AN EXPLORATION OF PATIENT BATHING PRACTICES AND BATH BASIN USE IN KENTUCKY HEALTH CARE FACILITIES

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FUNDING

• This work was supported by Sigma Theta Tau International, Kappa Theta Chapter Research Award, Western Kentucky University
BACKGROUND AND SIGNIFICANCE

• Health-care associated infections (HAIs) “are a major, yet often preventable, threat to patient safety.” (CDC, 2016)

• Approximately 5-10% of patients hospitalized in the U.S. contract a HAI per year. (CDC, n.d.)

• Bath basins have been identified as a potential source of transmissions of HAIs (Johnson, Lineweaver, and Maze, 2009; Marchaim et al., 2012).
BACKGROUND AND SIGNIFICANCE

- Other potential sources associated with bath basins include the use of washcloths and the water itself
  - Greaves (1985) reported that washcloths sampled prior to patient bathing grew gram-negative bacteria
  - Bed bath water got more contaminated as the bath progressed. Greaves (1985) noted “by the end of the bed bath, the water is a soup of soap and bacteria.”
BACKGROUND AND SIGNIFICANCE

• Strategies to reduce patient exposure to pathogens includes
  ▪ Eliminating the use of soap and water baths (Swan et al., 2016)
  ▪ Move to single-use prepackaged, premoistened, rinse-free disposable washcloths (McGoldrick, 2016)
  ▪ Chlorohexidine bathing (Wang & Layon, 2017)
  ▪ Adoption of standardized processes for patient bathing and bathing products (Eigsti, 2011)
The purpose of this pilot study was to:

1. Determine the bathing procedures for patients in both acute and long term care facilities in Kentucky

2. Describe the procedures used by facilities for labeling, cleaning, and disposing of reusable bath basins
RESEARCH DESIGN, PARTICIPANTS, & SETTING

• Pilot study
• Descriptive design
• Non-probability sample
  • Electronic surveys were sent to members of the Kentucky Hospital Association (N=120) and the Kentucky Association of Health Care Facilities (N=200)
  • 26 facilities participated in the study; 77% of the respondents provided acute care services
MEASUREMENTS

• Bath Basin Survey
  • Researcher-developed questionnaire
  • 17-item survey
    • 1 demographic item
    • 16 items assessed patient bathing procedures and protocols for handling bath basins
BATH BASIN QUESTIONNAIRE

1. Identify your facility.

2. Does your facility use disposable bath basins?

3. Are there standardized procedures for patient bathing?

4. Is there a difference in procedures for bathing patients related to diagnosis?

5. Is there a difference in procedures for bathing patients by location or unit in the facility?
BATH BASIN QUESTIONNAIRE

6. Is a new washcloth used for each body part bathed?

7. When does initial patient bathing begin?
   - Upon admission, the morning following admission, within ____ hours of admission, other (describe)

8. How often is a full bath given?
   - Daily, every other day, as needed, other (describe)
BATH BASIN QUESTIONNAIRE

9. Are there standardized procedures for cleaning bath basins?

10. Describe how bath basins are handled after completion of bathing.

- Wiped with a paper towel to eliminate standing water
- Placed upside down on a storage table to air dry
- Wiped with the washcloth and allowed to air dry
- Placed in patient restroom
- Other (describe)
BATH BASIN QUESTIONNAIRE

11. Are there standardized procedures for storage of bath basins after completion of bathing?

12. Are bath basins labeled for bathing use?

13. Are bathing supplies placed in bath basin used for patient bathing?

14. Are bath basins discarded after a certain period of time?
15. Is tap water used for bath basin water?

16. Is any type of antiseptic used in the bathing water?
   - If yes - what type and amount, amount of water

17. Are disposable washcloths used for bath basin bathing?
   - If yes – is the disposable washcloth impregnated with any substance and if so what?
DATA ANALYSES

• Data was collected in Qualtrics
• Descriptive statistics were used to characterize the sample
• Statistical tests were conducted in IBM SPSS Statistics version 23
RESULTS – PATIENT BATHING PROCEDURES

• 69% used disposable bath basins
• 44% noted the use of standardized patient bathing procedures
• 52% began patient bathing on the morning after admission
  - In addition, 44% specified patient bathing at other times i.e. as needed, within 24 hours of admission, upon patient request, post op day one, or patient condition or need for bath when admitted
## RESULTS – BATH BASIN USE, STORAGE, & DISPOSAL

<table>
<thead>
<tr>
<th>Question</th>
<th>YES n (%)</th>
<th>NO n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are bath basins labeled for bathing use?</td>
<td>4 (15.38)</td>
<td>21 (80.77)</td>
</tr>
<tr>
<td>Is tap water used for bath basin water?</td>
<td>23 (88.46)</td>
<td>3 (11.54)</td>
</tr>
<tr>
<td>Is any type of antiseptic used in the bathing water?</td>
<td>8 (30.77)</td>
<td>18 (69.23)</td>
</tr>
<tr>
<td>Are disposable washcloths used for bath basin bathing?</td>
<td>2 (7.69)</td>
<td>24 (92.31)</td>
</tr>
<tr>
<td>Are there standardized procedures for cleaning bath basins?</td>
<td>3 (11.54)</td>
<td>22 (84.61)</td>
</tr>
<tr>
<td>How are bath basins handled after completion of bathing? (Answer all that apply.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Wiped with a paper towel to eliminate standing water</td>
<td>13 (50)</td>
<td>5 (19.23)</td>
</tr>
<tr>
<td>▪ Placed upside down on a storage table to air dry</td>
<td>4 (15.38)</td>
<td>6 (23.08)</td>
</tr>
<tr>
<td>▪ Wiped with the wash cloth and allowed to air dry</td>
<td>11 (42.31)</td>
<td></td>
</tr>
<tr>
<td>▪ Placed in patient restroom</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Rinased at sink</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Placed in bedside table</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Disinfected with Dispatch® &amp; allowed to air dry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Placed in bag for storage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Discarded</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there standardized procedures for storage of bath basins after completion of bathing?</td>
<td>6 (23.08)</td>
<td>20 (76.92)</td>
</tr>
<tr>
<td>Are bathing supplies placed in bath basin used for patient bathing?</td>
<td>16 (61.54)</td>
<td>9 (34.61)</td>
</tr>
<tr>
<td>Are bath basins discarded after a certain period of time?</td>
<td>7 (26.92)</td>
<td>19 (73.08)</td>
</tr>
</tbody>
</table>
CONCLUSIONS

• The majority of participating facilities in Kentucky indicated that standard procedures for patient bathing and bath basin use are not developed
  • Exception – participants did note the use of disposable basins/CHG wipes in critical care areas
LIMITATIONS

• Pilot study – unable to generalize the results
• Response rate was low
  ▪ 17% for acute care facilities
  ▪ 3% for long term care facilities
• No record of who actually completed the survey
  ▪ Sent to CNO/Administrator but may have been completed by another staff member
• Use of researcher-developed tool
IMPLICATIONS FOR NURSING

• The cost of HAIs is a burden to society
• Findings from the current study demonstrate that many facilities lack standardized procedures to prevent the transmission of microorganisms during patient bathing and storage of disposable bath basins.
• Future studies should focus on quality improvement projects to prevent HAIs through the adoption of standardized bathing procedures, including the use, handling, and storage of disposable bath basins.
REFERENCES


Greaves, A. (1985). We’ll just freshen you up, dear…. Nursing Times, 81(10): suppl, 3-8


QUESTIONS?