Sri Lakshmi Narayana Institute of Medical Sciences

Date:06.10.2020

From

Dr.Thangapaneerselvam,
Professor and Head,
Department of Biochemistry,
Sri Lakshmi Narayana Institute of Medical Sciences
Bharath Institute of Higher Education and Research,
Chennai.

To

The Dean,
Sri Lakshmi Narayana Institute of Medical College
Bharath Institute of Higher Education and Research,
Chennai.

Sub: Permission to conduct value-added course: Hospital Infection and control – reg.,

Dear Sir,

With reference to the subject mentioned above, the department proposes to conduct a value-added course titled: **Hospital Infection and control** in Oct to Nov 2020 . We solicit your kind permission for the same.

Kind Regards

Dr.Thangapaneerselvam

FOR THE USE OF DEANS OFFICE

Names of Committee members for evaluating the course:

The Dean: Dr. Jayakumari

The HOD: Dr. Thangapaneerselvam

The Expert: Dr. Santhosakumari

The committee has discussed about the course and is approved.

Dean	Subject Expert	HOD
(Sign & Seal)	(Sign & Seal)	(Sign & Seal)

DEAN
SRI LAKSHMI NARAYANA INSTITUTE OF MEDICAL SCIENCES
OSUDU, AGARAM VILLAGE,
KOODAPAKKAM POST,
PUDUCHERRY - 605 502.

Sri Lakshmi Narayana Institute Of Medical Sciences
PONDICHERRY - 605 502.

PROFESSOR & HOD
DEPARTMENT OF BIOCHEMISTRY
Sri Lakshmi Narayana Institute of Medical Sciences
PONDICHERRY - 605 502

OFFICE OF THE DEAN

Sri Lakshmi Narayana Institute of Medical Sciences

OSUDU, AGARAM VILLAGE, VILLIANUR COMMUNE, KUDAPAKKAM POST,
PUDUCHERRY - 605 502.

[Recognised by Medical Council of India, Ministry of Health letter No. U/12012/249/2005-ME (P -II) dt. 11/07/2011]
[Affliated to Bharath University, Chennai - TN]

Circular

07.10.2020

Sub: Organising Value-added Course: Hospital Infection and control - reg

With reference to the above mentioned subject, it is to bring to your notice that Sri Lakshmi Narayana Institute of Medical Sciences, **Bharath Institute of Higher Education and Research** is organizing **"Hospital Infection and control"**. The course content form is enclosed below.

The application must reach the institution along with all the necessary documents as mentioned. The hard copy of the application should be sent to the institution on or before Aug to Sep 2020. Applications received after the mentioned date shall not be entertained under any circumstances.

Dean

DEAN
SRI LAKSHMI NARAYANA INSTITUTE OF MEDICAL SCIENCES
OSUDU, AGARAM VILLAGE,
KOODAPAKKAM POST,
PUDUCHERRY - 605 502

Encl: Copy of Course content

Course Proposal

Course Title: **Hospital infection and control**

Course Objective:

1. Overview of hospital infection
2. Sources of infections
3. Ways to prevent and treat the HAI

To sensitise the medical students about the Hospital acquired infections and the precautionary measures to be taken for prevention and control of HAI

Course Outcome: Gained knowledge on HAI and CAI precipitated in hospital and the difference between the two for rationale treatment and improvement of health care in a tertiary care hospital

Course Audience: MBBS students

Course Coordinator: Dr.Thangapaneerselvam

Course Faculties with Qualification and Designation:

1.Dr.Thangapaneerselvam, Professor & HOD

2.Dr.Prabhakar reddy, Associate Professor

Course Curriculum/Topics with schedule (Min of 30 hours)

SlNo	Date	Topic	Time	Hours
1	13.10.2020	Introduction, Background, Objectives	4-5 PM	1
2	14.10.2020	What is HCAI?	4-6 PM	2
3	15.10.2020	Mode of transmission	4-6 PM	2
4	16.10.2020	Hospital infection control program – objectives,components,universal precautions	4-7 PM	3
5	17.10.2020	HCAI control team and its responsibilities	4-6 PM	2
6	18.10.2020	Infection control process standard precautions	4-7 PM	3
7	19.10.2020	5 moments of hand hygiene	4-6 PM	2
8	20.10.2020	Personal protective equipment	4-7 PM	3
9	21.10.2020	Cleaning, disinfection & sterilisation	4-7 PM	3
10	22.10.2020	Isolation precautions	4-7 PM	3
11	23.10.2020	Exposure management	4-6 PM	2
12	24.10.2020	Survey of prevalence of HCAI in your tertiary care hospital – in ICU	4-6 PM	2
13	25.10.2020	Survey of prevalence of HCAI in your tertiary care hospital – Wards(medical)	4-6 PM	2
14	26.10.2020	Survey of prevalence of HCAI in your tertiary care hospital – wards(surgical)	4-6 PM	2

