Divisional level and the appointment of Divisional Directors of Health Services for Divisions will make this concept a reality.

The three types of institutions mentioned in this manual take the responsibility of providing and supporting primary health care to achieve the goal of H.F.A. 2000 A.D. Without their support primary health care could not achieve its full potential. Therefore, the present trend is to redefine the role of the hospital as a community institution which means, that the hospital is not only disease oriented but has responsibilities in the field of preventive medicine and health promotion.

In accomplishing the new responsibilities of a hospital, the hospital workers including the medical personnel shall change their traditional way of thinking and behaviour so as to fit themselves into the community hospital.

The role of the medical officer (Doctor) is very crucial and he is the team leader. He shall take care of individuals, community and his role as a teacher has to be over emphasized.

In order to fulfill the needs of the community, the hospital shall primarily be hospitable, and its image and credibility are such that community shall realize that this hospital is a social institution maintained for the people, by the people and of the people. The concept of community participation tries to "demedicalize" health and actively involves communities in a meaningful way to plan, implement, utilize, operate, monitor and evaluate their health care delivery systems.

In other words, the emphasis is now to be shifted from "Health care for the people" to "Health care by the people". (Ref. chapter 14 of this manual for further details on community participation).

1.2 OBJECTIVES

1. To indicate to the heads of institutions, the degree of involvement in providing and supporting Primary Health Care to achieve the universal goal of Health for All by the year 2000 A.D.

2. To make the heads of institutions understand the limits of facilities and resources, available in their respective institutions.

3. To make the heads of institutions to utilize the available facilities/ resources to provide an optimal service.

4. To make the heads of institutions aware of the correct steps to be taken in the event of solving problems beyond their institutional framework.

5. To use as a guide to compare the services to be provided in the respective institution.

1.3 BED DISTRIBUTION

The distinction between District Hospitals, Peripheral Units and Rural Hospitals is basically made on their size, and the range of facilities provided. At present there are two types of District Hospitals, namely large District Hospitals and small District Hospitals. Table 1 shows the average bed strength of the respective medical institutions.

Table - 1
AVERAGE BED STRENGTH OF DHH, PUU & RHH.

TYPE OF MEDICAL INSTITUTION	BED STRENGTH APPROX.
Average District Hospital	100
District Hospital (large)	OVER 100
Peripheral Unit	45
Rural Hospital	20

Source **- Annual Health Bulletin - 1991**

However there are wide variations in the bed strength at present, in different institutions. Under no circumstances should the bed capacity of the existing wards be increased without consulting Provincial Director of Health Services/Director General of Health Services. When requests are made to up-grade institutions, the Provincial Director must ensure and indicate that all facilities that should be available for each category have in fact been provided. See Table (2) and Table (3).

Table - 2
WARDS AND CLINICS FACILITIES IN DHH, PUU & RHH

FACILITY	DHH	PUU	RHH
Paediatric Ward	+	+	-
Maternity Unit	+	+	+
Common -{Male Ward	-}*	+	+
-{Female Ward	-}*	+	-
Female + Paediatric Ward	-	-	+
Laboratory	+	+	-
Long Term Care Clinic	+	+	-
Specialists Clinic	+	-	-

* Will have separate male and female Medical and Surgical Wards.

1.4 FUNCTIONS

The main function of District Hospitals, Peripheral Units and Rural Hospitals is to promote Primary Health Care in the community.

Table - 3
MAIN SERVICE PROVISION AREAS OF DHH, PUU & RHH

SERVICE PROVISION AREA	Dist. Hospital	Peripheral Unit	Rural Hospital
1. Out patient care	+++	++	+
2. In patient care	+++	++	+
3. Ante natal care	+++	++	+
4. Natal care	+++	++	+
5. Post natal care	+++	++	+
6. Infant care	+++	+	+
7. Family planning	++	+	+
8. Immunization	+	+	+
9. Control of communicable diseases	+	+	+
10. Screening for non communicable diseases & their management	+++	++	+
11. School health	++	+	
12. Oral health	+	+	-
13. Prevention of blindness & visual impairment	+	+	+
14. Health education	+	+	+
15. Screening for Tuberculosis	+	+	+

Table contd.....3/

SERVICE PROVISION AREA	Dist. Hospital	Peripheral Unit	Rural Hospital
16. Screening for Malaria	+	+	+
17. Provision of lab services	+	-	-
18. Radiological Examination	+	-	-
19. Maintenance of Medical Records	+	+	+
20. Provision of Surgical facilities for minor operations and LRT	+	-	-
21. Medico Legal care	+	+	-
22. Provision of diet	+	+	+

The Government Policy is to upgrade at least one medical institution per Divisional Secretarial Area / Divisional Director of Health Services Area to provide the full range of above mentioned services of good quality.

1.5 OUTPATIENT CARE

Outpatient care available in a medical institution varies considerably depending on the type of the hospital. Quality of care is better in a District Hospital than that provided by P.U. and far more superior to that of a Rural Hospital. Quality of service is augmented by the presence of laboratory and other diagnostic facilities such as X-Ray, E.C.G. etc. The degree of outpatient care is higher in some District Hospitals where there are consultants attached to them or in places where there are services of the visiting consultants.

However, more often than not, the prescribing officers working in the Out Patient Department are AMPP/RMPP. It is best that a medical officer can come to the O.P.D. having completed the ward work, both every morning and afternoon. All complicated cases and preferably second visits could be seen by a medical officer. It is ideal to have a special clinic for those who are on long term management such as Diabetes and Hypetension, especially in District Hospitals and also in Peripheral Units if possible.

These hospitals shall function as the first contact in their immediate locality providing primary care and in other instances shall provide the supporting role in the provision of primary care.

1.6 INPATIENT CARE

The level of In-patient care available in these three categories of institutions vary to a great extent because of the availability of diagnostic facilities which are very attractive. Quality of service is also higher in places where there are consultants. The total care available in the District Hospitals and Perpheral Units are far more superior to Rural Hospitals because of the availabilty of nursing personnel in these institutions. (For further details refer chapter 3 of this manual).

1.7 ANTE - NATAL CARE

All medical institutions shall conduct an ante-natal clinic fortnightly and shall distribute Thriposha, Haematemics, Vitamins and provide immunization against tetanus to pregnant mothers, in collaboration with field health staff of the respective D.D.H.S. However, the entire responsibility of managing such services is the duty of the Head of the Institution. The equipments, reagents, drugs, vaccines used to render such services shall be indented by Heads of institutions concerned.

Samples of blood for VDRL and blood for grouping could be taken from pregnant mothers wherever possible in consultation with MO/A.V.D.C and MO/Blood Bank respectively. Examination of urine for albumin and sugar, to be carried out in all pregnant mothers. Maternal weight gain to be recorded periodically. Maternal height is also to be recorded in the mother's card. All high risk pregnancies shall carry a "Red" Tag.

1.8 NATAL CARE, POST - NATAL CARE & INFANT CARE

(Refer relevant sections of chapter 4 of this manual)

1.9 WATER SUPPLY

All Hospitals should have an adequate supply of clean water. The average Water requirement is estimated to be 40-60 Litres per person per day. On the average, District Hospitals, Peripheral Units and Rural Hospitals should have overhead tanks of capacity 5,000, 3,000 and 2,000 gallons respectively and lower sumps of capacity 1,000, 750 and 500 gallons respectively.

In the event there is a difficulty in providing water, officer- in-charge shall get the help of the Divisional Secretary to get a bowser to transport good quality water.

Officer-in-charge shall get the help of the area PHI to chlorinate and determine the residual chlorine content of drinking water if the source of water is located within the Hospital premises.

1.10 FAMILY PLANNING SERVICES

In places where theatre facilities are availabe. Head of institutions shall ensure that LRTT and Vasectomies are performed on a regular schedule. Such days should be displayed on the Hospital notice board. Insertion of IUCDD should be done preferably on demand at a pre-determined time of each day and contraceptive sales outlet should function in every institution during working hours.

1.11 IMMUNIZATION

The Immunization shall be given on demand. All infants born in the Hospital shall be given BCG prior to discharge.

1.12 CONTROL OF COMMUNICABLE DISEASES

All patients suffering from communicable diseases shall promptly be notified to

the respective Medical Officer of Health / DDHS.

The notification card will have the provisional diagnosis. In the event that there is discrepancy between the provisional diagnosis, and final diagnosis MOH/DDHS shall be informed accordingly.

A list of notifiable diseases shall be displayed in Medical and Paediatric wards and also in the OPD consultation rooms for easy reference.

The officer-in-charge shall cross check the entries in the notification register with the entries made in the in-patient diseases register.

1.13. REHABILITATION

District Hospitals, Peripheral Units and Rural Hospitals shall provide first level of referral services to the community based rehabilitation programme. Those who manage disabled patients shall issue guidelines to community health workers regarding their community-based management and they shall review such patients periodically.

1.14 SCHOOL HEALTH

It is primarily a function of the community health workers. However, because of the enormous numbers of school children to be examined every year, they themselves cannot cope with this huge task. Being "community hospitals", officers in charge of these categories of institutions shall actively participate in school health component by involving a medical person. MO, AMP / RMP attached to these institutions, shall set apart Friday for school health activities in their catchment areas. Even in instances where a PHI or PHN is doing the school health work they shall get the support of the medical officer in the community hospital to examine the respiratory and cardiovascular systems of children. All referrals to local hospitals shall be attended by medical officers on Saturdays or any other day depending on the nature of the ailment. Children referred to them shall be treated and followed up until they are cured or free from their ailment.

1.15 PROVISION OF DIET

Refer chapter 21 of this manual.

1.16 RADIOLOGICAL EXAMINATION

Certain District Hospitals are provided with this facility. In such places., they can make arrangements to do radiological examination on request made by neighbouring Heads of institutions.

1.17 PROVISION OF SURGICAL FACILITIES FOR MINOR OPERATIONS AND TUBECTOMIES / VASECTOMIES

In places where the above facility is made available Heads of institutions shall

carry out minor surgical procedures. In places where there are medical officers qualified to perform tubectomies / vasectomies they can attend to such operations. In organising such activities they shall get the help of field health workers to refer cases for such procedures.

1.18 ORAL HEALTH

All D.HH. most P.UU. & some R.HH. are provided with oral health units. Children referred by the School Dental Therapist, shall be seen by Dental Surgeons. They shall conduct out-reach programmes in consultation with community health workers. Dental surgeons shall examine school children referred to them on Saturdays on a preferential basis. They shall be actively involved in screening for oral cancer.

To implement a successful programme on prevention of oral cancer and also to practice preventive dentistry the Dental Surgeons shall actively participate in the oral health component of primary health care programme. He shall provide technical guidance and leadership and shall work as a member in the primary health care team in drawing up a plan for the oral health programme, along with SDTT and DDHS in their areas. Dental surgeons shall visit the monthly conferences of the MOH/DDHS as per instructions given in chapter 7 of this manual.

He shall make an attempt to educate the community while doing his routine activities in the clinic as well as in the community. He shall attend the oral cancer screening programmes, organised by the field health workers.

1.19 PREVENTION OF BLINDNESS AND VISUAL IMPAIRMENT

All D.HH., P.UU & R.HH shall provide first level referral care. Some of the D.HH will function as satellite cataract surgery centres (where facilities are available).

1.20 HEALTH EDUCATION

All medical institutions shall carry out health education activities both in the out patient Department and also in the wards. It should be a routine activity. Inter-personal communication & group discussion shall be the main modes of Health Education. Posters, flip charts, flash cards may be used depending on the circumstances.

It is the duty of the Medical Officer treating the patient to tell him / her the illness that she /he has, in simple language and also to explain to him /her the possible factors that contributed to the illness. In the case of communicable diseases, the patient shall be informed the mode of communicability and period of communicability too. Preventive measures that should be taken shall also be explained.

A record in the Health Education Register should be kept of all Health Education activities carried out in wards. Officer in-charge shall initial such records on a routine basis. When doing health education, the topics should be chosen in relation to prevailing disease patterns. A list of topics shall be attached to the health education records (preferably on the inside

cover.) Every effort should be made to display health education slogans in appropriate places in the hospital wards and out-patients, departments.

1.21 SCREENING FOR T.B.

All medical institutions shall carry out screening procedures for T.B, by doing sputum examination on patients who are having cough of more than 2 weeks duration. In palces where laboratory services are available they shall examine sputum and in other instance the sputum samples shall be sent to regional laboratories, where they would be examined.

1.22 SCREENING FOR MALARIA

Medical insitutions in malarious areas shall take blood films from all fever cases. In places where facilities are available, such blood films shall be examined locally, and in other places blood films shall be sent to the field laboratories. All positives and clinical cases shall be treated promptly by giving them radical treatment for 5 days. All medical institutions in the malarious areas shall maintain semilog graphs showing :-

1. Weekly average O.P.D. attendance
2. Weekly average fever cases
3. Weekly average clinical malaria cases

1.23 SCREENING FOR FILARIASIS

All suspected cases shall be screened for Filariasis by doing night blood filming. All clinical and positive cases shall be treated promptly.

1.24 SCREENING FOR LEPROSY

All suspected cases and clinical cases shall be referred to the Dermatology Clinic or to PHI/ALC for laboratory confirmantion.

1.25 PROVISION OF LABORATORY SERVICE

The laboratory services are generally available only in District Hospitals. However in other places too, efforts can be made to organize a small laboratory for basic tests such as E.S.R., stools for AOC, W.B.C/D.C. and urine examination ets., without the help of a Medical Laboratory Technician. Indents for basic equipment and chemicals can be made annually.

1.26 MAINTENANCE OF RECORDS

All B.H.T.T. shall be returned to medical records room within 24 hours of discharging patients. The B.H.T.T. of judicial importance shall be kept under lock and key. Diagnosis shall be written in Block Capitals. The inpatient disease register shall be kept upto date.

1.27 INTEGRATION OF PREVENTIVE & CURATIVE SERVICES

Officers in charge of Patient care institutions shall attend the monthly conference of the D.D.H.S / M.O.H. It is a good forum for discussion of current community health problems and integration of curative & preventive care services. Similarly, the M.O.H. shall visit the patient care institutions in the area with a view to building up a good rapport with the curative sector.

CHAPTER 2

MANAGEMENT OF OUTPATIENT AND EMERGENCY SERVICES

2.1 INTRODUCTION

O.P.D. in a Hospital is one of the most important sections, as more patients use its facilities, compared to inpatient facilities. Patients who attend O.P.D. do so, with great confidence, that their ailments will be properly investigated, treated, or they will be referred for correct specialist attention.

O.P.D. officers should always be concerned, and curtail unnecessary admissinos. The patients who need indoor treatment, should be examined promptly, and admitted to respective wards/unit, by the admitting officer, with proper instructions regarding treatment.

It should also be noted that the cost of O.P.D. treatment is much less than Indoor treatment.

2.2 FACILITIES

Out patients Department of a Govt. District Hospital, Peripheral Unit or a Rural Hospital, should have the under mentioned facilities.

1) Ticket issuing counter

The services of a minimum of two courteous Labourers are needed for this task. This Section should be provided with the following:-

(i) A Long Counter Desk (for issue of tickets and maintaining of records).

(ii) Cupboards and racks to store printed forms, tickets etc.

(iii) Rubber stamp with the name of the Institution.

(iv) Stamp pad & ink.

- A Numbering Machine and Ink.
- O.P.D. Tickets, B.H.T.T. and Check Tickets.
- Two High Stools.
- A Bottle of Gum.
- A Register to maintain statistics of patients.
  (1 st visits & subsequent visits)
- A wall clock.

2 Consultation Rooms

BP Apparatus, Torch, Clinical Thermometer, Tongue Depressor etc. are required for the consultation rooms.

Few Rubber Satmps with directions to the OPD/ ward staff, such as, "HO to see stat", "Trolley", "Wheel Chair", "Inform Police" etc.

3 Dispensary

The O.P.D. Dispensary is open for issuing drugs from 8.00 a.m. to 5.00 p.m. uninterrupted. Depending upon O.P.D. attendance there should be sufficient number of Dispensing counters for Pharmacists / Dispensers to issue prescribed drugs.

The Pharmacist in-charge, other Pharmacists, Dispensers and minor staff attached to the Dispensary, should ensure that the Despensary is clean and tidy.

Pharmacists / Dispensers, are responsible for, correct labelling of bottles, tablet containers, ointments etc. Dangerous drugs to be kept under lock and key always. The Pharmacists / Dispensers should strictly follow the instructions regarding issue of dangerous drugs.

Only the staff attached to the Dispensary should be allowed to enter the Dispensary.

4. Dressing Room

The dressing room, should be under the supervision of a Nursing Officer. The services of two attendants viz:- a male and a female should be made available.

5. Injection Room

A separate room, equipped with facilities, viz:
Sterilizers, Trolley, Syringes etc, to administer injections should be available. An adequate number of Nursing Personnel to be set apart, to work in the Injection room. **An emergency tray should be available.**

2.3 WORKING HOURS

- O.P.D. to function from 8.00 a.m. to 12.00 Noon, 2.00 p.m. - 4.00 p.m.

- At other times it is open for admissions. The patients, after obtaining their O.P.D. tickets, should await their turn for consultation, seated.
- The labourer in the waiting hall should call out the numbers, and direct patients to Consultation Rooms.

2.4 ADMISSION PROCEDURE

Patients who come for admission including maternity cases should be examined properly.

A registration counter, must be available with a main admission register, managed by a trained labourer to record admissions, and to attend to inquiries.

Sufficient number of labourers, should be deployed to receive patients, and transport them to the admission room, and to the wards in the trolleys and wheel chairs.

Under no circumstances should patients be examined and admitted in admitting officer's Quarters.

2.5 MANAGEMENT OF EMERGENCIES

In order to provide an efficient, prompt and quick service, it would be better to have a separate room, under supervision of a Nurse to attend to emergencies. There should be a minimum of two trained attendants / labourers to assist the nurse. This service should be provided 24 hours of the day. This room should have 2 Beds, Saline Stands, Nebulizer, BP Apparatus, Oxygen Cylinder, Medicine Trolley, Dressing Trolley, Injection Trolley, necessary Drugs, Injections, Suturing Materials, Emergency Tray etc.

The patients, who are fit to go, may be sent home, after treatment. Those who need further indoor treatment, to be sent to the respective wards. This system would reduce overcrowding in a Hospital, to a great extent.

A separate room with at least two beds and two cots; should be available as a Rehydration room for diarrhoea patients, as 90% of the diarrhoea patients can be sent home after 4 - 6 hours of immediate treatment and advice.

2.6 CONCLUSION

A patient who comes to O.P.D. for treatment should be promptly attended to. If necessary facilities and services are available, a patient should be able to leave the O.P.D within two hours or so after obtaining, necessary treatment. Staff working in the O.P.D. must be motivated to work in co-ordination. O.P.D. premises must always, be kept clean and tidy. Supervising officers must frequently visit all sections & units in the O.P.D. to see that necessary services are provided to O.P.D. patients, without any delay.

CHAPTER 3

WARD MANAGEMENT

3.1 INTRODUCTION

Ward management is the science and art of giving quality care to patients in an organized way. As various categories of staff are involved, good coordination is essential. It involves diagnostic, curative and rehabilitative aspects of patient care and also disease prevention and community health.

Head of the team is the Sister or the Senior Staff nurse who also handles the inventory of the ward. She is the key leader of the ward.

3.2 OBJECTIVES

1. To provide safe, efficient and prompt, quality care to patients.
2. To rehabilitate patients enabling them to be productive socio-economically.
3. Continuing education of staff in modern trends in patient management so that they could educate the patient who will in turn educate the people at home and in the village to safeguard health and prevent disease.
4. To encourage research.

3.3 TEAM SPIRIT

The Medical Officers, Sisters, Nurses, Attendants and Labourers are the members of the health team. If team spirit is not maintained, the Sister will not be able to get the work done satisfactorily, and patient care will suffer. Team members should work in co-operation. They should get involved in regular ward rounds, ward conferences etc.

3.4 FUNCTIONS OF THE WARD

1. Accommodate sick people.

2. Nurse them back to health.
3. Provide necessary drugs and dressings as ordered by Medical Officer.
4. Maintain cleanliness and privacy of patient.
5. Centre for Health Education.
6. Make it a temporary home for the patient.
7. Centre for information regarding patients.
    (a) Keep health records.
    (b) Have an information desk in each unit and talk to relatives and give informantion as needed.
8. Teaching centre for staff.

3.5 WARD MANAGEMENT

Consists of the following:-

1. Unit management
2. Patient care management
3. Personnel management
4. Management of equipment and supplies.

3.5 UNIT MANAGEMENT- PHYSICAL SET UP OF THE WARD

1. Environment should be calm, quiet and pleasing to the eye.
2. Nurses station should be in the middle of the ward;
3. Duty rooms to all grades,
4. Utility room,
5. Store room,
6. Treatment room,
7. Pantry,
8. Recreation room with a library for patients,
9. Isolation room,
10. Toilet with water sealed drainage,
11. Bath with shower facilities,
12. Wash basins with running water with adequate supply of soap to encourage washing of hands,
13. Ward should be well ventilated with doors, windows and fans,
14. Washable paint should be used on walls for easy cleaning,
15. Outlets for water to drain after washing.
16. Drains right round the ward,

17. Off white or light colour on walls except in childrens unit, which should have attractive colours & paintings,
18. Every patient unit should have an iron bed with mattress, 2 pillows with pillow cases, Mattress cover, Bottom sheet, Mackintosh. Draw sheet, Top sheet, Over bed table, Bedside locker and if possible a screen right round the bed. Distance between 2 beds should be 3 feet.

3.7 PATIENT CARE MANAGEMENT

Care of the patient starts from OPD till the patient is discharged from hospital.

Courteous, kind,continuous attention should be given. Every effort should be made to ensure that the patient is made comfortable.

Receive patient cordially to the ward. Treat him as a wanted person and respect his personality.

Assess patient on admission and inform doctor and get patient seen by the M.O., as early as possible.

Give correct medication and treatment as soon as possible and treat patient as a whole. See to the cleanliness-detect priorities and treat same, considering the following 14 points in nursing by Virgenia Henderson.

The points of nursing by Henderson

Activit: es of daily living :-

1. Help patient to breathe normally
2. Help patient to eat and drink adequately
3. Help patient to eliminate by all avenues of elimination
4. Help patient to move & maintain desirable posture
5. Help patient to sleep and rest
6. Help patient to select suitable clothing; dress & undress
7. Help patient to maintain body temperature within normal range
8. Help patient to keep the body clean and well groomed
9. Help patient to avoid dangers in environment & avoid injuring others
10. Help patient to communicate with others in expression emotions, needs, fears etc.
11. Help patient to worship according to faith
12. Help patient to work at something that provides a sense of accomplishment
13. Help patient to play or participate in various forms of recreation
14. Help patient to learn, discover or satisfy the curiosity that leads to "normal" development and health.

Regulating the environment

As nurse is the most important person in the patient's environment, she should be courteous, understanding and neat in appearance.

The nurse incharge will set standards for her staff to follow, by her concern, understanding, honesty, kindness to and encouragement of the patients. She should provide a pleasant relaxing and a safe place for her patients.

Determine nursing needs

The most important patient need is to feel welcome. Assess patient physically, mentally, by results of lab reports, X-ray etc.

Plan to meet nursing needs

When assessment is done, it must be translated to planned nursing care to meet the needs. Plan must allow for adjustment as patient improves or new needs arise.

