## Brazilian central sterile supply department: yesterday, today and tomorrow

Centro de material do Brasil: ontem, hoje e amanhã

Centro de material de Brasil: ayer, hoy y mañana

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Since forever, in Brazil, the responsibility for coordinating the Central Supply Sterile Department (CSSD) has been delegated to nurses, based on the rationale that transforming contaminated material into clean/disinfected/sterilized and functionally satisfactory material is an act of caring for the patient. And caring for is the essence of nursing. The nursing staff at the CSSD defend as a value that "patient protection against contamination/cross-infection and other adverse events related to materials used in care, is above the duty and commitment to adequately meet the needs of care units, especially the surgical center".

The path of nursing teams at CSSDs has not been easy – and still is not. It is a shame that we do not have solid training in conceptual, technical, interpersonal, managerial skills directed to CSSD to occupy this space in the labor market competitively. This gap in nursing education has been highlighted for years in formal discussion forums, with little or no concrete repercussions in Brazilian nursing schools.

CSSD nurses have always had and still have an unconditional courage and willingness to overcome obstacles, mainly by means of self-education, mutual help and humility in the search for knowledge through multidisciplinary partnerships.

In this context, the rearguard of a solidly structured scientific society—the Brazilian Association of Surgical Center Nurses, Anesthetic Recovery and Material and Sterilization Center (SOBECC)—, globally connected with renowned international partners and supporters, especially the World Federation for Hospital Sterilization Sciences and the Association of periOperative Registered Nurses have, in some way, supplied the lack of basic training for nurses to manage the CSSD. Also worthy of special mention are the Brazilian research groups in the area of processing health products, which, aware of the difficulties of practice in CSSDs, have produced thoroughly constructed scientific evidence that is competitive for publication in renowned international journals.

Looking at our path, we nowadays recognize great achievements:

- Conviction that the cleanliness of health products is non-negotiable for ensuring the safety of material processing. In this sense, we have relentlessly questioned the manufacture of materials that do not allow safe cleaning, while recognizing the importance of extraordinary technological advances for the improvement of surgical procedures. We have also questioned the placement of implantable materials in trays that circulate through various CSSDs, without a standard operational protocol validated by the companies that decided to make them available, which deviates from the gold standard of other ready-to-use implantable materials;
- Acknowledging the lack of sense of coherence of the CSSDs obligation to establish shelf life for processed health products, as sterility is related to events and not to the date set on the packaging of devices. In this setting, a CSSD should never accept proof of a safe shelf life through microbiological cultures;
- Introjection that the safe bases of sterilization processes must urgently be extrapolated beyond chemical/

biological indicators, reaching the qualification of performance load testings, after qualifying the installation and operation of sterilizing machines;

- Acknowledging that low temperature sterilization methods have safety limitations that must be carefully bypassed, keeping in mind that these methods fall far short of the safety guaranteed by sterilization with pressured saturated steam;
- Update on the multi-causality of wet material in sterilization using pressured saturated steam, which may be related to steam quality, sterilizing equipment, cycle parameters, load and CSSD practices. Equipping oneself with CSSD practices that may impact on obtaining dry material;
- Maintenance of continuous discussions on controversial issues of material processing outside and inside health services, with highlight to the reuse of health products marketed as single-use and the risk of transmission of prion proteins.

What do we want for the times to come? We want the concept of safe surgery when it comes to materials not to be restricted to checking the change in chemical indicators types 1 and 5/6 in the operating room. We need senior management and the Infection Control Commission to be aware that a safe

surgery starts at the CSSD, and, therefore, to support the provision of dignified structures for work processes to take place satisfactorily, ensuring that the materials are transformed into an equivalent to "new". It is urgent that all CSSDs in Brazil hire professionals with conceptual, technical, interpersonal, managerial skills, who carry out validated standard operational protocols, especially for cleaning; and that they actively take part in the acquisition of inputs, accessories and new technologies for the different sectors of the CSSD, based on cost-effectiveness analyses. It is also necessary that the professionals responsible for the CSSDs leave their bubble, establishing dialogues with surgical center managers—our biggest client—, with the surgical team, including instrumentation nurses, and the senior management, strengthening arguments that can overthrow other non-coherent arguments. This will promote the visibility, respect, and appreciation of CSSDs.

What about patients, the reason for the CSSD's investment in safety? I hope that the patient's choice of a health service for invasive procedures, especially surgical centers, is based on the competence and trust on the works by the CSSD!

Finally, the theoretical basis of health product processing has evolved thanks to new scientific evidence and critical thinking. It is our duty to keep users of our services up to date on new patterns related to the safety of processed material.

Brazil, you can leave it to us! Nurses know all about CSSD!

