

Comparison of Traditional and Disposable Bed Baths in Critically Ill Patients

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ABSTRACT

BACKGROUND

- “For bedridden patients unable to perform personal hygiene measures because of acute illness or chronic debilitation, the bed bath, with either the traditional basin or, more recently, disposable baths, has long been a measure for improving hygiene and comfort.”

OBJECTIVE

- “To compare the traditional basin bed bath with a prepackaged disposable bed bath in terms of 4 outcomes: time and quality of bath, microbial counts on the skin, nurses’ satisfaction, and costs.”

METHODS

- “Forty patients in surgical, medical, or cardiothoracic intensive care units received both types of bath on different days. Baths were observed, timed, and scored for quality. Cultures of the peri-umbilicus and groin were obtained before and after each bath. At the end of the study, nurses were interviewed about their preferences.”

RESULTS

- “Neither total quality scores nor microbial counts differed significantly between the 2 bath types. Significantly fewer products ($P<.001$) and less time were used, cost was lower, and nurses’ ratings were significantly better with the disposable bath.”

CONCLUSION

- “The disposable bath is a desirable form of bathing for patients who are unable to bathe themselves in critical care and long-term care settings, and it may even be preferable to the traditional basin bath.”

KEY POINTS

TIME AND QUALITY OF BATH

- “Because several studies have indicated that bathing increases oxygen consumption and mixed venous oxygen saturation in critically ill patients, maximizing efficiency, time, and comfort for this procedure in ICUs is important.”
- Disposable baths took less time and fewer products were used. Also, the time required to gather equipment (4.05 vs. 1.90 minutes) and prepare was significantly longer with the traditional bath.

SKIN MICROBIOLOGY

- Differences in skin microbiology for patients bathed with the two different methods were not clinically significant.
- However, in most instances (69.8%), basin bath water was not changed. Since basin bath water becomes heavily contaminated with skin flora during bathing, not changing the water could create a reservoir for recontaminating the patient’s skin or moving flora from one area of the body to another. In terms of removing potentially harmful microorganisms, the effectiveness of a basin bath depends on the technique used.
- The disposable bath offered fewer opportunities for recontamination of the skin (the parameter “avoids recontamination” was defined as not reusing a cloth that had been used in groin area, perineum, or toes).

NURSE SATISFACTION

- Nurses expressed a clear and significant preference for the disposable bath, corroborating findings by other investigators.

COSTS

- Although the costs of the disposable bath products were slightly higher (\$2.79 vs. \$2.59), the overall cost (\$18.15 vs. \$19.87) was less for the disposable bath due to savings in nurses’ time and salary.
- Basin bath costs of water consumption, heating (which can be 21% to 32% of a hospital’s total energy consumption, depending on climate zone), and sewage were not included in the study. Washcloth replacement costs were not included either (washcloths are replaced after an average of 1.5 uses).
- If excluded costs were figured in, the cost differential in favor of the disposable bath would be even greater.

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