

Development and validation of an instrument to monitor the healing of incontinence-associated dermatitis

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Introduction: Incontinence-associated dermatitis (IAD) is defined as a skin inflammation that occurs as a consequence of exposure of the skin to urine and feces. IAD is a widespread problem in all care settings, with a prevalence between 5.6 and 50%. This large difference is explained by the potential confusion with superficial pressure ulcers. Some IAD assessment tools have been developed, but with limitations in terms of the validity and use in everyday practice. The aim of the study is to develop and validate an instrument to monitor the healing of IAD.

Methods: The instrument was developed based on a literature review of existing instruments. Content validity was evaluated in a Delphi procedures by ten experts. The instrument included three topics: (1) location of the IAD injury, (2) skin condition (including color and denudation) and (3) infection (including skin discoloration and purulent exudate). Four point rating scales were developed to assess the severity of the IAD injury. Reliability of the instrument was evaluated using a convenience sample of caregivers from six health care facilities who were asked to assess an IAD injury of one patient using three images over time. A gold standard was established by two experts. Data collection took place in March 2015.

Results: The participants were 225 nurses, 36 nursing students and 10 wound care experts from Flanders. 86,4% were female and 79.4% had no specific education within wound care. Preliminary results of the known-groups technique show no significant differences for both the score on denudation, on infection and the total score between the gold standard score and the mean score of the nurses, students and wound experts. In one image, a significant difference in the total score was found between the gold standard (score:210) and the mean score of the nurses (1034,8±396 ; p=0.039).

Discussions: Preliminary known-group analysis showed promising results. Further analysis will explore the (1) construct validity, (2) interrater reliability and (3) discrimination index of the instrument. These analyses will be conducted in short term to be presented at the time of the conference.

Clinical relevance: The categorization of the IAD injury through skin inspection is vital. The use of a validated IAD assessment tool could improve clinical decision making, care and research on the healing of IAD injuries. To date there is no validated instrument available.

References: Beeckman, D., Van Lancker, A., Van Hecke, A. & Verhaeghe, S. (2014) A systematic review and meta-analysis of incontinence-associated dermatitis, incontinence, and moisture as risk factors for pressure ulcer development. *Res Nurs Health*, 37(3), 204-18.