

MGM INSTITUTE OF HEALTH SCIENCES

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Value Added Course

Hospital Infection Prevention and Control

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Annexure-52A of BOM-62-2020

10 A: Hospital Infection Prevention and Control: Microbiology (Navi Mumbai and Aurangabad)

Hospital Infection Prevention and Control: **Microbiology (Navi** <mark>Mumbai)</mark>

Name of the course: Hospital Infection Prevention and Control

Eligibility: MBBS

Course Description: The Certificate in Hospital Infection Prevention and Control course is designed to provide knowledge about the impact of Hospital Acquired Infections (HAIs) and the roles of various stakeholders involved in infection prevention and control. The course incorporates best practices recommended by latest guidelines. The topics included in this course talk about how and why infections occur in hospitals, and ways to avoid such infections in the first place. The course also covers the ways of handling biomedical and hazardous wastes and methods of disinfecting the hospital environment.

AIM:

This course is an endeavor towards preparation of a group of MBBS students with expertise which is essential for effective implementation of infection control practices across all health care settings. By the infection control certification program, we aim at developing MBBS graduates in this field, equipped with adequate knowledge and skill needed for the maintenance of a safe hospital environment and health care delivery practices.

Objectives:

At the end of this course a 2^{nd} MBBS student will be able to:

- Identify and Explain health care associated infections (HCAIs) and its contributing factors, costs and impact
- Apply appropriate steps to break the chain of infection and reduce health care associated infections
- Use correct infection prevention and control measures including standard and transmission-based precautions
- Adopt best practices in collecting, labelling, transporting and reporting on specimens for laboratory analysis
- Identify an outbreak and prepare a plan for its management.
- Collect, Interpret and analyse data of various hospital acquired infection indicators.

Training Package: This includes printed course materials, lectures by experienced resource faculty and hands on experience during hospital posting and Infection control rounds.

Duration: 6hrs/day for 10 days (10 am to 4pm)

Batch: Not more than 5 candidates per batch

Course timing: Summer break in the month of May every year

Selection Criteria: Marks obtained in Microbiology in 1^{st} and 2^{nd} Internal exams

Course Co-ordinator: Infection Control officer (Dr D Khiste)

Facilitators: All teaching faculty of Microbiology Department,Infection Control nurse and CSSD technician

Fees: As decided by MGMIHS

Requirements: Additional remuneration (Min Rs 500/ Lecture) for conducting classes to the teaching faculty and Rs 200/day to Infection Control Nurse and CSSD technician.

Course Outline:

Day 1	• Lecture on Common Hospital acquired infection
	(10am to 11am)
	• Hospital posting along with Infection control Nurs
	(11am to 4pm)
Day 2	• Lecture on Universal safety Precautions (10am t
	11am)
	• Hospital posting along with Infection control Nurs
	(11am to 4pm)

Day 3	• Lecture on Sterilisation(10am to 11am)		
	• Hospital posting along with Infection control Nurse		
	(11am to 4pm)		
Day 4	• Lecture on Disinfection(10am to 11am)		
	• Hospital posting along with Infection control Nurse		
	(11am to 4pm)		
Day 5	• Lecture on Biomedical waste disposal(10am to 11am)		
	• Hospital posting along with Infection control Nurse		
	(11am to 4pm)		
Day 6	• Lecture on Role of Infection control Nurse in		
	prevention of VAP & CAUTI (10am to 11am)		
	• Hospital posting along with Infection control Nurse		
	(11am to 4pm)		
Day 7	• Lecture on Role of Infection Control Nurse in		
	prevention of CLABSI and MRSA outbreak (10am to		
	11am)		
	• Hospital posting along with Infection control Nurse		
	(11am to 4pm)		
Day 8	• Lecture on Needle Prick injuries and PEP (10am to		
	11am)		
	• Hospital posting along with Infection control Nurse		
	(11am to 4pm)		
Day 9	Posting in CSSD (10 to 4pm)		
Dev. 10			
Day 10	• Course Ending Exam		

Assessment:

• Theory Examination of 30 Marks will be conducted on Day 10.

- To be declared successful the candidate will need to score minimum of 50% marks in the above examination.
- For unsuccessful candidates a repeat examination will be conducted after 1 week.
- A certificate of completion will be handed to successful participants by MGMIHS at the end of the course.

