

O3_A2_A_Scientific Evidence

BED BATH - WASHING A BEDRIDDEN PATIENT BY USING WATER AND COMMON SOAP

Q1	How to tailor a bed bath to the individual needs of hospice and palliative care patients?
Patients	Palliative care patients, frail end-of life patients
Intervention	Provide a bed bath
Comparator	Not provide bed bath Provide other type of hygiene procedures
Outcome	Tailored personal hygiene Quality of life
Methodology	Randomized controlled trials Systematic reviews Meta-analysis Guidelines of practice

The provision of the patient bed bath is a fundamental nursing care activity yet few quantitative data and no qualitative data are available on registered nurses' clinical practice in this domain in the intensive care unit or palliative care setting.

For health professionals to make an informed choice and tailor each **bed bath** to the individual needs of the patient, they must firstly understand the different bed bath options available (Conservative bed bath using a wash bowl, towels, wet wipes etc), their impact on skin integrity and any associated risks they may pose to the patient in terms of cross-infection [2]. Only with this knowledge health professionals can determine the appropriate form and frequency of the bed bath [1,2].

Overall, proper training is an essential requirement that needs to be fulfilled by volunteers, particularly when involved in direct patient support [3]. Palliative day care has expanded rapidly in the recent years, but the types of care available vary. The most common activities are: review of patients' symptoms or needs, monitoring symptoms, **bathing**, wound care, physiotherapy, hairdressing and aromatherapy [4].

Studies:

Only one systematic review, no randomized trials or international guidelines were found. Also some descriptive studies were identified

Indications:

After performing literature search, we have identified scientific-based recommendations regarding tailoring bed bath to hospitalized patients. Limited scientific-based conclusions can be drawn.

Recommendations:

Although only a few studies related to washing without water in comparison to the traditional bed bath were found, they offer valuable evidence to health care institutions by indicating that washing without water can be seen as a worthy alternative to the traditional bed bath. The evidence is particularly relevant to long-term care institutions. Washing without water performs better on some outcomes (dryness of skin, time spent and overall quality) and might offer more advantages and value to the patient, the nursing staff and possibly also to other stakeholders such as family members and the

management of health care institutions. No differences in hygiene and bacterial count were observed.(5)

- A bed bath needs to be tailored (appropriate form and frequency) to the individual needs of the patient [1,2]
- Nurses and volunteers need to understand the different bed bath options available [3]
- Proper training is an essential requirement that needs to be fulfilled especially by volunteers involved in direct patient support. [3]
- Bathing should be an activity available at all times in palliative day care. [4]

References:

1. Coyer FM, O'Sullivan J, Cadman N. The provision of patient personal hygiene in the intensive care unit: a descriptive exploratory study of bed-bathing practice. *Aust Crit Care*, 2011 Aug; Vol. 24 (3):198-209, ISSN: 1036-7314.
2. Massa J. Improving efficiency, reducing infection, and enhancing experience. *British Journal of Nursing*, 2010; 19(22):1408-1414.
3. Pawłowski L, Lichodziejewska-Niemierko M, Pawłowska I, Leppert W, Mróz P. Nationwide survey on volunteers' training in hospice and palliative care in Poland. *BMJ Support Palliat Care*, 2016 Jul 29; ISSN: 2045-4368.
4. Higginson IJ, Hearn J, Myers K, Naysmith A. Palliative day care: what do services do? *Palliative Day Care Project Group. Palliat Med*, 2000 Jul; Vol. 14 (4):277-286. ISSN: 0269-2163.
5. Groven, F. M. V., Zwakhalen, S. M. G., Odekerken-Schröder, G., Joosten, E. J. T., & Hamers, J. P. H. (2017). How does washing without water perform compared to the traditional bed bath: a systematic review. *BMC Geriatrics*, 17, 31. <http://doi.org/10.1186/s12877-017-0425-4>