The doctor's orders, form the framework for nursing care plan. There is the overall objective for all patients, viz: restoring them to the fullest measure of health possible. Patient care planning has to be individualized.

Organizing daily work

Organizing of a hospital work is an art. It will reflect the capacity for organizing, and the personality of the nurse in-charge. The important points she should remember in organizing the ward are-

(a) The needs of the patients.

(b) The personnel she has.

(c) The amount of supervision that can be done.

Daily Routine :-

- Day Staff to takeover all patients after reading the night report.
- Patient care to be assigned according to the capabilities of the staff.
- Arrange all patients' beds.
- Sweeping followed by mopping in the morning (around 7.00 a.m.) and after noon (around 5.00 p.m.).
- Removing of cobwebs and washing of ward - weekly.
- Serving meals-under nurse's supervision, at 8.00 a.m, 11.30 a.m, 4.30 p.m. Tea at 10.00 a.m. and 2.00 p.m
- Medical officers ward round,
- Sending patients for various examinations, tests, accompnied by a hospital employee.
- Nurse or Sister in-charge should always help the Doctors to do rounds.

- Administration of drugs and injections - by nurses.

  6 hourly - at 8.00 a.m. - 2.00 p.m. - 8.00 p.m. & 2.00 a.m.

  T D S - at 8.00 a.m. - 2.00 p.m. - 8.00 p.m.

  B D - at 8.00 a.m. - 8.00 p.m.
- Emergencies to be attended to, immediately.

Needs of the patient on discharge

- Patient should be informed before hand when he is to be discharged so that he may prepare to go home. Advise on how to obtain drugs to take home & how to use same.
- Answer any questions he asks.
- How much rest is needed. Advise on diet, activities allowed.
- When to visit the doctor, possibility of complications, what signs to be reported to the doctor etc.
- Patient must be handed over to the relatives on discharge.
- If he is able to go alone, - he may be allowed but obtain, doctor's consent.
- If patient is unable to go alone and no visitors have come, inform next of kin by telegram.

Long term patients

Bed head ticket of Patients who stay more than 3 months must be renewed.

Transfer of patients

Fill the transfer form properly and the patient to be transferred by ambulance with an employee.

3.8 PERSONNEL MANAGEMENT

- The nurse in-charge should know job descriptions of all categories of staff.
- Duty rosters of each category of staff must be made by her & displayed on the notice board. This can be made daily, weekly or monthly.

Line of authority for nursing services management in D.H., P.U. & R.H.

1. Senior Ward Sister (Grade 1 Nursing Officer) is in-charge
2. Super Numerary Grade Staff Nurse (Nursing Officer)
3. Nursing Officer Grade ii "A"
4. Nursing Officer Grade ii "B"

Norms for nurses, midwives & other categories in District Hospitals

1. a)	Ward Sister	1 per hospital
	Nurses Supernumerary	Gr.I/Gr.II A & B

	Wards	1 Nurse to 6 beds
	OPD	1 Nurse to 100 patients for injections
		1 Nurse to do dressings
	Labour room	4 Midwiferytrained Nurses (1 per shift)
	Operating Theatre	2 Nurses per theatre
b)	Midwives	1 Midwife to 20 deliveries
c)	House Wardens	2 per Institution
d)	Ward Clerks	3 per Institution
e)	Seamstresses	1 per Institution
f)	Attendants	1 to 12 patients
g)	Ord. Labourers	12 per Institution
h)	San. Labourers	(3 per shift for 100 beds)
		15 per Institutions
		(1 per ward)

Peripheral Units

1. Staff Nurses Supernumerary Grade 1 / II A or B to be in-charge (with Mid-wifery qualification) of the institution and also to be in-charge of the Labour Room.

2.	Staff Nurses	1 Nurse to 10 Beds (Minimum 10 Nurses/Institution)
3.	Midwives	3
4.	Attendants	12 per Institution
5.	Ord. Labourers	8 per Institution
6.	San. Labourers	4 per Institution

Rural Hospitals

a)	Midwives	2 Midwives per Institution
b)	Attendants	6 per Institution
c)	Ord. Labourers	6 per Institution
d)	San. Labourers	3 per Institution

Management of Staff

- Delegate duties considering seniority and special skills of staff.
- Maintain attendance register, overtime register & leave register etc.
- Day & Night reports should be written by Nursing officers.
- Mid night total should be forwarded by the night duty Nurses.
- Sister or Nurse in-charge of the institution should do morning and afternoon rounds.

- Night supervisor should do 2 detailed night rounds.

Ward Conferences

All those who work in the ward should take part in the ward conferences. This is to improve conditions in the ward. Here, each member's view is considered. Should be held once a month.

Human Resources Development:

(a) Orientation programmes:

Staff must be oriented to the hospital & to the ward. Teach them routines, to whom they are responsible, different types of workers they have to work with, hours of duty, provision for illness, leave, days off, location of equipment in the ward, and procedures. After orientation, the person is allowed to work with another to become familiar with the work.

Inservice Education

Is required to assure quality patient care, and to keep abreast of scientific progress.
A calendar of inservice education is to be organized by the Matron / Sister Nurse in-charge.
Maintain health education registers

Methods of Inservice Education Are

- Lectures by doctors of latest developments & practices of Medical & Surgical Treatment.
- Film shows
- Discussions
- Demonstrations of new techniques or new equipment
- Clinical conferences

Ward Teaching

Classes for patient centered teaching programmes. Eg. special type of treatment. Special patient care techniques etc. This is organized by the Nurse in-charge. May get help from the doctor.

3.9 EQUIPMENT & SUPPLIES MANAGEMENT

The Nurse in-charge must have proper equipment & sufficient supplies to provide good quality care to her patients. Inadequate or insufficient equipment results in increased work and waste of time. 'Sometimes it endangers the patients' lives too.

All equipment needs to be kept in good repair & in working order. Any defective equipment should be sent at once for repair or replaced. Anything that is not working properly should be put away, till repaired, with a label pasted on it, indicating it is out of order.

Equipment needs to be kept where it is easily available and as near as possible to the place it will be used. Some things may be kept locked in a cupboard, the key to which must be available to the staff.

Oraganizing a Central Sterile Supplies Department (CSSD) is time saving. Nurse in-charge should instruct staff as to who may use what equipment & their responsibily for same. She must watch for & prevent waste or misuse by educating the staff in economical & proper use of all equipment & material.

Ensure Adequate Supplies By

1. Setting a minimum limit for the quantity of each item to be kept in the ward.
2. Having a satisfactory system for replacing broken or wornout equipment.
3. Making regular checks of inventories of all items.

Replacements

Supplies are ordered, weekly, biweekly, monthly, etc.

CHAPTER 4

LABOUR ROOM MANAGEMENT

4.1 INTRODUCTION

National Health Status is assessed by the Maternal Neonatal and Perinatal Mortality rates mainly. Labour room management has a bearing on these rates.

4.2 OBJECTIVES

1. To give good quality care at delivery.
2. Deliver a healthy baby.
3. To prevent complications during labour

   to **Mother**

   Baby

4. To reduce maternal, Perinatal, Neonatal Mortality rates.
5. To maintain sterility by :-

   (a) Proper Procedures

   Hand washing, sterilizing instruments as per standards set.

   (b) Ensuring Cleanliness

   Sweeping, Mopping three times a day or whenever necessary with soap and water, washing once a week (whole area) with soap water or with Antiseptic lotion.

   (c) Staff Discipline

   Changing gowns, shoes, wearing masks, aprons. Patient to be received by one entrance and the staff to enter by separate entrance if available. Aseptic technique is similar to operation theatre procedures.

4.3 PRE-ADMISSION PROCEDURES

i) Review General Examination notes made on admission to hospital.

ii) Pay particular attention to Obstetrics Findings recorded in B.H.T., namely.

- Past obstetrics history
- Present obstetric history
- Presentation
- Position
- Engagement
- P.V. Examination
- F.H.S.

iii) Check Vital signs, temperature, pulse, respiration and B.P.

iv) Evaluate lab. findings, namely; urine, sugar, albumin, H.B.% grouping and R.H. factor, V.D. R.L, X-ray, E.C.G., Scanning records if available.

v) Prepare mother for labour-Empty bladder, Bowels, Perineal care to be attended to.

vi) Check cleanliness of the mother (Head to toe)

vii) Take over and give over the mother and bed head Ticket.

4.4 ADMISSION PROCEDURES

i) Mother is sent to Labour Room at the end of the 1st stage.

ii) Labour Room Nurse in-charge receives the mother by checking B.H.T. and using a check list.

iii) Mother put to correct delivery Bed.

iv) Check, F.H.S. Pulse, respiration, B.P.., Bleeding P.V. abdomen, bladder, I.V. drip and enter necessary records in the B.H.T. and labour room admission register.

v) Prepare the mother for safe delivery.

4.5 DELIVERY INSTRUCTIONS

i) Continue to evaluate the progress of labour.

ii) Monitor F.H.S.. and pulse every 15 mts, Give oxygen if F.H.S. decreases. If F.H.S. increases or F.H.S. decrease inform the M.O. ro A.M.P. stat.

iii) Check contractions every two or three minutes. (Contractions last 60 to 90 seconds.)

iv) Check increase in blood in show.

v) Evaluate urge to push, involuntary bearing down.

vi) Observe bulging of perineum.

vii) Observe presenting part.

viii) Observe vaginal opening.

ix) Check crowning. Give Epis to Primipara and others if necessary.

x) Ask mother to take deep breath and push down when there is uterine contraction with full dialatation of the cervix.

Call mother by her first name throughout the delivery and explain every procedure to get her support.

xi) Be courteous to the mother throughout the delivery.

xii) As soon as the head is delivered, suck out secretions.

xiii) Clean eyes and keep baby on sterile GS towel.

xiv) Clamp the cord and after draining the placental blood toward baby, tie the cord.

xv) Tie the Disc to Mother & Baby (ensure that same number is given to mother and baby).

xvi) Separate the baby from the placenta and show the baby to mother.

Give the baby to mother to touch and feel the baby and to feed the baby with breast milk, within the first 30 minutes.

xvii) Give ergometrine as ordered by doctor.

After delivery of placenta observe mother for bleeding P.V. state of uterus, Pulse & respiration and record same, every 15 minutes.

Epis or tear to be sutured immediately by Dr / AMP.

xviii) Perineal care and general care to be attended to.

xix) Give mother a hot drink if there is no complication.

xx) Keep mother for two hours with continuing close observation in the labour room.

xxi) Record Time of Birth, expelling of placenta, in the B.H.T. and birth register.

4.6 BABY CARE

i) Observe bleeding from the cord or any other place.

Apgar scoring

(i)	**Heart rate**	**(ii)**	**Respiratory effort**
(iii)	**Muscle tone**	**(iv)**	**Reflex irritability**
	(v) Colour		

ii) Look for congenital malformations

iii) Look for meconium staining

iv) Suck out Secretions SOS

v) Minimum handling of baby to avoid infection

vi) Evaluate abnormal cry or no cry

vii) Measure the Baby - Length
- Shoulder
- Head circumference

viii) Record - Birth Marks, Sex

4.7 TRANSFER TO POST NATAL WARD

Before handing over the mother and baby to the post natal ward, following has to be recorded on the Bed Head Tecket, have a check list of them.

a) MOTHER

i) Condition of the bladder and uterus, temperature, pulse, respiration, B.P Disc No., whether I.V. drip is in progress.

ii) Perineal care and combing of hair to be attended to before sending the mother to the Post Natal Ward.

iii) Time of handing over the mother to ward and signature of the Nurse-in-charge of the Labour Room, to be recorded in BHT.

b) BABY

i) Disc No., time of sending baby to the ward to be recorded.

ii) When mother and baby are sent to the post natal ward, a midwife or nurse should accompany.

c) Nurse in-charge of the Post Natal ward to check the mother and baby es follows:-

Mother :- State of uterus, temperature, pulse respiration, Disc No., bleed ing and any other observation, note time of taking over to ward.

Baby :- Sex, bleeding, colour, secretions, Disc No., time of taking over and any observaions.

All these records are to be entered on the B.H.T.

Conduct inservice education of all labour room staff annually. Conduct monthly meetings of all labour room staff.

4.8 HIGH RISK MOTHERS

(To be displayed prominently on a poster in the labour room)

i) Elderly primi para

ii) Age below 16 or above 35

iii) Grand multi para

iv) Multiple pregnancy

v) Precious Baby

vi) Bad obstetric history

(a) A.P.H

(b) Two consecutive abortions

(c) Precipitated labour

(d) Previous still birth

(e) L.S.C.S.

(f) Prolonged labour

(g) P.P.H., retained placenta, atonic uterus

(h) Primary or secondary infertility

(i) Previous low birth weight

(j) Genetic disorders of previous children

(k) Assisted delivery with forceps

(l) Pregnancy complicated by medical disorders

(m) Post partum psychosis

(n) History of Endometriosis or hydatidiform mole.

Organize an inquiry desk during visiting hours outside the labour room to keep kith & kin informed of progress of labour. They will be anxious to know.

vii) Current medical / surgical conditions

a. Heart disease

b. Diabetes

c. Renal disease

d. Past history of deep vein thrombosis

e. Blood disorders, D.I.C. Haemophaelia

f. Infective Hepatitis or Jaundice past and present

g. Steroid Treatment
h. Drug Addiction
i. Thyrotoxicosis
j. Goiter or Thyroidectomy
k. T.B.
l. Psychiatric disorders
m. Previous surgical conditions
n. Infective diseases - AIDS
o. Height of mother less than 140 cm
p. Anemia or Malnutrition
q. Hypertension

viii) Present Obstetric History

a. P.E.T.
b. A.P.H.
c. Uterus large for dates or small for dates
d. Uncertain dates or forgotten dates
e. Hydramanios

4.9 STAFFING PATTERN

The Staffing Pattern of labour Room of District Hospitals, Peripheral Units and Rural Hospitals is generally as follows :

Sister or Nurse in-charge (Midwifery qualified)		
Nurses (Midwifery qualified)	)	
Midwives	)	
Attendants	)	
Ordinary Labourers Male	)	Staff for Three Shifts
Ordinary labourers Female	)	According to work load
Sanitary Labourer	)	

The Number of staff required will have to be for three shifts, according to work load.

CHAPTER 5

OPERATION THEATRE MANAGEMENT

5.1 INTRODUCTION

Operating Theatre in a District Hospital should be a safe, sterile place to carry out surgical procedures. It could be a room where minor surgical procedures are done or fully equipped theatre where major surgical procedures are done.

5.2 OBJECTIVES

To provide all facilities and equipment for the surgeon to carry out surgical procedures safely in a sterile atmosphere.

5.3 ACTIVITIES

Theatre in a District Hospital provides two main services.

1. Minor Surgical Operations.
2. Preparation of sterilized surgical dressings and sterilization of instruments. Out of these two activities preparation of sterile dressings and instruments is done only in a District Hospital where a large theatre is available and distributed to rural hospitals depending on their requirements.

5.4 THEATRE TEAM

To perform above activities the Operation theatre functions under a trained In-charge Nurse. Her team consists of few Staff Nurses and Minor staff, who have been trained in Theatre work.

A few members of the minor Staff should be trained in handling high pressure sterilizer, auto-clave, air-conditioner and a stand by electricty generator.

Periodical in-service training programmes and group discussions, which improve the quality of services, are organized under the guidance of Nurse in-charge of the Theatre who holds sole responsibility for smooth running of the theatre, **PATIENT CARE, STERILITY, MAINTENANCE, CO-ORDINATION OF PERSONNEL AND DUTY ASSIGNMENTS.**

5.5

STAFF NURSES ATTACHED TO THE OPERATION THEATRE PERFORM FOLLOWING ROLES

1. **Patient Care**
2. **Documentation**
3. **Assistance to Medical Officers**
4. **Cleaning and Sterilization**
5. **Infection Control**
6. **Building Interpersonal Relationship**

5.6 ROLE OF MINOR STAFF

Minor Staff help Theatre Nurses in tansportation of patients and equipment, sanitation and related activities. Nurse in-charge draws up Theatre activity time table which consists of date and time of Surgical Operations, sterilization of equipment and dressings, carbolization of the Theatre.

These activities should be spread out so as to ease the functioning of the Theatre with minimum staff. Separate duty rosters for different categories of staff is drawn up in advance according to demands of Theatre activity.

5.7 INFECTION CONTROL PROCEDURES

(a) Aseptic procedures in Theatre management is a priority. Patients awaiting surgery are pre-operatively washed, and draped with clean clothes. Isolation of pre-operative patients from septic cases is imperative to control cross infection. Separate clean trolleys should be available to transport patients to and from Operation Theatre, where, the patients are transferred to Theatre trolleys, then draped with caps, masks and leggings.

(b) The Operation Theatre is divided into two areas namely the Sterile Compart ment and relatively unsterile Compartment. Sterile side of Theatre houses Surgical Staff, Operation Table, Sterile linen and equipment. Used linen, equipment and discarded material from the operations are handled by Minor Staff who are allowed inside the

Theatre, and they should be confined to the Theatre until the Operation list is over. Good quality scrubbing lotion, savlon and spirits are used to clean surgical surfaces.

AFTER EACH SURGERY SESSION

1. **Operation table is washed**
2. **Theatre floor is washed and mopped**
3. **Equipment is changed (anesthetic mask, sucker nozzle, laryngoscope)**

(c) Relatively sterile cases are done early in the list and septic cases late to avoid risk of cross infection.

Each member of the surgical team should main tain asepsis through-out surgical operations.

Operation Theatre should be closed at once when a case of Tetanus or Gasgangrine is detected among surgical patients and a swab from Theatre is sent for microbiological examination. Theatre should then be washed with teepol or any other suitable solution and subsequent swabs are sent to prove sterility before re-opening. Daily cleaning of the Theatre and weekly washing with teepol improve the quality of aseptic environment. Autoclaving process should be closely supervised. Separate sets of surgical equipment and dressings can be packeted individually to ease handling and to maintain sterility.

Periodical checks should be done for sterility of the theatre. At least once in 6 months swabs should be examined from different places in the theatre. Another way of checking about sterility is to monitor the number of post surgical infections which should be limited to about 1 in 100 cases.

5.8 ACCIDENTAL FIRES

Three factors contribute to accidental fires in an Operation Theatre.

1. Closed Environment

2. Flammable Substances (Oxygen, Halothene, Ether and Spirits)

3. Sparking Electrical equipment (Diathermy, Electric Motors)

These accidents could be avoided if Theatre Team pays attention to the following rules:-

- **Periodical Checking For Oxygen Leaks and Proper Disposal of Empty Cylinders.**
- **Storage of all Flammable Liquids in Closed containers in a Safe place away fron Diathermy and other Hazardous Equipment.**
- **Smoking in and out side the Operation theatre is Strictly Prohibted.**
- **Keep Fire Extinguisher Handy.**

In case of Fire :-

1. Evacuate all persons and flammables
2. Switch off Electricity
3. Extinguish the fire

The Theatre staff should be aware of early detection of fires and fire extinguishing techniques. (Please see section on fires)

5.9 ELECTRICAL ACCIDENTS

Majority of modern equipment used in the Theatre is driven by electricity. Therefore, special training and care in handling them will prevent accidents. Each item of electric equipment must have earth connection, intact plug and properly insulated wires. The Circuit Breaker (trip switch) should be tested periodically to ascertain proper functioning.

New type of Ceiling Hung Electrical Out let Sockets are superior to old wall mounted sockets which are liable for electric leakage due to repeated contact with chemicals during carbolization. Frequent servising by visiting technicians from the Electricity Board is welcome.

CHAPTER 6

PATIENT CARE EVALUATION

6.1 INTRODUCTION

This chapter deals with HOW TO EVALUATE the PATIENT CARE SERVICES in your Institutions.

EVALUATION WILL HELP YOU TO :-

1. **Maintain quality of services provided.**
2. **Identify strengths and weaknesses in your Institution.**

6.2 WHAT TO DO

1. **You (in Consultation with DDHS) should SELECT the Areas / Activities THAT WILL BE USED TO Evaluate the Patient Care Services in your Institution.**
2. **INFORM your staff regarding the Evaluation Process and the Areas/Activities selected.**
3. **The Staff in your Institution should be aware of the standards that Need to be maintained.**
4. **Conduct the first assessment preferably with the DDHS and use this as the Base-line assessment.**
5. **Periodic assessment to be done at Regular intervals. Eg. Quarterly.**
6. **Assessment Reports to be forwarded to DDHS/PDHS.**
7. **You should discuss the Results of your Evaluation with your staff.**

6.3 HOW TO DO

1. **IT IS BEST you carry out the Evaluation as a Team.**
2. **Team may be Comprised of DDHS, Heads of Institution, RMP/ AMP, Sister or Senior Nurse.**
3. **For each Area/Activity selected, follow the following steps.**
   a) **Assess the current status.**
   b) **Compare the current status with the standards given for each item.**

      (see annexure)
   c) **Identify any gaps, shortcomings or deficiencies.**
   d) **Find out the reasons for items identified.**
   e) **Take corrective action.**
4. **Display the findings of each assessment in a Chart in your office. (See eg. given in 6.4)**
5. **Discuss the findings with your staff.**

6.4 TABULATION OF RESULTS OF ASSESSMENT

AREA/ACTIVITY	INDICATOR	STANDARD	DEFICIENCY IDENTIFIED	ACTION TAKEN
HEALTH INFORMATION SYSTEM				
a) Notification	Proper maintenance of NOTIFICATION Register	Notification of all 20 NOTIFIABLE Diseases	1. Malaria has not been NOTIFIED. 2. Watery Diarrhoea has not been notified.	1. Malaria to be notified. 2. Watery Diarrhoea is not a notifiable disease.
b) Inpatient Morbidity/ Mortality Records	Proper maintenance of inpatient Disease Register	ENTRIES to be made of all Discharges on the same day	Discharges not entered for the past one month	AMP to complete the register and maintain it daily.
c) Diagnosis of inpatients	Provisional Diagnosis within 24 hours and final diagnosis on discharge	% of diagnosis under Signs, Symptoms and illdefined conditions to be less than 3%	Undiagnosed percentage is 10	DMO to enter the diagnosis on discharge.

ANNEXURE I

Area/Activity	Indicatior of good performance	Standard to be achieved to ensure good quality of care
1. Cleanliness of Hospital	Clean toilets Clean OPD, wards, drains, garden etc.	Washing 4 times a day. Cleaning twice a day.
	Proper refuse disposal	Dust-bins to be emptied whenever full. Minimum twice a day.
	Sanitation	Visit by the Public Health In spectors.
2. Provision of safe water	Supply of boiled cooled water to patients & staff	Provision of bolied water at least twice a day.
3. Examination of in-patients	Ward rounds	Morning-Before 9 a.m. Evening-Between 2.p.m. to 4p.m. Night-Between 9.p.m. to 11 p.m.
	New admissions	Stamped cases to be seen immediately not later than 15 minutes.
		Morning admissions to be seen before 12.00 Noon. Afternoon admissions to be seen before 4.00 p.m.
4. Availability of essential drugs.	Most essential drugs to be available (See annexure II)	100 percent of the time.
	Rationality of prescribing	As per national standard regimes of treatment. Average number of drugs prescribed per patient at the OPD to be around 2 items per prescription.
5. Maternal care	Checking of urine, height, weight, natal-care	100 percent of admissions. Recording of FHS twice a day. Recording of FHS, pulse, during labour every 15 minutes.
	Post-Natal Care	Recording of pulse, bleeding PV, state of uterus every 15 minutes for 2 hours.
	Asepsis of Labour room	Inspection of labour room daily.

