Abstract

## **Original Article**

# Problem Identification of and Proposed Device Modification for Bedside Hygiene Care

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## Abstract

**Background:** Bedside hygiene care is a basic but important nursing intervention for bedridden patients.

**Objective**: We examined the circumstances of bedside hygiene care and the problems experienced by patients and nurses to proposed modification of bedside hygiene care devices.

**Methodology**: This cross-sectional nationwide study was conducted in 577 hospitals in Japan with 1,477 charge nurses chosen via stratified random sampling. Data were collected via a questionnaire on participants' experiences of washing patients' hair and bathing their hands, feet, and perineum. We also simulated a hair washing procedure to confirm and identify problems with hygiene care as reported in the questionnaire.

**Results**: Almost half of participants (49.7%) felt dissatisfied with their own bedside hygiene care. For hair washing, we observed significant difference between dissatisfaction and problems such as "uncomfortable positions are required to fit the vessel," "physician does not allow washing," "the hair-washing device is large," and "takes time to prepare the device" (all ps < .05 or .01). For hand bathing, dissatisfaction was significantly differed to "patient joint contractures," "water spilled on the bed," "difficulty in moving hands to hot water," and "[nurses'] low back pain during preparation" (ps < .05 or .01). For foot bathing, dissatisfaction was significantly differed to patient joint contractures and low back pain during preparation (ps < .05). Both patient/family members and nurses had similar requests for improving bedside hygiene care. From hair washing simulation, pain at the back head of patients and its source was confirmed. Nurses' complicated preparation and cleaning stage and repeated changing position during procedure were also pointed out.

**Conclusion**: Nurses were concerned with patients' discomfort during bedside hygiene care. Therefore, we proposed modifications to the typical bedside hygiene care device in terms of purpose, materials, and functionality to increase quality of care and nurse satisfaction.

Key Words: bedside hygiene care, care device, foot bathing, hair washing, hand bathing