Teerthanker Mahaveer University
Hospital Infection control practices

Duration-30 Hrs.

SYLLABUS

Course Content: The course should be complete within 6 weeks, which includes theoretical and practical training in the different aspects of hospital infection control parameter.

Background: Historical journey, organization of hospital infection control, journey of antimicrobials, current scenario and challenges in hospital infection control. Immunocompromised host and a special scenarios. Candidates will be introduced to the basics of hospital acquired infections (HAI).

Routes of transmission and their prevention: Various routes of transmission of infection and methods of prevention of infectious diseases in hospital settings.

Infection control programme organization: Role of hospital administration in hospital infection control, hospital infection control committee, infection control team, role of ICN, other staff, infection control manual, introduction to surveillance of hospital infection control.

Surveillance: Different principles and practices of surveillance of hospital acquired infections such as device associated infections (Ventilator associated pneumonia [VAP], Catheter associated urinary tract infections [CAUTI], and Central line associated blood stream infections[CLABSI]), surgical site infections (SSI), Clostridium difficile infection (CDI) and their routine surveillance. Hands on training in surveillance of hospital acquired infections will be provided.

Needle stick injury and post exposure prophylaxis: Needle stick injury (NS1), safe injection practices and post exposure prophylaxis (PEP) protocols among hospital staff, exposure reporting, evaluation of occupational exposure sources.

Sterilization and disinfection: Various physical and chemical methods of sterilisation and disinfection will be taught to the candidates. Cleaning and reprocessing of medical equipment, disinfection of Hepatitis B virus, Hepatitis C virus, HIV or TB contaminated devices. Practical hands on training will be conducted in the department of microbiology.

Personal protective equipment and standard precautions: Correct method of use of personal protective equipment (PPE), the significance of taking standard precautions, elements of standard precautions, supportive measures, administrative responsibilities, education and training of healthcare workers, patients and families will be taught to the candidates.

Isolation protocols: Protocols regarding indications of isolation in relation to infectious diseases such as swine flu, managing a patient during isolation, standard precautions to be taken in these patients will be taught to the candidates

Biomedical waste management: BMW rules 2016 update will be given to the candidates along with hands on training.

Central Sterile Services Department (CSSD): Visit to the central sterile services department along with infection control practices being followed in CSSD. Location and organization of CSSD in a hospital, workflow, transport and reception of non sterile items, cleaning of devices and items, drying, assembling and packaging, sterilization will be discussed in detail.

Laundry: Training on method of collecting and processing used hospital laundry such as linens, towels and other material along with segregation of such articles for sterilization and reuse based on pre-defined criteria will be imparted.

Device associated infections: Comprehensive teaching along with hands on training on various device associated infections such as VAP, CAUTI, CLABSI, their bundle care protocols and related aspects, prevention bundles, safe handover, inventory management, checklist and kits for different protocols such as lumbar puncture kit, central line kit etc.

Antimicrobial resistance (AMR): General aspects of AMR, control of antimicrobial resistance in health care facilities, Extended Spectrum Beta Lactamase producing Gram negative bacteria, Methicillin Resistant Staphylococcus aureus, Vancomycin Intermediate Staphylococcus aureus, CDI, Vancomycin resistant Enterococci, Mycobacterium tuberculosis, incidence of multidrug resistant organism infections, challenges in routine patient care, antimicrobial stewardship, antibiotic policy and its significance in reducing AMR in hospital.

Vaccination: Role of vaccination in reducing severe HAI such as Hepatitis B, H1N1 and other hospital acquired infections. Important vaccines in HIC such as HepatitisB, H1N1, MMR, chickenpox.

Blood spill: Management of blood spill with practical demonstration using simulated conditions.

Hand hygiene: The role of hand hygiene in hospital acquired infection. Steps of hand washing and related topics will be dealt in detail.

Environmental surveillance: Disinfection of OT & ICU and taking surveillance cultures from critical areas, setting up surgical site infection surveillance in hospital.

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