

How clean are we? - A look into the need for CSSD in healthcare set-ups



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What is CSSD?

Central Sterile Supply Department (CSSD) is the wing in a hospital responsible for ensuring sterile armamentarium and equipment supply to all the departments in a hospital. It is equipped with state of art sterilization machinery to ensure adequate sterilization by most optimal technology for different instruments employed in the practice of dentistry. It processes, issues, and regulates the sterile stores supply and thus monitors the state of asepsis in terms of the instruments used. A correct design, appropriate equipment, skilful operators and a unidirectional work flow are the fundamental principles behind an efficient CSSD.

Structure of CSSD

The CSSD comprises of four zones¹–

- Zone 1) The unclean and washing area
- Zone 2) The assembly and packing area,
- Zone 3) The sterilization area and
- Zone 4) The sterile area.

Each of these zones has designated equipment to perform specific functions towards sterilization of articles for immediate use in patient care. A CSSD unit in hospital ensures quality control processes by incorporation of latest technology to reduce incidence of hospital acquired infections. Incorporation of CSSD concept in multi-specialty hospitals eases on the task of maintaining sterilization and standardizes the quality of sterilization across various departments of a hospital.

Need for Infection Control in Dentistry – Risk Factors and Challenges

Infection control is a major issue in all specialties of dentistry as they deal with the oral cavity or associated tissues which are contaminated with blood or saliva easily. The intensity of asepsis needed to prevent cross contamination amongst patients or to doctors by ensuring a well-equipped sterilization process is thus paramount. Various guidelines

and policies have been developed around the world to standardize infection control in dental practice.

Dental equipment consists of re-usable instruments which unless adequately disinfected, may pose unacceptable risks of cross infection. Handpieces and their attachments, surgical instruments used in periodontal and facio-maxillary surgeries, small endodontic instruments, impression trays and other prosthetic components form a bulk of instruments with multiple patient usage. The likelihood of cross contamination if these are not properly sterilized can be countered by instituting a department responsible for ensuring the thorough sterilization of the same.

Role of CSSD- Improving Infection Control

The increase in hospital acquired infections in Indian hospitals highlights the need for a CSSD.² The primary role of CSSD is to support infection control within the healthcare facility. CSSD staff members must be well-trained and skilled, and committed to “doing what’s right” every step of the way. This would avoid any shortcuts in the sterilization process and ensure that standard practices are consistently followed.

CSSD is an independent department which takes up the charge of conducting cleaning, disinfection and sterilization procedures in a controlled and regulated conditions to ensure a safe working environment for the patients and staff. This also helps in reducing the work load of nursing staff and dental assistants, enabling them to devote more time towards patient care.

CSSD also maintains records and data about the sterilization processes and cycles and helps in assessment of efficacy of techniques employed for the same.

Future Promise

The need for improved sterilization implementation is not limited to multidisciplinary hospitals. The requirement of these services for smaller clinics and private practitioners has led to the outsourcing of the sterilization to independent

CSSD units in various location of metropolitan cities. These units collect, clean, pack and sterilize instruments from various clinics and deliver them back. Such a set-up becomes helpful when an extensive in-house CSSD cannot be set-up, as it meets the stringent needs of asepsis without the investment in space and infrastructure.

CSSD installation is not the end of the road in infection control. The CSSD team needs to be well trained and regularly updated about the latest norms and practices for asepsis and disinfection in dentistry. The CSSD team has the knowledge to support effective problem-solving and decision-making which impact the infection control and thus direct the standard of patient care and safety.

With increasing patient awareness, medico-legal aspects and rise in cross contamination, CSSD promises to be a solution for curbing these incidences and ensuring a sterile working environment and improvised infection control.

CSSD is becoming a norm for various hospital accreditations, thus emphasizing its importance in healthcare industry. Since dentistry deals with some of the most contaminated instruments and invasive and surgical techniques, CSSD has become a need of the hour, especially for multi-specialty Dental hospitals with huge patient in-flows.

References

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