15	27.10.2020	Compiling of overall data	4-6 PM	2
16	1.11.2020	Elaborate presentation on current status of rate of HCAI in your hospital with methods to reduce it for better patient care	2-6 PM	4
		Total		38

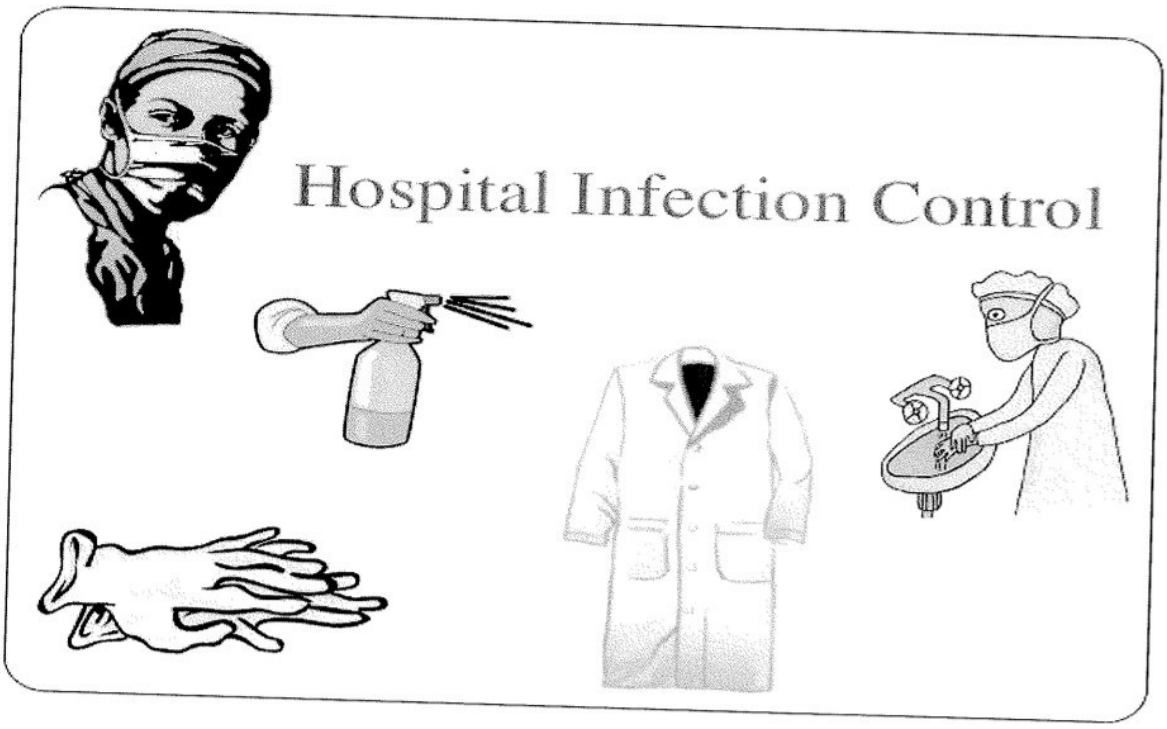
REFERENCE BOOKS:

1. Guidelines for prevention of hospital acquired infections - ncbi

2. Hospital Infection Control - JAPI

3. Revised Hospital Infection Prevention and Control Guidelines - ncdc

HOSPITAL INFECTION AND CONTROL



PARTICIPANT'S HANDBOOK

HOSPITAL INFECTION AND CONTROL

Healthcare-associated infection (HCAI) is one of the most common complications of health care management. • Nosocomial infections / hospital-acquired infections / hospital-associated infections / hospital infections.

They are a serious health hazard. Lead to increased patients' morbidity and mortality, length of hospital stay the costs associated with hospital stay.