Q2	Do we (always) need water in the provision of a bed bath for hospice and palliative care patients?
Patients	Hospice and palliative care patients, frail patients, elderly, end-of-life patients
Intervention	Single-use products for bed-bathing
Comparator	Conservative bed bath using a wash bowl, towels, wet wipes etc
Outcome	Quality of life Time consumption Nurse and patient satisfaction with the method Costs
Methodology	Systematic reviews Randomized controlled trials Cohort studies

Assisting patients with personal hygiene is often taking the form of a traditional bed bath using a wash bowl, towels, wet wipes etc. However, single-use products for bed-bathing are available and consist of a pack of skin-cleansing towels that are warmed in the microwave, and disposed of after use. A literature search has been performed to establish which is the best option. This showed relatively few studies

Studies:

One randomised controlled trial [1], two cluster randomised trials [2,3] and one systematic review [4] were found and taken into consideration.

Indications:

- Patient request
- In case of staff time constraints and in agreement with the individual patient

Conclusions:

- There is limited moderate to high quality evidence that washing without water is not inferior to the traditional bed bath [4].
- Assisting patients with personal hygiene is a fundamental nursing role, often taking the form of a traditional bed bath using a wash bowl, towels, wet wipes etc. However, single-use products for bed-bathing are available and consist of a pack of skin-cleansing towels that are warmed in the microwave, and disposed of after use. A literature search has been performed to establish which is the best option. This showed relatively few studies, but did identify one level IIB comparative study supporting use of single-use wipes for bedbathing unconscious intensive care patients in order to meet their hygiene needs, instead of traditional remedies. The study's conclusion is based on time consumption, nurse satisfaction with the method, bacterial cultivation and cost. A significant limitation of the study is the lack of a patient perspective [1].
- In the case of disposable baths, the costs are lower [2] as significantly less time is used. The nurses were very clear in their preference for disposable baths, and this was also the case for the majority of patients. There was consistency between the nurses and the patients in terms of their preference of bath type. When patients need assistance with personal hygiene, the nurse should inform the patient about the two methods and involve the patient in the decision [1]. Washing without water mildly protects from skin abnormalities/lesions, costs for preparing and performing bed baths do not differ from costs for traditional bed bathing. Thus, washing without water can be considered the more efficient alternative [2]
- Introduction of washing without water is likely to lead to more bathing completeness in nursing homes. However, inequity in care was also identified with a view to highly variable bathing completeness over wards and more incomplete bathing by care staff in residents with dementia [3].

References:

1. Nøddeskou LH, Hemmingsen LE, Hørdam B. Elderly patients' and nurses' assessment of traditional bed bath compared to prepacked single units: a randomised controlled trial. *Scand J Caring Sci*, 2015 Jun; Vol. 29 (2): 347-52. ISSN: 1471-6712.
2. Schoonhoven L, van Gaal BG, Teerenstra S, Adang E, van der Vleuten C, van Achterberg T. Cost-consequence analysis of "washing without water" for nursing home residents: a cluster randomized trial. *Int J Nurs Stud*, 2015 Jan; Vol. 52 (1): 112-20. ISSN: 1873-491X,
3. van Achterberg T, van Gaal BG, Geense WW, Verbeke G, van der Vleuten C, Schoonhoven L. Completeness of assisted bathing in nursing homes related to dementia and bathing method: results from a secondary analysis of cluster-randomised trial data. *Int J Older People Nurs*, 2016 Jun; Vol. 11 (2):121-129. ISSN: 1748-3743.
4. Groven FM, Zwakhalen SM, Odekerken-Schröder G, Joosten EJ, Hamers JP. How does washing without water perform compared to the traditional bed bath: a systematic review. *BMC Geriatr*. 2017 Jan 25;17(1):31. doi: 10.1186/s12877-017-0425-4.

