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In
B.L. KAPUR MEMORIAL HOSPITAL
(FEBURARY 15th 2020 to MAY 15th ,2020)

A Report
By

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Post-Graduate Diploma in Hospital and Health
Management
2018-2020



International Institute of Health Management Research , New Delhi

ACKNOWLEDGMENTS

First of all, I would thank God for enabling me to complete this report on “KNOWLEDGE OF INFECTION CONTROL PRACTICES AMONG HEALTH CARE WORKERS”.

Successfully completion of any type of project requires helps from a number of persons. I have also taken help from different people for preparation of this report. Now, there is a little effort to show my deep gratitude to that helpful person.

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Last but not the least I would like to thank my friends who have helped me a lot.

Dr. Sandeep Kaur

PG/18/065

PGDHM (2018-2020)

IIHMR, Delhi

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Dr. Sandeep Kaur student of Post Graduate Diploma in Hospital and Health Management (PGDHM) from International Institute of Health Management Research, New Delhi has undergone internship training at B.L. Kapur Memorial Hospital from 15th February 2020 to 15th May 2020.

The Candidate has successfully carried out the study designated to her during internship training and her approach to the study has been sincere, scientific and analytical.

The Internship is in fulfilment of the course requirements.

I wish her all success in all her future endeavours.

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Certificate of Approval

The following dissertation titled **“KNOWLEDGE OF INFECTION CONTROL PRACTICES AMONG HEALTH CARE WORKERS”** at **“B.L. KAPUR MEMORIAL HOSPITAL”** is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **Post Graduate Diploma in Health and Hospital Management** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation.

Name

Signature

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Dr .S.B. Arora

Certificate from Dissertation Advisory Committee

This is to certify that **Dr. Sandeep Kaur**, a graduate student of the **Post- Graduate Diploma in Health and Hospital Management** has worked under our guidance and supervision. He/ She is submitting this dissertation titled “ KNOWLEDGE OF INFECTION CONTROL PRACTICES AMONG HEALTH CARE WORKERS” at “B.L. KAPUR MEMORIAL HOSPITAL” in partial fulfillment of the requirements for the award of the **Post- Graduate Diploma in Health and Hospital Management.**

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

Dr. Nishikant Bele,
Associate Professor,

IIHMR Delhi

Dr. Sanjay Durani
Deputy Medical Superintendent,

B.L. Kapur Memorial Hospital

INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH,

NEW DELHI

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled Knowledge of Infection Control Practices among Health Care Workers. And submitted by Dr. Sandeep Kaur Enrolment No. PG/18/065 under the supervision of Dr. Nishikant Bele for award of Postgraduate Diploma in Hospital and Health Management of the Institute carried out during the period from 15th February 2020 to 15th May 2020 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

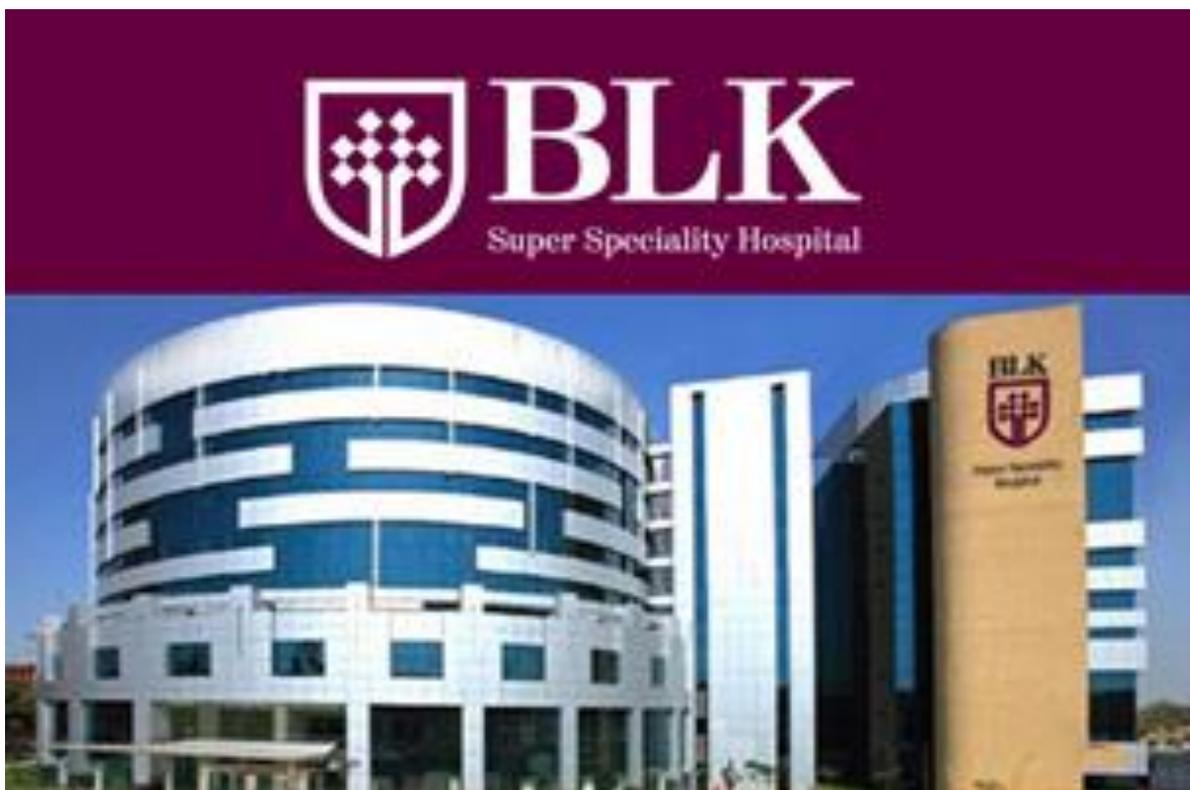
Signature

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PART-1

OBSERVATIONAL LEARNING
SECTION 1: INTRODUCTION



(Source- BLK MEMORIAL HOSPITAL)