COMMON HEALTHCARE ASSOCIATED INFECTIONS

Catheter associated urinary tract infection (CAUTI)

Surgical site Infection (SSI)

Catheter related blood stream infection (CRBSI)

Ventilator Associated Pneumonia (VAP)

HOW ARE INFECTIONS TRANSMITTED:

i. Direct contact between healthy and unhealthy person
ii. Airborne Viruses and bacteria spread through coughing and sneezing
iii. Ingestion Usually through water and food
iv. Insect or animal bite are the routes of transmission

What leads to hcais ?

1. Sources of microorganisms Surfaces- Hands, Devices Water, Food Blood Pharmaceutical agents
2. Patients at risk Frequent hospital admissions IVDUs, Immunocompromised
3. Acute wounds Using equipments internal to patients e.g. Catheters

4. Transmission of pathogens between staff, patients and among patients patients at risk for BBIs Sharing infected equipment.
5. Contaminated skin puncture.
6. From mother to child.
7. Contamination of wounds.
8. Blood transfusion HCAIs

Breaking the Chain of infection

- Breaking the Chain of infection is central to providing high quality health care for patients and a safe working environment for those that work in healthcare settings.
- It is important to minimize the risk of spread of infection to patients and staff in hospital by implementing good infection control programme.
- Infection prevention responsibility . Employers/ Organizations Employees Patients Attendants Visitors.

HOSPITAL INFECTION CONTROL PROGRAM

• Prevention of HCAI in patients is a concern of everyone in the facility and is the responsibility of all individuals and services providing health care.

• Risk prevention for patients and staff must be supported at the level of senior administration.

Components of infection control programme

1. Basic measure for infection control-standard and additional precaution
2. Education and training of health care workers.
3. Protection of health care workers
4. Identification of hazards and minimizing risks.

5. Aseptic techniques
6. Use of single use device, reproccessing of instrumental and equipment
7. Antibiotic usage,management of body/blood fluid,exposure handling of blood/blood product and hospital waste management.
8. Surveillance
9. Outbreak investigation
10. Incident monitoring

OBJECTIVES

• The main objectives of these guidelines is to prevent the health care workers and the environment from the transmission of infections:
• Facilities, equipment, and procedures necessary to implement standard precautions.
• Cleaning, disinfecting and reprocessing of reusable equipment.
• Waste management , prevention of HAI in patients

Universal precautions

• Universal precautions are the set of guidelines designed to protect the health care worker from exposure to infections such as HIV< Hepatitis B and C which are transmitted by blood and certain body fluids of patient.

COMPONENTS; Universal precautions consider only certain body fluids as capable of transmitting blood borne disease

Precaution related to body fluids

• Universal precaution applies to:
    • Blood

- Semen
- Vaginal secretions
- CSF
- Pleural/peritoneal/pericardial/amniotic fluids

- Universal precaution does not apply:
    1. Feaces
    2. Nasal secretions
    3. Sputum
    4. Sweat
    5. Tears/urine/vomitus
    6. Saliva

The role of the hospital infection control committee (HICC) is to implement the annual infection control Programme and policies.

1. Commitment towards Maintenance of Surveillance over HCAIs.
2. Develop a system for identifying, reporting, analyzing, investigating and controlling HCAIs.
3. Develop and implement preventive and corrective programs in specific situations where infection hazards exist.
4. Advice the Medical Superintendent on matters related to the proper use of antibiotics, develop antibiotic policies and recommend remedial measures when antibiotic resistant strains are detected.
5. Review and update hospital infection control policies and procedures from time to time.
6. Help to provide employee health education regarding matters related to HCAIs.
7. HICC shall meet regularly - once a month and as often as required

8. Hospital Infection Control Committee (HICC) Is responsible for establishing and maintaining infection prevention and control, its monitoring, surveillance, reporting, research and education The Committee is an integral component of the patient safety programme of the health care facility

9. Structure of Hospital infection control committee Chairperson: Hospital administrator Member Secretary: Senior Microbiologist Members: Representation from Management/Administration (Dean/Director of Hospital; Nursing Services; Medical Services; Operations) Relevant Medical Faculties Support Services: (OT/CSSD, House- keeping/Sanitation, Engineering, Pharmacologist, Store Officer / Materials Department) Infection Control Nurse (s) Infection Control officer

10. Infection Control Team

• The Infection control team should comprise of at minimum

1. An infection control officer,
2. A microbiologist (if ICO is not a microbiologist),
3. And infection control nurse. ICT takes daily measures for the prevention and control of infection in hospital.