Q3	Is the use of oil effective to reduce signs of dry skin?
Patients	Hospice and palliative care patients with signs of dry skin
Intervention	The use of oil
Comparator	Any soap
Outcome	Incidence of adverse skin conditions Reducing dry skin Patient satisfaction
Methodology	Systematic reviews Randomized controlled trials Cohort studies

Studies:

One single centre randomized observer blind pragmatic parallel group trial [1]

One review [2] and one systematic review [4]

One multi-centre cross-sectional prevalence study [3]

Indications:

- patients who are in need of washing/bathing assistance
- patients suffering pruritus or oncological diseases
- patients who have musculoskeletal diseases

Recommendations:

- Skin care interventions to tackle dry skin are recommended particularly for hospital patients and nursing home residents who are affected by pruritus or oncological diseases, who are in need of washing/bathing assistance, and who have musculoskeletal diseases.
- Skin care management protocols should be available to reduce the likelihood of skin irritation and breakdown and ultimately promote comfort of the older person and/or palliative patient.
- Regular use of the investigated bath oil [1] might be effective in improving the skin barrier function in patients with mild dry skin
- Regular use of the investigated bath oil [1] might be effective in the management of a broad spectrum of dry skin conditions.

Conclusions:

Patients in acute and long-term care settings receive daily routine skin care, including washing, bathing, and showering, often followed by application of lotions, creams, and/or ointments. These personal hygiene and skin care activities are integral parts of nursing practice, but little is known about their benefits or clinical efficacy [4].

A pragmatic trial [1] provides empirical evidence that the regular use of the investigated bath oil is effective in improving the skin barrier function in children and adults with mild dry skin when used in routine skin care and supports its use as a basic element for the management of a broad spectrum of dry skin conditions.

The prevalence of dryness of skin was found to be 48.8% [3], mostly among elderly, oncology patients, with musculoskeletal diseases. However, information on the safety of topical skin care interventions is lacking [2]. Therefore, because of the lack of evidence, no recommendation on the safety on any intervention can be made.

References:

1. Kottner J, Kanti V, Dobos G, Hahnel E, Lichterfeld-Kottner A, Richter C, Hillmann K, Vogt A, Blume-Peytavi U. The effectiveness of using a bath oil to reduce signs of dry skin: A randomized controlled pragmatic study. *Int J Nurs Stud* 2017 Jan; Vol. 65, pp. 17-24.
2. Hodgkinson B, Nay R. Effectiveness of topical skin care provided in aged care facilities. *International Journal of Evidence-Based Healthcare*, May 2005; 3(4): 65-101.
3. Lichterfeld A, Lahmann N, Blume-Peytavi U, Kottner J. Dry skin in nursing care receivers: A multi-centre cross-sectional prevalence study in hospitals and nursing homes. *Int J Nurs Stud*, 2016 Apr; Vol. 56:37-44. ISSN: 1873-491X,
4. Lichterfeld A, Hauss A, Surber C, Peters T, Blume-Peytavi U, Kottner J. Evidence-Based Skin Care: A Systematic Literature Review and the Development of a Basic Skin Care Algorithm. *J Wound Ostomy Continence Nurs*, 2015 Sep-Oct; Vol. 42 (5):501-524. ISSN: 1528-3976.

Q4	PH-factor of soap & shampoo
Patients	Hospice and palliative care patients receiving a bedbath
Intervention	Different kind of soaps and shampoos commonly used by the population
Comparator	-
Outcome	pH factor
Methodology	Cross sectional study

Normal healthy skin has potential of hydrogen (pH) range of 5.4-5.9 and a normal bacterial flora. Use of soap with high pH causes an increase in skin pH, which in turn causes an increase in dehydrative effect, irritability and alteration in bacterial flora. The soaps and shampoos commonly used by the population at large have a pH outside the range of normal skin and hair pH values. In addition, the majority of soaps and shampoos available in the market do not disclose their pH [1].

Studies:

Cross sectional study [1]

Recommendations:

Before recommending soap to patient especially those who have sensitive and acne prone skin, due consideration is given to the pH factor and also that manufacturers will give a thought to pH of soaps and shampoos manufactured by them, so that their products will be more skin and hair friendly [1].

Conclusions:

We endorse the recommendations of the consensus.

References:

1. Tarun J, Susan J, Suria J, Susan VJ, Criton S. Evaluation of pH of Bathing Soaps and Shampoos for Skin and Hair Care. *Indian J Dermatol*, 2014 Sep; Vol. 59 (5): 442-4. ISSN: 1998-3611.