



**PRAVARA INSTITUTE OF MEDICAL SCIENCES
(DEEMED TO BE UNIVERSITY)**

**Loni, Tal. Rahata, Dist. Ahmednagar 413736
NAAC Re-accredited with 'A' Grade**

SYLLABUS

**Post Doctoral Fellowship in Healthcare Associated Infections : Prevention Control
(Dept. of Microbiology)
(Dr. Balasaheb Vikhe Patil Rural Medical College)
(Academic Council Meeting Dated 25th August 2022)**

Title: Healthcare Associated Infections: Prevention & Control

Duration Course- One year

Objectives

- To study the epidemiology and the risk factors for developing healthcare-associated colonization and infection
- To know the principles of surveillance and identifying healthcare associated infections, organisms resistant to antimicrobial agents, or epidemiologically important organisms.
- To study the data supporting important infection control and antibiotic management strategies
- To be able to effectively respond to issues about exposure to infectious diseases and appropriate prevention and control strategies for hospital acquired infections.
- To have awareness of the impact that healthcare associated infections on health of patients.
- To understand a wide variety of specific topics: Basics of epidemiological methods, outbreak investigations, microbiology labs, case studies, antimicrobial management, UTI, VAP, SSI, BSI, MRSA/ VRE, C. difficile, patient safety, occupational exposure and vaccination

COURSE CONTENTS

1. Introduction to HAIPC
2. Basic Epidemiology
3. Healthcare associated infections and their prevention
4. Organization of Infection control programme
5. *Functional aspect of Infection control programme*
6. *Importance of Infection control in Healthcare Facilities*
7. Surveillance of Hospital Acquired Infections in hospitals
8. *Hand Hygiene and aseptic techniques*

9. Standard Isolation Precautions
 10. Cleaning, Disinfection and Sterilization
 11. *Engineering control in ICU, OT, CSSD & OPD areas*
 12. *Infection control: Planning & designing*
 13. Infections in ICUs and their prevention
 14. Operation theatres
 15. Catheter associated Urinary tract Infection
 16. Hospital acquired pneumonia
 17. Catheter-related blood stream infections
 18. Resistant and emerging pathogens and Bioterrorism agents
 19. Central sterile supply department
 20. Role of HAI team in Laundry
 21. Food services
 22. Biomedical Waste Management (BMW)
 23. *Healthcare workers safety: Risk reduction and Management Plan*
 24. Post exposure management
 25. Infections in traumatized patients
 26. Infections in Immunocompromised host and their prevention
 27. Clinical microbiology laboratory standards relating to Infection control
 28. Antimicrobial resistance & stewardship
 29. Management of disease outbreak
 30. Economics in Healthcare associated infections
 31. *NABH standards in Infection Control*
 32. *Audits in Infection Prevention & Control Practices*
 33. *Preparation Of IPC manual*
 34. *Preparation Of CSSD manual*
 35. *Preparation Of BMW manual*
- **TEACHING STRATEGIES**
 - A total of 290 working days (approximately) will be available for teaching, learning and evaluation in one year. It is further divided in to 20% teaching hours and 80% of the hours will be assigned for outside classroom sessions (Daily rounds in critical/ non-critical areas, surveillance, audits, BMW rounds, laboratory work, CSSD visits, Infection control Meetings etc)
 - **Each candidate have to go through arotatory posting in following areas**
 - a) Microbiology laboratory (Bacteriology, Virology, Serology, Mycology, Parasitology etc.)

- b) Daily rounds with infection control team (ICT) in critical care areas (MICU, SICU, CCU, HDU, RICU)
- c) Daily rounds with infection control team in wards, OPD/ casualty, laundry, food services
- d) Sterilization & Disinfection (in OTs, CSSD & Laboratory)
- e) Biomedical waste management rounds with BMW team
- Candidates have to participate & observe in all activities of Infection control team during posting.

- **ASSESSMENT PROCEDURE-**
 1. Each candidate has to complete at least one project under guidance of Microbiology faculty and have to submit & certify it before completion of the course.
 2. *Log book*
 3. *Minimum attendance- 80%*
 4. *Examination (Total 400 marks)*
 - *Two Theory papers-100 marks each*
 - *Practical & viva- 200 marks*
 - *Passing Criteria- 50 % in each theory & practical*
 - *Evaluation Microbiology- Faculty in Microbiology*
 - *Duration of Theory exam- 3 hrs each*
 - *Duration of practical exam- 1 day*
 5. Certificate of Fellowship will be given to each candidate on completion of course.

