

CAHE JC Critically Appraised Article Summary

Journal Club Details

Date of submission	April 2009
Journal Club location	Masonic Homes
JC Facilitator	Stacey Watson
JC Discipline/s	Occupational Therapy

Clinical Scenario

What are the client outcomes for those utilising prescribed pressure cushions to address good pressure management (vs. not using a pressure cushion)?

Review Question/PICO/PACO

- P** Clients, 60+, deemed as 'at risk' of pressure-ulcers
- I** Prescribed pressure cushions for seating
- C** No cushion
- O** client comfort, pressure ulcer risk, good pressure management

Article/Paper

McInnes E, Bell-Syer S, Dumville JC, Legood R, Cullum NA. Support surfaces for pressure ulcer prevention. *Cochrane Database of Systematic Reviews* 2008; Issue 4. Art. No.: CD001735.

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Article Methodology:	Systematic Review
Returned JC on:	28 April 2009
By CAHE staff member:	Lucylynn Lizarondo

CONTACTS

www.unisa.edu.au/cahe
 karen.grimmer-somers
 @unisa.edu.au
 Telephone (08) 8302 2769
 Facsimile (08) 8302 2766

University of South Australia
 GPO Box 2471
 Adelaide SA 5001
 Australia

CRICOS Provider Number
 001218



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University of South Australia
 Centre for Allied Health Evidence

Ques No.	Yes	Can't Tell	No	Comments
1	✓			The review asked a clearly focused question. Participants: Patients receiving health care who were at risk of pressure ulcer development, in any setting Intervention: Low tech constant low pressure support services; high tech support surfaces; other support surfaces such as turning bed/frames, operating table overlays, wheelchair cushions, limb protectors Outcomes: incidence of new pressure ulcers, grades of new pressure ulcers as primary outcomes; secondary outcomes considered were cost of devices, patient comfort, durability of the device, reliability and acceptability
2	✓			The review considered only randomised controlled trial (RCT) which is the appropriate research design when examining evidence of effectiveness. Is it worth continuing? YES
3	✓			The bibliographic search included a wide range of electronic databases and the reviewers did a follow-up on the reference lists.
4	✓			The authors assessed the methodological and reporting quality of the included trials in terms of randomisation, allocation concealment, comparability at baseline, blinding of assessor, intention to treat analysis, percentage of participants for whom data was complete at defined study end point.
5	✓			Only the results of similar studies (similar participants, outcomes, intervention and comparisons) were pooled into meta-analysis. Where the trials are heterogeneous, relative risks from individual studies were presented.
6				Results were presented using relative risks with 95% confidence intervals. Bottom line results <ul style="list-style-type: none"> • Higher specification foam mattresses when compared with standard hospital foam mattresses can reduce the incidence of pressure ulcers in people at risk. • The relative benefits of alternating and constant low pressure devices are unclear but alternating pressure mattresses may be more cost effective than alternating pressure overlays. • Medical grade sheepskins are associated with a decrease in pressure ulcer development. • No definite conclusions can be drawn regarding the merits from seat cushions, limb protectors and various constant low pressure devices. • Seat cushions and overlays designed for use in Accident and Emergency settings have not been adequately evaluated. •

Ques No.	Yes	Can't Tell	No	Comments
7		✓		The pooled results of trials examining the merits of higher spec foams can be considered precise as the confidence intervals were relatively narrow. Results for the other trials were varied.
8				The participants covered by the review do not seem to be any different from the characteristics of patients in the local setting, to make the results inappropriate for them. However, the extent to which the results can be applied to the local setting is a decision that is best made by those dealing with each individual setting.
9	✓			The review considered the most important outcomes related to the effectiveness of different support surfaces. (grading and incidence of pressure ulcers, costs, adverse reactions)
10				Evidence supports the use of higher specification foam mattresses whenever possible. Health facilities should also consider the use of selected pressure relief devices for high risk patients in the operating theatre.

CONTACTS

www.unisa.edu.au/cahe
karen.grimmer-somers@unisa.edu.au
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 Facsimile (08) 8302 2766

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