LEGACY

Dr. B.L.Kapur, an eminent obstetrician and gynecologist, founded a Charitable Hospital in 1930 at Lahore. In 1947, he affected to post-partition India and founded a maternity hospital at Ludhiana. In 1956 on the invite of the then Prime Minister, Dr. B L Kapur initiated the project for setting up a two hundred bed hospital in Delhi. The hospital was inaugurated by the Prime Minister, Pt. JawaharLal Jawaharlal Nehru on 2nd Jan 1959

VISION

To create a patient-centric, tertiary healthcare organization focused on non-intrusive quality care utilizing leading edge technology with a human touch.

MISSION

- Achieve Professional Excellence in delivering Quality care.
- Ensure care with Integrity and Ethics.
- Push frontiers of care through Research and Education.
- Adhere to National and Global Standards in Healthcare.
- Provide Quality healthcare to all Sections of Society.

SECTION 2

ORGANIZATIONAL PROFILE

ACCREDITATIONS

Dr.B.L. Kapoor Memorial Hospital is accredited by **National Accreditation Board for Hospitals (NABH)** and Healthcare Providers, and **National Accreditation Board for Laboratories and Calibration(NABL)**, for its processes and high quality patient care and pathology services. Recently, it was accredited by International Health accreditation body **Joint Commission International(JCI)**



Fig:1.1(Source: Dr.B.L.Kapur Hospital)

Quality Policy

- Realization of the hospital’s vision and mission.
- Meeting changing needs and expectations of the patients.
- Introduce quality in all its services and ensure continuous improvement of quality through national and international accreditations.

Quality Objectives

- Engage credentialed professionals in all disciplines and services.
- Continuously update the knowledge of the professionals through in-house or external training, participation in academic activities such as CMEs, seminars, symposia, conferences and by providing access to internet and journals and books in the hospital library.

- Promote research.
- Provide state-of-the-art health care with compassion and dignity to all.
- Introduce established newer technologies in clinical services without delay.
- Provide reliable and updated diagnostic services.
- Monitor all critical processes to ensure continuance of quality.
- Create health awareness across the sections of the population of Delhi.
- Introduce postgraduate courses and fellowships in different clinical disciplines.
- Start training programs for paramedical staff.
- Extend health consciousness in the community.
- Provide free health care to indigent patients.
- Ensure the safety of patients, attendants, employees and all stakeholders.
- Practice environmental management systems.
- Continuously enhance customer satisfaction.
- Promote staff development and increase employee satisfaction.
- Establish an efficient Hospital Information System to have paperless and permanent access to patient records and easy analysis of outcomes.
- Establish a quality assurance system to minimize pre analytical, analytical and post analytical errors with laboratories.

Quality Parameters

- The hospital has been designed for maximum safety and comfort of the patients and healthcare providers. It complies with national and international standards for hospital accreditation.
- Clinical governance is an integral part of our practice.
- Robust quality and infection control practices are in place.
- Best in class modular OT's and ICU's with HEPA filters, laminar air flow and 20 complete air changes per hour and access control minimise the risk of infection.
- Isolation rooms have been earmarked in the ICU to treat critically ill infectious patients thus preventing a threat to other patients.
- Stringent "Biomedical Waste Management" practices for segregation, storage, transport and disposal of hospital waste are in place.
- Green building: The hospital is designed to allow sunlight in most of the ICUs and patient rooms as it minimizes stress on the patients and gives them a proper orientation of time.
- The hospital has one of the most advanced "Building Management Systems" which help in patient and employee safety and reduce the excessive burden on the infrastructure and environment.

- Delhi's first automated pneumatic chute system for immediate transfer of samples, medicines, and documents minimizing delays & ensuring safe and hygienic transfer.
- The "Hospital Information System" used is the most advanced and user friendly and helps to reduce medical errors as well as contributes to faster and better patient management.

CENTRES OF EXCELLENCE

- **Centre for bone Marrow Transplant**
- **Cancer Centre**
- **Heart Centre**
- **Centre of Neurosciences**
- **Institute for Liver and Digestive diseases**
- **Centre for Renal Sciences and Kidney Transplant**
- **Institute for Bone, Joint Placement, Orthopedics**
- **Centre for Chest and Respiratory diseases**
- **Centre for Plastic and Cosmetic Surgery**
- **Centre for Child Health**
- **Centre for Critical Care**