11. Responsibilities of the hict

- Develop a manual of policies and procedures for aseptic, isolation and antiseptic techniques.
- Carry out targeted surveillance of HAIs, data analysis and take corrective steps
- Advise staff on all aspects of infection control and maintain a safe environment for patients and staff.
- Supervise and monitor cleanliness and hygienic practices

- Oversee sterilization and disinfection.
- Monitor the use and quality control of disinfectants
- Advise management of at risk patients.
- Supervision of isolation procedures.
- Investigate outbreaks and take corrective measures for control and prevention of outbreak Waste management
- Training of all new employees as to the importance of infection control and the relevant policies and procedures.
- Regular training programme for the staff to ensure implementation of infection control practices
- Audit infection control procedures and antimicrobial usage
- Monitor Health care workers safety Programme.
-

INFECTION CONTROL PROCESSES Standard Precautions

- Standard Precautions are designed to reduce the risk of transmission of micro-organisms from both recognized and unrecognized sources of infection in the hospital.
- Standard Precautions applies to all patients regardless of their diagnosis.
- Standard Precautions shall be implemented when contact with any of the following are anticipated:
    - 1. Blood
    - 2. All body fluids, secretions and excretions, with the exception of sweat regardless of whether or not they contain visible blood.
    - 3. Non-intact skin (this includes rashes)
    - 4. Mucous membranes

Standard Precautions Requirements

- ✓ Hand hygiene:
- ✓ Pathogenic organisms from colonized and infected patients (and sometimes from the environment) transiently contaminate the hands of staff during normal clinical activities and can then be transferred to other patients.
- ✓ Proper hand hygiene is an effective method for preventing the transfer of microbes between staff and patients.
- ✓ Increasing hand-washing compliance by 1.5 – 2 folds would result in a 25-50-% decrease in the incidence of healthcare associated infections.

Five (5) Moments in Hand Hygiene-

Hand hygiene must be practiced:

1. Before touching a patient.
2. Immediately before performing a clean or aseptic procedure, including handling an invasive device for patient care, regardless of whether or not gloves are used.
3. Promptly after contact with body fluids, excretions, mucous membranes, non-intact skin, or wound dressings regardless of whether or not gloves were used.
4. After touching a patient and his/her immediate surroundings, even when leaving the patient's side.
5. After contact with inanimate objects (including medical equipment and furniture) in the immediate vicinity of the patient.

Hand hygiene Positives

- Use between patients.
- Quick, easy & effective.

• Can use when going in and out of wards, houses or rooms.
• Use after gloves kills 99.8% of bacteria. Negative
• Don't work to kill diarrhoea causing viruses.
• Only use if hands look clean.
• If in doubt use soap and water. Alcohol gels 20-30 sec
Hand washing 40-60 sec

Personal protective equipment-

1. Use of Gloves: Clean gloves must be worn when touching blood, body fluids, excretions, secretions and contaminated items and when performing venipuncture.
2. Face Mask, eye protection & face shield: Face Mask must be worn during procedures or patient care activities that are expected to generate splashes or sprays of blood, body fluids.
3. N95 Respirators-
    - Respirators are masks specifically designed to filter small particles spread by the airborne route, such as tuberculosis, measles and varicella. They are used for aerosol generating procedures that have been shown to expose staff, including:
    - Sputum induction
    - Diagnostic bronchoscopy
    - Autopsy examination
    - Laboratory handling of Mycobacterium tuberculosis such as concentrating respiratory samples for smear and culture.

Respirators

Respirators rely on an airtight seal and have tiny pores which block droplet nuclei.

Face / surgical masks

Masks have large pores and do not have an airtight seal to around the edge, permitting inflow of droplet nuclei

Gown or Apron:

Gown/apron must be worn to protect skin and to prevent soiling of clothing during procedures or patient care activities that are expected to generate splashes or sprays of blood, body fluid, secretions and excretions.

Instruct symptomatic persons and health care workers to cover their mouths/noses when coughing or sneezing, use and dispose of tissues, perform hand hygiene after hands have been in contact with respiratory secretions and wear surgical mask if tolerated or maintain spatial separation, >3 feet if possible.

