Introduction

The reprocessing of reusable medical devices (MD) is a key-element in clinical settings infection control, being reported in several medicine fields.

Objectives

To perform a descriptive review of clinical dental instruments definition as MDs and to describe concepts of MD reprocessing and traceability processes in dentistry.

Results

Sixteen papers were selected. Dental instruments are included in the MD category and regulated by law (Figure 1). Depending on the nature and complexity of the MD (Figure 2), several methods can be applied, recognizing their characteristics and limitations. MD reprocessing/traceability involve several stages and may include (Figure 3): disassembly, cleaning, disinfection, inspection, testing for functionality, packaging, sterilization and storage, requiring detailed records (Figure 4), logistical capacity and appropriate training. The instructions of MD manufacturers fall short of the necessary regulatory requirements, with information gaps that may limit those processes (Roebuck E.M. et al., 2008). Literature description is scarce, being necessary further studies applied to particularities of the dentistry clinical environment.

Conclusion

The reprocessing / traceability processes depend on the MD type, instructions issued by MD manufacturers, professional training and require documented and validated records, there being no standard protocol.

Clinical Implications

The possibility of reprocessing/tracing reusable MD assures resources optimization and promotes patients and dentistry team safety.

Methods

Research was performed in PubMed between the years 2000-2015, with the keywords: “cross-contamination”, “disinfection”, “sterilization”, “reusable instruments”, “reprocessing”, “traceability” and “dental medical devices”. Five hundred and sixty three papers were identified. Research methodology included narrative/systematic reviews, and observational studies of reprocessing/traceability processes; publications regarding the effects in MD resistance, efficacy of methods and equipment processing were excluded.

References