

People with bariatric needs may experience problems with skin hygiene but there is little evidence regarding skin hygiene practices to guide care

# Skin hygiene for patients with bariatric needs

## In this article...

- Why people with bariatric needs experience problems with skin hygiene
- Summary of the findings of a literature review
- Suggestions for further research

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Patients with bariatric needs are likely to experience skin problems because maintaining skin hygiene, particularly between skin folds, can be a challenge.

This article is a summary of a literature review that explored the evidence on skin hygiene for people with bariatric needs. The findings reveal a gap in the evidence base and the authors make several recommendations for further research.

Nurses are increasingly delivering care to patients with bariatric needs but there is no standard definition of “bariatric” (Cowley and Leggett, 2010). The term is often used interchangeably with “obese” and is related to weight distribution and mobility issues.

The World Health Organization (2013) classifies people who have a body mass index of  $\geq 25$ -29.9 as being overweight, a BMI of  $\geq 30$ -39.9 as obese and a BMI of  $\geq 40$  as morbidly obese.

A working definition to describe someone with bariatric needs is that he or she is:

“...someone who weighs  $\geq 150$ kg or more, has a BMI of  $\geq 40$  or who has large physical dimensions, lack of mobility or other conditions that make moving and handling difficult” (Robertson, 2010).

## Skin problems

It is known that people with bariatric needs are likely to experience skin problems (Blackett et al, 2011).

Maintaining personal hygiene, with particular emphasis on the care of skin folds, is an essential element of nursing care if health and wellbeing is to be maintained and skin breakdown – with its associated impact in terms of cost to the individual and society, and diminished quality of life – is to be prevented.

In the context of this article, skin hygiene is defined as activity undertaken to keep the skin clean, dry, comfortable and intact, as this is a key issue. There is much evidence related to pressure-ulcer prevention in patients with bariatric needs (Atrice, 2012; Rush and Muir, 2012; Hurst et al, 2004) but the focus of this article is on maintaining skin integrity through effective skin hygiene.

Patients with bariatric needs have an increased risk of changes to their skin. An altered epidermal barrier leads to increased water loss and dryness of the skin (Guida et al, 2010), erythema is more pronounced (Löffler et al, 2002) and there is reduced microvascular reactivity (Francischetti et al, 2011). Changes may also occur in collagen formation (Black et al, 1971).

Large skin folds can lead to heat rash, blocked and inflamed sweat glands (Rush and Muir, 2012), and an increase in bacteria and fungi (Pokorny, 2008).

Heavy adipose tissue resting on the skin can lead to increased friction and shear forces, maceration, tears and the development of pressure ulcers (Blackett et al, 2011).

## 5 key points

**1** People with bariatric needs are likely to experience skin problems

**2** Large skin folds can lead to heat rash, and blocked and inflamed sweat glands

**3** Heavy adipose tissue resting on the skin can lead to increased friction and shear forces, maceration, tears and pressure ulcers

**4** There is little evidence to guide how nurses should care for this group of patients

**5** Research is required into the assessment and efficacy of skin care routines on skin integrity

## BOX 1. AREAS FOR FUTURE RESEARCH

- Assessment and evaluation of the use of soaps and cleansers, emollients, powders and odour-control products, and their impact on skin integrity
- Development and testing of a risk assessment tool
- Investigation of methods promoting patient education and self-management
- Randomised controlled trials and studies investigating patient and care provider perceptions of skin care

### Literature review

A comprehensive review of the literature on skin hygiene practices for people with bariatric needs yielded just six published articles and four internet-based guidelines, policies or protocols.

The six papers were published between 1991 and 2012. Five originated in the US and one in the UK. They were all descriptive in nature and three main themes were identified:

- » Skin hygiene practices;
- » Involving patients in their care;
- » Organisational practices.

### Skin hygiene practices

There was consensus in the skin hygiene practices theme that skin must be kept clean and dry, but there was little evidence about how this could best be achieved.

The use of soap and water (Rose and Drake, 2008; Brentin and Sieh, 1991), alternative wash products and talcum powder (Mathison, 2003; Rotkoff, 1999) was discussed but no clear conclusions were reached. Most authors advocated the use of emollients but there was no consensus on how or when these should be applied (Rush and Muir, 2012; Blackett et al, 2011).

### Involving patients in their care

The theme around involving patients in their care focused on equipment and assistance and, in particular, asking patients whether they had devised strategies to maintain their skin hygiene (Blackett et al, 2011; Rose and Drake, 2008).

### Organisational practices

Organisational issues concerned:

- » Assessing need;
- » Documenting care;
- » Maintaining patient safety (Blackett et al, 2011; Mathison, 2003).

The search of internet-based guidelines, policies and protocols revealed guidance on assessment, equipment and referral to tissue viability specialists, but no explicit evidence about skin hygiene. It is notable that there is no specific validated tool for skin assessment in patients with bariatric needs (Rush and Muir, 2012; Rose and Drake, 2008).

Regular assessment was advised, including observing for pressure ulcers in atypical areas, for example skin folds. In addition, the resources required in terms of equipment and staff including a named coordinator with responsibility for patient assessment and appropriate beds, mattresses, sliding sheets, hoists and diagnostic and monitoring equipment were highlighted (Rush and Muir, 2012).



Intertrigo in the lower abdominal skin fold; this is common in people who are overweight

### Conclusion

This review highlighted the lack of an evidence base for effective skin hygiene practices for people with bariatric needs and demonstrated that care tends to be based on custom, practice and the opinions of clinicians. The reviewed articles identified the need for further research; no empirical studies have been published to date.

Several areas have been identified for further research (Box 1), including the assessment and evaluation of using soaps and cleansers, emollients, powders and odour-control products, together with the impact these have on skin integrity.

The development and testing of a risk-assessment tool for skin integrity, along with an investigation into methods of promoting patient education and self-management, are needed. These requirements were identified in the area of skin hygiene for patients with bariatric needs in relation to both randomised controlled trials and studies investigating patient and care provider perceptions; research must move beyond descriptive studies. **NT**

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