SPECIALITIES

Anaesthesia& Pain Management

Bone Marrow Transplant

Cancer Care

Cyberknife Centre

PET Scan

Gastroenterology & GI Surgery

Liver Transplant

Bariatric Minimal Access Surgery

Cardiac Care

Obstetrics &Gynaecology

Neurosciences

Orthopedics & Joint Reconstruction

ENT Surgery & Cochlear Implant

Vascular & Endovascular Surgery

Laparoscopic Gynecology &Foetal Medicine

Infertility & IVF Treatment

Pediatrics & Neonatology

Nephrology & Urology

General Surgery

Plastic, Reconstructive & Aesthetic Surgery

Critical Care

Internal Medicine

Kidney Transplant

Pulmonary Medicine

Endocrinology & Endocrine Surgery

Psychological Medicine

Dermatology

Ophthalmology

Dentistry Medicine & Dental Surgery

Ayurveda

Transfusion Medicine & Blood Bank

Physiotherapy & Rehabilitation

INTERNATIONAL PATIENT SAFETY GOALS

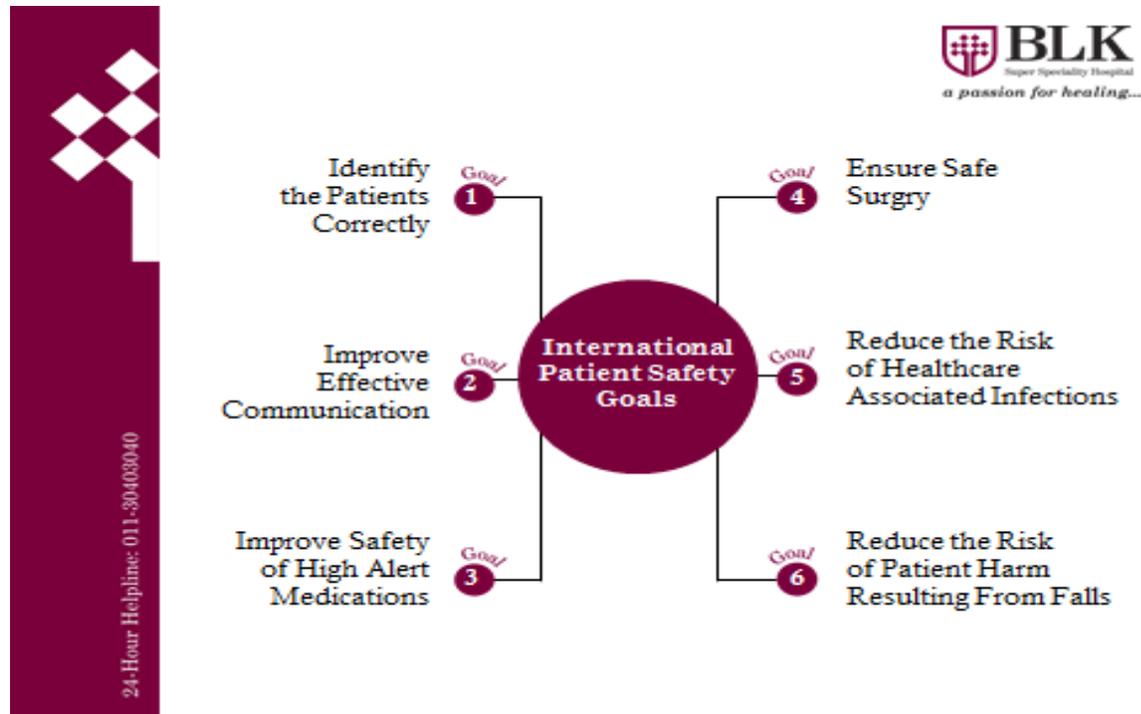


Fig:1.2(Source:Dr.B.L.Kapur Memorial Hospital)

International Patient Safety Goals (IPSG) facilitate commissioned organizations address specific areas of concern in a number of the foremost problematic areas of patient safety.

Six IPSG Goals are

- 1. Identify the Patient correctly**
- 2. Improve Effective Communication**
- 3 Improve Safety of High Alert Medications**
- 4Ensure Safe Surgery**
- 5 Reduce the Risk of Healthcare Associated Infection**
- 6 Reduce Risk of Patient Harm resulting from falls**

IDENTIFICATION OF PATIENTS

At Dr.B.L.Kapur Memorial Hospital,patient identification is done by the use of color coded bands .The following colored bands are used to identify the various categories of patients:

1. **Blue** –All the admitted patients
2. **Yellow** – Allergic patients
3. **Red** - Vulnerable patients
4. **Orange**- Diabetic patients
5. **Grey**- Emergency, Dialysis, Endoscopy, Radiology (If patient is to be given sedation, Radiation Oncology, Nuclear Medicine and Minor OTs)

FACILITY SAFETY AND EMERGENCY CODES

Dr .B.L.Kapur Memorial Hospital has designated Safety committee that does the proactive risk assessment to identify the potential safety and security risk areas.
Various Emergency Codes used in the hospital to alert the staff and action teams at act rapidly in case of emergency events.

Event	Defined code	Number
Fire	Code Red	3055
Cardiac Arrest	Code Blue	3023
Trauma Team	Code Green	3023
Ext. Disaster	Code Yellow	3055
Internal Disaster (Bomb/Fight)	Code Grey	3055
Child Abduction	Code Pink	3055
Death	Code Black	3055

Table 1.2(Source: Dr.B.L.KapurMemorial Hospital)

Code Blue:

Is a case of life saving emergency situation.

