The Development of the Sterile Processing Profession through the years in Mexico and Latin America

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Background

- The SPDs existed since hospitals were first built
  - They were the union of the pharmacy, linen department and the OR
- In the 1970’s and the 1980’s:
  - Pharmacy, linen department and housekeeping were often consolidated in one area: “Central Supply”
  - There was not much standardization: most people learned on the job from others in the department
  - The majority of products that were being processed by CS, were now being manufactured as “disposable” and sterilized outside of the hospital
    - Central Supply and Sterilization Departments were incorporated into the “Materials Management Department” and the processing and sterilization of surgical instruments became a small section in the department
Background

In the 1990’s:
- The development of new and less invasive surgical techniques
- New materials and more complex devices
- Necessity of low temperature sterilization methods
- Tremendous strides in total joint and spine surgery
- “Loaner trays”

More complexity in a department that had been relegated to the corner of the Materials Management Department
Mexico and Latin America

• The situation was not different

  Opportunity for Improvement

• What had to be done to change the situation and make the CSSD visible?

• Research:
  • Improvements
  • Changes
The Central Supply Department Situation

- Staff
- Infrastructure
- Equipment
- Industry and Manufacturers
The Staff & the CSSD...

• It was an unknown, forgotten and unwanted department:
  • it was undervalued

• The staff that worked in the CSSD, was the one that behaved badly:
  • Place of punishment
  • Nobody wanted to work in the CSSD
The Staff...

• Moreover, the staff was not trained to carry out the tasks:
  • Many times it was the janitor's staff who did the cleaning of the instruments
  • No PPE
  • The IFUs were unknown
• The work of the CSSD was based on the assembly of textiles and sterilization of gauze
• The cleaning and decontamination were made in the surgical areas
Infrastructure...

- Old hospitals: Located where there was space
  - A small place in a corner of the hospital
- Unplanned during the design of a new hospital
- Closed places, without ventilation, difficult access
- No division between areas (decontamination, assembly and packaging, sterilization)
Equipment

- No equipment for decontamination
- In most cases, only textiles for packaging
  - Worst cases: Kraft paper
- Very old autoclaves
- Only few hospitals with low temperature sterilizers:
  - Use of HLD
- No sterilization assurance monitoring
- No preventive maintenance of autoclaves
- No preventive maintenance of the physical space

Photo: Courtesy of Nora Carbone, Argentina
The industry and manufacturers

• Little or no manufacturer involvement
• Inaccurate information:
  • Liquid sterilants: “sterilization in 20 minutes”
Where to start?

**Staff:**
- Awareness
- Education & Training
- Certification
  - Pride of belonging

**Infrastructure and Equipment:**
- Create awareness in the Executive Board

**Industry:**
- Find partners who support the project
Objectives:

- Raise standards of practice based on international standards, guidelines and norms
- Change the perception of the department
- Increase the staff’s skills
- Create a multidisciplinary team with the involvement of other departments

Make the CSSD visible
Team work

Healthcare Facilities

CSSD, IP, Surgical Staff

Manufacturers

Professional Associations

Accreditation Organization
On April 26th, 2003 the first CBSPD Technician Certification Exam in Mexico was given:

- 48 candidates
- 82% passed

More than 3000 exams were given since 2003

Guatemala, Nicaragua, Costa Rica, Panama, El Salvador, Colombia, Chile, Peru, Bolivia, Argentina and Puerto Rico
Professional Associations and Partnership with Manufacturers

- To promote good practices in the CSSD through:
  - Continuing Education
  - Training
- To promote and disseminate updated information through national and international: publications, events, conferences, etc.
- In services “custom made”
- To provide consultations to Hospitals
- Support for conferences and continuing education
Results and achievements

- Change from:
  - Textiles to nonwovens
  - Manual cleaning to mechanical washers
  - Manual documentation to electronic softwares for traceability

- Improvements:
  - Difference between HLD and sterilization
  - Complete Sterilization Assurance Monitoring
  - Verification of the cleaning processes
  - Use of PPE
  - Low temperature sterilizers
  - Preventive maintenance programs for equipment and physical areas
Commitment to the profession:
  - Need for Continuing Education
  - Awareness of the importance of following standards, guidelines, norms, IFUs and the regulations of each country

Pride in working in the department

Better facilities with separated areas and equipment:
If not available: improvement in the processes
The CSSD is no longer an unknown, forgotten and unwanted place, it is valued and many want to work in the CSSD.
Cleaning automation

Sets Assembly

Photos: Courtesy of Nora Carbone, Argentina
Cleaning verification

Photos: Courtesy of Nora Carbon, Argentina
Before...
After...
Before and after

Courtesy of Nancy Diaz, Colombia
Challenges

• Reuse of single use devices:
  • Work with the manufacturers of SUD to find a way win-win:
    • Economic
    • Environmental concerns
  • Emphasize the use of IFUs for device processing
The future...

- CSSD will continue to become a more regulated and studied department:
  - Evolving standards and evolving products
- Importance of following standards, guidelines and IFUs:
  - From the minimum requirements to the “State of the Art”
- Working on required certifications
  - Better educational programs for SP personnel
- Expanding automation and increasing the use of Artificial Intelligence to improve device processing and information exchange among CSSD, inventory management and surgery
Conclusions

- In the last 25 years there has been a renewed focus on the **Sterile Processing Department** and Instrument Processing.
- The pandemic reinforced the essential contributions and the important role played by the CSSD within healthcare organizations.
- Without the dedication of the SP professionals to cleaning, decontaminating, disinfecting, and sterilizing devices and instruments used in the OR, it would be impossible to provide infection-free patient care.

**Sterile Processing matters!!!**
Thank you!  Danke!
¡Gracias!  Merci!
ありがとうございます
References


5. Photos courtesy of Carmen Caro (Puerto Rico) and Nora Carbone (Argentina)