6. Health Education	Availability of a Health Education Unit.	A trained officer to be in-charge
	Health Education Records.	Maintenance of records of 100 percent of health education activities.
7. Integration of Preventive and Curative care	Health Education Activities Attendance of Head of Institution at Meetings of DDHS Medical Officers of Health.	Daily Programmes to be carried out. All Monthly Meetings to be attended
D D H S Integration of Preventive and Curative care.	Regular visits by D D H S MOH to Hospital.	
8. Information System.		
a. Notification	Proper maintenance of Notification Register	Notification of all 20 notifiable diseases
b. Inpatient morbidity/ mortality records	Proper maintenance of the inpatient diseases register	Entries to be made of all discharges on the same day
c. Diagnosis of inpatients	Provisional diagnosis within 24 hours and final diagnosis on discharge	Percentage of diagnosis under "signs, symptoms and ill-defined conditions" to be less than 3 percent
9. Proper sterilization of instruments	Maintenance of sterilization chart	For all instrument sterilizers and entries made for every batch of instruments sterilised
10. School Health	Functioning of School Clinics	To be held every Saturday
11. Inservice Education	Availability of inservice training calender	All staff trained annually
12. Discipline	Punctuality of all categories of staff	To report for work in time

ANNEXURE - II

List of Essential Drugs

1. Aspirin/Acetylsalicylic Acid - 300 mg.
2. Paracetamol - 0.5g. tabs.
3. Phenoxymethyl Penicillin tabs. - 125 mg.
4. Chloroquine tabs. - 250 mg.
5. Mebendazole tabs. - 100 mg.
6. Primaquine tabs. - 7.5 mg.
7. Cotrimoxazole tabs. - 480 mg. & 120 mg.
8. Chlorpheniramine Maleate tabs. - 15 mg.
9. Propantheline Bromide tabs. - 15 mg.
10. Chlorhexidine & Cetrimide solution
11. Indomethacin Caps. - 25 mg.
12. Vitamin B Complex tabs. Ordinary
13. Promethazine Hydrochloride tabs. - 25 mg.
14. Ferrous Sulphate tabs. 300 mg.
15. Proflavine hemi Sulphate lotion
16. Fortified Procaine Penicillin vials inj.
17. Calcium Lactate tabs. - 300 mg.
18. Oral Rehydration Salt Pkts.
19. Benzyl Benzoate lotion
20. Salbutamol tabs. - 4 mg.
21. Aluminium Hydroxide tabs. - 5mg.
22. Promeathazine Hydrochloride syrup - 125 ml. 5mg/5 ml.
23. Tetanus Toxoid - 0.5 ml.
24. Ampicillin Cap. - 250 mg.
25. Tetracycline Caps. - 250 mg.
26. Salicylic & Benzoic Acid Ointment (whitfield)
27. Benzyl Penicillin 1 Million Units vials Inj.
28. Metronidazole tabs. - 200 mg.
29. Aminophylline Inj. - 2.5 mg.
30. Chloramphenicol Eye drops - 0.5% - 5 ml.
31. Senna Standardised tabs. - B.P.7.5 mg.
32. Diazepam tabs - 5 mg. & 2 mg.
33. Vitamin A & D Caps.
34. Hydrocortisone Skin Ointment tubes - 15 mg.
35. Hydrochlorothiazide tabs. - 50 mg.
36. Methyldopa tabs. - 250 mg.
37. Benzathine Penicilline 1.2 Million Units vials Inj.
38. Phenobarbitone Tabs - 30 mg.
39. Tetracycline HCL Eye Ointment tubs 1% - 3.5 G.
40. Propranolol 10 mg. tabs 40 mg.
41. Gentian Violet (Lotion)
42. Folic Acid 5 mg. tabs.
43. Thyroxine Sodium .05 mg. tabs.
44. Ampicilline Syrup bottles 125 mg. /5 ml.
45. Phenobarbitone 60 mg. tabs.

CHAPTER 7

DENTAL SERVICES

7.1 INTRODUCTION

The Oral Health care of the population is provided by the Dental Surgeons who work within the Medical infrastructure. The Dental Surgeons provide their services through the Dental Clinics which are closely integrated with the Out patient Departments of the hospitals. Basic' curative procedures related to Oral and Dental diseases are provided in District Hospitals, Rural Hospitals, Peripheral Units and a few Central Dispensaries.

7.2 OBJECTIVE

To provide total Dental care, (preventive and curative) to the public.

7.3 LOCATION

Dental clinics are sited in the O.P. Ds of hospitals.

7.4 STAFF

The cadre of Dental Surgeons for a large District Hospital is two and a small District Hospital, Rural Hospital or P.U.is one. In a two-man station, the senior Dental Surgeon will be the officer-in-charge and be responsible for the smooth and efficient functioning of the clinic.

The support staff in a dental clinic should be either a Nursing Officer or Attendant or Labourer who is trained on the job. General circular 1757 of 23.09.81 states that this person would remain in the clinic for a minimum period of 2 years.

7.5 EQUIPMENT

A dental clinic in a District Hospital, Rural hospital, Peripheral Unit or

Central Dispensary should have the following basic equipment:

1. Dental Chair and Unit
2. Electric Sterilizer
3. Dental Instruments (Annexure 1)
4. Dental materials and drugs. (Annexure 2)
5. Furniture and Hardware

New equipment required for the clinic should be indented through the MOIC / DDHS. The Dental Surgeon should advise the MOIC of any equipment deficiencies in the clinic and follow up matters until the equipment is ordered and brought to the clinic. Guidelines for ordering equipment appear in General Circular 1726 of 16.01.91 (MF/4/91)

7.6 DUTIES

The details of the duties of Dental Surgeons is given in para 7.15.

The Dental Surgeon will be on call to treat emergency cases at any time.

A Dental Surgeon should work full time, 8.00 a.m. to 12 noon & 2.00 p.m. to 4.00 p.m. which means that each officer must have a Dental chair and unit.

The DMO should be kept informed about the movements of the Dental Surgeon during duty hours.

The Dental Surgeon will be responsible for the maintenance and care of Dental equipment.

The Dental Surgeon must attend the DDHS/MOH Conference once a month (General Circular 3009 of 26.01.89). He shall do so after 10.00 a.m. upto which time he should attend on those seeking treatment in his clinic.

The Dental Surgeon will act for the MOIC in a one-man station in his absence. In hospitals where there are no Medical Officers, the Dental Surgeon should be appointed as the Officer in-charge (General Circular.....1189 of 23.9.81).

7.7 LEAVE

Leave taken by the Dental Surgeon has to be approved by the DMO in advance. Relief arrangements from the closest station must be made.

Work on public holidays should be approved only if there is sufficient workload. A minimum of 15 appointments for conservation should be given for a morning session of a public Holiday.

7.8 TREATMENT

All patients attending the clinic should be seen by the Dental Surgeon although a fixed number of 40 extractions has been stipulated.

Saturday mornings are exclusively for children. However this does not preclude adults being treated if time permits.

7.9 RANGE OF SERVICES PROVIDED

Extractions, Conservation (fillings), Scaling & Polishing, Minor Oral Surgery (eg. removal of impacted teeth,incisions, apicoectomies),Root canal treatment. Extractions and temporary fillings are generally done in the mornings. If the surgical work finishes before noon, the officer must engage himself in Health Education activities in the OPD and Wards of the Hospital.

Appointments for conservation are given for the afternoons. A minimum of 10 appointments should be given per Dental Surgeon and the waiting list should not exceed two weeks.

If there are no patients in the clinic, the Dental Surgeon should keep himself gainfully occupied by getting patients from the wards and providing them with comprehensive treatment. Comprehensive treatment is providing complete, full mouth dental care to a patient.

7.10 SERVICE PROCEDURES

Persons attending the clinic for Consultation or Treatment are required to obtain numbers in the mornings. Urgent procedures such as extractions and deep fillings are attended to in the mornings and appointments for conservation given for the afternoons. However this does not preclude an extraction being performed in the afternoons. The Dental Surgeon must be available to provide treatment of any kind during his duty hours.

The hours of work must be displayed very prominently outside the clinic for the information of the Public. (General Circular 1122 of 10th September (1980)

7.11 QUALITY OF CARE

Extreme caution must be given to the proper sterilising of Dental Instruments. The Dental Surgeons should supervise the sterilising procedures and maintain absolute cleanliness in the clinic. Sufficient time must be devoted to provide quality care to the patient. The patients should be eduated and informed of the needs for treatment. The Dental Surgeons should not be satisfied by providing only the treatment on demand.

7.12 SERVICES NOT PROVIDED

Major Oral Surgery.

Advanced conservation (eg. Crowans, Bridges etc.)

Prosthetic Dentistry (Provision of Dentures) Orthodontic Treatment.

Preventive services and periodontal surgery.

7.13 RECORD KEEPING

1. Treatment Card -

The patient's history, a charting of the mouth and the treatment given is recorded on this and filed for future reference. This is maintained by the Dental Surgeon.

2 Patients Register -

The Number, Name and Treatment given to a patient is systematically recorded in this book.

3. Monthly Record Sheet H 1201 -

Daily entries should be made in Form H 1201 in Triplicate. An Instruction Manual has been developed to assist Officers to fill this form. These returns have to be forwarded to the Medical Statistician & Regional Dental Surgeon, before the 5th of the following month. The third copy is to be retained in the clinic. These orders came into effect with General Circular 1735 of 24.12.91 (MAE/57/91)

7.14 QUARTERS

Dental Surgeons are entitled to Government quarters after the needs of the Medical Officers on call have been met (Circular Letter 1341 of 7.06.79)

7.15 DUTIES OF DENTAL SURGEONS APPOINTED TO GOVERNMENT HOSPITALS

Dental Surgeons work under the Administrative control of the M.O.I.C. of the Medical Institution.

Duty Hours	:-	**Week days and Saturdays**
Morning	:-	08.00 a.m. - 12.00 Noon
Afternoon	:-	02.00 p.m. - 04.00 p.m.
		03.00 p.m. - 05.00 p.m.
Sundays	:-	08.00 a.m. - 10.30 a.m.
Public Holidays	:-	08.00 a.m. - 12.00 Noon (If necessary to be decided with the Head of the Institution).

- A notice indicating the Duty Hours should be prominently displayed for the information of the public.

- Outside normal hours of duty, he shall be on call to attend to emergency cases, day and night. He shall practise all aspects of Dental Surgery.

- A Diary-H. 136 in which the time of arrival and departure is written daily should be maintained. It should be submitted to the D.M.O. weekly. A similar Diary should be maintained at Visiting Stations.

- He should maintain a record of the work done in a Register set apart for the purpose. Morning and afternoon work should be shown separately.

- The A.M.P. Pharmacist or whoever is responsible for the surgical stores, shall order, receive, maintain and supply adequate stocks of dental materials, durgs and equipment for the Dental Clinic, under the supervi - sion of the Dental Surgeon-in-charge of the Dental Clinic. Once they are issued to the Dental Clinic, the Dental Surgeon-in-charge shall be responsible for them and shall see that they are maintained in a satisfactory condition. The Dental Surgeon shall issue Medical Certificates in the field of dentistry whenever necessay according to the Rules laid down on the issue of Medical Certificates.

Annexure - 1

RECOMMENDED LIST OF NON-CONSUMABLES (FOR A NEW DENTAL CLINIC)

SR. NO.	ITEM	QUANTITY
2914	Dental Chair	01
3255/2003	Dental Engine Electric/Non-electric	01
3187/2809	Sterilizer Electric/Non-electric	01
3025	Aseptic Table	01
3160	Instrument Cabinet	01
3853/3029	Instrument Tray with lid Aluminium/Stainlesss Steel	01
3070	Hand piece straight	01
2993	Hand piece Contra-angle	01
2122	Cheatle Forceps	01
2859	Tooth Extracting Forceps Assorted	10
2866	Root Elevator, W. James	03
2867	Root Elevator Winters	02
3018	Hypodermic Syringes 3 cc	02
2450	Hypodermic Syringes 2 cc	02
3089	Extracting Tweezers	01
2857	Chip Syringe	01
3630	Spare Bulb for above	01
3087	Water Syringe	01
3633	Spare Nozzle for above	01
2248	Amalgam Carver	01
3635	Amalgam Carver Wards	01
2996	Scalers D/E	02
3202	Mortar and Pestle	01
2970	Mercury Holder	01
2972	Mixing Slab Glass	01
2884	Medicament Bottles	06
3425	Dappen Glass	02
3003	Spatula Steel	01
2943	Bur Stand	01
2656	Bur Brush	01
3637	Oil Stone	01
2850	Amalgam Carrier	01
2851	Amalgam Plugger	01
2852	Amalgam Spoon	01
3128	Mouth Mirror Handle	02
2973	Mouth Mirror Top Plane	04
3804	Mouth Mirror Magnifying	01
2986	Plastic Instruments	03
2987	Probes D/E	02
2932	Excavators D/E	02
2383	Spirit Lamps	01
2400	Trays E. I. Rectangular	02
2869	Scissors Ash	01

Annexure - 2

MINIMUM REQUIREMENTS OF CONSUMABLES (FOR A NEW DENTAL CLINIC)

SR.NO	ITEM	QUANTITY
301	Clove Oil 15 ml.	01 bottle
2883	Matrix Bands	01 pkt.
2897	Burs Asstd.	12 of each
2900	Carbolized Resin 15 ml.	01 bottle
2901	Silver Alloy	100 g.
2902	Zinc Phosphate Cement Powder	02 pkt.
3009	Zinc Phosphate Cement liquid	02 bottles
2915	Finishing Strips	01 pkt.
2916	Waxed Nylon Floss	01 reel
2931	Eugenol 30 ml.	01 bottle
3076	Composite filling material	01 pkt.
3094	Cellulose Strips	01 pkt.
3237	Stain Remover	01 bottle
3238	Prophylaxis Paste Jars	01
3412	Tooth Polishing Brushes	12
3435	Bristle Brushes	15
3499	Mercury 30 G.	60 G.
3608	Mouth Wash Bottles	02
2264	Hypo Needles 234x38 mm	12

SUPPORTIVE SERVICES

CHAPTER 8

LABORATORY SERVICES

8.1 PRESENT STATE OF LABS IN DISTRICT HOSPITALS

In the present context, a district hospital laboratory is manned by a single technologist with the help of a labourer.

THE BASIC EQUIPMENTS AVAILABLE INCLUDE :-

- A MICROSCOPE
- CENTRIFUGE
- HOT AIR OVEN
- ESR RACKS
- COUNTING CHAMBERS

Therefore the lab is able to perform only a few haematological and some other basic tests in spite of an available competent MLT. The tests that are carried out in four major disciplines of Pathology are as follows.

HAEMATOLOGY	-	HB%, PCV
	-	WBC / DC
	-	ESR
	-	BLOOD FILM
BIOCHEMISTRY	-	URINE FR
HISTOLOGY	-	NONE
BACTERIOLOGY	-	GRAM'S STAIN
	-	'AFB' STAIN

* Can be done as no special equipments are necessary for these.

8.2 STAFFING AND THEIR RESPONSIBILITIES

1. Medical laboratory Technologist:-

DUTIES WOULD BE TO
Perform Investigations. **Prepare and despatch samples to relevant referral laboratories.** **Record keeping.** **Taking care of Equipments and Reagents.** **Placing annual indents and obtaining same on time.**

2. Labourer - One should be assigned to lab work only.

DUTIES WOULD BE
Cleaning, Washing and Helping the MLT. **Receiving Specimens.** **Distributing the Reports.**

8.3 SUPERVISION - Should be by M.O.I.C.

8.4 BASIC NEEDS FOR A HOSPITAL LAB
LABORATORY EQUIPMENTS AND GLASSWARE

The following equipments and glassware be provided in the Laboratory. (1 to 43)

1.	Microscope Monocular or Binocular	-	1
2.	Centrifuge Mechanical or Electircal	-	1
3.	E. S. R. Stand	-	2
4.	Chemical Weighing Balance & Weights	-	1
5.	Electric Hot Plate	-	1
6.	Test Tube Racks	-	2
7.	Spirit Lamp	-	1
8.	L.P. Gas Unit	-	1
9.	L.P. Gas Burners	-	2
10.	Haemocytometers or Counting Chamber	-	1
11.	Staining Rack Set	-	1
12.	Test Tubes Medium Size		
13.	Microscope Glass Slides		
14.	Cover Glasses for Glass Slides		
15.	E.S.R. Tubes		
16.	Khan Tubes		
17.	Centrifuge Tubes		
18.	Drop Bottles		

19. Reagent Bottles (various sizes)
20. Pipettes (WBC)
21. Pipettes (RBC)
22. Pipettes Blood
23. Beakers Small (various sizes)
24. Grease Marking Pencils
25. Rubber Teats or Bulbs
26. Rubber Tubing Small Sizes
27. Funnels of Various Sizes
28. Gas Lighter and Flints
29. Stand for Pipettes
30. Urine Meters
31. Filter Paper Packets
32. Test Tube Brushes
33. Haemoglobin Scale Book
34. Measuring Cylinders Graduated
35. Bottles Aspirator Glass
36. Bottles Aspirator Polythene
37. Flasks Conical
38. Flasks Flat Bottom
39. Wash Bottles
40. Spare Wicks for Spirit Lamp
41. Litmus Paper Red and Blue
42. Pasteaur Pipettes
43. Test Tubes for Boiling

8.5 LABORATORY CHEMICALS

The following chemicals should be provided in the Laboratory.

1. Sodium Carbonate
2. Sodium Citrate
3. Copper Sulphate
4. Leishman Stain
5. Sulpho Salycylic Acid
6. Trichloro Acetic Acid
7. EDTA Dipotassium Salt
8. EDTA Disodium Salt
9. Methyl Alcohol
10. Ethyl Alcohol
11. Methylated Spirits
12. Immersion Oil
13. Iodine
14. Acetic Acid
15. Barium Chloride
16. Sodium Sulphate
17. Potassium Oxalate
18. Potassium Iodide
19. Sodium Chloride

CHAPTER 9

STERILIZATION PROCEDURES

9.1 INTRODUCTION

Sterilization means the freeing of an article from all living organisms,including Viruses, Bacteria, Fungi and their spores both Pathogenic and Non-Pathogenic.

9.2 OBJECTIVES

i. To maintain aseptic techinque in the Operating Theaters.

ii. To reduce Wound Infection, Urinary Tract Infection, Lung Infection and other Infections in the wards.

iii. To promote early recovery of Surgical Patients.

iv. To prevent complications of Post-operative Patients.

9.3 METHODS OF STERILIZATION :-

Physical Methods
Chemical Methods

Physical :-

Heat
Filteration
Radiation

Chemical :-

By using:-

- Desinfectants (e.g. lysol)
- Halogens (e.g. Chlorine, Iodine, Milton)

- Metallic Salts and Metallic Organic Compounds (e.g. Silver Nitrate)
- Formaldehyde
- Glutaraldehyde
- Oxidizing Agents (e.g. H_2O_2, Potassium Permanganate)
- Alcohol (e.g. Surgical Spirit)
- Detergents (e.g. Savlon, Cetavlon)

9.4 DRY HEAT-HOT AIR OVEN

This is the main method of sterilization by dry heat. The oven is usually heated electrically and has a Thermostat that maintains the Chamber air constantly at a chosen temperature and a fan to assist circulation of air. This method is used for sterilizing of glassware, oil and greases which are impermeable to moisture.

Rcommended sterilization times and temperatures

160° C	-	2 Hours
170° C	-	1 Hour
180° C	-	1/2 hour

N. B.:-

☆ **DRESSINGS, TEXTILES, RUBBER, LIQUIDS**

Cannot under sterilised by hot air method

9.5 MOIST HEAT

- Steam under pressure (autoclave)
- Boiling

9.6 STEAM UNDER PRESSURE

Saturated steam is a more efficient sterilizing agent than hot air. Autoclaving is the method most widely used for sterilization of surgical supplies, and bacteriological culture media.

Critical factors in saturated steam sterilization are heat and moisture, time and pressure. Heat itself readily kills Micro Organisms. Spores are more resistant to dry heat, but are readily destroyed by saturated steam. Saturated steam is a gas and is therefore able to circulate by convection. Satrurated steam penetrates to all objects in the steam sterilizer.

9.7 TIME

The lower the Temperature, Longer the time.

Example:-

TEMPERATURE	TIME	PRESSURE
121° C	20 - 3 Min.	15 lbs. per 1sq. Inch
134° C	10 - 15 Min.	--do--

☆ For greater efficiency air must be removed from the Chamber of the Autoclave by pumps or displacement Method.

9.8 IMPORTANT POINTS FOR AUTOCLAVING

- All items should be washed throughly with soap and dried for preparation of packets or trays for autoclaving.
- Maximum weight of one packet should not be more than 5 kgs.
- Wrapping cloth should be double layered.
- Don't wrap tightly.
- Put name tag on each pack.
- Sign each packet content slip.
- Use chemical indicator inside package for sterility. If sterilizing process is successful, indicator colour will change.
- Sterlized packages can be kept for a maximum of 10 days only.
- Maximum size of Textile packages is 20 x 28 x 30 cms. Otherwise the steam penetration is not good enough and the packages will remain wet or unsterile after sterilization process.
- Never put packages very close to sterilizer door and walls.
- Never load the sterilizer tightly.
- Nev er re-use the packing towels (wrappers) without washing properly.
- Proper loading of autoclave is important to guarantee good penetration of steam and ensure that the supplies sterilized in the autoclave come out dry.
- Clean the autoclave Chamber (when it is cold) at least once a week with water,cleaning agent and rinse well with water and dry.
- Autoclaves should be handled by well Trained Staff only.
- Nurses too should have knowlege and skills to handle the autoclave.

9.9 QUALITY CONTROL

- Chemical indicator strip for every package.(Indicator colour will change after proper sterilization).
- Do the Bowie-Dick test for Autoclaves before starting the sterilization of the packages. The change of colour shows that the right temperature and steam pressure are reached and good steam penetration has taken place.
- Check your Autoclaves with biological indicators. (Spore test) frequently.
- New autoclav es should be tested before operation.
- This test should be done after repairs also.

9.10 BIOLOGICAL INDICATORS (SPORE AMPOULES)

- Spore ampoules should be obtained from the M.R.I.
- Put the ampoule with the items which have to be sterilized.
- Make a separate package for this.
- After the sterilization process is over ampoules shuld be sent to M.R.I. for culture.
- If culture shows these spores are destroyed that means autoclave is in a good working order.

9.11 BOILING

Boiling is not a recommended and effective sterilization method. But if there is no other alternative, boiling method can be used at district and other peripheral hospitals.

9.12 IMPORTANT POINTS IN BOILING

- There should be 2 separate sterilizers. One for Syringes and the other for Surgical items. (Instruments, Rubber Goods)
- Sterilizers should be washed and cleaned twice a day with soap and water.
- Sterilizers must be kept in a suitable place to avoid electrical hazards and must be kept in a place where there are no roof leaks or other water leaks.

Items should be boiled for 20 minutes at boiling point. A Chart should be maintained near the sterilizer to record timing. Items should not be added into the sterilizer while one set of items is being boiled.