Chain of Survival in case of Code blue:

- 1. Patient becomes Unresponsive & there is no breathing or only gasping**
- 2. Call for help**
- 3. Activate code blue**
- 4. Get Crash cart**
- 5. Check pulse**
- 6. Start BLS and CPR**
- 7. The team arrives, BLS/ACLS continues**

The sequence of CPR/BLS:

CAB

- 1. C-Chest compressions**
- 2. A-Airway**
- 3. B-Breathing.**

End-of-Life Care:

- I. The hospital does not have a “DNR” policy. “Do not resuscitate” is not legal**
- II. Respect the patient’s / family’s values, religion, culture preference, emotional, spiritual concerns while giving the palliative care to the patient**

INFRASTRUCTURE

Spread on five acres of land, with a capacity of 650 beds, BLK Super Speciality Hospital is one of the largest tertiary care private hospitals in the country.

Floor Plan

GROUND FLOOR	Emergency
	Transfusion Medicine
	Pre-Anaesthesia Check-up (PAC Clinic)
	Interventional Radiology
	Mammography
	Waiting Lounge
	Reception
	OPD-1

	OPD-2 Diagnostics
	Nuclear medicine,
	Admission
	Billing
	Cafeteria
FIRST FLOOR	International Patient Lounge,
	OPD-3
	OPD-5
	OPD-6
	OPD-7
	OPD-8
SECOND FLOOR	ICUs- MICU,CTVS,ICCU1&2,NSICU,SICU,OTICU,KTICU
	OTS
THIRD FLOOR	IPD rooms
	Bronchoscopy,
	External Counter Pulsation (ECP)
FOURTH FLOOR	IPD rooms
	Birthing Suits
	Labour Room
	NICU
	PICU
FIFTH FLOOR	IPD rooms
	Chemotherapy
	Day care
SIXTH FLOOR	IPD rooms
	Gastro and liver ICU
	HDU
	BMT
SEVENTH FLOOR	plastic and Cosmetic Surgery
	IVF and Reproductive Medicine,
	BMT
	HR
BASEMENT	Radiation Oncology
	Physiotherapy,
	Sports Medicine and Neurorehabilitation
	MRD
	Financial Counseling

Table 1.3

BED PLAN

Category	Total No. of Beds
Nursery	03
NICU+HDU	16
PICU	08
MICU	25
SICU	14
NSICU	11
CTVS	19
ICCU-I + ICCU-II	16
KTICU	5
Operation Theatre	16
OTICU	7
BMT (7 th Floor)	12
BMT (6 th Floor)	12
3A	40
3B	22
3C	35
3D	18
5 th Floor Day-care (MBU)	16
Labour O.T.	1
Labour Room	3
4A	20
4B	13
4C (Labour Recovery)	07+05
4D	12
5A	20
5B	22
5C	35
5D	260
6A	16(GLICU)+15(GLHDU)
6B	21
6C	38
7A	31
7B	Closed
EMERGENCYDEPARTMENT	20 BEDS

Table 1.4

BIOMEDICAL WASTE HANDLING

- Stringent "Biomedical Waste Management" is rehearsed for isolation, stockpiling, transport and transfer of clinic squander. Shading coding for dustbin packs is utilized for waste isolation and transfer.

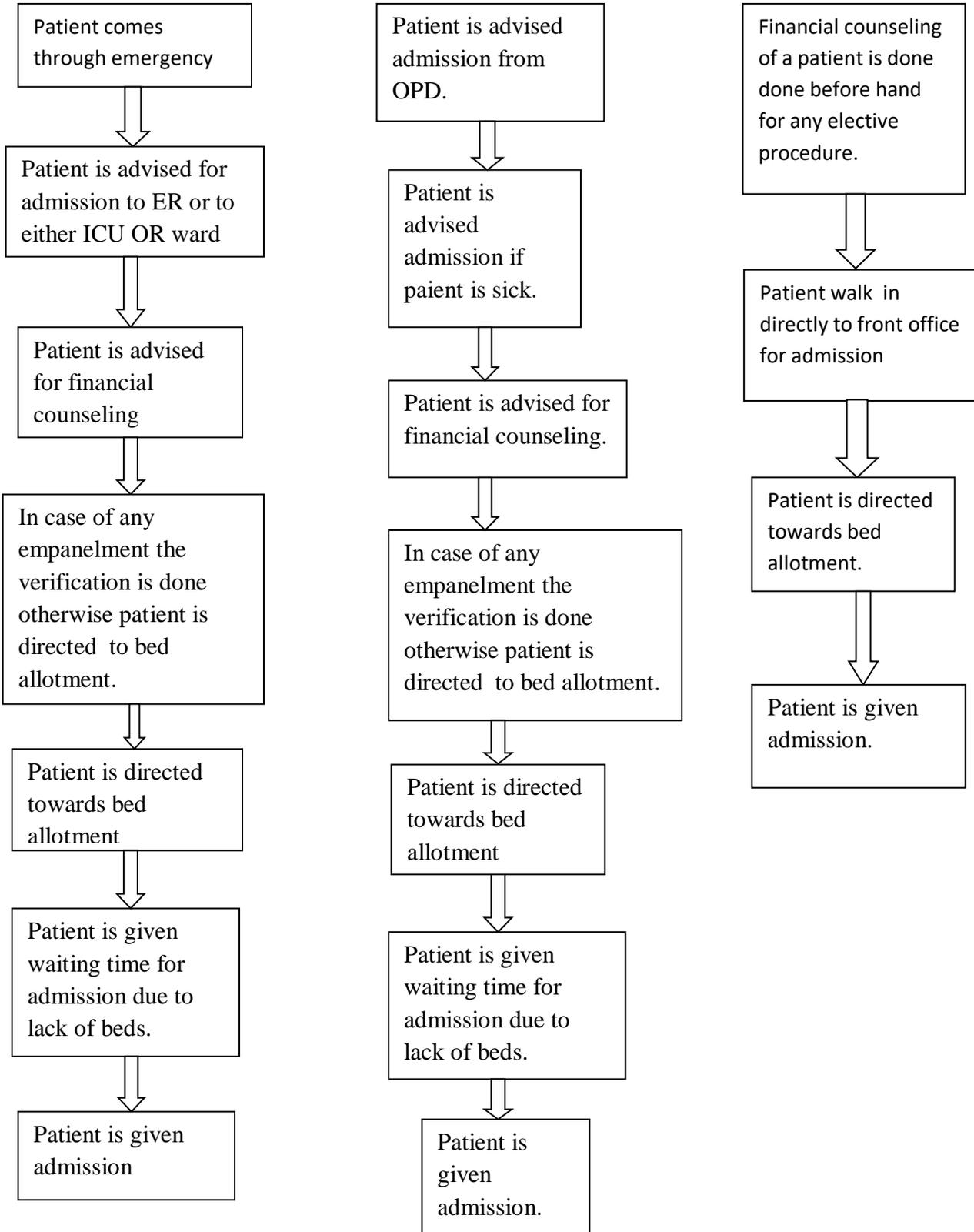
The infographic is titled "BIO MEDICAL WASTE SEGREGATION" and features the JCI Accredited logo on the left and the BLK Super Speciality Hospital logo on the right. It lists eight categories of waste and their disposal methods:

Yellow Bag	Yellow bag with Cytotoxic label	Red Bag	Blue Puncture Proof Container	White Puncture Proof Container	Black Bag	Green Bag	Blue Bag
Infected Non-plastic Waste <ul style="list-style-type: none"> Anatomical waste Tissues Organs Body parts Lab cultures Dead fetus Blood & body fluid, dressings, swabs, cotton etc., contaminated Soiled plaster casts Mask, cap Bags containing residual or discarded blood and blood components Contaminated linen, mattress and clothings Expired and discarded medicines 	<ul style="list-style-type: none"> Cytotoxic drugs Items contaminated with cytotoxic drugs 	Infected Plastic Waste <ul style="list-style-type: none"> IV sets and bottles Catheters Syringes (without needles) Vacutainer (without needles) Urine bags Tubings Gloves Infected plastic 	<ul style="list-style-type: none"> Broken, discarded and contaminated glass including medicine vials and ampoules except those contaminated with cytotoxic wastes 	Sharps <ul style="list-style-type: none"> All Needles, Scalpels, Lancets, Blades, Outdewires, Trocar, Biopsy Needles 	Domestic Hazardous Wastes	Biodegradable Waste <ul style="list-style-type: none"> Kitchen waste Leaves / plants 	Recyclable Waste <ul style="list-style-type: none"> Paper Cardboard Plastics, etc.

Fig:1.3(Source:Dr.B.L.Kapur Memorial Hospital)

ADMISSION PROCES

Admission in the hospital is done from OPD, Emergency and some admissions are planned for elective procedures .Admission process involves the following steps:



STRALASIAN guidelines for triaging of the patients in Emergency is followed

S. No.	ATS Category	Response	Description of Category
1	Category 1	Immediate simultaneous assessment and treatment	Immediately Life-Threatening
2	Category 2	Assessment and treatment within 10 minutes (assessment and treatment often simultaneous)	Imminently life-threatening or Important time-critical treatment or Very severe pain
3	Category 3	Assessment and treatment start within 30 mins	Potentially Life-Threatening or Situational Urgency or Humane practice mandates the relief of severe discomfort or distress within thirty minutes
4	Category 4	Assessment and treatment start within 60 mins	Potentially serious or Situational Urgency or Significant complexity or Severity
5	Category 5	Assessment and treatment start within 120 mins	Less Urgent or Clinical-administrative problems

Table 1.5 (Source: Dr.B.L.Kapur Memorial Hospital)

