Reviewer’s report

Title: Data enhancement for co-morbidity measurement among patients referred for sleep diagnostic testing: an observational study

Version: 1 Date: 26 April 2009

Reviewer: Ariel Tarasiuk

Reviewer’s report:

This is an interesting paper, contributing to the validity of self-reported morbidity.

P4 L2 – “…there have been no studies to date…” The investigators should better develop their study rationale. A large volume of the literature was not cited! They should cite a series of pivotal reports from Manitoba, Canada (from MH Kryger’s group) and Israel (A. Tarasiuk’s group), which, by using administrative economic databases, explored OSA morbidity years prior to diagnosis among different populations.

P4 2nd paragraph – It is not clear how the use of “…administrative databases” will “…enhance self-reported co-morbidity”. Please clarify your study aim.

P5 last two lines – Please change RDI to Apnea-Hypopnea Index (AHI). Please include in the text a brief description of your methodology of scoring AHI.

P6 “Determination of Co-morbidities and Clinical” 1. How did you control for the quality of data collected? 2. Was there a technician available to clarify questions? 3. Please provide reference regarding the validity and/or psychometric properties of questionnaires used.

P6 “Determination of Co-morbidities from Administrative Data Sources” For those of us who are not familiar with the Alberta health system, what is the validity of these administrative databases? Was the validity confirmed in previous studies, similarly to that of the Manitoba database (in many studies)? Please provide references to support your findings.

P6 2nd paragraph – give reference to Epworth Sleepiness Scale (Johns, Sleep 1991;14:540-554).

P13 1st paragraph – the authors should include in this paragraph some discussion of why agreement was also low for stroke. Clearly the diagnosis of stroke is traumatic to both patients and families, and they are aware of it!

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a
statistician.

**Declaration of competing interests:**

I declare that I have no competing interests

Best Ariel Tarasiuk