- When syringes are being boiled, pistons and barrels should be separately wrapped with cloth.
- Boiled items should be removed from the sterilizer at the boiling point (100°c) otherwise these will be wet and micro-organisms can grow.
- **Disposable items must not be boiled and re-used**
- Sterilized forceps should be used when boiled items are removed from the sterilizer.

9.13 COLD STERILIZATION

Heat-sensitive items such as endoscope should be sterilized by cold sterilization. 2% Glutaraldehyde is most effective chemical agent for cold sterilization.

Endoscope is put in 2% Glutaraldehyde for 30 minutes, washed with sterile water, dried and wrapped with a sterile towel. Solution level should be always above the item. (Validity period of prepared 2% Glutaraldehyde solution is only 14 days) 2% Glutaraldehyde is very effective sterilization agent against H.I.V. & H.B.V.

9.14 STERILIZATION PROCEDURE IN OPERATING THEATER
Refer Chapter 5

- Every item should be autoclaved.
- Packet system should be implemented.
- Endoscopes should be sterilized by using 2% Glutaraldehyde for 30 minutes (cold sterlization).

Thorough cleaning is most important in the Operating Theaters.

Cleaning should be done :-
before operation)
in between operation) **can be mopped by using**
after operation) **Teepol.**

- Operating theater washing should be done once a week.
- Instrument cleaning should be done once a week.
- All staff of operating theaters should fully change to the Theater Dresses.
- **Carbolising of Trolleys, Floors and Wall with Lysol is not recom mended. Teepol should be used instead.**
- Lysol can be used for the Bathrooms and outside Drains.
- Culture swabs in Operating Theater to be sent to M.R.I. as and when necessary.

CHAPTER 10

MANAGEMENT OF MEDICAL RECORDS

10.1 IMPORTANCE

The rational management of Health Services at any level demands that relevant information be available and used. Relevant, reliable and timely information will help in better decision making to deliver quality services using available resources efficiently. Since the medical records provide most of the relevant information, it is imperative that they be maintained accurately and at the proper time.

10.2 BED-HEAD TICKET (BHT)

The BHT is a very important medico - legal document. it is the most important source of information provides data on morbidity, mortality, age and sex distribution, and seasonal variations of isease to the Health manager. Further, it may be also useful for research purposes and follow - up some cases.Therefore, the following procedure should be followed when a BHT is issued, maintained and retained.

1. When a patient is admitted to a hospital, a BHT is issued and registration takes place in the Hospital Admission Register. The serial numbers should be maintained on an annual basis. The numbers issued should be suffixed by the addition of the current year.

   Eg: 1/92 - 1058/92, 1/93.....

2. When a bystander is to be admitted, two BHT's must be written, one for the patient, and the second for the mother (bystander), under the same number issued to the patient. However, only the patient must be registered in the Hospital Admission Register and the Ward admission Register, the word 'guardian' must be written on the top of the BHT issued for the mother, which is used only for the purpose of dieting.

3. If a new-born infant is treated as an inpatient, a separate BHT must be written after registering in the Hospital Admission Register. In these circumstances, drugs must be prescribed on the infant's BHT and not on the mother's BHT.

4. Diagnosis and cause of death must be written correctly on the BHT in BLOCK CAPITAL LETTERS, in the appropriate cage. Abbreviations and vague symptoms should not be used, eg. S.O.B., R.T.A., Fever.
5. BHT's of all patients discharged from the ward must be sent to the officer-in-charge of Inpatient Statistics the following morning, and no BHT's of discharged patients should be retained in the ward for any reason. Data from the BHT's are needed to maintain the Inpatient Disease Register.
6. BHT's patients who die should not be sent to the Registrar for purposes of death registration. A death certificate, duly completed on from 417112 should be sent instead.
7. If a BHT is required for an inquest, it must be obtained from the Medical Records Department.
8. BHT's of discharged patients must be stored for a period of 5 years. Judicial BHT's required for medico-legal purposes must be kept for 25 years.
9. Each BHT must have the name of the patient, the BHT number, and the age written legibly on the top.
10. The Physical findings results of investigations and daily states must be written legibly for each day, and each entry must be initialed and dated.
11. Daily states should include:

S ymptoms
O bservations
A nalyses
P rogress and
P rescriptions

10.3 IN-PATIENT REGISTER

The main source of information on disease pattern is the in-patient register. This is maintained by extracting data from BHT's. Study of the inpatient register helps the health manager to identify the leading causes of hospital morbidity and mortality in his / her institution. Further analyses will provide the manager with information on age, sex and seasonal variations in hospital admissions, and he/she could allocate resources accordingly, and provide an efficient service. For example, if malaria is a problem, most resources should be allocated to malaria control, drugs, laboratory facilities etc.

The following procedure should be followed in maintaining the Inpatient Register:-

A printed Inpatient Disease Register, along with an index, is provided by the Medical Statistics Unit to all institutions to facilitate easy recording. This register can be used by a small institution (small DH,PU or RH) for many years. The pages of this register are serially numbered and ruled as in the specimen. (Annexure 1).

A sufficient number of pages must be allocated for diseases listed in the Indoor Morbidity and Mortality Return (IMMR) depending on their incidence, e.g. Institutions in Anuradhapura or Polonnaruwa districts should allow more pages to record discharges in respect of Malaria. A page could be divided and used to record disease and, the ICD code/list number as given in the IMMR return, must be written on the top of each page.

All Bed Head Tickets of discharged patients (including transfers) should be sent from the ward to the officer responsible for maintaining the Inpatient Disease Register, the following morning. Before doing so, the nursing staff should check all BHT's.

The BHT number, age, sex and the month of discharge of each patient must be recorded in the relevant cage. A death has to be circled or written in red for easy counting and all deaths occurring within 24 hours of admission to the hospital should be marked with an asterisk. When the discharges / deaths for the quarter are completed a line must be drawn. The last serial number will give the total discharges (live and deaths) for the quarter. The number of discharges and deaths in respect of each disease must be transferred to the IMMR. Information on BHT's sent late from the ward should be included in the succeeding quarter.

10.4 QUARTERLY INDOOR MORBIDITY AND MORTALITY RETURN

IMMR provides a quarterly summary of the inpatients register. It also provides information on total admissions and patient days for the quarter and deaths referred for inquest. Therefore, study of this return quarterly before forwarding it to the Medical Statistician, will provide the health manager with vital information mentioned earlier. This information could be made use of for re-allocation of beds, indenting of drugs and further inquiring into deaths.

All government hospitals providing inpatient care, other than maternity hospitals, must submit the IMMR quarterly to the Medical Statistician through the PDHS/Deputy Provincial Director. According to this return, there are 299 diseases/disease groups. The number of discharges and deaths according to the diseases/disease groups must be completed with the data available in the inpatient register. As mentioned earlier, these data originate from the BHT's.

It cannot be over-emphasized that maintenance of accurate and complete BHT's is a very important practice.

10.5 HOSPITAL NOTIFICATION REGISTER

The surveillance of communicable disease is based on a system of notification of certain diseases. The Quaratine and Prevention of diseases Ordinance of 1897 and it's subsequent amendments provide the necessary legislation for the implementation of this system.

According to this ordinance, every practitioner treating a case of a notifiable disease, should notify such cases to the MOH of the area where the patient resides.

The notifiable diseases are listed and reviewed from time to time.

Most notifications originate from hospitals, especially from the medical and paediatric wards. Each ward should maintain a register, listing all such notified cases in sequence. This will be the ward notification register. In a small hospital, a single register will serve this purpose. When a patient with a notifiable disease is admitted, the MO treating the case should **notify the case on clinical diagnosis using a standard notification card (Form Health 544) without waiting for confirmation.** The particulars related to this case should be entered in the ward notification register and the form sent to the office without delay to be notified to the MOH promptly.

In the case of cholera, plague, yellow fever and acute flaccid paralysis suspected poliomyelitis, notification should be immediate, by telephone or telegram to the MOH, RE., DPDHS and DDG (PHS).

In the case of HIV infection/AIDS, the notification should be made to DGHS/ DSTD/AIDS control programme, immediatly, in a confidential manner.

USES AND PURPOSES OF THE NOTIFICATION REGISTER

- **Notification is an important source of epidemiological information, and enables early detection of desease outbreaks, which permits immediate action to be taken hy the health authority to control the spread. It is also useful for planning facilities for**

(i) Medical Care

e.g. (a) number of hospital beds required for patents with specific diseases.

(ii) Planning facilities for preventive services.

e.g. screening programmes, immunization campaigns and provision of sanitary services.

- **Evaluation to assess whether measures takan to control and prevent the disease are effective in reducing the frequency of the disease.**

10.6 QUARTERLY OUTDOOR AND CLINIC RETURN

An accurately maintained outdoor return will provide vital information on the outdoor morbidity pattern of disease, according to the age and seasonal variation. This in formation will help the manager to allocate resources accordingly, e.g. allocation of separate personnel to attend to children, senior citizens, accident victims etc. Depending on the problem, similar allocation of other resources, such as drugs, vaccines, health education material, may be done efectively, if the data are studied before forwarding to the Medical Statistician through the Deputy Provincial Director of Health Services.

Outdoor Return (OPD Return)

An OPD Register must be maintained under the headings given in Annexure 2. All subsequent visits and fever cases should be marked with an "X" in the appropriate column. At the end of the day, a line should be drawn and a summary giving the total for the day. This information should be transferred to the Collection Book maintained as shown in annexure 3.

A register similar to the OPD Register should be maintained in respect of the Branch Dispensaries and Visiting Stations and these totals also should be transferred to the collection book. The total number of treatment days, subsequent visits and total visits should be entered in the outdoor return and submitted to the DPDHS (RDHS) quarterly.

Clinic Return

Institutions where clinics are held should maintain a clinic register in each type of clinic. Information such as number of clinic sessions, number of first visits and subsequent visits have to be recorded in the Clinic Return.

10.7 MONTHLY MATERNITY RETURN AND BIRTH REGISTER

The Brith Register gives vital information on the number of births, live births, still births and birth weights of infants born in the hospital. The officer-in-charge could study the trends of birth weights and still births, investigate and initiate intervention programmes with the relevant officials. The following procedure should be followed to maintain the above register and return.

MONTHLY MATERNITY RETURN (H 830)

The information to complete the Monthly Maternity Return is obtained from the Birth Register, maintained in all hospitals having maternity wards.

The following instructions should be followed in maintaining this register:-

- Births (live and still) over 28 weeks of gestation should be recorded in the Birth Register.
- Serial number (yearly / monthly) should be given to the delivery (mother).
- Still birth should be recorded in red.

- Twin, triplet delivery etc. should be bracketed.
- Birth weight of the infant must be recorded correctly.

At the end of each month, a summary should be prepared and recorded in the Birth Register itself before making entries of the succeeding month.

The monthly maternity returns should be forwarded to the DPDHS by the **5th of the following month.**

10.8 ANNUAL BED STRENGTH AND STAFF RETURN

Analysis and comparison of the data of this return and the IMMR will help the health manager to re-allocate beds and staff according to the morbidity patterns. This return should be maintained as follows:

BED STRENGTH RETURN

This information is collected as of the 31st of December each year. The ward number, type of ward (i.e. surgicl, medical etc.) number of patient-beds and other beds must be recorded in this return. This imformation must be obtained by doing a physical count all beds in the hospital.

Patient beds are defined as the **"Number of available, servicaable beds in a hospital, both occupied and vacant, excluding cots for the new-born nursery".** Beds used in connection with brief treatment periods, such as examination room or labour room or otherwise normally used for patient to whom other beds are assigned, are excluded.

STAFF RETURN

Information of medical and para-medical staff in position as of 31 st December must be recorded in the Staff Return and submitted to DPDHS.

ANNEXURE 1

Disease : Malaria **I.C.D. Code: 084**

TOTAL DISCHARGE				
SERIAL NUMBER	B.H.T. NUMBER	AGE	SEX	MONTH OF DISCHARGE
1	350/92	34	M	1
2	401/92	46	F	1
3	541/92	22	F	2
4	706/92	12	F	3
5	756/92	51	M	3
				(End/1st Q:)
1	1002/92	50	F	4
2	1522/92	38	M	5
3	2215/92	40	F	5
4	2231/92	22	M	6

ANNEXURE 2

O P D REGISTER

Ser-No.	Name of Patient	Sex	Age	Sub visit	Ser-No.	Name of Patient	S	A	S V
(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
1	Ramani Abeyratne	F	32						
2	Edward Perera	M	40	x					
3	Ramani Silva	F	6/12						
-									
-									
-	Kamini Dias	F	40						
88									
89									

Summary for the Day:

Total Visits = 89

Subsequent Visits = 10

First Visits = 79

Fever Cases = 9

CHAPTER 11

CONTROL OF HOSPITAL ACQUIRED INFECTIONS

11.1 INTRODUCTION

HOSPITAL ACQUIRED INFECTION (NOSOCOMIAL INFECTION)

These are infections acquired during a hospital stay. The infection is not present at the time of admission and is usually seen 48 hours after admission.

Cross Infection

This means infection acquired in hospital from other people, either patients or staff.

Self Infection

Infections caused by micro-organisms which the patient carries normally on his own body, including organisms acquired during hospitalization.

Sterilization

Removal or destruction of all living micro-organisms (including spores) - (See chapter on Sterilization Procedures)

Disinfection

The removal or destruction of harmful organisms, not including bacterial spores.

11.2 INFECTION CONTROL COMMITTEE

Hospital Acquired Infection that cannot be eradicated in many cases could be reduced and thereby we are in a position to reduce morbidity and mortality. The infection control committee in a hospital is the central decision and policy making body for infection control. In General Hospitals, this committee is chaired by the microbiologist. In smaller hospitals, it should be the head of the institution who is interested in infection. This

committee must meet regularly, preferabaly every month or two months, to review hospital acquired infections, evaluate technical information and formulate policy.

In the event of an out-break where it cannot be controlled at the local level expert advice should be sought from the next level.

11.3 INFECTION CONTROL NURSE

The number of infection control nurses is determined by the size of the hospital. Ideally one full-time infection control nurse is required for the surveillance and control activities for every 250 hospital beds.

The Infection Control Nurse (ICN) performs surveillance, develops infection control policies together with the microbiologist, trains hospital personnel about infection control and investigates suspected outbreaks. She needs to have contact with all levels of clinical, preventive, administrative and support service staff throughout the hospital.

11.4 SURVEILLANCE OF INFECTION

The most important task of the infection control nurse is that of surveillance. Continuous surveillance for Hospital Acquired Infection (HAI) is preferred whenever possible. This method allows early detection of outbreaks of infections as well as data on the basic rates of HAI. There are two basic methods to screen for HAI:

a) Laboratory Based)
b) Clinical Based) **Surveillance**

In the laboratory based method, the ICN goes to the microbiology laboratory on a regular basis to collect culture results before reviewing patients' notes on Bed Head Tickets (BHT). This method is useful in detecting out-breaks of HAI and symptomatic infections. In the second method, patients' notes are reviewed for evidence of HAI. If laboratory reports are not available at the time, they could be obtained later from the laboratory to which specimens have to be referred to.

The sensitivity of the laboratory based method depends on the number of clinical specimens, availability and quality of the microbiology laboratories. The diagnosis of HAI based on clinical records requires sound knowledge of the surveyor and close liaison with ward nurses and doctors. Surveillance is the most important component of infection control activities. These methods should be properly designed for each hospital. Infection control policies should serve to solve problems of HAI, that have been identified by surveillance.

11.5 INFECTION CONTROL IN OBSTETRIC UNITS

In an obstetric unit (ward and labour room) three types of patients are at particular risk of acquiring HAI.

a) **Antenatal mothers with ruptured foetal membranes allowing access to the foetus and liquor amnii.**

b) **Mothers in the immediate post-natal period specially those who may have a caesarean section wound.**

c) **The neonates, whose response to infection are immature.**

These are particularly prone to infections of the umbilicus, eye, respiratory tract or gastro-intestinal tract.

Any organism may give rise to infection in these patients but Staphylococcus Aureus and coliform bacteria are the commonest.

Handwashing after contact with each mother and baby is the single most important means of controlling the spread of infection.

11.6 GENERAL MEASURES OF MINIMIZING INFECTIONS IN ALL WARDS AND LABOUR ROOMS

(1) All 'open' cuts or other lesions on the hands or arms of staff must be covered with dressings.

(2) Appropriate gloves should be worn when handling body fluids.

(3) 'Sharps' (needles, syringes, scalpel blades) must be properly disposed of.

(4) After venepuncture, needle must be removed before sample is transferred to specimen containers.

(5) All 'sharps' injuries must be reported to ICN.

(6) Ensure all specimen containers are tightly closed.

(7) In labour rooms, gloves must be worn when vaginal examination or other obstetric procedures are undertaken.

(8) Where ever possible use disposable needles.

CHAPTER 12

MEDICO LEGAL FUNCTIONS

12.1 INTRODUCTION

In addition to their other duties, the District Medical Officers and Medical Officers in-charge of Peripheral Units and Rural Hospitals are responsible for Medico-Legal services in respect of the Police areas coming within the purview of the institution.

The Medical Officer must attend to the Clinical Medico-Legal examinations, Medico-Legal postmortem examinations, Exhumations, Visiting Scenes of Crime and the recording of Dying Declarations.

To carry out such examinations expediently, the Medical Officer must ensure that he/she is equipped with the necessary trained staff, Instruments and the relevant Forms.

12.2 WHEN TO SEEK HELP OF CONSULTANT JMOO

If any difficulty arises in carrying out such examinations, due either to complexity of the case or the inexperience of the Medical Officer, then the Medical Officer concerned must inform such authority that ordered/ requested such examination, in writing, giving reasons for his/her inability to carry out such examination and also advise such Authority to refer the case to the nearest Judicial Medical Officer.

If any difficulty arises in the interpretation of the findings and/or giving an opinion as regards the cause of death or any other medico-legal issue that may arise, then the Medical Officer who carried out such examination must

immediately consult the nearest Judicial Medical Officer and obtain the necessary advice and guidance.

12.3 REFERRAL TO A FELLOW M.O.

In examinations where the victim/assailant/accused or their close relations are personally known to the Medical Officer or when allegations of Medical Negligence/Neglect of Duty are brought against the Staff of the Institution, then the Medical Officer must advise the Judicial Authority, ordering such examinations to refer the examination in question to the Medical Officer of another Institution.

In the case of a death in the custody of the Police, in a Station coming within the purview of the Medical Institution then the Medical Officer in-charge of the Institution must advise the Judicial Authority to refer the postmortem examination to a Medical Officer of another Institution.

Whenever, a Medical Officer responsible for the Medico-Legal Services of the Institution takes leave, falls ill or is unable to attend to work due to any other valid reason, then arrangements must be made with the next senior Medical Officer in the Institution or the Medical Officer in-charge of the neighbouring Institution to cover up such work. Such acting arrangements must be communicated to the Deputy Provincial Director of Health Services & Divisional Director of H.S. without delay.

12.4 MEDICO-LEGAL EXAMINATIONS (CLINICAL)

Medical Officers in-charge of Institutions must give information to the Officer in-charge of the nearest Police Station, regarding admission or treatment of patients following intentional violence, sexual assaults, accidents, poisoning or any other situation where there is reasonable ground to suspect that a crime had been committed.

a) Medico-Legal Clinical Examinations are carried out in the following circumstances:-

(i) Request of a Police Officer:-

Medico-Legal Examination Forms (Police-20) are issued to injured persons by the Police Department in cases of intentional violence, sexual assault, road traffic accidents, industrial accidents, poisoning, drunkenness, consumption of drugs, insanity etc.

After the examination, the Medical Officer must hand over to the Police Department, his report in the police copy of the Medico-Legal Examination Form as soon as possible.

ii) Orders of Judges, Magistrates and other Judicial Officers:-

Reports on these examinations must be sent in the Medico-Legal Report Form (H 1135).

b) CLINICAL MEDICO LEGAL EXAMINATION-STEPS

(1) History from the patient, es to the circumstances that led to the present condition.

(2) Physical examination as regards Nature, Size, Shape, Disposition and Site of Injury.

(3) General Physical Examination.

(4) Conducting Relevant Investigations.

(5) Referral of Patients to Specialists, as necessary.

In respect of (4) & (5), when such facilities are not available in the Institution, then the patient may be referred to the nearest Institution where such facilities are available along with the Medico-Legal Examination Form and a referral Letter.

12.5 MEDICO-LEGAL POSTMORTEM EXAMINATIONS

These examinations are ordered by a Judge/Magistrate or an Inquirer-into-Sudden Deaths. They should be carried out promptly. Before performing the postmortem examination, the Medical Officer should see that the body is identified by two persons acquainted with the deceased. The examination must be complete. The internal examination must include, opening into all body cavities and dissecting all organs therein. All dissected internal organs must be put back into the body cavities and sewn up before the body is handed over to the relatives. If the Medical Officer has removed any organs for further studies, he should make a note of such organs removed in the postmortem examination report.

In Postmortem examinations where the cause of death is not established at the end of the examination, it is mandatory to take specimens from all vital organs for Histology (Preserved in 10% Formalin solution) and also to remove specimens for Toxicological analysis. Soon after the completion of the postmortem examination, the Cause of Death and other relevant opinions must be communicated to the Judicial Authority. The Medical Officer must enter all the postmortem examination findings in the Postmortem Examination Report Form (H 42).

The Medicel Officers must order inquests through the Officer-in-Charge of the nearest Police Station into the following deaths:-

(a) Where the cause of death is not known.

(b) Death is unnatural (Homicide/Accident/Suicide).

(c) Death related to Medical and Surgical Procedures or when there are allegations of negligence.

(d) Deaths under suspicious circumstances.

(e) Death of a prisoner.

(f) Death following Tetanus & Rabies.

Cause of death may be entered in the Bed Head Ticket for consideration of the Judicial authority conducting the inquest.

In respect of Pathological postmortem examinations, the following criteria must be satisfied:-

(a) The cause of death is natural and is known to the Medical Officer requesting the Examination, and entered in the bed head ticket.

(b) An inquest has not been ordered into the death.

(c) The Medical Officer certifying death must fill the declaration of death form.

(d) The consent of a close relative obtained in writing on the bed head ticket.

(e) The approval of the Head of the Institution obtained .

(f) All autopsy findings entered on the bed head ticket of the deceased.

All Medico-Legal Postmortem Examinations should be carried out in Mortuaries with basic facilities like a postmortem table, running water and adequate light. Such examinations should not be carried out after sunset in artificial light. However if the Medical Officer is of the opinion that the delaly in keeping the body overnight will adversely affect the Medico-Legal investigation, then he may carry out such investigation provided there is adequate artificial light.

12.6 The mortuary labourer must be trained in postmortem examination techinques and Mortuary Management.

12.7 When a person is found to be dead, when brought to the Hospital, the Medical Officer Certifying the patient to be dead, must enter the name, age and address of the deceased and also name and address and the

relationship of the person who brought the deceased, in a register. An inquest must be held into all such deaths.

12.8 EXHUMATIONS

Acting under Section 373 (2) of the Criminal Procedure Code, a Judicial Authority may order a Government Medical Officer to exhume a body and carry out a postmortem examination. An inexperienced Medical Officer may not be competent to carry out a postmortem examination on an exhumed body. In such situations, a Medical Officer may carry out only the exhumation of the body and advise the Judicial Authority to refer the postmortem examination to a Judicial Medical Officer.

