

Office of Evidence Based Practice (EBP) – Dr. Brown’s Baby Bottles

Specific Care Question: When infants in the Neonatal Intensive Care Unit are being fed with Dr. Brown’s Bottles would standard cleaning procedures versus no standard cleaning procedure result in decreased health care infections in this population?

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Clinical Bottom Line:

No evidence was found to answer the question. Standard work should be established for this issue.

Summary:

At Children’s Mercy, there is no written policy on the handling and cleaning of reusable baby bottles. Since there is no established procedure, The Joint Commission (2014) recommends the following:

There are numerous steps involved in the cleaning, disinfecting, and sterilizing of medical equipment, devices, and supplies. It is critical that health care workers follow standardized practices to minimize infection risks related to medical equipment, devices, and supplies. In order to maintain a reliable system for controlling this process, organizations should pay attention to the following:

- Orientation, training, and competency of health care workers who are processing medical equipment, devices, and supplies.
- Levels of staffing and supervision of the health care workers who are processing medical equipment, devices, and supplies.
- Standardization of process regardless of whether it is centralized or decentralized.
- Reinforcing the process (for example, the use of placards which list the steps to be followed, according to manufacturer’s guidelines).
- Ongoing quality monitoring.

(The Joint Commission, 2014)

Dr. Brown’s Bottle, the manufacturer provides cleaning guidelines for its bottle systems and nipples in a hospital environment.

- Prior to first use and in between feedings the work area and equipment in the infant bottle preparation room/area should be kept clean at all times.
 - Wash work surfaces with cleaning solution appropriate for food contact before and after use.
 - The bottle, nipple, collar and internal parts (unit) should be disassembled and thoroughly cleaned prior to initial use and after each use with a dishwashing detergent and brush to eliminate all debris.
 - The reusable feeding unit and nipples should be washed in warm, soapy water, rinsed well between each use, and sterilized at least daily (every 24 hours).
 - Brushes used in the cleaning of units and other equipment should be sanitized or replaced at least every 24 hours.
 - To sanitize the unit every 24 hours, use a Dr. Brown’s microwaveable steam sterilizer bag.
 - Each steam sterilization bag can be used for a total of 20 times at the following power levels and timeframes:
 - 1.5 minutes for 1100W+
 - 3 minutes for 800 – 1100W
 - 5 minutes for 500 to 750W
 - Microwaveable safe brushes can also be placed in the bags for sanitizing.
 - Always check the nipples for signs of wear and replace when damaged.
 - The Dr. Brown’s Bottle system and nipples can also be cleaned via Autoclaving (Steam Sterilization).

(Dr. Brown’s Medical, 2016)

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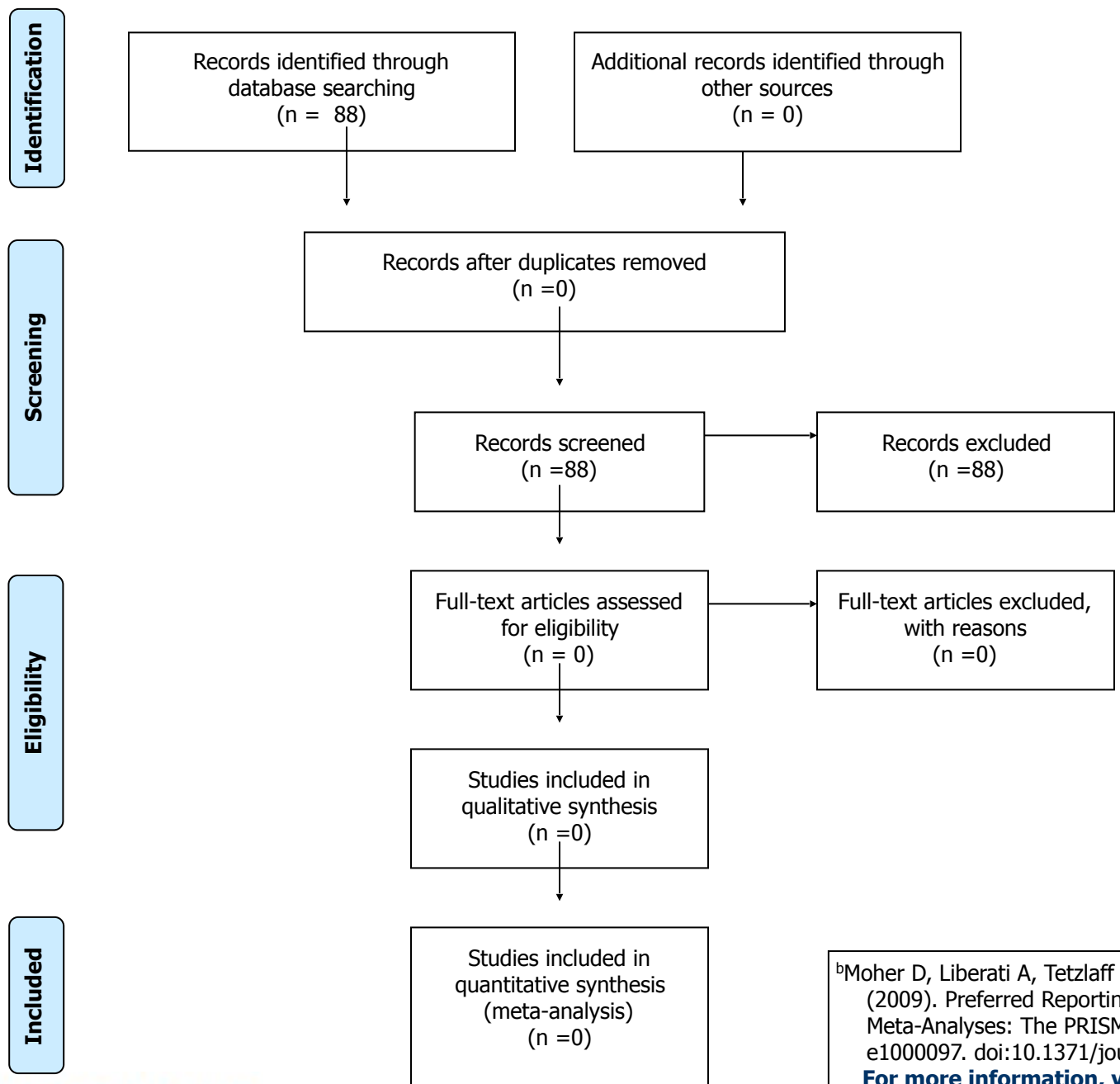
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Search Strategy and Results: : ("Bottle Feeding"[Mesh] OR "baby bottle" OR "baby feeding bottle" OR "infant feeding bottle") AND ("Infection Control"[Mesh] OR "Infection/prevention and control"[Mesh] OR "Cross Infection"[Mesh] OR "Iatrogenic Disease"[Mesh] OR "Disinfection"[Mesh] OR "Equipment Contamination"[MeSH]) Filters: English 88 results; 0 identified for closer review, 0 articles answered the question.

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Figure 1. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)^b



^bMoher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(7): e1000097. doi:10.1371/journal.pmed1000097
For more information, visit www.prisma-statement.org.

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Reference

Suggested Guidelines for Cleaning Dr. Brown bottle systems and nipples in a Hospital Environment. (2017, October 13). Retrieved from <https://www.drbrownsbaby.com/medical/wp-content/uploads/2016/10/suggestedguidelinesforcleaning080813.pdf>

The Joint Commission. (2014). Improperly sterilized or high-level disinfected Equipment. Retrieved from http://www.jointcommission.org/assets/1/23/Quick_Safety_Issue_Two_May_2014.pdf