Respiratory hygiene/cough etiquette: Instruct symptomatic persons and health care workers to cover their mouths/noses when coughing or sneezing, use and dispose of tissues, perform hand hygiene after hands have been in contact with respiratory secretions and wear surgical mask if tolerated or maintain spatial separation, >3 feet if possible.

CLEANING, DISINFECTION AND STERILIZATION

CLEANING OF ENVIRONMENTAL SURFACES

□ Clean housekeeping surfaces (e.g., floors, walls, tabletops) on a regular basis, when spills occur, and when these surfaces are visibly soiled.

□ Disinfect environmental surfaces (e.g., bedside tables, bedrails, and laboratory surfaces)

□ Clean walls, blinds, and window curtains.

□ Decontaminate mops heads and cleaning cloths regularly to prevent contamination (e.g., launder and dry at least daily).

CLEANING OF BEDDING AND BLANKET

- Clean and disinfect mattress impermeable covers.
- Launder pillow covers, washable pillows, and blankets between patients or when they become contaminated with body substances.

DISINFECTION

Most microbes are removed from defined object or surface, except spores. Classified according to their ability to destroy different categories of microorganisms:

- High Level disinfectants: Glutaraldehyde 2%, Ethylene Oxide
- Intermediate Level disinfectant: Alcohols, chlorine compounds, hydrogen peroxide, chlorhexidine,
- Low level disinfectants: Benzalkonium chloride, some soaps

GENERALGUIDELINES FOR DISINFECTION:

• Critical instruments/equipment (that are those penetrating skin or mucous membrane) should undergo sterilization before and after use. E.g. surgical instruments.

• Semi-critical instruments /equipments (that are those in contact with intact mucous membrane without penetration) should undergo high level disinfection before use and intermediate level disinfection after use. E.g. endotracheal tubes.

• Non-critical instruments /equipments (that are those in contact with intact skin and no contact with mucous membrane) require only intermediate or low level disinfection before and after use. E.g. ECG electrodes.

ISOLATION PRECAUTIONS

Isolation precautions are needed to prevent the transmission of pathogenic microorganisms within the healthcare setting.

□ The patients of following disease categories should be treated under isolation. Severe influenza cases, Subacute respiratory Syndrome (SARS), Open case of tuberculosis, Anthrax, diphtheria, Pertussis, Pneumonic plague, Chicken pox, and patients infected with multidrug resistant bacterial pathogens.

ISOLATION PRECAUTIONS

Contact precautions Airborne precautions: Droplet precautions Enteric infections, diarrhea that cannot be controlled, or skin lesions that cannot be contained. Pathogens transmitted by respiratory droplets generated by a patient by coughing, sneezing, or talking, Acute respiratory infection, undiagnosed or meningitis and/or sepsis with petechial rash . Infectious agents transmitted person-to- person by the airborne route, such as M. tuberculosis, measles, chickenpox, disseminated herpes zoster.

Patient placement

• Appropriate patient placement is a significant component of isolation precautions.

□ Determine patient placement based on the following principles:

• Route(s) of transmission of the infectious agent

• Risk factors for transmission in the infected patient

• Risk factors for adverse outcomes resulting from healthcare- associated infection in other patients in the area.

• Availability of single-patient rooms

• Patient options for room-sharing

Contact Precautions:

1. Required for patients with enteric infections, diarrhea that cannot be controlled or skin lesions that cannot be contained.

Droplet precautions:

Required for patients known or Suspected to be infected with pathogens transmitted by respiratory droplets that are generated by a patient who is coughing, sneezing, or talking, Acute respiratory infection, undiagnosed or meningitis and/or sepsis with petechial rash.

Patient placement:

a. Place patients who require Contact Precautions in a single-patient room when available; if single-patient rooms are unavailable, and then place patients infected with the same pathogen in the same room.

b. If it becomes necessary to place a patient who requires Contact Precautions in a room with a patient who is not infected or colonized with the same infectious agent

i. Avoid placing patients on Contact Precautions in the same room with patients who have conditions that may increase the risk of adverse outcome from infection or that may facilitate transmission.

ii. Ensure that patients are physically separated (i.e., >3 feet apart) from each other. Draw the privacy curtain between beds to minimize opportunities for direct contact.

iii. Change protective attire and perform hand hygiene between contacts with patients in the same room, regardless of whether one or both patients are on Contact Precautions

Use of personal protective equipment:

• Don a mask upon entry into the patient room or cubicle.

