INFECTIOUS DISEASES

CARE BUNDLE FOR PREVENTION OF ICU ACQUIRED INFECTIONS

*Vasanth Kumar **Suchitra Ranjit

Abstract: Bundle is a collection of evidence based medical practices that help in improving outcome. Care bundles contribute to infection prevention, reduce unnecessary antibiotic usage and may limit the development of antibiotic resistance. Hand hygiene and aseptic techniques are important elements of any care bundle. The components of ventilator associated pneumonia bundle aim to prevent micro-aspiration, colonization of upper airway and gastrointestinal tract with potentially pathogenic organisms and contamination of ventilator circuit. The components of catheter associated infection prevention bundle aim to prevent extraluminal transmission of microorganisms from patient's skin and intraluminal transmission via direct contamination of the catheter or tubing. Care bundles are relatively easy to develop and implement in hospital set up using Plan-Do-Study-Act model with help of a team member identified as a bundle champion.

Keywords: Bundle, Ventilator associated pneumonia prevention bundle, Central line care bundle, Catheter associated urinary tract infection prevention bundle, Plan-Do-Study-Act cycle

- * Consultant
- ** Senior Consultant and Head of Department, Pediatric ICU, Apollo Children's Hospital, Chennai email: suchitraranjit@yahoo.co.in

Points to Remember

• Each and every component of care bundle is vital for achieving the desired outcome.

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- Bundles contribute to infection prevention, reduce unnecessary antibiotic usage and may limit the development of antibiotic resistance.
- Pediatric ventilator bundle consists of head end elevation, daily assessment for readiness to extubate, daily oral care, ventilator circuit care and suctioning precautions.
- Central line care bundle includes hand hygiene, maximal barrier precautions, chlorhexidine for skin preparation, transparent dressing and prompt removal of the catheter.
- Routine antibiotic prophylaxis and routine replacement of central line or urinary catheter is not recommended.

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