

CAHE JC Critically Appraised Article Summary

Journal Club Details

Date of submission	2008 November
Journal Club location	Masonic Homes
JC Facilitator	Stacey Watson
JC Discipline/s	Occupational Therapy

Clinical Scenario

How do community exercise programs contribute to the improved health of older people who have chronic conditions, particularly diabetes, living in the community?

Review Question/PICO/PACO

P	Older people (55+) with diabetes living in the community
I	Community exercise groups
C	No exercise
O	Level of health; quality of life

Article/Paper

Orozco LJ, Buchleitner AM, Gimenez-Perez G et al. Exercise or exercise and diet for preventing type 2 diabetes mellitus. *Cochrane Database of Systematic Reviews* 2008, Issue 3. Art. No.: CD003054. DOI: 10.1002/14651858.CD003054.pub3

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Article Methodology:	Systematic Review
Returned JC on:	21 November 2008
By CAHE staff member:	Lucylynn Lizarondo

Ques No.	Yes	Can't Tell	No	Comments
1	✓			<p>The review asked a clearly focused question.</p> <p><i>Population:</i> Participants are of any age, sex or ethnicity belonging to any major risk groups for the development of type II diabetes</p> <p><i>Interventions:</i></p> <ul style="list-style-type: none"> • Exercise vs. standard recommendation or no intervention • Exercise and diet vs. standard recommendation or no intervention • Exercise vs. diet <p><i>Outcomes:</i> incidence of diabetes; diabetes and cardiovascular related morbidity (primary outcomes)</p>
2	✓			<p>Randomised controlled trials which investigated the interventions of interest were included in the review. RCT is the gold standard in providing evidence for effectiveness and inclusion of this study design in an intervention systematic review is just appropriate.</p> <p>Is it worth continuing? YES</p>
3	✓			<p>The bibliographic search has included a wide range of electronic databases and the reviewers did a follow-up on the reference lists.</p>
4	✓			<p>The risk of bias assessment for all the included studies was done independently by two authors. Disagreements were resolved by a third reviewer.</p>
5	✓			<p>The results of the different studies with similar participants and outcomes were combined in a meta-analysis. Test for heterogeneity was likewise performed.</p>
6				<p>The results were presented using risk ratio and confidence interval.</p> <p><i>Bottom line result:</i> Interventions aimed at increasing exercise combined with diet are successful in reducing the incidence of type 2 diabetes mellitus in high risk individuals.</p>
7	✓			<p>Results were precise in terms of statistical significance as shown by the narrow confidence intervals.</p>
8	✓			<p>The generalisability and applicability of the results are promising. However, the extent to which the findings could be applied in the local setting is a decision that is best made by the specific organisation.</p>
9	✓			<p>Important outcomes related to the risk for developing diabetes have been covered by this review.</p>

research news

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Ques No.	Yes	Can't Tell	No	Comments
10	✓			<p>This systematic review was carefully and rigorously conducted. It has good methodological quality. Hence, the results can be used to inform practice.</p> <p>Whilst there is evidence for the effectiveness of exercise combined with diet, further studies are required to explore exercise only interventions and studies looking at the effects of exercise and diet on other outcomes (quality of life, morbidity and mortality and other cardiovascular outcomes).</p>

For more information on the CAHE Journal Clubs contact:
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