

# CHAPTER: 10

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## STUDY ON QUALITY CONTROL IN CENTRAL STERILE SUPPLY DEPARTMENT IN DAMAS MEDICAL CENTER, SHARJAH

<sup>1</sup>*Alisha Aniruddha Kunte*  
Student, IIHMR University

<sup>2</sup>*Dr. J.P. Singh*  
Professor, IIHMR University

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## **INTRODUCTION**

It is well-established that a hospital relies on the cleanliness of its equipment and linens. Instruments utilized in surgeries or procedures must undergo thorough cleaning and sterilization for reuse [1]. The Central Sterile Supply Department within the hospital plays a crucial role in sterilizing equipment and supplying sterile instruments to various hospital departments. Its primary responsibility involves the decontamination of used instruments [2].

The establishment of a Central Sterile Supply Department (CSSD) aims to consistently provide sterilized instruments when and where needed, meeting agreed-upon standards and ensuring cost-effectiveness within the hospital. This study's objective was to assess whether a multi-specialty clinic adhered to proper protocols and policies, aligned with Sharjah Health Authority standards, and to identify any potential bottlenecks. The significance of this investigation lies in the fact that a CSSD plays a crucial role in processing and distributing supplies, particularly sterile tools and equipment required across various hospital departments. Described by Bhattacharjee as a hospital service, CSSD is responsible for delivering sterile supplies to all departments, encompassing ordinary wards, outpatient departments, and specialized units [3].

## **RESEARCH OBJECTIVES**

1. To institute and uphold standardized procedures for the sterilization of various items utilized in the hospital.
2. To examine the standard operating procedures for sterilization within the Central Sterile Supply Department.
3. To analyze the quality control mechanisms implemented in the Central Sterile Supply Department.

## **RESEARCH METHODOLOGY**

The study was conducted over a period spanning from March 29 to June 29, 2022, within the Central Sterile Supply Department (CSSD) unit at Damas Orchid Medical Center in Sharjah. It adopted a descriptive

and observational research design. The study population included staff members from the CSSD department and the management of the selected hospital. Data collection involved structured interviews and questionnaires administered to the identified individuals. Additionally, secondary data was gathered from hospital profiles, websites, magazines, and articles.

Inclusion criteria comprised management staff, doctors, and nursing staff with at least one year of experience, along with patients. Conversely, staff members with less than six months of experience were excluded from the study. The study employed questionnaires and personal interviews as tools for data collection. Convenience sampling was utilized as the sampling method, with a total sample size of 25. This included 5 management staff, 7 doctors, 10 nursing staff from CSSD & OT, and 3 OT helpers. Data collection primarily relied on observation methods, and the study focused on quantitative data analysis.

## **RESULTS & DISCUSSION**

The data analysis reveals key insights into various aspects of the Central Sterile Supply Department (CSSD) at Damas Orchid Medical Center in Sharjah. It is evident that all management staff members are fully aware of the CSSD Department. The satisfaction levels with the current work efficiency of the CSSD staff, with 60% expressing satisfaction and 40% indicating dissatisfaction. 80% of staff report no missing instruments, while 20% acknowledge cases of missing instruments in the CSSD. Only 20% of management staff conduct inspections of the CSSD, indicating a potential area for improvement. Data demonstrates that 60% of employees follow color coding and zoning, while 40% do not adhere to these guidelines. All staff members use gloves during duty, but only 20% use masks, 10% use head caps, and 30% follow hand hygiene procedures. Figure 6.15 shows that 56% of staff follow quality indicators in the CSSD, while 38% do not, and 8% did not respond. In terms of standard, only 8% of staff claim to follow them, while 88% do not, with 4% not responding. Data provides insights into problems noticed by staff during work hours. The majority (64%) report issues during emergency times, 12% during elective operations, and 12%

during both emergency and elective operations. Twelve percent did not respond. These findings suggest areas where the CSSD at Damas Orchid Medical Center can potentially enhance efficiency, documentation, and adherence to standards and safety measures.

## **CONCLUSION**

To enhance the effectiveness of Central Sterile Supply Department (CSSD) practices at Damas Orchid Medical Center, it is recommended to implement various modifications based on the findings and analysis of the study. Firstly, healthcare professionals handling non-sterile instruments should consistently employ relevant safety measures and general precautions when dealing with infectious items. Strengthening training programs is crucial to ensure that all healthcare workers possess a comprehensive understanding of and adhere to infection control practices. The management should provide well-established policies and procedures to facilitate the smooth operation of CSSD. In terms of facility planning, Damas Medical Center should consider redesigning the CSSD layout, incorporating a minimum of three CSSD divisions to optimize efficiency. Thorough documentation is essential, and CSSD should maintain comprehensive records of cleaning, disinfection, sterilization, and indicator results. Continuous education and training interventions for CSSD staff, including nurses, technicians, and laborers, are vital for maintaining and enhancing their knowledge and skills in medical and surgical equipment sterilization.

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