12.9 VISITS TO SCENES OF CRIME

All Medical Officers must visit scenes of crime at the earliest opportunity if such a request is made by a Police Officer or a Judicial Authority. Failure or delay in visiting a scene of crime can result in loss of Scientific Data vital for the investigation.

12.10 DYING DECLARATIONS

In the case of serious injury following intentional violence where, in the opinion of the Medical Officer, the patient may die before his statement is recorded by a Police Officer, then the Medical Officer in-charge of the Institution must inform the Magistrate of the area through the Officer-in-charge of the nearest Police Station to record the dying declaration of the patient. If however, death is imminent then the Medical Officer-in-charge of the Institution must take down in writing the statement made by the person seriously injured with particular reference to the name of assailant, nature of weapon used and place, date and the time of sustaining such injuries.

12.11 REPORTS, RECORDS AND FEES

(1) All notes of examinations must be made clearly and legibly, in the prescribed forms.

(2) All reports sent to Courts or any other Judicial Authority must be in duplicate. A copy must be kept by the Medical Officer.

(3) Notes and reports of examinations made by the Medical Officer, is his/her personal property and must be kept under lock and key. The Medical Officer should take it with him/her when he/she is transferred to another Institution.

(4) All notes and reports must be preserved for at least 25 years.

(5) Bed Head Tickets, X-rays and other reports pertaining to Medico - Legal cases must be preserved in the Institution for a period of at least 25 years.

(6) On receipt of the notice or summons from a Judicial Authority to forward a report to Court or when a request for a report is made by the Attorney General or the Police Department, the Medical Officer must make such report available without delay.

(7) Private Medical Reports (MLR & PMR) can be issued only at the written request of the affected person or his next of kin when such person is severely disabled or dead. A private Medical Report cannot be issued to a third party.

(8) Separate Registers must be maintained for

(a) Clinical Medico-Legal Examinations

(b) Postmortem Examinations

(9) Fees are payable by the respective High Courts for submitting Medico-Legal Reports to Courts (H-1135) after the examination of a patient and for conducting and submitting a report in H-42 after postmortem examinations, under section 373 (1) & the Criminal Procedure Code.

CHAPTER 13

MEDICAL ETHICS

13.1 INTRODUCTION:

In Medicine, Ethics is concerned with the code of conduct and actions of a professional. All professionals are distinguished from Technicians in terms of having or not having a Code of Conduct and Ethics.

The following groups in hospitals have Ethics.

DOCTORS OF ALL CATEGORIES
RMP
AMP
TRAINED NURSES

13.2 PATIENT'S RIGHTS

Every patient getting service from a government or a private Institution has the following Rights.

RIGHT TO BE TREATED WITH DIGNITY
RIGHT TO INFORMATION
RIGHT TO CONFIDENTIALITY
RIGHT TO CHOOSE TREATMENT
RIGHT OF REFERENCE

13.3 CODE OF CONDUCT OF HOSPITAL/MEDICAL PROFESSIONALS

1. **No discrimination on grounds of class, race, caste, creed etc.**
2. **Provider of service should be professionally competent, dedicated, honest and exhibit good ethical behaviour.**
3. **Should have good interpersonal relations with other professionals.**
4. **Should abide by rule of law.**
5. **Develop and maintain optimum standards of care.**
6. **Professionals should not solicit fees, rewards, favours etc. for the normal services rendered during hospital duty.**
7. **Should not use official facilities to promote their own private practice.**
8. **Each Professional should be a member of the professional body and take active part in its activities.**
9. **Maintain confidentiality of patients.**
10. **Whenever the individual has a health related problem, guide to the best advantage of the patient.**

13.4 HOSPITAL PUBLIC RELATIONS

i) Hospital Public Relations is the extension of hospital activities both within the hospital as well as outside the hospital.

ii) It is defined as the deliberate, planned and sustained effort to establish and maintain mutual understanding between the hospital and the public.

iii) Public relations must be planned and not merely indulged in a haphazard manner just to meet the crisis situation.

iv) It should be properly organised and adequately budgeted for, using human, physical and financial resources.

v) The principal objectives are-understanding and acceptance. The understanding must be mutual. In public relations, one must understand other people and their different attitudes, and at the same time, create an understanding of the organisation and its personnel, policies and services.

vi) Public relations involves communication both inwards and outwards. Well managed, well informed and job satisfied personnel are more likely to get involved in external public relations voluntarily, willingly and effectively. Every member of the staff should be involved and motivated. Members of the minor staff, are especially important as

they are in frequent contact with the public. They should be properly trained and motivated. The gate keeper, security officer, telephone operator and lift operator, the labourers are as important in public relations as those who head the institution. The impression that these persons create regarding the hospital is of tremendous importance.

vii) For effective and successful public relations, it is important that every member of the staff should be vigorously trained, constantly monitored and disciplined.

13.5 IT IS USEFUL TO HAVE IN EVERY HOSPITAL

(a) Grievance or complaints section.

(b) An information section.

(c) A system to serve the public in an orderly manner without unnecessary delays, especially in the outpatients department, at the dispensing counters and the diagnostic departments.

(d) Promptness and diligence when answering emergency calls; and also

(e) Sign boards in all three languages, Courteous, well informed attendants and labourers will help to ease the flow of public, reduce delays and so improve the services.

To sum up one should be hospitable in a hospital and that is the best form of public relations.

CHAPTER 14

COMMUNITY PARTICIPATION IN THE MANAGEMENT OF HOSPITALS

14.1 INTRODUCTION

Community participation in the management of a hospital plays a vital role in mobilizing vast untapped resources which can be channelled towards improving the quality of services provided by the Institution. As the quality of services improve, the Institution's image in the Community rises and it brings in its wake more community participation in its activities.

One way of achieving this objective is to set up a Hospital Development Committee comprising of dedicated Community leaders. The success of such a committee depends to a large extent on the leadership and guidance provided by the Head of the Institution.

14.2 THE COMMITTEE

The committee should consist of not more than 10 to 15 members depending on the status of the hospital. For example the committee for a Rural Hospital should not exceed 10 members whilst a committee for a District Hospital may constitute upto 15 members.

The membership of the Committee shall consist of

a) The Divisional Secretary.

b) The Divisional Director of Health Services or his/her representative.

c) One or two Representatives from a non-Governmental organisation. eg. Lions Club.

d) Representative from the Business Community Trade or Industry.

e) Persons nominated by the DDHS or Head of the Institution.

The DDHS/Head of the Institution shall nominate upto 50% of the members. Those nominated should be strong Community Leaders who could make a valuable Contribution towards the success of the committee. Free Technical advice could be obtained by nominating recognised Engineers, Architects, Accountants, etc. to the committee.

14.3 PROCEDURE FOR CONDUCTING MEETINGS

The following are some of the important ones.

1. Meetings of the Committee should be held at least once in three Months.
2. The Chairman of the Committee should be elected by the members at its first meeting.
3. A member of the staff of the Institution should be the Honorary Secretary.
4. Membership of the Committee, which is renewable, could be for about two years at a time.
5. A member who has failed to attend three consecutive meetings without a valid reason would be deemed to have ceased to be a member of the committee.

The Hospital Committee should work out a more detailed list of such procedures.

14.4 FUNCTIONS OF THE COMMITTEE WILL BE TO:-

a) Recommend improvements to buildings, furniture and fittings and equipment wherever necessary.

b) Recommend improvements to service facilities.

c) Approach Businessmen, Industrialists, Bankers, Private Sector Organisations etc. to obtain financial and technical assistance for identified development projects.

d) Organize fund raising activities such as benefit shows, lotteries etc.

e) Provide a suitable forum for community leaders to participate in the decision making process, and be a forum for active collaboration between the public and the Institution.

14.5 LIMITATIONS TO THE FUNCTIONS OF THE COMMITTEE

The members shall have no right to:-

(1) Give instructions to the hospital employees on any matter whatsoever. Any complaints should be directed to the Head of the Institution.

(2) Collect or accept money for or on behalf of the hospital without the prior approval of the Hospital Committee.

(3) The members of the committee will not interfere in the General Management or Administratrion of the Hospital.

(4) No member should issue any Press release on matters pertaining to the work of the Institution.

(5) Membership of the Public, Press etc. should not be permitted at meetings without the expressed permission of the Chairman.

CHAPTER 15

REFERRAL SERVICES DEVELOPMENT

15.1 INTRODUCTION

There is a very good network of curative care institutions evenly spread throughout the country. While the out patient facilities of every category of hospital, are well patronised, the in-patient care facilities of DHH, PUU & RHH, are under-utilized. On the other hand, the secondary & tertiary care institutions are over-utilized leading to overcrowding in these facilities, with consequent problems of maintaining cleanliness, dilution of quality of care, over-use of costly antibiotics etc. All follow up clinics are also overcrowded, leading to unsatisfactory state of care.

A forward referral system enforced by a legislative mechanism will not be acceptable. It would be possible to establish a referral system through motivation of the public, to utilize in-patient curative care facilities nearest their residences. The philosophy that has been developed so far is to establish a good back referral system from the closest secondary or tertiary care institution in the first instance. This is coupled with a public education programme as to the advantages of utilising the local services as against the disadvantages of patronizing far away secondary and tertiary care services.

15.2 LEVELS OF CARE

The first level of care, commonly known as primary care, is normally available at the District Hospitals, Peripheral Units, Rural Hospitals and Central Dispensaries. Secondary care is provided through institutions which are equipped with the main specialties. Base hospitals and large district hospitals with specialized diagnostic and treatment facilities can be categorised as secondary care institutions. Provincial, Teaching and Special Hospitals are considered to be Tertiary Care Institutions.

15.3 OBJECTIVES

1. To minimise over-crowding, in Institutions and thereby provide efficient, prompt care to patients.

2. To ensure maximum utilisation of all types of available resources and to prevent wastage.

3. To educate staff, and patients continuously on the advantages of using nearest primary care institutions, so that they will in turn educate, the public at home and community level.

4. To improve the quality of care provided at tertiary and secondary level institutions.

5. To establish very sound link between primary, secondary and tertiary care institutions.

15.4 TYPES OF REFERRAL SYSTEMS

1. Compulsory type referral services system where:

   a) the government will lay down the rules and regulations and the channel of referral.

   b) Patients are not free to select the institutions they wish.

2. Regulated voluntary type referral services system. Regulated voluntary type of referral services system will be discussed in this chapter.

15.5 FUNCTIONS

a) All medical institutions in a given area must be functionally and administratively linked together.

b) A unified system of records to each level of medical care should be developed (eg. referral registers, referral forms, referral cards, transfer forms etc.) which will reflect the flow of patient from periphery to higher level, follow up, diagnostic and therapeutic measures etc.

c) When the patients are referred there should be arrangements for identification of the patient's real health need/needs and to give priority as far as diagnosis and treatment are concerned.

d) Ideally all referred patients should be provided with transport facilities to reach the higher level institutions and whenever possible when referred back.

e) The entry points of the patients in medical care organization of the referral service area should not be fixed by the organization. Patients should be free to decide the entry point. But once the patient enters a particular entry point, further referral should be regulated by the system.

f) For an effective and efficient referral service, all types of professional and non-professional staff should understand the value of 'team work' hence a continuous in-service training programme is essential.

g) All types of General Practitioners (Western, Ayurvedic and others) should be involved with the referral system. Referrals from private hospitals, clinics and dispensaries should be welcomed.

15.6 CHANNELS OF REFERRALS

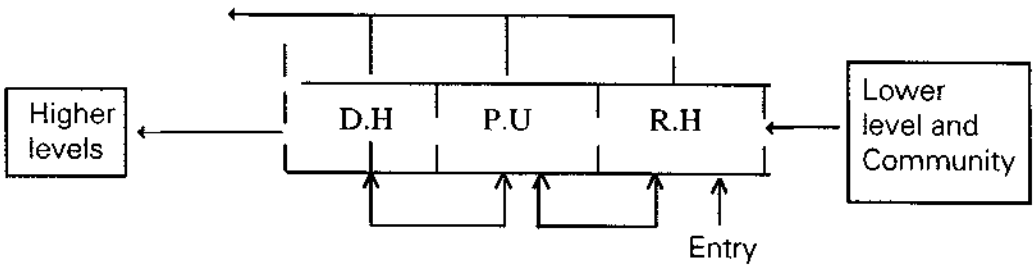


Fig. 1. A Diagram showing channels of referral

A patient will select any cage as entry point. But the referral system should regulate his channel of further referral.

A referral services system is not a one way flow channel. It is rather a dual way flow of patients. A back referral service is also important, where, health providers at lower level will have a chance to improve their knowledge and skills while patients are followed up.

15.7 SUPPORTIVE MEASURES FOR AN EFFECTIVE REFERRAL SERVICES

1. Regular in-service training programmes should be organized for all categories of staff on the value of referral services.

2. Attempts should be made to educate patients at OPD, clinics as well as in wards.

3. Political blessings are mandatory for successful referral services. A very good cooperation should be developed with such authorities.

4. Development of community participation and inter-and intra-sectoral co-ordination will definitely strengthen the whole organization.

5. An effective monitoring system should be developed.

6. Co-operation of preventive health services, is critical.

GENERAL ADMINISTRATIVE SERVICES

CHAPTER 16

GENERAL ADMINISTRATION AND ESTABLISHMENT FUNCTIONS

16.1 INTRODUCTION

Office management is concerned with the performance of the functions of offices.

16.2 OBJECTIVE

Ensuring the performance of the office functions efficiently is the objective of office management. Most of these functions belong to the clerical staff. These functions should be assigned to the clerical and other relevant staff. The performance of these functions must be regularly supervised by the Head of the Institution.

16.3 FUNCTIONS OF AN OFFICE

The five major functions of any office are:

1) **Receiving Information**
2) **Recording Information**
3) **Arranging Information**
4) **Giving Information**
5) **Safeguarding Assets**

A well functioning office is an important asset of a Hospital.

16.4 CREATING AND MAINTAINING FILES

1) Case Registers are maintained in form general 31. Code letters should be assigned to every clerk, according to availability of clerks.

ESTABLISHMENT WORK	ADMINISTRATION WORK	FINANCIAL WORK
EA	MA	FA
EB	MB	FB

There will not be separate branches for the above divisions if the number of Clerks is less than three. Each clerk should maintain a case register and all the cases opened should have code letters, serial number and the year during which the case is opened, on the right hand top corner of each case. (eg. EA/1/93 - FA/1/93.)

If there is only one clerk, the case register should be divided into three sections and cases must be opened with code letters of the respective divisions and three sets of cases should be maintained.

2) While cases will be maintained for different subjects, skeleton personal files have to be maintained for each member of the staff. There should be a separate case register for skeleton personal files with a separate page in the register for each category of staff. Each catergory of staff, should bear a separate code in addition to the code letters of the establishments division and the serial number of the entry in the case register.

e.g. EA/MO/1 for Medical Officers
EA/NO/1 for Nursing Officers
EA/MA/1 for Male Attendants
EA/FA/1 for Female Attendants
EA/MW/1 for Midwives
EA/HCS/1 for Clerks

Skeleton Personal files transferred from other Institutions should be registered in the case register under the next available serial number.

3). An Index Register should be maintained by each clerk.

4). Circular file should be maintained in respect of each category of circular and circular letter.

16.5 DEALING WITH DAILY TAPPAL

Every communication received in the office should be date-stamped. The Tappal should be opened in the presence of the Head of the Institution or in the presence of the Chief Clerk, if available. "Registered" and "Express" letters should be indicated on top left hand corner. The subject clerk should take over letters after initialling the entry in the register. All incoming correspondence must be entered in the inward register.

All Registered and Express letters to be sent, should be entered in the outward Register and Express Letters Register.

16.6. MAINTENANCE OF REGISTERS

The following Registers should be maintained

1. Case Register in form general 31
2. Cadre distribution Register
3. Register of Increments
4. Attendance Register
5. Leave Register
6. Short leave Register
7. Index Register
8. Register of Employees reaching 55 years of age
9. Register of Inward, "Registered" and "Express" letters
10. Register of Outward, "Registered" and "Express" letters
11. Inward & Outward Registers for other letters.

16.7 REPORTS AND RETURNS

1. Every Institution, big or small is expected to report certain events at periodic intervals to higher authorities. The information thus generated can be used to plan and monitor the activities of the Institution or the area concerned.

2. The District Hospitals, Peripheral Units and Rural Hospitals are expected to report the following.

1. Service Reports of Minor Employees (monthly)

1. Number of days on duty during the month.
2. Number of off days in the month.
3. Number of days with full pay.
4. Number of days with half-pay (in detail)
5. Overtime to be paid.
6. Holiday pay due to be paid.
7. Payments due for duty on off days.

2. Changes of Staff Due to Transfers, Appointments, Retirements (monthly)

1. Name of the Officer.
2. Designation.
3. Previous station.
4. Date of reporting / leaving the station / retirement.

3. Increments to be Paid (monthly)

1. Name of the officer.
2. Designation.
3. Present salary.
4. Increment.
5. Salary to be paid.

4. Bills to be Settled: Food, Milk, Firewood,Laundry (monthly)

1. Institution received from/issued to.
2. Name of the item and the quantity.
3. Details of receipt, orders.
4. Details of issue orders.

5. Loss and Damage of Stores Items - FR 115 (monthly)

1. Particulars of the item.
2. Date of loss or damage.
3. Present position of action taken thereto.
4. Value.
5. Write off order in terms of financial regulations.

6. Holiday Warrants (monthly)

1. Number of the warrant.
2. Date of issue.
3. Number of tickets.
4. Name & Designation of the person to whom the concession was granted.

CHAPTER 17

INDUCTION AND IN-SERVICE TRAINING

17.1 INTRODUCTION

The work force of a DH/PU/RH consists of several categories of staff. Some of them have pre-service, basic training while others are employed without any training. Whether with pre-service training or not, all staff who come into an institution, need an orientation to the new institution, its functioning and to their role and responsibilities in it.

17.2 INDUCTION TRAINING

1. Objectives

Induction training will make the staff aware of and be comfortable with the Job and the people they have to work with. This will lead to better rapport and bring in, the concept of team work.

For the employees without any pre-service training, induction training can be directed to gain experience in the work they are expected to perform. Negative attitudes or wrong information given by others can be neutralized, and potential problems eliminated before they occur.

A planned programme must be developed for different categories of personnel.

2. Planning for Induction Training

i) A Committee with MOIC as Chairman with other Medical Officers, Nursing Officer in-charge, Clerk, Oversear, representatives of other categories should be set up. Learning needs assessment of each category of staff must be done. The Committee should identify the trainers from the institution or if necessary from outside the institution.

ii) Bi-monthly meetings of this Committee should be held to review and reformulate programmes. Accordingly, the co-ordinator should draw up the programme and forward it to the MOIC through the Nursing Officer in-charge.

EXAMPLES

A. INDUCTION TRAINING FOR LABOURERS

Duration - One week

Content - What is a hospital-organizational chart,
- Inter-personal relationships
- Ethics
- Responsibilities
- Demonstrations, return demonstrations by trainees.
- Prevention of cross infection etc.

B. NURSES AND FHW

Duration: One day

Content:

1. Orientation to team work in the hospital and the hospital set-up.
2. Any special regulations procedures & standards particular to the institution.
3. Assisting in welfare activities.

iii) A Nursing Officer who shows interest in teaching and who can get on with people and has around 5 years experience would be ideal to coordinate training programmes.

17.3 IN-SERVICE TRAINING

1. Objective

The benefits of in-service training are:

1. Improves quality of service.
2. It increases job satisfaction and motivates staff to perform better.

This can be - **1. Formal class room training,**
2. On the job training (in-service)

It is imperative that all hospitals conduct annual in-service training programmes based on a pre-planned calendar. Personnel must be encouraged to attend such programmes by making arrangements to cover up their duties without affecting the service.

2. Content

Content must depend on the needs of each hospital. eg. if the technical skills of the nurses are poor, the programme should emphasize this area. If new equipment is brought to the hospital or a new method of treatment is introduced, then these should take priority in the in-service programme, Educational needs expressed by the staff have to be catered to. The supervising officers can identify the needs during supervision and by the problems that arise in the hospital.

17.4 FACILITIES FOR TRAINING

Each hospital should have a room with at least the minimum requirements to conduct training. A black board, and chairs with writing hand are required. An overhead projector would be an advantage.

If facilities are not available in small hospitals, the DDHS/PDHS can organize training centres to serve a number of adjoining small hospitals.

17.5 NUMBER OF PARTICIPANTS & DURATION OF TRAINING

The number of participants for each programme will depend on

1. **Objectives of the programmes**
2. **The beneficiaries**
3. **The topics**
4. **Number that can be released without affecting the functioning of the hospital**

The number for such programmes should not exceed 15 as small group teaching is more effective.

Duration:- 3-4 day programmes are most suitable. All members of each category must be given equal opportunity to participate in these programmes.

Advance programme of in-service training for the year for the different categories of staff should be made by the appointed committee and officer i/c of the institution should get funds from the Provincial Director of Health Services through the Divisional Director of Health Services.

17.6 METHODS OF TEACHING

The monotonous lecture method should be avoided.

1. Lecture-discussion where the participants actively participate.
2. Demonstrations
3. Role play
4. Individual or group assignments
5. Presentation of case studies
6. Educational Games

17.7 EVALUATION OF THE PROGRAMMES

The committee should, from time to time, check whether there is an impact on the quality of care consequent to these training programmes.

17.8 LIBRARY

Each hospital should develop a library of its own. It should have books and journals local and foreign, which can be used by medical officers, nursing officers and other staff. A clerk can be assigned to run the library as part of his duties. All hospitals should get into the mailing list of regular publications of Health Education Bureau, Family Health Bureau, Epidemiology Unit, Population Division etc.

Funds for the purchase of books for the library should be requested at the beginning of year from Provincial Director of Health Services.

CHAPTER 18

FINANCIAL MANAGEMENT

18.1 INTRODUCTION

This Chapter is supplementary and subordinate to the Financial Regulations. It should be noted that these regulations have been laid down for the carrying out of financial operations in an ordely manner.

18.2 EXPENDITURE FROM THE CONSOLIDATED FUND

All normal expenditure on public services is met from the consolidated fund which is managed by the Treasury. Before any money can be withdrawn from the consolidated fund for expenditure, it is necessary that the Parliament should authorize such expenditure and a warrant issued by the Minister of Finance.

Any officer who violates the limitations enforced by the financial regulations is liable to be surcharged for any unauthorized expenditure.

18.3 ESTIMATES

The estimate of expenditure is a forecast of the cost of the services that the Department intends to provide during the course of a year. Before any money is withdrawn from the consolidated fund, an essential pre-requisite is sanctioning of funds for expenditure by the Parliament.

The Department presents, an estimate to Parliament, for this purpose.

18.4 IMPREST

Imprest is the sums advanced by the Treasury for meeting Public

expenditure by the Department and is limited to cash requirements. The imprest is settled to the extent of the vouchers rendered to the Auditor General.

18.5 SUB-IMPREST

Provincial Directors (Paying Units) may issue sub-imprests to heads of Institutions for the following purposes:-

a) Cashiers at Provincial Directors Offices, DDHS Offices for meeting small items of expenditure.

b) Defraying petty cash expenses in medical Institutions.

c) Refund of Hospital charges.

d) Payment of Blood donors etc.