DISCHARGE PROCESS

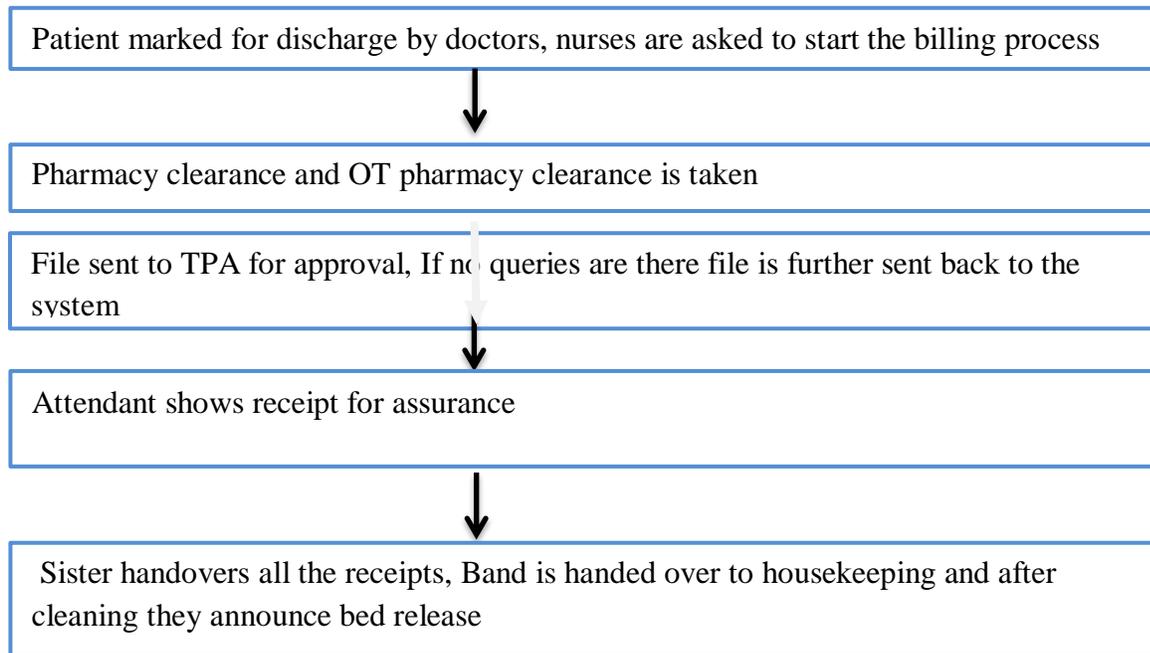


Fig:1.3

INTENSIVE CARE UNIT(ICU)

The Critical care Programme of Dr. B.L.Kapur Memorial Hospital is largest in the region with a bed capacity of 125 bed. Location of various ICUs is as follows:

LOCATION	ICU
Second Floor	Medical ICU
	Surgical ICU
	Intensive Coronary care unit(ICCU-I&II)
	Neurosurgical ICU
	Organ Transplant ICU
	Kidney Transplant ICU
	Cardiothoracic and vascular surgery ICU
Fourth Floor	Neonatal ICU
	Pediatric ICU
Fifth floor	GLICU

Table:1.6 Critical care unit is equipped with high end patient monitoring devices, ventilators and isolation rooms. Facilities for haemodialysis, CRRT, SLED, endoscopy and opy are available at the bedside.

PART -2

ABSTRACT

Healthcare associated infections are major challenge mainly in public health agenda. It leads to morbidity and mortality, longer duration of hospitalisation as well as increased cost of treatment in both developed and resource poor countries. As per joint commission on accreditation health care organisation (JACO) and the centres for disease control and prevention (CDC) follow guidelines when caring for the patients such as wash hands thoroughly after removing gloves and before and all client contact, wear gloves when there is a direct contact with blood, don't break or recap needles, discard into puncture-resistant containers and disposal of contaminated items. Hence the project aims to check basic knowledge practices of healthcare workers regarding infection control and prevention in hospital. The methodology undertaken was descriptive study comprising of secondary data which include 10 research articles and other sources from internet. Objective is to assess the knowledge for infection control practices among health care workers and make appropriate recommendation. Study shows that nurses with higher educational level have more knowledge than that of lower educational level and reason behind this is that high educational nurse's acquired more essential information. Education programs should be planned time to time for nurses and other health care workers. Monthly staff training sessions on infection control.

Keywords: Morbidity, Mortality, Infection, Nurses, Education

INTRODUCTION

Health care associated infection is major challenge mainly in public health agenda. IC (Infection control) is a scientific approach and practical solution designed to prevent harm caused by infection to patients or health workers. The need for infection control in healthcare facilities is born out of all need to prevent health care associated infections (HCAI).

HCAI defined as an infection occurring in a patient during the process of care in a hospital or health care facility which was not present or incubating at the time of admission. It leads to morbidity and mortality, longer duration of hospitalisation as well as increased cost of treatment in both developed and resource poor countries. HCAIs is due to lack of standardized infection prevention program which was neglected due to limited resources, poor sanitary conditions and hygiene practices.

In developed countries HCAI concerns 5-15% of hospitalized patients and can affect 9-37% of those admitted to intensive care units (ICUs). Recent studies conducted in Europe reported hospital-wide prevalence rates of patients affected by HCAI ranging from 4.6% to 9.3%.

To curtail this menace it has become necessary to reduce morbidity and mortality that has comes with HCAI .

Simple practical procedures are the part of the components by 40 of standards precautions against HCAI is found to be effective in reducing the HCAIs. Simple hand hygiene when performed well can reduce the prevalence of HCAI and improved compliance in hand hygiene with standard alcohol based rub can reduce the rate of nosocomial infections %.

The joint commission on accreditation of health care organisation (JACO) and the centres for disease control and prevention (CDC) documented that health care providers show follow certain guidelines when caring for clients such as wash hands thoroughly after removing gloves and before and after all client contact, wear gloves when there is direct contact with blood, don't break or recap needles, discard into puncture-resistant containers and disposal of contaminated items.

Nurses play a crucial role in preventing and controlling transmission of an infection through the application of standard precaution and maintainers of the health care environment.

All nurses in all roles and settings, can demonstrate leadership in infection prevention and control by using their knowledge, skills and judgement to initiate appropriate and immediate infection control procedures.

