Journal Club Details

Journal Club: Royal Hobart Hospital
JC Facilitator: Sarah Florrison & Kristin Fulton
JC Discipline: Speech Pathology

Clinical Scenario
How do speech pathologists identify and manage choking events?

Review Question/PICO/PECO

P: Adults with dysphagia
E: Any method for identifying choking events/any management approach
C: other approaches
O: accurate identification of choking events; effective management of choking

Article/Paper


Please note: due to copyright regulations iCAHE is unable to supply a copy of the critically appraised paper/article.

Article Methodology: Cross sectional study
JC meeting on: 2nd June 2011
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| 1       | ✓   |            |    | **Was the purpose stated clearly?**  
The aim of the study was clearly stated in the abstract and the introduction section of the article.  
Aim: To identify risk factors for choking in adults with learning disabilities who have histories of choking |
| 2       | ✓   |            |    | **Was relevant background literature reviewed?**  
The authors have sourced relevant literature to establish that choking is a significant cause of death in people with learning disabilities. As such, it is important to identify factors that increase the risk of choking; hence this study was undertaken. By identifying predictors, preventive interventions may be initiated to avoid aspiration. |
| 3       | ✓   |            |    | **Describe the study design. Was the design appropriate for the study question?**  
The study used a cross-sectional design, which is a type of observational research. This approach is appropriate because the aim of the study was to identify factors associated with swallowing/choking problems.  
Note: A cross-sectional survey is a study that examines the relationship between conditions [choking] (or other health-related characteristics) and variables of interest [e.g., Down syndrome, use of psychotropic drugs, severity of learning disability, etc.] as they exist in a defined population [adults with learning disabilities] at one particular time. This design is best for quantifying prevalence of a disease or risk factors. |
| 4       | ✓   | ✓          |    | **Was the sample described in detail?**  
Detailed description of participants was provided in Table 1.  
**Was the sample size justified?**  
The study did not report the adequate sample required to achieve power in the results. A 33.7% response rate is relatively low; however, in a community survey such as this, it can be considered an excellent response rate.  
**Describe ethics procedure. Was informed consent obtained?**  
Ethics procedure was not reported in this study. There are instances when ethics review board exempts the research from the requirement for a signed consent form, especially with surveys. By returning the completed questionnaire, participants consent to participate in the study. However, the authors should ensure that subjects are fully informed about the nature of the research project so that they can make an informed decision to participate or not. |
| 5 | ✔ | **Were the outcome measures valid?**  
Test for validity of the questionnaire used was not reported in the paper. |
|---|---|---|
| 7 | ✔ | **Results were presented in terms of statistical significance? Were the analysis methods appropriate?**  
A good level of detail is provided in the statistical analysis and results sections and provides assurance that analysis methods were appropriate.  
Univariate and multivariate logistic regression was used to analyse the relationship between choking and other variables of interest. |
| 8 | ✔ | **Drop-outs were reported?**  
The paper reported the number of participants who returned the questionnaire. |
| 9 | ✔ | **Conclusions were appropriate given study methods and results?**  
**Bottom line result**  
There is an increased risk of choking for the following: those with severe learning disability, (+) Down syndrome, people with incomplete dentition, those who are taking a greater number of psychotropic drugs; antisocial eating habits for those in the institutional settings. |

**Summary of search strategy**

**Key words**
- Concept 1: choking OR ‘swallowing problems’
- Concept 2: screening OR management OR assessment
- Concept 3: ‘speech pathology’ OR ‘speech therapy’

**Databases**
- Medline, EMBASE, CINAHL, Academic Search Premiere, PubMed, SpeechBITE, Ageline, Allied and Complementary medicine, BioMed Central Gateway, ProQuest family health, Health and Medical Complete and Google

**Limiters**
- English articles only, past 10 years