Patient transport

a. Limit transport and movement of patients outside of the room to medically-necessary purposes.

b. When transport or movement in any healthcare setting is necessary, ensure that infected or colonized areas of the patient's body are contained and covered.

c. Remove and dispose of contaminated PPE and perform hand hygiene prior to transporting patients on Contact Precautions.

Airborne precautions:

1. Required for patients known or suspected to be infected with infectious agents transmitted person-to-person by the airborne route, such as M. tuberculosis, measles, chickenpox, disseminated herpes zoster.

2. Develop systems (e.g., triage, signage) to identify patients with known or suspected infections that requires Airborne Precautions upon entry into the health facility.

Patient placement

a. Place patients who require Airborne Precautions in an airborne infection isolation room (AIIR) that has been constructed with the following conditions

i. Provides 6-12 air changes per hour.

ii. Directs exhaust or air to the outside, or through HEPA filters if exhausting to the outside is not possible.

iii. Has a monitor for air pressure with visual indicators.

iv. Can be closed with a door when not required for entry and exit.

b. If an AIIR is not available and transfer to a facility with AIIR is not possible, place a surgical mask on the patient and place him/her in a single room.

Once the patient leaves, the room should remain vacant for the appropriate time, generally one hour, to allow for a full exchange of air.

c. Instruct patients with a known or suspected airborne infection to wear a surgical mask and observe Respiratory Hygiene/Cough Etiquette.

Once in AIIR, the mask may be removed

Personnel restrictions

a. Restrict susceptible healthcare personnel from entering the rooms of patients known or suspected to have measles, varicella, disseminated zoster, or smallpox if other immune healthcare personnel are available.

Use of personal protective equipment

a. Healthcare personnel should use a fit- tested respiratory, such as an N95, before entering the room of a patient with known or suspected tuberculosis or smallpox.

b. A fit-tested N95 or surgical mask may be appropriate for healthcare personnel to wear while caring for patients with known or suspected measles, chickenpox, or disseminated herpes zoster.

Patient transport

a. Limit transport and movement of patients outside of the room to medically-necessary purposes.

b. If transport or movement outside an AIIR is necessary, instruct patients to wear a surgical mask, if possible, and observe Respiratory Hygiene/Coug h Etiquette.

c. For patients with skin lesions associated with varicella or smallpox or draining skin lesions caused by M. tuberculosis, cover the affected areas to prevent aerosolization or contact with the infectious agent in skin lesions.

d. Healthcare personnel transporting patients who are on Airborne Precautions do not need to wear a mask or respirator during transport if the patient is wearing a mask and infectious skin lesions are covered.

Exposure management

a. Administer measles vaccine to exposed susceptible persons within 72 h after the exposure or administer immune globulin within six days of the exposure event for high-risk persons in whom vaccine is contraindicated.

b. Administer varicella vaccine to exposed susceptible persons within 120 h after the exposure or administer varicella immune globulin, when available, within 96 h for high-risk persons in whom vaccine is contraindicated (e.g., immunocompromised patients, pregnant women, newborns whose mother's varicella onset was <5 d before or within 48 h after delivery).

c. Administer smallpox vaccine to exposed susceptible persons within 4 days after exposure

Annexure II

DEPARTMENT OF BIOCHEMISTRY

STUDENT LIST

S.No	Reg No	Name	Signature
1	U15MB356	SARANYA. E	Saranya. E
2	U15MB357	SARATH KUMAR. A	Sarath.
3	U15MB358	SATHESH. B	Sathesh. B
4	U15MB359	SATHIYA NARAYANA .S	Sathiyanarayana
5	U15MB362	SENTHILKUMARAN. A	Senthil. K. A
6	U15MB363	SHAHARA ZAD .S	Shahara
7	U15MB364	SHAKTHI. K	Shakthi. K
8	U15MB347	RAM KUMAR. S	Ramkumar. S
9	U15MB348	RAMRAJ. D	Ramraj. D
10	U15MB349	RATCHAKESH. R	Ramraj
11	U15MB350	REVANTH. C	Revanth. C
12	U15MB341	PRAVEEN. R	Praveen
13	U15MB342	PREETHIKA. R	Preethi
14	U15MB343	PRIYADHARSHINI .R	Prakash
15	U15MB335	NIVETHITHA. R.N.	nivethi
16	U15MB356	SARANYA. E	E. Saranya
17	U15MB357	SARATH KUMAR. A	Sarath
18	U15MB358	SATHESH. B	Sathe
19	U15MB359	SATHIYA NARAYANA .S	Sath
20	U15MB360	SEDHUPATHY. S	Sedhu