18.6 PETTY CASH IMPREST

i) The Amount fixed in each of above cases will vary according to circumstances and the estimated payments during a month. The limits shall be fixed by Provincial Director, who may consult the Chief Accountant / Dy. Secretary Finance attached to the P.C.

ii) Heads of Institutions should maintain separate registers on a specific form in respect of each type of sub-imprest granted. The receipt side of the registers should be entered by the Head of Institution on receipt of the imprest. The entries on the payment sides should be made as and when payments are effected. The supporting documents for those entries will be receipted vouchers.

iii) The register should be balanced daily. The balance shown in the register should be verified and tallied with the cash in hand before being deposited in the safe. Vouchers for the renewal of imprest should be rendered to the Divisional / Provincial office along with supporting under receipt. Petty Cash issued shall be renewed at least once a month but not later than 25th of a month. However, action shall be taken by the Head of Institution earlier for the renewal of imprest when 40% of imprest, has been spent.

A certificate in the following form shall be furnished at the time of renewal.

certify that I hold in cash on day/ month/ year.....the sum of Rs.....and cents.....being the unspent balance out of the petty cash Imprest entrusted to me.

The balance is as follows:

a)	Imprest allowed.....	Rs.....
b)	Paid document sent for renewal	Rs.....
c)	Paid document in hand	Rs.....
d)	Balance as per petty cash book	Rs.....

Signature:.....

Date:..... Designation:.....

iv) The entire petty cash imprest shall be settled by 25th of December each year unless permission has been obtained from the proper authority in advance to settle the sum during the first week of January.

18.7 REGISTER OF REMITTANCES (REMITTANCES RECEIVED FOR PAYMENT TO EMPLOYEES AND OTHERS,)

A remittance register should be maintained at every Institution, for recording all remittances received. All the particulars for both receipts and payments should be posted up with meticulous accuracy in all detail. The Head of Institution should ensure that all pages of this register are numbered before being put out for use.

i) The maintenance of Remittance register and accounting of all remittances received are the responsibility of the Head of Institution. The duties of the officer in-charge of remittance register should be performed in his absence by the officer acting for him.

ii) The officer permanently in-charge of remittance register every time he reports for duty after a period of absence or leave, should check up the payments made during the period of absence and satisfy himself that the entries are a true and correct record of all receipts and payments made.

iii) The remittance register should be balanced at the end of each day, taking into account the balance brought forward from the previous day.

iv) Every payment should be recorded fully on the payment side at the time of payment. At the end of the day, the register should be totalled

and balanced. The balance should be carried forward to the following day. It has to be emphasized that the Book balance should be verified daily with the actual cash in hand by the Head of Institution. Un-paid vouchers should be tallied with the un-paid amount at least once a week.

18.8 MISCELLANEOUS CASH COLLECTION REGISTER

i) An officer recovering money on behalf of the Government shall ensure that a receipt is issued for the money received, that an entry is made in the collection register and that the collections are duly accounted for. This register should be maintained in every Institution to record receipts and disposal of all collection in respect of miscellaneous items such as issue of private medical certificates, sale of family planning items, sale of unserviceable items, sale of garden produce etc.

ii) When any cash is received, an official receipt on Form General 172 should be written out using double sided carbon. (The delegation of any duties by the officer in-charge will not absolve him of responsibility).

iii) The cash collection shall be remitted by a money order or deposited in the Bank, whichever is easier, weekly or earlier. A collection of Rs. 500/-, or of one week whichever is more, should be so remitted to P.D.'s Office. Necessary entries to that effect should be made in the register.

iv) The head of Institution should check these entries with the actual money orders to ensure that the cash had in fact been remitted and genuine entries made in the register. An official receipt in form General 172 should be obtained from the P.D.' s Office in respect of remittance made and filed for record. The Head of the Institution should check these receipts with the actual money oders to ensure that receipts have been received in respect of all remittances.

18.9 DAILY CASH BALANCE STATEMENT REGISTER

A record of the balance monies in hand should be prepared at the end of each day in a register. The balance of petty cash, miscellaneous cash collections, postal imprest etc. should be shown in the register.

18.10 CUSTODY OF SAFE KEYS

i) Cash and other valuables shall be lodged in the safe. The officer i/c will be responsible for the safe custody of cash and other valuables. The keys should be in the personal custody of the officer in-charge. In the event of his absence, necessary arrangement should be made by the Head of Institution in consultation with the PD,D.PD,D.D.H.S. for custoday of the safe key.

ii) Duplicate key of the safe must be treated with anticorrosive and deposited at the Treasury.

iii) If the original key is lost the fact must be reported forthwith to the PD Office.

18.11 PAID DOCUMENTS

i) Paid documents must always be kept under lock and key. Paid documents should be returned after completing payments, within ten working days of receipt of the remittance.

ii) All paid documents should be forwarded to the paying unit accompanied by a memorandum stating partly paid and unpaid documents.

iii) As the paid vouchers relating to the month have to be forwarded to the Auditor General, special attention should be paid by the Heads of Institutions, to return them in time.

18.12 LOSSES

i) All losses should be reported to Chief Accounting Officer to enable him to send a preliminary report under FR 104 to Auditor General.

ii) In case of a theft or fraud or accident, police should be informed immediately.

iii) In terms of F.R. 104, when a loss or damage occurs, inquiries should be instituted to ascertain the cause of loss or damage and to fix responsibility. If the loss is over Rs. 500,000/= a board of inquiry will be appointed by the Chief Accounting Officer (Chief Secretary in provincial councils). The Chairman of such board should be a civil list officer.

As and when such reports are received by the PDHS, he will make arrangements to hold an inquiry and fix responsibility. The value of the losses plus Departmental charges, after due investigation will be recovered on such occasion. (Departmental Charges-50% of the cost of Drugs, 40% of the cost of Surgical items & 25% of the cost of General items. No departmental charges for loss of cash).

iv) Head of institution should maintain a register for recording of all type of losses in order to furnish information on:

Preliminary Report under	**FR 104 (3)**
Final Report under	**FR 104 (4)**
Report for write off	**FR 109**

v) It should be clearly understood that a surcharge against an employee is not a punishment imposed on him. It is either a recovery of an amount overpaid to him or of any loss caused to the Government for which he is held responsible.

vi) However if the responsibility cannot be fixed on any officer, authority for write-off should be obtained, from the Chief Accounting Officer. When authority is obtained the loss can be reduced from the books quoting reference to such authority.

CHAPTER 19

MANAGEMENT OF DRUGS SUPPLIES

19.1 INTRODUCTION

Pharmaceuticals play a crucial role in preventive and curative health care. Drugs are a vital and expensive component in the provision of Health Services. A fair proportion of the health budget is invested in Pharmaceuticals. To ensure maximum benefit from such investment, it is essential that the drug requirements should be based on realistic estimates. Rational prescribing and efficient drug management with a sense of cost and quality consciousness would contribute towards Sri Lanka achieving, the goal of "Health for All by the Year 2000 A.D.", using the primary health care approach.

19.2 OBJECTIVES

a. To make the prescriber cost conscious.
b. To promote rational prescribing.
c. To ensure adequate supplies of safe and effective drugs in the Institution throughout the year, within the given allocation.
d. To maintain proper storage.
e. Methodical stock control.
f. To prevent pilferage.
g. To completely stop the condemning of drugs due to expiry, spoilage etc.

19.3 CARE IN PRESCRIBING

1. All drugs with Generic Names should be prescribed with their Generic Names.
2. The prescriptions should contain the Diagnosis/Indication for use of

drugs, correct dosage, frequency with which the drug should be taken and amounts to be issued. The prescription should be legibly written and signed by the prescribing officer.

3. In the case of accountable drugs, the prescription should contain besides what is stated in (2) above, a short clinical history.

4. O.P.D. patients should be prescribed drugs for the minimum period possible which should not exceed 3 days of treatment.

5. No clinic patient shall be prescribed drugs for more than two weeks except Psychiatric, Epileptic, Tuberculosis and Leprosy Patients, who could be given drugs for a period of four weeks provided the Consultant/Officer in-charge of T.B. / Leprosy clinic is satisfied that the patient cannot visit the clinic fortnightly. In such cases, the Consultant or Officer in-charge of T.B./Leprosy clinic, as is applicable should sign the prescription.

6. The prescribing officer should ensure that:

   a) minimum drugs essential for treating the patient, are prescribed;

   b) cost of drugs is specially taken note of and where alternatives are available, the cheapest are prescribed;

   c) the patient clearly understands as to how the drugs prescribed are to be taken;

   d) the drugs prescribed are correctly dispensed to the patient and in amounts prescribed and are taken by the patient as instructed.

7. The dispensing officers should:

   a) educate the patients on the use of drugs and their possible side effects.

   b) dispense the exact amounts of drugs prescribed and

   c) advise the patient to take the full course of drugs prescribed.

All authorised prescribing officers should exercise utmost care in prescribing expensive drugs. Whenever possible, prescribing officers should refrain from issuing prescriptions for tonics etc. even on request, to be purchased outside since it brings disrepute to the institutions and causes hardships to the patient.

8. In the wards, repeating drugs should not be compiled with at the end of the third day, unless the drugs are recorded by name, dosage and frequency.

9. The Officer in-charge of the institution should bring to the notice of all authorised prescribing officers, the cost of antibiotics as well as the other expensive, frequently used drugs and encourage them to be cost-conscious.

10. The poster "Do you know the cost?" should be displayed prominently at the clinics, O.P.D. and wards, so as to inspire a sense of cost consciousness among the prescribers.

11. All expensive antibiotics and drugs prescribed over 3 days from the O.P.D. should be authorised by the Head of the Institution.

19.4 MAJOR ACTIVITIES

1. Proper estimation of annual requirement of drugs (Considering the ABC Analysis).
2. Receipts and maintenance of records.
3. Storage.
4. Issues to wards and O.P.D.
5. Stock Control (Daily balancing of books).
6. Complaints of sub standard drugs and adverse reactions with samples being sent to D/ NDQAL.
7. Condemning of unserviceables.

19.5 ESTIMATION OF ANNUAL REQUIREMENTS OF DRUGS

a) The estimation of the quantity of drugs required for the following year is a vital activity and would be the responsibility of all prescribing officers in the Institutions. The drug review committee should attend to annual activities. The members of the institutional drug review committee would be:

D. M. O. / M. O. I. C. / M. O. O. / R/ A. M. P. P.

b) Annual estimates should be based on the morbidity patterns and standard treatment regimes, ideally.

c) Head of the institution would receive 03 sets of Estimate Books from the Medical Supplies Division.

d) Head of the Institution should prepare the average monthly consumption of all items as clearly explained in the Manual on Management of Drugs in Chapter 4.

e) Annual financial allocation should be considered in this process. Estimating according to the A B C Analysis which are based on cost gives a realistic estimate within the allocated financial resources.

f) A B C Analysis categorises the items into three main categories, namely A, B & C.

A Category items are those items which consume 80% of the money allocated for purchase of all items.

B Category Costs 10 - 15% of the money, and C Category, the balance.

g) All 3 sets of filled estimate books, should be sent to Dy. P.D.H.S. for approval and after that one set would be returned to the Institution.

19.6 RECEIPTS, ISSUES & STOCK CONTROL

a) Items would be issued on a quarterly basis from Divisional Drug Stores.

b) The Officer in-charge of the drug stores should check the quantity of each drug received, their expiry dates and enter the invoices in the Drugs Register on the same day. Any discrepancies / breakages should be brought to the notice of the Head of the Institution and to the officer from the D.D.S. immediately and also noted on the Invoices.

c) A table giving the Name of the Item, Expiry Date and Quantity should be prepared for all dated products and updated as and when receipts/ issues are made.

d) When requests for issues are received from substores/wards, the issuing officer should check the registers to see whether the entries are correct and the books have been balanced correctly and whether proper authorization had been given by the officer concerned. He should also check the balance stock available at the sub-store periodically and if there is any discrepancy, it should be brought to the notice of the Head of the Institution.

e) Only a week's supply should be issued to the Units and as far as possible empty vials and containers should be collected when issuing the drugs, so that better control could be maintained. Empties received should be taken into a register and disposed of periodically with the approval of the Officer in-charge either by auctioning or returning to D.D.S.

19.7 STORAGE OF DRUGS

a) Drugs should be kept dry, cool and away from light.

b) Tablets should be kept in air-tight tins and screw-top jars or in the original containers.

c) It should be ensured that there is no roof leakages.

d) The room should be clean,with white-washed walls, well ventilated, well lit, and with a fire extinguisher.

e) Drugs should be stacked at least 10 c.m. from floor level and 35 c.m. from any wall (to prevent attack by white ants)..

f) Storage of drugs should be done in a manner that it would facilitate:

1. The issue of drugs on the closest expiry date first and
2. The issue of drugs according to dates of manufacture, if their expiry dates are not indicated.
3. The issue of drugs on the first in-first out basis.

g) Display prominently the list of drugs with expiry dates.

h) Dangerous drugs and Narcotic drugs should be kept in a locked

cupboard so that these would not be accessible to unauthorised persons.

i) Expensive drugs should always be kept under lock and key.

j) In addition to the drugs register, Bin Cards indicating the stock re-order level, re-order quantity etc. should be used.

k) Expired drugs, substandard drugs, drugs without labels on the containers and drugs which had been withdrawn should be stored separately from the others and condemning should be done as early as possible.

l) Periodic Test Checks should be done as indicated in the Manual on Management of Drugs.

19.8 ESTIMATION OF SURGICAL & DENTAL ITEMS

a) Estimate Books have been prepared for Surgical & Dental items.

b) Three sets of books would be sent to Dy.P.D.H.S.

c) DPDH in turn will send 3 sets to institutions where after being completed 2 sets would be returned keeping 01 in the institution.

d) After consolidating the estimates, PDH's would send 01 copy to M.S.D. retaining one copy with him and the other at D.D.S.

e) Items would be issued to Divisional Drug Stores on quarterly basis which subsequently would be distributed in the same frequency to institutions.

19.9 ESTIMATION OF VACCINES

a) Vaccines should be indented on a monthly basis from the divisional Drug Stores.

b) Indenting should be done on a monthly stock return Form.

c) Maintenance of the cold chain should be strictly adhered to.

d) Polio Vaccine should be kept in the freezer compartment 0^0 C.

e) Rest of the vaccines should be kept in the main chamber, including the diluents for Measles and BCG vaccines (4^0 - 8^0 C)

f) Vaccines (as well as drugs) should never be stored in the door of the refrigerator.

g) Temperature chart of the refrigerator should be maintained and checked twice a day.

h) E.P.I. Manual should be referred to for further guidance.

19.10 MONITORING OF ADVERSE DRUG REACTIONS

1. Adverse drug reactions could occur due to:

   A. Deficiencies in the manufacturing processes.
   B. Poor storage conditions.
   C. Spoilage during transportation.

2. All adverse drug reactions should be notified and monitored by the D.M.O./ M.O./ M.O.I.C.

3. Drug reactions should be complained to D./M.T.& S and D/N.D.Q.A.L. with the following information.

   A. Name of the drug
   B. Name and address of manufacturer
   C. Batch No. (if any)
   D. Lot No. (if any)
   E. Expiry Date (if any)
   F. Date of manufacture
   G. Nature of problem

4. It would be appreciated if samples could be delivered with the complaints, so that immediate action could be initiated by D/NDQAL.

5. Instructions received on the quality should be conveyed to all the staff members.

19.11 CONDEMNING OF UNSERVICEABLE DRUGS

Condemning of drugs takes place due to:

A. Drugs getting expired
B. Spoilage due to poor storage conditions
C. Breakages during the transport

If the annual indenting is done methodically with the usage of drugs according to the "First-in-First-out" basis drugs getting expired could be completely stopped.

Guidelines for proper storage of drugs should be clearly adhered to as stated in Page.39 - Chapter 9 of "Manual on Management of Drugs".

Inspite of the above if drugs collect for condemning following procedures should be adopted.

A. Drugs to be condemned should be taken over to a separate register containing the Name of the Drug, Manufacturer, Batch No. Date of Manufacture, Expirty Date and Quantity to be condemned.

B. These should be stored separately from the normal drugs.

C. Three copies of the Gen.47 form should be completed by the Officer-in-Charge and should be sent to Deputy Provincial Director who in turn would appoint a Board consisting of 03 members.

D. It would be the responsibility of the Officer-in-Charge to follow up this activity and to see that condemning is being done biannually.

E. Best method of condemning would be:

i) Incineration-Institutions where this facility is not available setting fire to the drugs could be done after taking out from the bottles.

ii) Empty bottles could be auctioned after removing the labels.

CHAPTER 20

ENSURING THE SMOOTH RUNNING OF THE INSTITUTION (SUPERVISION)

20.1 INTRODUCTION

This Chapter deals with:-

i) The Philosophy of supervision
ii) Importance of planning supervision
iii) How to supervise
iv) How to ensure supervision at regular intervals
v) How to ensure effectiveness of supervision

The important areas which should be supervised are also given for guidance.

20.2 WHAT IS SUPERVISION

The term supervision derives from two Latin words, super (over) and visum (to see). It means vision from above; that is somebody with authority is directing affairs from his position above.

REMEMBER

1 Supervision is a helping process
2 Good work should be praised
3 Deficiencies should be pointed out to the person being supervised and a chance given to improve, prior to taking punitive measures.

20.3 WHAT ARE THE MAIN OBJECTIVES OF SUPERVISION ?

i) To ensure the hospital is functioning satisfactorily, over all. For

example; whether patients get courteous & prompt treatment; whether the office is functioning smoothly.

ii) To ensure that critical patient care activities take place as they should. For example; whether mothers in labour are monitored, whether instruments are sterilized by boiling for 20 minutes.

If the Institution is not supervised, the public will be dissatisfied, and will complain to higher authorities.

Newspapers will highlight deficiencies, there will be petitions and inquiries.

20.4 FOR SUPERVISION TO BE EFFECTIVE IT MUST BE PLANNED

Plan to supervise the following daily:-

1. Cleanliness of toilets, wards, drains & garden. (please see section on Sanitation)

A daily ward round will prevent a lot of problems.

2. Are essential drugs available?
   (Please see section on Drugs & Supplies)
3. Are mothers in labour monitored properly?
   (Please see section on Labour Room Management)
4. Are instruments sterilized properly and entries made in the sterilization chart?
   (Please see section on Sterilization Procedures)
5. Draw the red lines in all Attendance Registers. This would ensure punctuality by all categories of staff.

20.5 THE FOLLOWING CAN BE SUPERVISED PERIODICALLY, FOR EXAMPLE MONTHLY:-

1. Are patients and staff supplied with boiled cooled water?
2. Are ward rounds done by your colleagues in the morning befor 9.a.m.? Are all patients seen, are all admissions between ward round and 12 noon seen before Doctor/R/AMPP go for lunch? Are all admissions between 2 and 4 p.m. seen before officers leave at the end of day at 4 p.m. Are stamped cases seen immediately, not later than 15 minutes?

3. Are all returns sent in time? (Please see section on Returns)
4. Are health education activities carried out properly?
5. Is the inpatient diseases register up to date?
6. Are notifications done promptly and is the Notification Register maintained properly?

USE A SIMPLE CHART TO HELP YOU SUPERVISE

ITEM	FREQUENCY OF SUPERVISION	LAST DONE
Monthly returns	5th of every month	5.5.93
Inpatient Diseases Register	10th of every month	10.5.93

20.6 WHAT ARE THE METHODS OF SUPERVISON ?

1) Observe

- Cleanliness
- Monitoring of FHS by FHW
- Flow of patients in the OPD

2) Check Records

- Entries in sterilization charts
- Records of monitoring of FHS & Pulse
- Inpatient Diseases Register
- Notification Register

3) Interview

- Mothers, to find out whether urine was examined and blood pressure taken at time of admission.
- Patients, in the OPD to find out when they came in, when they were registered, and when they were seen by the Doctor and when the drugs were issued.
- Has the patient been told how and when to take drugs?

4) Test Checks

- Drugs
- Whether the No. of items of drugs prescribed has been given at the OPD counter and in correct amounts.

Follow-up is the Key to Effective Supervision

20.7 A FEW DON'TS

I) Do not pull up staff in front of patients!

ii) Do not confront staff with patients due to a lapse of the former!

iii) Do not hesitate to give praise where praise is due!

Do Regular Supervision and Enjoy Sesing the Institution Improve !

LITILITY SERVICES

CHAPTER 21

DIET SERVICE

21.1 INTRODUCTION

Provision of diets is a very important function in medical Institutions. It has to be accomplished very carefully and systematically.

The heads of institutions have to shoulder greater responsibility in this regard for, it is a continuous daily process. Special care needs to be exercised relating to preparation of the diets and also in the selection of the suitable diets to satisfy the needs of individual patients.

There are two types of diets

1. Patient's diets and
2. Servant's diets

The diets ordered for these two categories of persons would be prepared separately. In District Hospitals, Rural Hospitals and Peripheral Units, raw provisions supplied to the hospitals by the contractors are cooked (a) by his employees at the hospital kitchen under close supervision of the institutional staff, or (b) by hospital staff.

21.2 DIET FORMS

The following forms are now in use for ordering, accounting and control of diets.

1. Form Health 31 ... Diet Table
2. Form Health 31 A ... Analysis of Diets
3. Form Health 32 ... Table of Extras
4. Form Health 32 A ... Summary of Extras
6. Form Health 730 A ... Order for Raw Provisions
8. Form Health 15 ... Diet slip (order for raw provisions

			from contractors who have contracted to supply cooked meals)
9.	Form Health 202	...	Milk Order
11.	Form Health 945	...	Register of Shortages
12.	Form Health 894	...	Register of Surprise Inspections of raw provisions
14.	Form Health 38		Hospital Expenditure Return
15.	Form Health 302	...	Diet Vouchers
16.	Form Health 891	...	Rice Register

21.3 REGISTER OF RAW PROVISIONS ACCEPTED

At all Institutions which receive raw provisions for cooking, a register shall be maintained for the daily recording of the quantities of each item of raw provisions, groceries and sundries supplied.

Separate sections must be allotted, for minor employees, paying patients,non- paying patients and T.B. Patients. This register shall be inspected by the officer-in- charge of the Institution at regular intervals and initialled.

21.4 DIET RECORDS

The diets prescribed shall be entered daily from the Bed Head Tickets, as soon as the Medical Officer has finished his ward rounds. The normal diets are entered in the Table of Diets and the extras in the Table of Extras.

21.5 TABLE OF DIETS

The Table of Diets (Form Health 31) has the following headings:-

1. Serial No. from beginning of month
2. No. given to patient in Admission Book
3. Paying patient or not
4. Name
5. Age
6. Sex
7. Disease
8. Date and hour of admission
9. Date of Discharge
10. Date of Death
11. Date of Month - 1 to 31 (One column for each date)
12. No. of days spent by patient in hospital, in the current month.
13. Total days in hospital from first admission to end of current month.

21.6 ANALYSIS OF DIETS (FORM HEALTH 31 A)

The number of diets under the following categories shall be recorded daily in this form-

1. Minor staff Diets
2. Non-paying Patients Diet
3. Paying Patients Diets (Class i & ii)
4. The total number of diets for the day. The entries shall be totalled and tallied daily.

21.7 SUMMARY OF EXTRAS

The totals of extras ordered each day in the Table of Extras (Health 32) shall be entered daily in the Summary of Extras (Health 32 A) under the respective heading and or amended heading and the summary of Extras totalled at the end of each month.

