



University of  
South Australia

International Centre for  
Allied Health Evidence

iCAHE

A member of the Sansom Institute

## iCAHE JC Critical Appraisal Summary

### Journal Club Details

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#### Journal Club location

JC Facilitator

JC Discipline

#### Question

#### Review Question/PICO/PACO

- P** Adults with any of anal incontinence, faecal incontinence, impaired rectal sensation and obstructed defecation/'anismus'/'anal sphincter dysynergia
- I** Anal Balloon Biofeedback Training
- C** Usual Care, or doing nothing
- O** Improvement in QOL or improved symptom scale or 'effective therapeutic treatment'

#### Article/Paper

Lette F, Lima M, Lacerda-Fiho A, 2013, 'Early Functional Results of Biofeedback and its Impact on Quality of Life of Patients with Anal Incontinence', *Arquivos de Gastroenterologia*, vol. 50, no. 3, pp. 163-169

*Please note: due to copyright regulations CAHE is unable to supply a copy of the critically appraised paper/article. If you are an employee of the South Australian government you can obtain a copy of articles from the [DOHSA librarian](#).*

**Article Methodology:**

Cohort Study

**CONTACTS**

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Ques No.	Yes	Can't Tell	No	Comments
1	✓			<b>Did the study address a clearly focused issue?</b> Yes – Study authors aimed to evaluate immediate results of biofeedback in treatment of fecal incontinence and quality of life of the patients it affects.
2	✓			<b>Did the authors use an appropriate method to answer their question?</b> Yes – Authors used a prospective cohort design to answer their question. <b>Is it worth continuing?</b> Yes
3	✓			<b>Was the cohort recruited in an acceptable way?</b> Yes – The cohort was recruited based on whether they had undergone biofeedback treatment during May 2009 and April 2011, participants were excluded if they were unable to understand the principles of biofeedback therapy, had a complete absence of contraction of anorectal sphincter, or if they had rectal sensitivity.
4	✓			<b>Was the exposure accurately measured to minimize bias?</b> Yes – The Exposure was measured by the patients symptoms of anal incontinence, which was characterised by involuntary leakage of gas or stool for a period greater than one month.
5	✓			<b>Was the outcome accurately measured to minimize bias?</b> Yes – Outcome measures were a mixture of subjective and objective to ensure minimisation of bias. Quality of Life and Severity of Anal incontinence were the two main outcomes being measured and investigated as a result of biofeedback therapy.
6	✓			<b>Have the authors identified all important confounding factors?</b> Yes – Authors note that anal incontinence is not readily defined in literature so measuring its effect on QoL is difficult and may vary accordingly. Also identified as a factor is mechanical factors which may influence results – a minimal voluntary contraction of external sphincter muscles for example, should be required to ensure consistency of results. Quality of life was argued to be highly subjective due to the potential psychological impact of anal incontinence on the studied populations, <b>Have they taken account of the confounding factors in the design and/or analysis?</b> Yes – The small sample size was understood to be a confounding factor, as well as the lack of reliable indicators of functional improvement of anal incontinence after therapeutic intervention
7		✓		<b>Was the follow up of subjects complete enough?</b> Participants were not followed up post- study, and outcome date were instead collected before and after each session of biofeedback therapy

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8	✓			<p><b>What are the results of this study?</b></p> <p>The evaluation of the results of FISl showed a significant increase in the number of individuals who had low severity scores of symptoms before and after the biofeedback (from 48.1 to 65.4%) with <math>P = 0.004</math>. There was significant improvements in domains of the FIQL, behaviour (<math>P = 0.008</math>), depression (<math>P = 0.006</math>) and embarrassment (<math>P = 0.008</math>) after biofeedback. There was no significant correlation between the improvement of functional parameters evaluated by FISl and the improvement of quality of life. Positive correlation was found between the improvements of the domains of FIQL. There was no significant correlation between the results obtained using the FISl and FIQL with clinical variables assessed.</p>
9	✓			<p><b>How precise are the results?</b></p> <p>Results are presented with 95% CI and p values</p>
10	Journal Club to discuss			<p><b>Do you believe the results?</b></p>
11				<p><b>Can the results be applied to the local population?</b></p> <p><b>CONTEXT ASSESSMENT (please refer to attached document)</b></p> <ul style="list-style-type: none"> <li>- Infrastructure</li> <li>- Available workforce (? Need for substitute workforce?)</li> <li>- Patient characteristics</li> <li>- Training and upskilling, accreditation, recognition</li> <li>- Ready access to information sources</li> <li>- Legislative, financial &amp; systems support</li> <li>- Health service system, referral processes and decision-makers</li> <li>- Communication</li> <li>- Best ways of presenting information to different end-users</li> <li>- Availability of relevant equipment</li> <li>- Cultural acceptability of recommendations</li> <li>- Others</li> </ul>
12				<p><b>Were all important outcomes considered?</b></p>
13				<p><b>Are the benefits worth the harms and costs?</b></p>
14				<p><b>What do the study findings mean to practice (i.e. clinical practice, systems or processes)?</b></p>
15				<p><b>What are your next steps?</b></p> <p><b>ADOPT, CONTEXTUALISE, ADAPT</b></p> <p><b>And then (e.g. evaluate clinical practice against evidence-based recommendations; organise the next four journal club meetings around this topic to build the evidence base; organize training for staff, etc.)</b></p>
16				<p><b>What is required to implement these next steps?</b></p>