PROFESSOR & HOD
DEPARTMENT OF BIOCHEMISTRY
Sri Lakshmi Narayana [illegible] Medical Sciences

Senthilkumaran

1. Hand washing is critical to infection control. Which of these is not considered a cleaning agent?
   a) Water
   b) Alcohol hand gel
   c) Liquid soap

2. When handling items which are soiled with bodily fluids, it's important to wear gloves. Which of these would not be suitable?
   a) Latex
   b) Neoprene
   c) Polythene

3. Which colour bag should you use when disposing of clinical waste?
   a) Red
   b) Yellow
   c) Green

4. Which of the following can be worn on hands during patient care?
   a) A ring with a plain band
   b) False nails
   c) Rings with stones
   d) None of the above

5. Do you need to wash your hands after wearing gloves?
   a) Yes
   b) No
   c) Only if hands are visibly soiled

6. Which of the following is not included in Standard Infection Control Precautions?
   a) Management of blood and bodily fluid spillage
   b) Patient's personal hygiene
   c) Safe handling of linen
   d) Cleanliness of care equipment

7. How long should hands be washed for after wetting hands and applying soap?
   a) 5 seconds
   b) 2-3 minutes

c) For as long as you feel appropriate
d) 15-20 seconds

8. Which of the following should be avoided during hand washing?
   a) Paper towels
   b) Liquid soap
   c) Nail brushes

9. When should you dispose of a plastic disposable apron?
   a) At the end of each shift
   b) Every hour
   c) Between caring for each patient
   d) After it's been washed once

10. Which of the following would not be advisable when cleaning a faeces spillage?
   a) Discarding disposables as household waste
   b) Washing hands
   c) Putting on an apron and gloves
   d) Removing the spillage with disposable paper towels

11. Disinfection is a process in addition to cleaning. When is it necessary?
   a) When a patient touches a door handle
   b) When an item comes into contact with mucous membranes
   c) When you re-use a bedpan made of pulp
   d) It isn't necessary unless you know a patient has an HCAI

12. What is the definition of a 'single use' item?
   a) An item that can be used by a single patient, multiple times
   b) An item that can only be used once before it needs disinfecting
   c) An item that can only be used once before being disposed of
   d) An item that can only be used for a single day

Edhepsky

1. Hand washing is critical to infection control. Which of these is not considered a cleaning agent?
    a) Water
    b) Alcohol hand gel
    c) Liquid soap

2. When handling items which are soiled with bodily fluids, it's important to wear gloves. Which of these would not be suitable?
    a) Latex
    b) Neoprene
    c) Polythene

3. Which colour bag should you use when disposing of clinical waste?
    a) Red
    b) Yellow
    c) Green

4. Which of the following can be worn on hands during patient care?
    a) A ring with a plain band
    b) False nails
    c) Rings with stones
    d) None of the above

5. Do you need to wash your hands after wearing gloves?
    a) Yes
    b) No
    c) Only if hands are visibly soiled

6. Which of the following is not included in Standard Infection Control Precautions?
    a) Management of blood and bodily fluid spillage
    b) Patient's personal hygiene
    c) Safe handling of linen
    d) Cleanliness of care equipment

7. How long should hands be washed for after wetting hands and applying soap?
    a) 5 seconds
    b) 2-3 minutes

c) For as long as you feel appropriate
d) 15-20 seconds

8. Which of the following should be avoided during hand washing?
   a) Paper towels
   b) Liquid soap
   c) Nail brushes

9. When should you dispose of a plastic disposable apron?
   a) At the end of each shift
   b) Every hour
   c) Between caring for each patient
   d) After it's been washed once

10. Which of the following would not be advisable when cleaning a faeces spillage?
   a) Discarding disposables as household waste
   b) Washing hands
   c) Putting on an apron and gloves
   d) Removing the spillage with disposable paper towels