Diet Scales

Different Scales of diets operate for:-

a) Minor Employees
b) Non-paying Patients
c) Paediatric Patients
d) Paying Patients

21.8 RESPONSIBILITY FOR PLACING DIET ORDER, CERTIFICATION AND ACCEPTANCE OF SUPPLIES

If two medical Practitioners but no clerks are available at any Institution, one of them, preferably the Junior Officer, shall place the order and certify the top portion of the Diet Slip. The other officer (the Senior Officer) shall accept the supplies and certify that the order placed is correct and that the provisions were taken over by him.

If there are one or two clerks and one or more medical Practitioners a clerk may place the order on behalf of the officer-in-charge, and the receiving officer may be another clerk or a Medical Practitioner. The Head of the Institution shall lay down a roster for these duties to be performed, the duties being rotated once a fortnight.

Where there are no clerks, alternate arrangements must be made by the head of the Institution for placing/acceptance of supplies.

21.9 CERTIFICATE OF RECEIPT

The officer taking over the provisions should sign the certificate at the bottom of the order Form after taking over of provisions. He should also indicate the time of receipt.

21.10 ORDER & RECEIPT OF SUPPLIES

The orders for raw provisions and extras shall be given to the Contractor on the appropriate form before 11.30 a.m. each day.

The suppliers shall be given written instructions as regards the time at which they shall supply the provisions. The raw provisions required for the afternoon tea, afternoon extras and night shall be taken over at 2 p.m; the provisions required for tea at 6 a.m.; and the provisions for the noon-meal and morning extras at 8 a.m.

No raw provisions shall be stored in the premises of the Institution for daily issue, viz, rice, tea, etc. unless special written authority has been obtained from the DDHS/PDHS. The quality of provisions taken over shall be good and quantity correct, accurate records being maintained of every item taken over. Proper supervision of the taking over of provisions by the subordinate staff must be exercised by the Head of the Institution who shall carry out all the checks laid down by departmental circular instructions.

A record of the receipt into each ward, of all extras shall be maintained in a special register. The extras shall be issued from the kitchen each afternoon and morning, soon after provisions are taken over from the supplier, but not later than 3 p.m. and 9.00 a.m. The issue of extras to patients is the duty of nursing staff. In institutions where no nursing staff is available such duties must be delegated in writing to the attendants/ labourers by the Head of the Institution. Any raw provisions obtained which are found to be in excess of requirements eg. curry stuff shall be stored in a cupboard and the office immediately intimated in a special book kept for the purpose, of the excess quantities of provisions available so that a proportionate reduction can be made from the new order. This must be done immediately after the making of the particular meal is completed.

21.11 SHORTAGES

Any shortages in delivery shall be recorded at the time of acceptance of supplies in the column under "Shortages". Simultaneously, they should also be entered in the Register of Shortages (Form Health 945).

When the shortages are made good, further entries will be made in the Register of Shortages showing the quantities replaced and the time of receipt by the Receiving Officer.

At the time the provisions are taken over, all particulars of every item received shall be entered immediately in the counterfoil copy of the order and the necessary certificate furnished at the bottom of the order. Any shortages or other irregularities shall be immediately noted in the relevant Register. Replacements of shortages and of rejections shall also be noted at the time of replacement in the Irregularities Register. If the supplier does not replace any articles rejected within a reasonable period of time, the Medical Officer shall procure the same from some other source, subject to conditions of the contract. Regular inspections shall be carried out by the Head of the Institution in regard to the taking over of provisions and records maintained in the register of surprise inspections.

When taking over provisions, these shall be properly examined as to quality and shall be properly weighed, measured or counted as the case may be. When any articles are ordered and received in a particular measure, the payment shall be according to the measure, e.g. coconuts, they shall be of standard weight but paid for according to numbers. In cases like this, both weights and numbers shall be entered against particulars of supply.

All hospital balances used for weighing provision shall be checked periodically and all errors corrected and/or repairs effected.

21.12 ENTRIES IN BED HEAD TICKET

The diets and extras required for patients shall be entered daily in the Bed Head Tickets on the morning visit of the Medical Officer. If the diet and extras are entered by a member of the nursing staff, such order must be initialled by the Medical Officer. The diet for new admissions shall be entered by the Admitting Officer according to the time of admission, viz, half-diet and extras for a patient admitted after 12 noon. When necessary, a supplementary order for new admissions may be placed with the supplier.

If a patient who has been admitted, has died or been discharged, and was for any portion of the previous day in the hospital without a diet for that day having been ordered, such patient should be accounted for in the "No Diet"column of the analysis of Diets and shall be added to the total number of diets, so as to arrive at the correct "Daily Number in Hospital". (If any have died or been discharged at or before the morning visit, no diet shall be ordered for them, as the diet ordered on the previous day ends with the midday meals, after which all discharged, as a rule leave.)

When a patient is unable to use a full diet, but is able to use a portion of it, he shall be placed on a half diet.

When a patient (an infant, for instance, or moribund patient) is unable to use any diet, or a patient provides himself with diets from home, he shall be shown in the "No Diet" column in the analysis of Diets, but he shall be included in the "Daily Number in Hospital".

When a patient for whom any diet or extras have been ordered leaves the hospital or dies, the attendant of the ward shall at once inform the officer delegated to order provisions, who shall forthwith inform the contractor and cook and the preparation of further meals of that patient shall be stopped. The fact of discharge or death must also be entered in the diet table, such entry being checked and initialled by the Head of the Institution. The contractor shall be paid only for the meal or meals that were actually issued to such patient, and for the one that may have been in course of preparation, and only for that portion of extras actually used or were being prepared.

The meals or extras that may have been actually in preparation for such patient should, when suitable, be used for new admissions or when there are no new admissions, shall be distributed amongst other patients.

The Officer-in-charge may at his discretion allow a patient to provide himself with a diet suitable for his case, provided that such food is brought to the hospital at the appointed hours.

21.13 DIET SCHEDULE

A chart showing the programme of diets for the week shall be displayed in each ward, in Sinhala and Tamil.

For those admitted after mid-night, suitable extras shall be ordered until they are provided with the prescribed diet for the next day.

After the visit of the Medical Officer to the wards, the particulars of the diet shall be extracted from the Bed Head Tickets and entered in the Diet table (form Med. 31a) extras being entered in the Table of Extras (form Med. 32a).

The total number of diets shall be entered in the relevant order form and the provisions required for those diets worked out in accordance with the scale and together with the extras entered in the relevant portion of the order.

The provisions shall be taken over in the presence of the kitchen Stewardess or Cook who is responsible for the preparation of the meals. A proper distribution sheet shall be prepared according to the diets to be issued to each ward. In institutions where there is no Stewardess, this will be done by the officer ordering the provisions. The Head of the Institution shall see that the meals are properly, hygienically and tastily prepared before distribution is made. Distribution shall not be left in the hands of the cook in any institution. When a Kitchen Stewardess is not available other suitable arrangements shall be made for supervision of the distribution' by the Head of the Institution.

21.14 HOSPITAL EMPLOYEES' DIETING

For the purpose of dieting hospital employees a separate diet table shall be maintained. This shall be entered daily by the officer who marks the attendance.

In the distribution, diets to servants shall be served first so that after distribution is completed any remaining shall be further distributed to the patients.

Hospital employees are strictly prohibited from removing any article of diet from the institution. Meals provided for them shall be consumed on the premises.

Diet shall not be ordered for employees if they are on leave and unable to call at the institution for meals. There is no objection to providing them with diet if they are on leave provided they call for their meals.

Hospital employees shall not accept from contractors either free meals or any gratuitous services.

21.15 DISTRIBUTION

Diets must be served to patients and employees at the following times as far as possible.

a) Afternoon Tea	-	**2.30 p.m.**
b) Evening Meal	-	**5.30 p.m.**
c) Morning Tea	-	**6.30 a.m.**
d) Noon Meal	-	**11.30 a.m.**

Extras shall also be given at these times except when considered necessary to be given at other times. The hour and date when a patient is discharged from or dies in hospital shall be entered in the diet table and the bed head ticket. The diet table shall be initialled on the same day by the Head of the Institution.

CHAPTER 22

AMBULANCE SERVICE

22.1 INTRODUCTION

The Ambulances catering to the transportation of patients are purchased from State Funds and the financial aid received from Foreign Governments and International Agencies. The expenditure incurred annually in the maintenance and operation of these ambulances is very large. With the sharp increase in the price of fuel and lubricants and the high cost of spare parts, it is absolutely necessary that the greatest economy is exercised in the use of transport. The expenditure incurred on maintenance and the wear and tear of vehicles etc. should be reduced to minimum. Further,

i) The responsibility for the proper use and maintenance of Ambulances rests with the Officer-in-charge of the Institution. He should conform to all instructions regarding care and maintenance of the Ambulances.

ii) All journeys should be sanctioned by him or by an officer authorized to act on his behalf.

iii) A journal should be maintained by the Officer-in-charge of the Ambulance. An extract of the journal should be forwarded to the D.D.H.S.

iv) A similar journal should be maintained by the Driver of the Ambulance and should be checked and initialled daily by the Officer-in-charge.

v) Ambulance should be marked on the top left-hand corner of the windscreen with the lettering in Sinhala denoting the Institution to which the vehicle is attached.

22.2 USE OF AMBULANCES

i) To transport cases of serious illness from smaller hospitals, and

Maternity Homes to the Institution to which Ambulance is attached or directly to the Base/Provincial/Teaching Hospital.

ii) To transport urgent maternity cases within the area served by the Ambulance, to the Institution to which the Ambulance is attached, when summoned by a Family Health Worker.

iii) To transport similar cases from the Institution to which the Ambulance is attached, to the Base/Provincial/Teaching Hospital.

iv) To transport chronic or convalescent cases from the major Institution to Special Institutions intended for such cases, or back to small Institutions. (back referral).

v) To transport cases of serious injury within the area served by the Ambulance to the Institution to which the Ambulance is attached when summoned by an Officer i/c., of the Police or by a Divisional Secretary.

vi) Ambulance may also be used to transport patients to any other Hospital from a Teaching/Base/Provincial Hospital on the return journey: (Preferably on the return route).

vii) Ambulance should be used only for the transport of patients in the above mentioned cases, and such transport should be done free of charge.

viii) Ambulance should not be used for the transport of Medical personnel or for any other purpose except with the prior approval of the PDHS.

ix) On very urgent and special occasions, an Officer i/c., of an Ambulance may authorise the transport of small quantities of drugs from Medical Supplies Division/Divisional drugs stores, on the return journey. Such small quantities of drugs should be packed under the seats and the Driver should be instructed not to load them on the Stretchers and the Seats under any circumstances.

x) With a view to minimising the trips, all Drivers of Ambulances should be instructed to comply with the following instructions strictly:-

a) Drivers should touch down at the Institutions on their way to Higher Level Hospitals and inquire whether there are patients to be transferred to these Hospitals.

(To be done only after consultation with the O.I.C. regarding urgency of case being transported).

b) Such patients should be loaded immediately and the ambulance should be despatched without delay.

c) Similarly on its return journey, the Ambulance should transport patients from Teaching/Provincial/Base Hospital back to any other Hospital on it's way, on the journey back to the Institution.

d) **Priority:** When more than one call is received at the same time for the use of Ambulance, the urgency of the case as assessed by the Medical Officer-in-charge of Ambulance shall determine priority.

22.3 AMBULANCE HIRE AND METHOD OF PAYMENT

i) The Ambulance may be hired by a private party to remove a patient from an Institution to any other Institution on payment of the hire, with the approval of the M.O. i/c., of the Institution.

ii) A fee of Rs. 04/70 per single kilometer should be charged for every journey.

iii) Only one relative is permitted to accompany a patient in the Ambulance. Once the patient is admitted to Hospital even though the mileage for the return journey is also paid, no relative should be permitted to travel back in the Ambulance.

iv) The Head of the Institution should also satisfy himself that the Institution could manage without an Ambulance for the period the Ambulance is away from the Institution on a private hire.

v) The head of the Institution should recover the hire in cash before the vehicle leaves the Station.

22.4 COMMUNICABLE DISEASES AND DISINFECTION OF AMBULANCES

i) Cases of Communicable Diseases should not be transported by Hospital Ambulances, except when they occur in a Government Institution or when summoned by a Medical Officer. The Ambulance should be disinfected immediately after such use.

ii) In disinfecting an Ambulance after transporting a case of infectious disease, the following should be complied with:-

   a) All linen used during transport of the patient should be steamed, or soaked in a bath of disinfectant for at least one hour, before it is given for laundering.

   b) All cushion covers should be removed and seats wiped with disinfectant solution, cleaned and sun-dried and fresh cushion covers put on before re-use.

iii. The interior of the Ambulance should be sprayed with a disinfectant solution, cleaned and dried before re-use and the disinfection should be done under the personal supervision of a responsible officer, i,e., Medical Officer, Asst. Medical Practitioner or Public Health Inspector.

22.5 THE STAFF ATTACHED TO AN AMBULANCE

i) Ambulance Driver.

ii) Ambulance Cleaner. An Ordinary or Sanitary Labourer may be assigned these duties. There should be no objection in allowing one Labourer to continue to work in the Ambulance for a period of six months to one year.

iii) A Hospital Attendant or a trained Labourer should be detailed to accompany the patient. A female attendant or a female labourer should accompany a female patient.

Midwifo should always accompany maternity cases.

22.6 RESPONSIBILITIES OF THE DRIVER AS REGARDS MAINTENANCE OF VEHICLE

i) In addition to the instructions given in the Vehicle log book, the following should be complied with by all Drivers:

a) Daily

1. Clean and wash vehicle;
2. Check water level in radiator and oil level in engine sump;
3. Test brakes and lights;
4. Check tyre pressure, if possible, otherwise every occasion when fuel is taken;
5. Check steering;
6. Start engine and listen for any unusual noises.

Report to the Officer- in-charge all defects and see that they are put to right at once. All defects must be recorded in writing.

b) Weekly

1. Clean under carriage, engine, springs, transmission and steering with used engine oil. The equipment in the vehicle shall also be cleaned.
2. Check and top up oil in the:-
   (a) Sump
   (b) Gear box
   (c) Differential
   (d) Steering box
   (e) Clutch and brake master cylinders.
3. Check, clean and tighten battery terminals. Top up battery cells to required level with distilled water.
4. Check for any rattles, loose bolts and nuts and unusual noises on the run.
5. Clean and oil all tools and check air pressure on all wheels including the spare wheel.

ii) In the case of new vehicles the first servcie should be at 1,000 kms and thereafter at 5,000 kms. The first three services should be carried out at the Workshops of Agents as some of these services are done free, and as per manufacturer's instructions.

iii) Servising at every 2,000 to 3,000 kms.

1. Complete high pressure lubrication service at the approved Service Station.
2. Drain and refill sump with the correct grade of oil as per Manufacturer's instructions.
3. Check battery electrolyte specific gravity.
4. Grease all greasing points and lubricate all points where grease should not be used.
5. Tighten all body bolts and nuts.
6. Get oil filter and air cleaner elements cleaned.
7. Rotate the wheels as follows:- left front wheel to right rear wheel, right rear wheel to left rear wheel; left rear wheel to right front wheel; and right front wheel to go as spare wheel.

iv) At every 10,000 kms:-

1. Drain and refill gear box and differetial with new oil of correct grade.
2. **Air Cleaner** - remove, clean and wet with fresh oil if oil bath type. Otherwise clean element with pressurised air.

22.7 VEHICLE IDENTITY CARD

Every departmental vehicle will be issued a Vehicle Identity Card by the Head Office. This should be kept in the custody of the driver and produced whenever necessary at a fuel station or to an inspecting officer.

22.8 RECORDS TO BE MAINTAINED

The following records should be maintained by every officer-in-charge of a vehicle:-

i) Vehicle Log Book on Form General 267

ii) 8.1.2. - Daily Running Chart on Form General 268

iii) 8.1.3. - The Vehicle Inventory indicating the Requisition No., date of registration,

iv) 8.1.4. - Vehicle File.

These documents should be available for inspection at any time and information contained therein should be up-to-date.

22.9 VEHICLE LOG BOOK

1) Log Book maintained on Form General 267 should be in the personal custody of the officer-in-charge of the vehicle.

2) The necessary information relating to the vehicle at page 7 will be entered at the Head Office, before a vehicle is issued to an Institution.

However, if the necesary particulars have not been entered, the Officer-in-charge must promptly contact the Head Office and get the relevant particulars, and enter the same in the log book.

3) Officer-in-charge of a vehicle should see that all information as indicated below is recorded in the appropriate sections of the Log Book:-

   i) Fuel consumption-with date of verification authenticated by a Staff Officer.

   ii) Annual Licence No. should be recorded.

   iii) Tools & Accessories, No. should be recorded.

   iv) Replacement of battery giving make, number and date of replacement.

   v) Replacement of tyres giving make, number and date of replacement, and milometer reading.

   vi) All major and minor repairs should be recorded.

   vii) Servising - date and meter reading should be recorded.

   viii) Accidents - date of accident, place, name of driver, particualrs of damage, cost of repairs, nature of action taken against the driver if any and reference to file number should be recorded.

4) Whenever a vehicle is released for temporary duty in another Institution, necessary entries should be made at page 22 of the Log Book.

5) Loss of the Log Book should be promptly reported to the DDHS/PDHS explaining the full circumstances under which the loss occurred. The PDHS should examine the cause of the loss and take suitable action to prevent such losses in future. A duplicate should be obtained from Head Office.

CHAPTER 23

SANITATION

23.1 IMPORTANCE

Sanitation in the hospital is one of the important aspects in the patient care services in the hospitals. It is not merely keeping the wards and sanitary annexes clean and tidy, but making the whole environment free of pollution and conducive to the inmates of hospital like a home, It has to create a pleasant environment in and around the hospital to keep up the quality and efficiency of patient care.

23.2 IT INVOLVES;

a) **Sanitation of wards**:- should be kept clean and tidy all the time. Shall be swept and mopped with antiseptic lotion or detergent fluid twice a day before the ward rounds in the mornings and afternoons preferably before 7.30 a.m. and 1.30 p.m.

Floor of all wards shall be regularly washed at least once a week.

Dirt of any description that may be accidently thrown on the floor or elsewhere shall promptly be removed.

Cleaning of walls, doors and windows removal of cobwebs from roofs and eves and drying up of mattresses in the sun shall be done once a week.

Cleaning of lockers, cupboards, tables, dining tables, trolleys, wash basins and sinks should be done daily.

b) **Decoration of Wards**:- Decoration of wards with flower vases, pictures hung on walls (or painted on walls) and potted plants kept along the corridors of wards may be preferred to create a homely environment.

c) **Sanitary Annexes**:- The sanitary annexes should be kept spotlessly clean all the time. It should be washed as freqently as possible. The toilets should be cleaned at least 4 times in the day and twice in the

nights. In the day time it may be around 7.30 a.m., 10.30 a.m., 1.30 p.m. and 4.30 p.m. and in the nights may be around 7.30 p.m. and 4.30 a.m.

Spraying the floor of toilets with antiseptic lotions or detergent fluid is preferred. Protective wear (caps, masks, gloves, plastic aprons and boots) may be provided to sanitary labourers while working. They may be provided with tongs and enamel pails to remove and collect dirty towels, rags, pieces of cloth, papers and sanitary pads thrown into the toilets by patients before flushing.

d) **Debugging** :- It is essential that debugging of furniture and beds should be carried out at regular intervals. The nurses should ensure the debugging under the supervision of the PHI of that area.

e) **Drains**:- Drains in the hospitals must be maintained perfectly for the complete draining of the surface water and waste water from kitchen and bathrooms. Drains should be cleaned and blocks removed daily to allow the free flow of drain water without stangnation.

f) **Sewerage:**- The sewerage lines, catch pits, soakage pits etc. should be supervised regularly and kept without blocks. Each Institution may be provided with cleaning rods for the removal of such blocks when noticed.

g) **Surroundings** :- Around the wards,. along the corridors, along the drains, around the catchpits, soakage pits and water sumps, grass to a width of about 2 feet should be cut neatly and flower plants planted. Implements for such purpose such as mammotty, vesikatty, crowbar etc. should be provided.

h) **Lawns:** - All lawns in the hospital premises should be mowed and kepto clean. Wherever possible, seats made up of concrete or iron must be provided for the patients to sit and relax. Rest park for patients and play parks for children may be maintained in lawns wherever possible. A lawn mower may be provided.

i) **Flower Gardens:**- Flower garden is a must in every hospital. It may be grown in front, along the sides of wards and corridors. Shady trees may be grown in the hospital premises wherever possible.

j) **Backgardens** :- Backgarden should be regularly weeded and maintained. Best is to allow the employees to grow vegetables if they wish. It may be divided into small plots and allocated to employees for them to maintain.

k) **Kitchen** :- The kitchens of the hospitals shall be kept at all times clean and in good condition and the utmost attention shall be paid to the cleanliness of the meatsafes, chopping blocks, kitchen tables, vessels and utensils, walls, floors sinks the fly proofing etc.

All minor staff shall wear aprons and caps provided to them, while working in the kitchen. The head cook/diet stewardess shall be responsible for the condition of the kitchen and all the utensils used therein.

l) **Labour room**:- Labour room shall be kept clean and tidy every time. It should be mopped at least twice a day. Blood stains should be

removed then and there. Wastes and placenta are disposed promptly. The soiled linen may be removed and washed promptly.

Cleanliness in the labour room is the responsibility of the midwife/nursing officer.

m) **Mortuary** :- Mortuary should be sited in a suitable place well away from the wards and fitted with refrigerator facilities to keep the dead bodies until claimed by the relatives. It may be provided with a cart to carry the unclaimed bodies to the burial grounds. A separate stretcher should be used for the transport of dead bodies from wards to mortuary.

23.3 WHO IS RESPONSIBLE FOR SANITATION

Sanitation is mainly the responsibilty of the administration. It should be supervised by the House Officer, Sister/Senior Nurse in-charge, PHI /Range and Overseer.

Maintaining cleanliness in wards, sanitary annexes, drains of close proximity are the responsibilities of labourers attached to the respective wards. These are to be supervised by the nursing officers in-charge of the ward. Maintenance of lawns in the hospital, flower gardens in front, garden behind, patients rest park and children's play park are the responsibilities of overseer.

Disposal of Refuse

Proper disposal of refuse is an important activity, otherwise there is a constant danger of breeding of flies, mosquitoes and emanation of offensive odours.

Dust bins with covers should be kept in the wards for collection of refuse in the wards. These are to be emptied as frequently as possible, but at least twice a day and whenever necessary. After emptying; the dust bins should be washed dried and kept. Plastic dust bins are preferable. For taking refuse to where the refuse is deposited for final disposal, hand carts may be provided.

Final disposal of refuse

There are different methods of disposal of refuse. Whenever local authorities are available arrangements could be made with them for final disposal by taking them to council's dumping grounds. Dust bins (big ones) may be installed in the hospital in an accesible place for collection by the local authorities. Where such facilities are not available, it should be properly trenched or burnt. Kitchen waste and waste meals from the wards may be collected separately and disposed suitably.

Blades, needles and sharps should be collected separately in disposable bags and are burnt and disposed suitably. Clinical wastes, pathological wastes etc. should be disposed suitably preferably by incineration.

Installation of incinerators to large district hospitals is recommended.

