



University of
South Australia

International Centre for
Allied Health Evidence

CAHE

iCAHE JC Critical Appraisal Summary

Journal Club Details

Journal Club location	Flinders Medical Centre
JC Facilitator	Pamela Hewavasam
JC Discipline	Speech Pathology
CAT completed by:	Matt Ransom

Question

What is the inter-rater reliability of the Danish version of the V-VST applied to elderly patients admitted to geriatric or medical wards due to acute illness and administered by occupational therapists skilled in examining patients suspected of Oropharyngeal dysphagia?

Article/Paper

Jørgensen, L.W., Søndergaard, K., Melgaard, D. and Warming, S., 2017. Interrater reliability of the Volume-Viscosity Swallow Test; screening for dysphagia among hospitalized elderly medical patients. *Clinical nutrition ESPEN*, 22, pp.85-91.

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:	Reliability
----------------------	-------------

CONTACTS

www.unisa.edu.au/cahe
iCAHE@unisa.edu.au

Telephone: +61 8 830 22099

Fax: +61 8 830 22853

University of South Australia
GPO Box 2471
Adelaide SA 5001
Australia

CRICOS Provider Number
00121B



University of
South Australia

International Centre for
Allied Health Evidence

iCAHE

A member of the Sansom Institute

Ques No.	Yes	Can't Tell	No	Comments
1	✓			<p>Did the study address a clearly focused issue?</p> <p>Study assessed the inter-rater reliability of the Danish version of the V-VST applied to elderly patients admitted to geriatric or medical wards due to acute illness and administered by occupational therapists skilled in examining patients suspected of Oropharyngeal dysphagia?</p>
2	✓			<p>Did the authors use an appropriate method to answer their question?</p> <p>The VVST was applied to patients twice within maximum one hour by raters who administrated the test in an order based on randomization, blinded to each other's results. Agreement, Kappa values, weighed Kappa values and Kappa adjusted for bias and prevalence are reported.</p> <p>Is it worth continuing? Yes</p>
3	✓			<p>Is the disease status of the tested population clearly described?</p> <p>See table 1 - Descriptive characteristics of the included patients are presented</p>
4	✓			<p>Were the methods for performing the test described in detail?</p> <p>See 2.1 The volume-viscosity swallow test for more detail</p> <p>The Volume-Viscosity Swallow Test was performed as described in the original study by P. Clave et al. 2008. In the V-VST the patient's ability to swallow boluses of three different volumes (5, 10 and 20 ml) and three different viscosities (liquid, nectar and extreme spoon-thick) was tested. During swallowing trials the tester looked for specific signs of impaired safety (cough, changes in voice quality, a decrease in oxygen saturation >3%) and specific signs of impaired efficacy (impaired labial seal, oral residue, piecemeal deglutition, pharyngeal residue).</p>
5				<p>What are the results?</p> <p>The interrater reliability of V-VST as screening test for OD in patients admitted to geriatric or medical wards was substantial with an overall Kappa value of 0.77 (95% CI 0.65-0.89) however interrater reliability varied among hospitals ranging from 0.37 (95% CI -0.01 to 0.41) to 0.85 (95% CI 0.75-1.00). Interrater reliability of the accompanying recommendations of volume and viscosity was moderate with a weighted kappa value of 0.55 (95% CI 0.37-0.73) for viscosity and 0.53 (95% CI 0.36-0.7) for volume. The overall prevalence of OD was 34.5%, ranging from 8% to 53.6% across hospitals. The prevalence and bias adjusted Kappa value (PABAK) was 0.76 (range 0.6-0.85). Mean time to perform the test was 13.1 min (SD 6.924).</p> <p>The V-VST seems to be a moderately reliable screening tool for detecting OD among medical and geriatric patients. However, the recommendations of volume and viscosity add limited clinical value to the test.</p>
PSYCHOMETRIC PROPERTIES				
				RELIABILITY:

CONTACTS

www.unisa.edu.au/cahe

iCAHE@unisa.edu.au

Telephone: +61 8 830 22099

Fax: +61 8 830 22853

University of South Australia
GPO Box 2471
Adelaide SA 5001
Australia

CRICOS Provider Number
00121B



University of
South Australia

International Centre for
Allied Health Evidence

iCAHE

A member of the Sansom Institute

6		Inter-rater For OD diagnosis, there was a substantial inter-rater reliability with a kappa value of 0.77 (95% CI 0.65-0.89) and an overall agreement of 88%.
CLINICAL UTILITY		
7		<15 minutes administration time Mean time to perform the test was 13.1 min (SD 6.924).
8		Do you believe the results?
9	Journal Club to discuss	Can the results be applied to the local population? Choose relevant context issues. The following are only suggestions to prompt discussion. CONTEXT ASSESSMENT <ul style="list-style-type: none">- <i>Infrastructure</i>- <i>Available workforce (? Need for substitute workforce?)</i>- <i>Patient characteristics</i>- <i>Training and upskilling, accreditation, recognition</i>- <i>Ready access to information sources</i>- <i>Legislative, financial & systems support</i>- <i>Health service system, referral processes and decision-makers</i>- <i>Communication</i>- <i>Best ways of presenting information to different end-users</i>- <i>Availability of relevant equipment/tool</i>- <i>Cultural acceptability of the tool</i>- <i>Others</i>
10		Were all important outcomes considered?
11		What would be the impact of using this test on your patients/population?
12		Are the benefits worth the harms and costs?
13		What do the study findings mean to practice (i.e. clinical practice, systems or processes)?
14		What are your next steps? <i>ADOPT, CONTEXTUALISE, ADAPT</i> 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.)
		What is required to implement these next steps?