

The Basinless Bath: *A Study on Skin Dryness and Patient Satisfaction*

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OVERVIEW

Proper skin care provides comfort and prevents and treats skin breakdown. For older adults, skin care takes on particular importance because as people age the skin becomes more susceptible to burns, bruising, xerosis (dry skin), pressure sores, shear type injuries and delayed wound healing. It is estimated that 59% to 79% of the elderly have pruritic skin conditions.

The AHCPR pressure ulcer prevention guideline states: Skin should be cleansed at time of soiling and at routine intervals. The frequency of skin cleansing should be individualized according to need and/or patient preference¹.

Nurses assume the major responsibility for skin and wound management in most healthcare settings². Administration of the daily bed bath is seen by many nurses as one of their most important tasks (Webster, Bowman, Sutton, 1988) and a time to spend talking with the patient and/or assessing a patient's condition. Choosing the appropriate bathing method is one way nurses can help prevent skin problems.



OBJECTIVE

First, to compare the basinless bath to the traditional basin bath for effectiveness at improving dry skin, patient satisfaction, nurse satisfaction and cost effectiveness.

Second, to evaluate and choose a basinless bath product based on the following criteria: packaging, warmth, cleansing solution, clinical research, nurse satisfaction and patient satisfaction.

BASINLESS BATH VS. TRADITIONAL BASIN BATH

The main concept behind the basinless bath is the use of one wash cloth per body part/extremity, thus avoiding cross contamination. Some products offer disposable wash cloths with a surfactant based cleansing solution containing tissue friendly emollients that help maintain moisture in the skin. The solution quickly evaporates from the skin's surface making towel drying unnecessary, thus avoiding further friction to the patient's skin. Nursing time: 10 minutes.

The traditional basin bath includes: basin, bar soap, water, wash cloths, towels and a moisturizing lotion. Nursing time: 20 to 30 minutes.

STUDY

This quasi-experimental study was performed to determine if the basinless bath was as effective as the traditional basin bath. Variables studied were patient skin condition, patient satisfaction, nurse satisfaction and cost analysis. A sample of 60 patients, requiring complete or partial bed baths, were selected from the Iowa City Veterans Affairs Medical Center on the Progressive Care Unit and the Surgical Unit.

A thorough skin assessment using a modified version of the Skin Condition Data Form (SCDF) developed by Frantz and Kinney (1986) was obtained prior to bathing³. Patients served as their own controls with the right side of the body receiving the experimental treatment (basinless bath) and the left side of the body receiving the control (traditional basin bath).

Patients were bathed for three consecutive days using the experimental and control treatments. After the third bath, another skin assessment using the SCDF was performed.

INSTRUMENT

The Skin Condition Data Form (SCDF) was selected as the assessment tool for this study. Frantz and Kinney (1986) developed this tool to analyze the relationship between sebum content and dry skin for subjects over the age of 65. In a pilot study (Hardy, 1990) utilizing the SCDF in assessing the skin condition of 15 elderly long-term care residents, analysis of the data obtained suggested that scaling and flaking were valid indicators of dry skin⁴.

For the purpose of this study, a modified SCDF was used. For observed skin dryness the rater assigned a score of 1- absent, 2- mild, 3- severe. The two constructs of skin dryness used are defined as follows:

1.) Flaking: appearance of dandruff like flakes when fingers are lightly rubbed over skin surface.



2.) Scaling: fish like scales on the skin's surface that are easily rubbed off with fingers.



RESULTS

The following summary shows statistical significance of improved skin condition.

Skin Condition After Bathing			Statistically significant (p<.05)
Body Part	Basinless Bath	Traditional Basin Bath	
Upper arms - anterior	.0001	.0008	
Upper arms - posterior	.0002	.0014	
Forearms - anterior	.0001	.0001	
Forearms - posterior	.0001	.0001	
Thighs - anterior	.00024	.00012	
Thighs - posterior	.00024	.00024	
Lower legs - anterior	.01413	.02767	
Lower legs - posterior	.0217	.02767	
Feet	.00162	.00281	
Heels	.00323	.00562	
Toes	.00482	.00818	

Patient Satisfaction	Strongly Agree	Agree	Disagree	Strongly Disagree
1. I felt clean after the basinless bath.	62%	38%		
2. Privacy was respected during the bath.	58%	42%		
3. The basinless bath was easy to use.	72%	28%		
4. My skin felt soft after the basinless bath.	67%	33%		

5. The bath I liked best was: Basinless Bath 97% Traditional Basin Bath 3%

Nurse Satisfaction	Strongly Agree	Agree	Disagree	Strongly Disagree
1. The basinless bath is easy to administer.	87%	13%		
2. The basinless bath technique saves me time.	75%	25%		
3. The patient is clean after the basinless bath.	68%	32%		
4. My hands felt soft after using the basinless bath.	87%	13%		
5. The patient was satisfied with the basinless bath.	72%	28%		

6. The bathing technique I liked best was: Basinless bath 100% Traditional Basin Bath 0%

Cost Analysis	Supplies	Cost per Bath
Traditional Basin Bath	Basin - reusable (\$2.06)	--
	Bar Soap	.08
	Bath Oil (1/2 bottle)	.95
	4 Washcloths (\$.38ea.)	.12
	2 Towels (\$1.50ea.)	.30
	Launder Washcloths (4oz.)	.26 (4 per bath)
	Launder Towels (8oz.)	.26 (2 per bath)
	Nursing Time	21 minutes
	Nursing Salary (\$.24/minute)	5.04
	Total	\$7.01
Basinless Bath	Product	2.50
	Nursing Time	10 minutes
	Nursing Salary (\$.24/minute)	2.40
	Total	\$4.90
Basinless Bath Savings	\$2.11 per bath	

CONCLUSION

The basinless bath not only improved dry skin, but was overwhelmingly preferred by both patients and nurses participating in this study. The basinless bath was also found to be a highly cost effective alternative to the traditional basin bath. On average, the basinless bath took 10 minutes to administer compared to 21 minutes for the basin bath which decreased the labor cost per bath by half.

Upon determining the effectiveness of the basinless bath, it was necessary to evaluate and select a basinless bath product. The Comfort Bath from Sage Products was chosen due to its insulated packaging that retains warmth, effective cleansing solution and moisturizing ability. Patients and nurses unanimously preferred the Comfort Bath.

Product Selection Criteria	Packaging	Warmth	Cleansing Solution	Moisturizing Ability	Clinical Research	Nurse Satisfaction	Patient Satisfaction
Comfort Bath ¹	X	X	X	X		X	X
Bag Bath ²							
Septi-Soft ³			X				

REFERENCES

- ¹ U.S. Agency for Health Care Pressure Ulcers in Adults: Prediction and Prevention (AHCPR Pub. No. 92-0047). Rockville, M.D., U.S. Department of Health and Human Services, (1992).
- ² Frantz, R.A., and Gardner, S., (1996). Clinical Concerns: Management of Dry Skin. *Journal of Gerontological Nursing*, 15-18.
- ³ Frantz, R.A., and Kinney, C.N., (1986). Variable associated with skin dryness in the elderly. *Nursing Research*. 35, 98-100.
- ⁴ Hardy, M., (1990). A Pilot Study of the Diagnosis and Treatment of Impaired Skin Integrity. *Nursing Diagnosis*, 10-18.

¹ Comfort Bath™ is a trademark of Sage Products Inc.

² Bag Bath™ is a trademark of Incline Technologies, Inc.

³ Septi-Soft® is a registered trademark of ConvaTec