Pest and rodent control

Every step should be taken to control pests and rodents in the hospitals. Breedingplaces of flies and mosquitoes should be explored. If identified, remedial action must be taken to destroy them. They are bound to breed in refuse dumping pits and cowdung; mosquitoes are bound to breed in soakage and catch pits and sewerage lines. To control flies Dipthrex may be used in the ward and dumping pits. Rodents may be either trapped and destroyed or poisoned.

Cattle Nuisance

Cattle shall not be allowed under any circumstances to graze or to be kept in any hospital premises. A suitable perimeter fence with barbed wire or parapet wall should be put up to prevent cattle trespass. Cattle traps may be constructed at the gates.

Stray Dogs & Cats

Stray dogs and cats should be eliminated from the hospitals. DMO/MO I/ C shall get them disposed of with the assistance of PH Veterinary Services.

Sanitation Register

The services of the PHI of the area is available to the MO I/ C of the Institution to supervise the maintenance of sanitary conditions of an Institution and its surroundings. If there is no hospital PHI, the PHI/ Range where the hospital is situated is responsible for overall supervision. He should visit the hospital as frequently as possible. He maintains a sanitation register where he should make his observations and suggestions regarding sanitation. This register should be submitted to Head of the Institution who then takes suitable actions on the recommendations of PHI. Range PHI should visit the hospital at least once a week.

Water Supply

Usually the water supply to a hospital is from the town supply. In places where there is no such supply, the water is obtained from a separate source such as spring or well. In all instances the water supply should be safe and adequate.

All water for drinking purposes shall be boiled and filtered before use. The water could be boiled in the wards by providing electric kettles or boilers to the wards. Where electricity is not available it may be boiled in the kitchen and placed in receptacles for drinking in the wards.

Where the water supply is not from the town supply, the range PHI should regularly chlorinate according to the formula laid down. It should be preferable to test water samples from these wells, sumps or other sources from time to time for bacteriological and chemical contamination.

Removal of Dead Bodies

Dead bodies should be kept separately in the ward until removed to the mortuary. Should be transported in a separate trolley or stretcher meant for this purpose.

Disposal of Unserviceables

The unserviceable items from the wards such as General Stores Items, linen, hardware or surgicals should be condemned by a board of survey and disposed of suitably from time to time. Under no circumstances, should these unserviceable items, such as mattresses, linen or hardware be stacked up in the corridors or wards.

CHAPTER 24

COMMUNICATION

24.1 INTRODUCTION

Communication is the process by which two or more people exchange ideas, facts, feelings or impressions, in ways that enable each to understand the meaning, and intent of messages used for the purpose.

24.2 ELEMENTS OF COMMUNICATION

i) **Source or sender :**
Person or organization from which the communication commences.

ii) **Message :**
What is actually transmitted is a selection from available information.

iii) **Channel :**
It is the route by which the message is transmitted.
This is also sometimes referred to as the vehicle or method.
There are three main groups of methods.

a) Interpersonal
b) Group
c) Mass Media

In a hospital setting, the widely used channel is Interpersonal or person-to-person, communication.

It is a form of communication involving face-to-face interaction between source and receiver.

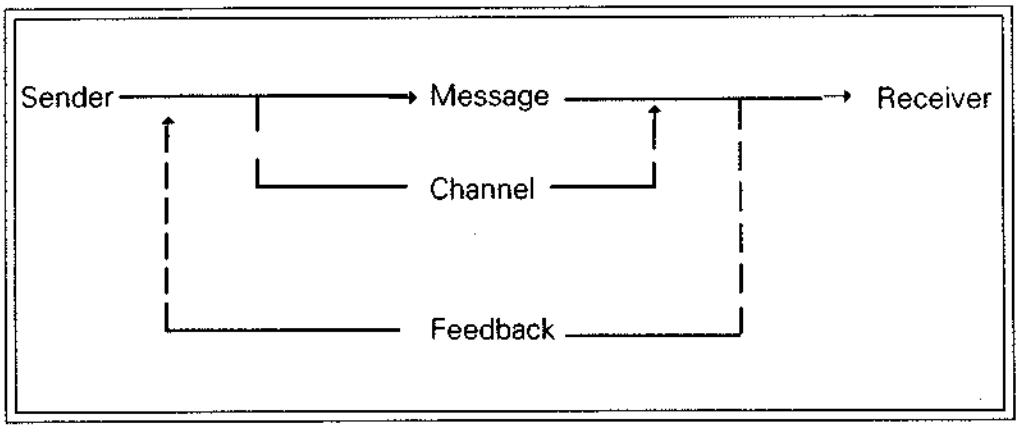
iv) **Receiver :**

Person or organization which receives the message.

v) **Feedback :**

Reaction of the receiver after receiving the message.

vi) **The communication model :**



24.3 FACTORS FOR EFFECTIVE COMMUNICATION

Unless you have a clear and complete understanding of the message, or concept you are presenting, effective communication may not take place. Therefore before every act of communication, give thought to the following questions.

i) **WHO** - Who should be told?
What kind of people are they?
What are their Educational backgrounds, Training & Skills?
Do they know enough about this subject to act on my message?

ii) **WHAT** - What is the purpose of this message?
What am I trying to say?
What background information should I pass on?
What things should I leave out?
What is the best medium to use?

iii) **WHY** - Why is it important?
Why should they receive the information?

iv) **WHEN** - When should I tell them?
When will they be ready to receive the information?

v) **HOW** - How should this be communicated?
How can I be sure they will understand, learn and act on my message?

24.4 PROBABLE RECEIVERS OF YOUR MESSAGE

i) **INTERNAL**- (Staff)

- Sisters, Nurses, Attendants
- Pharmacists, M.L.TT.
- Cooks, Watchers, Drivers etc.
- Skilled and unskilled Labourers.

ii) **EXTERNAL**

- Patients, their relatives and friends.
- Officials of other government & non-governmental agencies of the area.
- Well wishers of the hospital.

24.5 OPPORTUNITIES FOR COMMUNICATION

i) Staff meetings.

ii) Ward meetings.

iii) Meetings, formal and informal with individual members of the staff.

iv) Instructions - message book, notices to staff Meetings, both individual and collective.

v) Patients, relations and their friends.

vi) Members of the other govt. and non-govt. agencies.

vii) Well wishers.

viii) Information conveyed via audio visual aids.eg. Posters, notices, leaflets, booklets etc. (These can be at the O.P.D., clinics, corridors and wards etc).

Don't forget that adult vision has a range of only up to 2 m. in height and the notices should not be put up above this height.

24.6 CHARACTERISTICS OF A GOOD COMMUNICATOR

i) Ready to listen to others and their opinions by providing opportunity for dialogue, discussion and participation.

ii) Firm but pleasant (Does not show anger), Uses simple language and words rather than technical jargon.

iii) Keeps this audience happy and comfortable.

iv) Looks for ways to reward success (eg. Praise the members of the staff doing right things).

v) Checks the feed-back. The reaction of the receiver is important to measurE understanding and success.

24.7 SOME IMPORTANT GUIDELINES

i) **Telephone:**

a) Try to keep it in working order.
b) Have emergency numbers at hand.
(eg. Divisional Drug Stores, Police, MOH, MOO, etc.)
c) Train people to answer the phone politely.

ii) **Call Book :**

a) Maintain a call book
b) Keep it at a prominent place.

iii) **Maintain Line of Communication :**

When giving instructions, maintain line of communication. eg.

a) To labourer through overseer or nurse-in-charge as the case may be.

b) To nurses and attendants through the sister-in-charge.

c) To DGHS through DDHS/PDHS/DDGHS.

iv) **Identify Skills and Talent in the Institution :**

a) There may be persons with good hand writing, artists, dramatists, singers, forceful speakers etc. in your staff.

b) Identify their skills and talents and make use of them, for example, for writing of notices, posters etc, and Presenting of Health Education activities.

CHAPTER 25

FIRE AND SAFETY AWARENESS SERVICE

25.1 INTRODUCTION

Fire and Safety awareness in hospitals is of utmost importance to its employees. Whatsoever be the cause of fire, the devastating effects it has are too well known.

In a hospital, in addition to the working staff, there are infirm and helpless patients, some of whom cannot move without assistance to safer places. Hence the situation caused by fire in hospitals becomes much more complex and intricate than in other places. The safety of patients and employees is the prime interest and responsibility of the hospital in the event of a fire.

25.2 OBJECTIVE

The safety programme must be geared to the primary objective of providing protection to the patients, incapable of seeking their own safety without assistance.

The programme, in its essence, should consist of a carefully documented plan clearly instructing the personnel on what should be their specific duties in case of fire.

Regular inspection of fire hazards, adequate provision of fire emergency equipment and correction of fire safety deficiencies are essential. Further, a systematic and continuing course of periodic fire drills is vital for successful fire and safety awareness among the hospital employees.

25.3 CLASSIFICATION OF FIRE

(i) Fires involving solid materials usually of organic nature in which combustion takes place with the formation of glowing embers. e.g: Wood, Paper, Textile.

- **Class A.**

(ii) Fires involving liquids or liquefiable solids. e.g: Oil, Fat, Burning liquids.

- **Class B.**

(iii) Fires involving gases.

- **Class C.**

(iv) Fires involving metals. e.g: Magnesium, Sodium, Titanium.

- **Class D.**

(v) Fires involving electrical hazards.

- **Class E.**

25.4 PREVENTION OF FIRE

Fire can be prevented by:-

(i) Frequent inspection of fire sensitive areas.
e.g. Operating Theatres.

(ii) Regular checks of electrical installations by respective local authority.

(iii) Extra care in handling inflammable items and safe storage of same.

25.5 FIRE EXTINGUISHERS - THEIR APPLICATION

CLASS	EXTINGUISHING PRINCIPLE	A B C ALL PURPOSE POWDER Blue Colour	WATER Red Colour	B C E Yellow Colour
CLASS A Fires involving solids	Water Cooling or Combustion Inhibition	Excellent Rapid flame knock-down & excellent protection against reignition	Excellent Good penetration & rapid cooling of combustible below fire point. Prevents re-ignition	Rapid Flame knock down
CLASS B Fire involving liquids or Liquefiable Solids	Flame Inhibiting or Surface Blanketing and Cooling	Excellent Rapid flame knockdown	No Water will spread the fire	Rapid flame knockdown
CLASS C Fire involving Gases	Flame Inhibiting	Yes	No	Yes
CLASS D Fire involving Metals	Exclusion of Oxygen and Cooling	No. Use of wrong medium could cause explosion	No. Use of wrong medium could cause explosion	No. Use of wrong medium could cause explosion
CLASS E Fire involving Electrical Hazards	Flame Inhibiting	Yes Non Conductor	No Water is a conductor	Excellent Non-conductor leaves no residue

25.6 EVACUATION

This refers to the movement of patients in case of a fire emergency. This does not necessarily imply emptying of the building. Rather it denotes the removal and shifting of patients from the area endangered by fire to a safe place.

Priority of evacuation:

i) Lying cases

ii) Ambulatory cases

iii) Equipment.

25.7 TRAINING AND DRILLS

Successful handling of a fire break-out in a hospital will greatly depend on the skills of its staff in such an eventuality.

This becomes feasible only by providing the hospital employees with regular training on handling of the available fire fighting equipment. In addition, frequent fire drills without the movement of patients should be conducted with the assistance of the respective local authorities. All patients should be informed in advance of all such fire drills.

25.8 MAINTENANCE OF RECORDS

i) All available fire fighting equipments should be periodically checked by the relevant officials and the corresponding records and reports maintained by the head of the Institution.

ii) The electrical installations should be inspected by the local electrical authority and a certificate and report to this effect must be maintained by the head of the Institution.

iii) All records of actual fire break-out, however small it might have been, should also be recorded indicating the cause of fire and other relevant details.

25.9 DUTIES

i) Person at the site of fire

a) Verify the extent of fire.

b) Inform the immediate superior on duty in that area.

c) Take action to put off the fire.

ii) Sister or Nurse-in-charge

a) Organize persons for fire fighting using fire extinguishers or by improvisation.

b) Remove all inflammable items from the line of fire.
c) Switch off the Main Switch.
d) Arrange for emergency light.
e) Organize the evacuation of the patients with the assistance of Medical Staff.

iii) Telephone Operator

a) Inform DMO, Doctors on Duty.
b) Inform the Police and Fire Brigade.
c) Communicate to other hospital staff.

iv) MS/DMO

a) Verify the truth.
b) Mobilize man-power from other parts of the hospital.
c) Request for external assistance.
d) Activate disaster plan.

v) Security/Watchman

a) Take control of the situation.
b) Request for more staff to assist.
c) Assist in fire fighting with available resources.
d) Help in patient evacuation.
e) Organize the safety of hospital equipment and patient belongings.
f) After fire is extinguished, arrange for salvage operation.

25.10 CONCLUSION

The need for an adequate fire and safety awareness for hospitals should be emphasized. The dictum **'Prevention is better than cure'** holds true.

Hospitals being particularly vulnerable to fire hazard, a compact fire emergency programme based on a fore mentioned guidelines is mandatory.

CHAPTER 26

LINEN SERVICE

26.1 INTRODUCTION

It is necessary to provide a sufficient quantity of clean linen at regular intervals for proper patient care. Frequent change of linen is a preventive measure to check cross infection.

26.2 OBJECTIVES

i) To prevent cross infection.

ii) To provide a clean and pleasant environment for the patients.

26.3 TYPES OF LINEN USED IN PARTICULAR PLACES

i) **Hospitals Wards**

Screen Cloth
Hand Towels
Window Curtains
Dusters
Bed Sheets
Draw Sheets
Mattress Covers
Pillow Cases
Towels
Checked Cloth
Shirts
Jackets

ii) **O.P.D.**

Screen Cloth
Door Curtain

Window Curtains
Dusters
Hand Towels

iii) **Operating Theatre & Labour Rooms**

Overalls
Nurses Frocks
Pyjamas
Pyjama Shirts
Masks
Caps
Operating Theatre Sheets
G.S. Towels
Leggings
Wrapping Towels

26.4 PERIODICITY OF CHANGING LINEN

i) **Ward bed Linen** - once in 3 days

To receive a new patient

After soiling

After death of a patient

ii) **Curtains** - Once a week

Hand Towels - Change twice daily

Operating Theatre Linen - After each operation

26.5 LINEN NEEDED IN PREPARING AN ORDINARY RED IN A WARD

Bed sheets Large	-	02
Draw Sheets	-	01
Mattress Covers	-	01
Pillow Cases	-	02
Mackintosh	-	01 Meter

Sufficient sets should be available in a ward to cater to shortfall of laundered linen during rainy season.

26.6 PROCUREMENT

i) O.I.C. shall take suitable measures to maintain adequate supply of linen to the hospital.

ii) For this purpose he shall transmit his annual requisition through the D.D.H.S. to the P.D.H.S. in time.

26.7 CONTROL OF LOSS OF LINEN

i) To minimise losses, all staff working in the wards needs to take adequate care in protecting linen.

ii) All staff working in wards is responsible for the protection of Govt. Property (General circular No. 427)

iii) Prepare sub - inventories to fix responsibility.
Inventories to be checked weekly and shortages, reported.
Prevent private linen usage in the wards.

iv) Hospital linen should be stampted, "D.H.S." Name of the hospital & ward/section to be marked with indelible ink.

26.8 CONTROL OF INFECTION

i) Infected linen should be kept in a separate container.
ii) Handle with care to prevent spread of organisms.
iii) Containers used to store soiled linen must be cleaned with detergent and water weekly.
iv) Infected linen should not be put on the floor.
v) Place infected linen into a container with a dilute disinfectant solution, for one hour.
vi) Linen containers must not be allowed to overflow.
vii) Linen must not be sorted out inside the wards or on corridors.
viii) Linen from scabies and lice infected patients should be treated as soiled linen.

26.9 DHOBY SERVICE

i) Ideal system would be to have a daily dhoby service.

ii) Soiled linen from theatre, labour room and linen soiled with excreta etc. should be washed by a sanitary labourer, and dried before giving to the dhoby.

26.10 MAINTENANCE OF INVENTORIES

i) Main Inventory is with a clerk.

ii) All items received in Ward or Unit should be included in the unit Inventory and acknowledged. (Inventory Book - Health 501)

iii) Nursing Officer-in-charge shall maintain the following books and registers;

1.	Linen Request Note Book	-	Health - 500
2.	Linen Condemning Book	-	Health - 503
3.	Laundry Book	-	Health - 87

iv) Issues of items to subordinate staff will be under sub-inventories.

v) Nurse-in-charge shall check all the sub-inventories once a week.

vi) If a shortage is detected, she shall inform the D.M.O. in writing, without delay.

vii) Any linen torn but sewable shall be sewn with the assistance of a seamstress.

viii) All clean and soiled linen should be stored in their proper places, under lock and key.

ix) Keys of the linen cupboard should be safely kept by the Nurse-in-charge.

x) Minimum amount of Linen, necessary shall be issued at any one time.

xi) Linen needed for the night shifts shall be issued to the Night Nurse.

xii) All washable soiled or dirty linen shall be handed over to the dhoby for washing. (use Laundry Book - Health - 87)

xiii) On receipt of clean linen the Nurse shall prepare Health 87 in triplicate and send the original and duplicate copies to the D.M.O's office.

26.11 CONDEMNING OF LINEN

i) Sort out un-useable linen for condemning.
ii) Nurse shall bundle them according to the Inventory numbers and label.
iii) Fill-up General 47 Form.
iv) Obtain authority from the O.I.C. to condemn the linen.
v) The nurse shall produce the linen listed for condemning, to the Board of survey.
iv) Once the Board of survey approves the condemning of the linen, obtain written authority from the board of survey to write off.

26.12 SOME GENERAL REMARKS

i) Materials shall be in cotton and washable.

ii) Private linen should not be used except for personal attire.

iii) All patients who are going to operating theatres and labour-rooms should be in hospital linen.

iv) Public donations shall be accepted but should conform to norms of hospital linen.

CHAPTER 27

LANDSCAPING

27.1 NEED FOR LANDSCAPING

A clean, neat and beautiful hospital environment will provide pleasant surroundings and improve staff morale and patient satisfaction. Landscaping the garden is an essential prerequisite for beautifying the premises.

27.2 SELECTION OF STAFF

Among labourers, usually there are some individuals who are interested keen and talented in landscaping. These can be handpicked and employed for landscaping.

27.3 TRAINING OF STAFF

It would be ideal if basic training would be arranged in a place like a Botanical Gardens.

27.4 MOTIVATION

i) Individual blocks should be allocated to each individual, to create a sense of responsibility and personal interest.

ii) An annual competition to select the best kept block will infuse extra interest and keenness. A certificate can be issued or a prize given to the winner.

iii) Personal appreciation by the head of the Institution, and by other members of the staff will spur the individual to perform better.

27.5 SUPPLY OF EQUIPMENTS

Following basic equipments should be supplied.

1. Mammoties

2. Rakes

3. Manual Grass Cutters, etc.

Power lawn mowers and hand tractors with attached slasher to be provided to Institutions with vast garden space.

27.6 SUPPORT FROM THE PRIVATE SECTOR

Private sector organizations and N.G.O. can be invited to maintain blocks in the hospital garden in the same way they maintain hospital wards.

CHAPTER 28

BABY FRIENDLY HOSPITAL INITIATIVE

The Baby Friendly Hospital Initiative is a global effort spearheaded by UNICEF and WHO to involve hospitals and health services together with parents and the community to ensure that all babies are breast fed and given the best start in life. The most critical period of a child's life is the first year, and within this, the first six months as a phase of rapid physical and psychosocial development. Breast milk should be the primary food source during this period, as adequate quantities will satisfy virtually all the nutritional needs of an infant for the first four to six months of life. There is growing concern that this traditional practice which was widely prevalent is being threatened by a thriving powdered milk industry, increased urbanization and more working women. Increasing numbers of women are now delivering in hospitals, whilst contributing to a substantial decline in maternal mortality could also adversely affect successful lactation unless there is adherence to hospital practices which protects and supports breast feeding.

Breast feeding, lies at the very core of Child Health, and has received great prominence in all programmes related to the survival, growth and development of children. Scientific evidence in support of the advantages of breast milk and breast feeding for both mother and infant includes its immunological protection against infection, its completeness as a primary food source for the infant, its cost effectiveness and availability, cleanliness, effects on fertility on the mother and its beneficial psychosocial impact on the child.

Even the most sophisticated and carefully adapted formula is not a proper substitute for human milk, due to species-to-species differences in protein composition and fat content. Although not completely reliable, breast feeding can have a contraceptive effect as long as there is lactation amenorrhea. While not excluding it, artificial feeding from an early age cannot ensure skin-to-skin and eye-to-eye contact between mother and breast fed child that ensures proper bonding. Artificial feeding from an early age has been regarded as the

world's biggest experiment without controls in terms of its potential (long) range effects such as atherosclerosis, hypertension, obesity and allergy to non-specific proteins.

There is a general belief that most Sri Lankan mothers breast feed their babies. Data on exclusive breast feeding is surprisingly limited. According to 1982 study, 99 percent of mothers initiated breast feeding, but at the end of the first month of life, only 87 percent of rural sector infants and 64 percent of the urban sector were exclusively breast fed. This further declined by the end of the third month to 41 percent urban, 47 percent town and 60 percent rural sectors. Formulas had been introduced during the third month for 58 percent in the urban, 55 percent in the town and 48 percent in the rural sector. This proportion further increased at six months. The commonest reasons were "not having enough of milk", while only 10 percent thought that it was because they had to go back to work.

Today the hospital is the initial contact with 80 percent pregnant mothers, particularly at delivery. This encounter must be utilised to put an infant on the correct path to nutritional wellbeing. Creating the correct understanding about lactation needs the strong support of health workers.

To achieve the breast feeding goal, reassessment of current hospital procedures and practices, particularly during the perinatal period is important. A re-emphasis on breast feeding is needed. Action which can contribute towards successful breast feeding may, or may not be included in hospital routines although practices which inhibit lactation could be taking place. The unfriendliest act for the new-born is to deny breast milk and put him on infant formula as a poor substitute.

The principal goal of the BFHI is to mobilise the health care system and health workers to promote and support breast feeding and to create a demand by women for hospitals that encourage breast feeding. The title has been used to emphasise that hospitals can play an important role and to give formal recognition for their support of breast feeding. The following could be regarded as the most essential features of a Baby Friendly Hospital:

a) Availability of a practical set of guidelines to help in the implementation of the effective programme to promote breast feeding. Assumption of knowledge about successful lactation among health workers is not good enough. Thus there should be a written breast feeding policy that is routinely communicated to all Health Care Staff. It should also be visible and well displayed to be seen by all Health Staff;

b) All Health Staff must be trained in skills necessary to implement this policy;

c) Mothers need to be shown how to breast feed and how to maintain lactation even if they are separated from their infants. This is also relevant to premature babies and caesarean mothers.

d) New born babies should not be given any food or drink other than breast milk, unless medically indicated. There should be no promotion of infant foods or drinks, other than breast milk, displayed or distributed to mothers, the staff or the facility;

c) There should be rooming-in on principle. The mother and baby must be allowed to be together for 24 hours;

f) Breast feeding on demand should be encouraged;

g) No artificial teats or pacifiers should be given to breast fed infants;

h) Mothers when discharged, should be advised to follow-up with the local public Health Midwife and MCH clinic in terms of continued support for successful lactation.

It is essential that the authorities of all medical Institutions look into the general practices of breast-feeding in their maternity units and take appropriate measures to promote exclusive breast-feeding among mothers who deliver in thejr Institutions.