Annexure-52A of BOM-62-2020

10 A: Hospital Infection Prevention and Control: Microbiology (Aurangabad)

Topic:-Hospital associated Infections: Prevention and Control for 2nd Year MBBS students:

Name of the course: Hospital associated Infections: Prevention and Control - for 2nd Year MBBS students:

Eligibility: 2nd MBBS

Course Description: It is a short certificate course aimed at providing adequate Knowledge to 2nd MBBS students about health care associated infections, how infection occurs and ways to prevent such infections. To provide knowledge about the impact of Hospital Acquired Infections (HAIs) and the roles of various stakeholders involved in infection prevention and control. The course also covers best practices recommended by latest guidelines. As the course also covers ways of handling biomedical and hazardous wastes and methods of disinfecting hospital environment, the students will be better equipped with enough knowledge and skills needed for the maintenance of a safe hospital environment and health care delivery practices, as it is the need of the hour.

Course Objectives

- The program in Health Care Associated Infections (HAIs) is organized to provide adequate Knowledge about health care associated infections & its impact.
- 2. Apply appropriate steps to break the chain of infection and reduce health care associated infections
- 3. Use correct infection prevention and control measures including standard and transmission-based precautions
- 4. To provide knowledge in control of HAIs in different settings in the hospital treatment and diagnostic areas
- 5. To provide adequate knowledge to identify an outbreak

Course Outcomes. At the successful completion of the course the student will:

- 1. Have knowledge of common organisms causing HCAIs ,its sources ,various routes of transmission .
- 2. Have knowledge about device associated infections & measures to prevent it.
- 3. Have knowledge of safe needle handling and PEP(post exposure prophylaxis)
- 4. Have knowledge about use of Personal protective equipment and standard biosafety precautions.
- 5. Have knowledge of biomedical waste segregation & its management.
- 6. Have knowledge about management of blood spill with practical demonstration using simulated conditions.

- 7. Have knowledge of the importance of hand hygiene in prevention of hospital acquired infection.
- 8. Have knowledge about environmental cleaning, disinfection of high risk areas.

Course timing: During Summer vacation every year

Duration of Course : (Total 16 hrs)

Eligibility Criteria for admission: UG --2nd (MBBS)

Admission / Selection Process- 1^{st} 5 students applied for the course

Intake Capacity : 05 Students

TEACHING hours- Total 16 hours - 2 hours per day.

Course Co-ordinator: Infection Control officer (DrAnupamaWyawahare)

Facilitators: All teaching faculty of Microbiology Department.

Fees: As decided by MGMIHS

Requirements: Additional remuneration (Min Rs 500/ Lecture) for conducting classes to the teaching faculty & Rs 200/ lecture to infection control nurse (ICN).

Course Outline:

Teaching scheme (Total period allotted to each topic)

• 16 hrs teaching – 2 hours per day.

Sr. No	TOPICS	No. of Periods allotted
1	Introduction to Health care associated infections, (HCAI), factors affecting HCAIs & its impact.	1
2	Common organisms causing HCAIs, sources and modes of its transmission	1
3	Standard Universal Precautions & Transmission Based Precautions & PPE.	1
4	CSSD: Monitoring & Validation of Sterilization Activities	1
5	BMW Management and spill management	1
6	Hand Hygiene Guidelines	1

Theory Lectures

7	High risk areas & Device associated infections.	1
8	Identification of Outbreak Of Hospital Acquired Infection	1
9	Prevention and control of HCAIs part 1 : Needle Handling Policy, Safe Injection And Infusion Practices, Needle Prick Injury/ Body Fluid Exposure- Protocol	1
10	Prevention and control of HCAIs part 2 : Hospital infection control program.	1
11	Antibiotic policy & its importance.	1
12	Course ending exam	1

Demonstrations/ Practical's

Sr. No	TOPICS	No. of Periods allotted
1	Sterilization procedures and its Quality control methods Disinfectants Used In Hospital & Methods for testing efficacy of disinfectants eg - In Use test	1
2	BMW – Segregation of biomedical waste & disposal methods, & spill management.	1
3	Hand Hygiene steps	1

4	CSSD Visit along with ICN	1

Eligibility to appear in exam: 80% attendance is must

Assessment:

- Theory Examination of 30 Marks will be conducted in the form of short answer questions (SAQs)
- SAQs --- 5/6 (30 marks)
- To be declared successful the candidate will need to score minimum of 50% marks in the above examination.
- For unsuccessful candidates a repeat examination will be conducted after 1 week.
- A certificate of completion will be handed to successful participants by MGMIHS at the end of the course.