This study is aimed to assess knowledge of infection control practices among health care workers.

RATIONALE

- HCAIs are infection that were not presenting or incubating at the time of admission and are received by the patient during the process of care in a hospital or any other health care facility.
- The joint commission on accreditation of health care organisation (JACO) and the centres for disease control and prevention (CDC) documented that health care providers follow certain guidelines when caring for patients such as wash hands thoroughly after removing gloves and before and after all client contact, wear gloves when there is direct contact with blood, don't break or recap needles, discard into puncture-resistant containers and disposal of contaminated items.
- Hence this project titled **study on knowledge of infection control practices among health care workers** aims to check basic knowledge practices of health care workers (NURSES) regarding infection control and prevention in hospital.
- Result of this study shows how many health care workers knows basic knowledge of infection control and are they practising it properly.

REVIEW OF LITERATURE

The prevention of health care associated infections is central to the provision of safe, high quality health care. Infections acquired in health care facilities are a major public concern contributing to increased morbidity and mortality. Reducing the risk of HAIs and using infection prevention principles are in the control of health care workers and health care workers must have correct, up to date and appropriate information and practices accordingly.

In Medieval era there were list of hospital infections wound such as smallpox tuberculosis, diphtheria and typhus was reported as formidable hospital infection rate (90%) , clean wound infection rate (80%) and hospitalization associated death rate(40%-70%). Hospitals were unsanitary. Clean sheet were not the norm and patients were expected to bring their blankets and linens with them. Mattresses were made up of straw and bed covers with animal's furs and that were cleaned annually. The air in the sick wards was foul so much that attendant use vinegar-saturated sponges over their noses and mouths to combat to odours.

During post World War II (1940-1950) infection control programs was focused on environmental cleanliness. For the hazardous bacteria in dust led to emphasis on proper technique when handling linens. Quarantine and isolation were emphasis because diseases like smallpox and TB were seen in US hospital.

Acc. To the study done in 2016 descriptive cross sectional survey was conducted among doctor and nurses in tertiary referral centre. Knowledge and practices among respondent shows 70% and 65% nurses and doctor were more knowledgeable that hand hygiene is more effective method to control HCAI.

Acc to another study published in 2012 cross sectional survey was done in tertiary care super speciality hospital for 4 months. Study shows knowledge regarding standard procedures is more in doctors (71.3%) and nurses (52%) and knowledge regarding hand hygiene was (86.8%) as there was no difference in the response of doctors and nurses.

Acc to recent study done in 2018 which was carried in Ethiopia hospital state that 84.6% of respondents were found to be knowledge about infection prevention. 57.3% respondent had good practice towards infection prevention.

Acc. To another study published in 2013 shows that nurses who had more than 5-8% experience have average knowledge (41.5%) , 6% had excellent knowledge and 30.5% had good knowledge and 22% had below average knowledge.

Healthcare Infection control practices Advisory Committee (HICPAC) include following strong recommendations for hand hygiene in health care setting. Healthcare personnel

Should use an alcohol based rub or wash with soap and water for the following clinical indications :

- Immediately before touching a patient.
- Before performing an aseptic task (placing an indwelling device) or handling invasive medical devices.
- Before moving from work on a soiled body site to a cleaned body site on the same patient.
- After touching a patient or patients immediate environment.
- After contact with blood , body fluids or contaminated surfaces.
- Immediately after glove removal.

METHODOLOGY

The methodology undertaken was descriptive study comprising of secondary data which include 10 research articles and other sources from internet. The study target nurses of age between 20- 35 yrs.

OBJECTIVE

- TO ASSESS THE KNOWLEDGE FOR INFECTION CONTROL PRACTICES AMONG HEALTH CARE WORKERS.
- TO MAKE APPROPRIATE RECOMMENDATION FOR THE CORRECTIVE ACTION.

SECONDARY ANALYSIS

RESULT

- Acc. To study Infection control practices among doctors and nurses in a tertiary care hospital published in 2012 by Manisha Jain and et-tal states that knowledge regarding hand hygiene in nurses is 86.8% and knowledge regarding standards procedure are poor i.e. 55.3%. And knowledge regarding the transmission of blood borne is 24.8%. An infection control practice among nurses is 24 %.
- Acc to another study Knowledge And Practices Of Nurses In Infection Prevention And Control Within a Tertiary Care Hospital published by Olfat A Salem shows that knowledge related to infection control measures during patient care during hand washing is 78.3% and knowledge regarding gloves (71.1%) disinfection (63.3%) and discarding (93.3%) is good and nurses had poor practice about infection measures i.e. 51.7% . Study says that majority of nurses had good knowledge about infection control measures related to the hand washing before and after , disinfection and discarding. About practice of infection control majority of nurses had a poor practice of hand washing before and after the procedure.
- Acc to a recent study Knowledge, practice and associated factors of infection prevention among health care workers in Debre Markos referral hospital, northwest Ethiopia published by Melaku Desta in 2018 states that nurses are found more knowledgeable about infection prevention (84.6%). About 93.3 % and 94% knew that disinfection and antiseptic prevent infection acquired infection. Nurses found to have average practice towards infection control activities i.e. 57.3%. The finding indicate that majority of the health care workers in the hospital had adequate knowledge on infection prevention. Healthcare worker with higher educational level had more knowledge than the lower educational level. Health care workers who haven't attend any training had less knowledge on infection prevention. Heath care workers who age is more than 30 were two times more likely to practice infection control activites . Healthcare worker with more working experience more than 10 years were three times more likely practiced infection control activites.
- Another study Knowledge Of Infection Control Practices Among Intensive Care Nurses in a Tertiary Care Hospital published by Kanwalpreet sodhi et al. in August 2013 shows only 5% of nurses had excellent knowledge. More experienced nurses had good knowledge 69% and nurses with less experienced have average knowledge 31% regarding various infection control method. Regarding infection control practices nurses had average knowledge i.e. 60%. Finding indicate that experiences nurses more than 10 years experience had more knowledge on infection control practices.