- **FEE STRUCTURE-**
 - Rs 1,00,000 for entire course

- **ELIGIBILITY CRITERIA FOR INDIAN/ FOREIGN STUDENT:** Applying candidate should have completed MBBS/MSc in Medical Microbiology/ PhD in Medical Microbiology/ Postgraduate Medical degree in the concerned specialty from a recognized Indian/ Foreign university.

- **INTAKE CAPACITY-** Maximum 5 per course.

**EXPENDITURE STATEMENT FOR ONE ACADEMIC YEAR FOR
FELLOWSHIP IN HEALTHCARE
ASSOCIATED INFECTIONS: PREVENTION & CONTROL
UNDER DEPARTMENT OF MICROBIOLOGY, DBVPRMC, PIMS, DU**

For Indian Students:

Income	Expenditure
Tuition Fees: Rs 1,00,000 per candidate.	Honorarium for resource person Rs 1000 per lecture (in-house faculty) and Rs 2000 per Guest lecture
Registration Fees: Rs 1000 Admission Fee: Rs 4000	Administrative expenditure Rs 5000 per candidate
Note 1. Leaves of 6 days/ course will be sanctioned by the institute. 2. Fellow will bear all expenditures 3. Paid Accommodation will be available as per PIMS (DU) rules.	

For Foreign Students:

Income	Expenditure
Tuition Fees: \$ 1200 per candidate.	Honorarium for resource person Rs 1000 per lecture (in-house faculty) and Rs 2000 per Guest lecture
Registration Fees: \$ 20 Admission Fee: \$100	Administrative expenditure Rs 5000 per candidate

Note

1. Leaves of 6 days/ course will be sanctioned by the institute.
2. Fellow will bear all expenditures
3. Paid Accommodation will be available as per PIMS (DU) rules.

- **Evaluation:-**

Term end examination will be arranged and conducted by Dept. of Microbiology, Dr. Balasaheb Vikhe Patil Rural Medical College and declare the result.

- **Examination Scheme**

Paper – I: Post Doctoral Fellowship in Healthcare Associated Infection : Prevention & Control – I
 Paper – II: Recent advances in Post Doctoral Fellowship in Healthcare Associated Infection :
 Prevention & Control

Theory Examination:- (2 Paper of 100 marks each)

2 LAQ x 20 Marks = 40 Marks

6 SAQ x 10 Marks = 60 Marks

Practical Examination:-

One Long Case / Long experiments = 50 Marks

Three Short Cases (3 x 30) = 90 Marks

Viva Voce / Oral / OSPE / Spottes = 60 Marks

Minimum Passing:-

- i) Minimum 50% in Theory papers (Each paper minimum is 40%)
- ii) Minimum 50% in Practical /Clinical & Viva Voce
- iii) Overall 50% Theory & Practical/Clinical

Award of class:-

- 50% to 59.5% = IInd class
60 to 74.5% = Ist Class
Above 75% = Ist Class with Distinction

Attempts:-

- A student shall clear the Examination only within three attempts or within 4 years of admission.
- Result / Issue of Mark Sheet – Head of Institute & HOD will jointly issue the Mark Sheet.

Certification:-

- A) Title – Post Doctoral Fellowship in in Healthcare Associated Infection : Prevention & Control.
- B) A fellowship is awarded upon successful completion of the prescribed study program, which will state that i) Candidate has completed the prescribed course of Post Doctoral Fellowship in in Healthcare Associated Infection : Prevention & Control, ii) Candidate has completed prescribed clinical experience. iii) Candidate has passed the prescribed examination.
- C) Certificate will be issued with the signatures of concern Dean, Dr. Balasaheb Vikhe Patil Rural Medical College & Vice-Chancellor, Pravara Institute of Medical Sciences (Deemed to be University).
- D) Certificates to be prepared by concern College.




Registrar
Pravara Institute of Medical Sciences
(Deemed to be University)
Loni-413736, Tal. Rahata, Dist. Ahmednagar
(M.S. India)