11. Disinfection is a process in addition to cleaning. When is it necessary?
   a) When a patient touches a door handle
   b) When an item comes into contact with mucous membranes
   c) When you re-use a bedpan made of pulp
   d) It isn't necessary unless you know a patient has an HCAI

12. What is the definition of a 'single use' item?
   a) An item that can be used by a single patient, multiple times
   b) An item that can only be used once before it needs disinfecting
   c) An item that can only be used once before being disposed of
   d) An item that can only be used for a single day

Sri Lakshmi Narayana Institute of Medical Sciences

Affiliated to Bharath Institute of Higher Education & Research

(Deemed to be University under section 3 of the UGC Act 1956)

CERTIFICATE OF MERIT

This is to certify that **REVANTH. C** has actively participated in the Value Added Course on **Hospital Infection and control** held during Oct 2020 – Nov 2020 Organized by Sri Lakshmi Narayana Institute of Medical Sciences, Pondicherry- 605 502, India.

Dr. Santhosakumari

RESOURCE PERSON

DEPARTMENT OF BIOCHEMISTRY
Sri Lakshmi Narayana Institute Of Medical Sciences
PONDICHERRY - 605 502.

Dr. Thangapaneerselvam

COORDINATOR

PROFESSOR & HOD
DEPARTMENT OF BIOCHEMISTRY
Sri Lakshmi Narayana Institute of Medical Sciences
PONDICHERRY - 605 502

Sri Lakshmi Narayana Institute of Medical Sciences

Affiliated to Bharath Institute of Higher Education & Research

(Deemed to be University under section 3 of the UGC Act 1956)

CERTIFICATE OF MERIT

This is to certify that **SATHESH. B** has actively participated in the Value Added Course on **Hospital Infection and control** held during Oct 2020 – Nov 2020 Organized by Sri Lakshmi Narayana Institute of Medical Sciences, Pondicherry- 605 502, India.

Dr. Santhosakumari

RESOURCE PERSON

DEPARTMENT OF BIOCHEMISTRY
Sri Lakshmi Narayana Institute Of Medical Sciences
PONDICHERRY - 605 502.

Dr. Thangapaneerselvam

COORDINATOR

PROFESSOR & HOD
DEPARTMENT OF BIOCHEMISTRY

Course feedback form

Course title:

Date : 31.10.20

Course code: BIO - 02

Department: Biochemistry

S.no	Design of the course	1	2	3	4	5
1	The objective of the course clear to you					
2	The course contents met with your expectations					
3	The lecture sequence were well planned					
4	The lectures were clear and easy to understand					
5	The audiovisual teaching aids were effectively used					
6	The instructor's encouraged interaction and was it helpful					
7	The contents were illustrated with examples					
8	Overall Rating of the course					

*** Rating: 5 – Outstanding; 4 - Excellent; 3 – Good; 2– Satisfactory; 1 - Not-Satisfactory**

Suggestions if any:

Signature

Course feedback form

Course title:

Date : 31/10/2020

Course code: BIO - 02

Department: Biochemistry

S.no	Design of the course	1	2	3	4	5
1	The objective of the course clear to you					
2	The course contents met with your expectations					
3	The lecture sequence were well planned					
4	The lectures were clear and easy to understand					
5	The audiovisual teaching aids were effectively used					
6	The instructor's encouraged interaction and was it helpful					
7	The contents were illustrated with examples					
8	Overall Rating of the course					

*** Rating: 5 – Outstanding; 4 - Excellent; 3 – Good; 2– Satisfactory; 1 - Not-Satisfactory**

Suggestions if any:

Signature

Date: 30.11.2020

From

Dr.Thangapaneerselvam
Professor and Head,
Department of Biochemistry,
Sri Lakshmi Narayana Institute of Medical Sciences
Bharath Institute of Higher Education and Research,
Chennai.

Through Proper Channel

To

The Dean,
Sri Lakshmi Narayana Institute of Medical Sciences
Bharath Institute of Higher Education and Research,
Chennai.

Sub: Completion of value-added course: Hospital Infection and control - reg.,

Dear Sir,

With reference to the subject mentioned above, the department has conducted the value-added course titled: Point of care testing from Oct to Nov 2020 for 20 students. We solicit your kind action to send certificates for the participants that is attached with this letter. Also, I am attaching the photographs captured during the conduct of the course.

Kind Regards,

Dr.Thangapaneerselvam

Encl: Certificates

Photographs