- Acc to study Knowledge And Practices Of Infection Control Among Healthcare Workers in a Tertiary referral Center in North-Western Nigeria by Garba et.al states some gaps in knowledge regarding hand hygiene as half of the doctors are agreeing with use of sterile glove as the most effective method of preventing HCAI. The overall knowledge on the risk of transmission of blood borne pathogen and post exposure prophylaxis was poor. Practice of hand hygiene was good as fewer respondents reported washing their hands in between patient care and nurses reporting better practice.
- Acc to study Assessment Of Knowledge, Attitudes And Practices towards infection control among health care workers in Trinidad and Tobago by Chandrasekhar G et.al published in 2017 show that knowledge on infection control among healthcare workers was poor. As health care workers knew about the manual listing of infection control and preventing guideline . It shows that 84% of participant knew about proper handling of working equipment . Only 44% of health care workers have good practice to prevent hospital acquired infection and contamination.
- Acc to another study Practices of healthcare workers regarding infection prevention on bale zone hospitals published in 2020 by Demisu Zenbaba shows more than 36.8% of health care workers have good infection prevention practice as it shows 62.3% and 37.7% of health care workers had a history of sharp material injuries within the lifetime and the last one year. About 72.1% health care workers appear to have good knowledge regarding infection prevention . Good knowledge of health care workers regarding infection prevention , profession of healthcare workers , availability of personal protective equipment were found to have significant association with practice of health workers infection .
- Acc to study correlation between health professionals knowledge attitude and practice about infection control measures by Diana lobo shows that majority of staff nurses had average knowledge scores (51.25%), self reported practice scores (58.75%)and observed practices scores (68.75%). Finding of this study says knowledge does not always translate into good practice. Lack of resources , excess workload and time constraint have been reports as a major factors which lead to poor practice of infection control. Acc to another study named as effect of an educational health program on the knowledge ,attitudes and practices of health care workers with respect to nosocomial infections in the national liver institute ,Egypt by Gaafar M Abdel-Rasoul published in 2016 shows that doctors had the best level of knowledge followed by nurses but their practice score was almost less than that of nurses. Continuous education , efficient in service training , efficient in service training and monitoring and evaluation of health care workers play a essential role in infection control practices.

- According to the study "Knowledge, awareness and practice of infection control by health care workers in intensive care units of a tertiary hospital in Nigeria" published by Majeed Babajide Adegboye, it shows that health care workers had good knowledge regarding infection control but residents and interns had moderate knowledge about hand hygiene. Nurses had good practices of hand hygiene than doctors. The study showed that only 13.9% of health care workers had ever attended any form of training program on infection control.

DISCUSSIONS / FINDINGS

- Hospital Acquired Infections is a common problem in all over the world. Without a adequate infection control knowledge and practice health care workers are at higher risk of acquiring infection disease. Therefore health care workers knowledge as well as practice can play an important role in infectious Prevention and Control.
- Infection Control involves Hand Hygiene, Standard Precautions and Transmission Based Precaution. Earliest guidelines say Use of plain soap and promoted the use of waterless agents but other studies says superior activity of alcohol based product for reducing bacterial count.
- Hand Hygiene is a first initial step towards successful control in any health care setup.
- This study aimed to assessed Knowledge of Infection Control Practice among Health Care Workers and study target Nurses. Now this study shows that nurses with higher educational level have more knowledge than that of lower educational level and reason behind this is that high educational nurse's acquired more essential information.
- Nurses with more experienced is another factor associated with knowledge that means nurses with more experienced are more knowledge on infection control than that of less experienced nurses.
- Knowledge on infection control is associated even in taking training in Infection Control. Nurses who haven't attended any training had less knowledge.
- Nurses above 30 yrs of age were have more practice of infection control activities when compared to those who are less than 30 years. This can be due to ages advances, years of services increased which improved their practices with time.
- Work experience is other factor related with practice of infection control activities. Nurses who had more work experienced (more than 10 yrs) shows more practice of infection control activities.
- Some studies also shows gaps in knowledge regarding hand hygiene and nurse agreeing with use of sterile glove as the most effective method of preventing HCAI. Knowledge on risk transmission of blood born was poor and practice of hand hygiene was generally good.
- Finally Training on current guidelines could upgrade the knowledge and skills of nurses as they would wisely understand basic principles , standard of practices and implement them

RECOMMENDATIONS

- Education programs should be planned time to time for nurses and other health care workers.
- Monthly staff training sessions on infection control.
- Frequent assessment of staff's knowledge regarding infection control and how infection spreads.
- Hospital Infection Control Measures guidelines must be updated frequently.

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THANK YOU

