

## **Author's response to reviews**

**Title:** Discomfort and agitation in older adults with dementia

### **Authors:**

Isabelle C Pelletier ([isapelletier@hotmail.com](mailto:isapelletier@hotmail.com))

Philippe Landreville ([philippe.landreville@psy.ulaval.ca](mailto:philippe.landreville@psy.ulaval.ca))

**Version: 2 Date:** 12 February 2007

**Author's response to reviews:** see over

Québec, February 12, 2007

Dear Sir, Dear Madam,

As requested by Mrs Liz Hoffman in her letter of December 2006, we are submitting a revised version of our manuscript (5233319471167623) for publication in *BMC Geriatrics*. The revised title of the manuscript is “Discomfort and agitation in older adults with dementia”. In this letter, we provide a point-by-point response to the concerns of the referees.

Dr Buffum:

- *Include a design in the methods section and the abstract.*
  - We now mention in both the abstract and methods sections that this is a correlational study using a cross-sectional design.
- *The sample needs more detail*
  - The number of nursing homes (three) is now indicated in the abstract and methods sections. Note that this study did not specifically include residents with painful diagnoses and that only RNs provided data for the residents.
- *Address the issue of patients' consent.*
  - Staff members were the participants in this study. Indeed, the main variables reflect how they perceive selected residents. The residents themselves did not participate directly to the data collection. Staff members did provide the researchers with factual information obtained from the residents' file to which they had authorized access as part of their work. Prior to the study, the researchers were granted permission to obtain this information by the Professional Services Director of each participating facility. Residents' rights were protected by concealing their identity (a code was used instead of their name on each document related to the study). Université Laval's Research Ethics Committee approved this project. These details are now provided in the revised manuscript (pp. 10-11).
- *What was the rationale for using the DS-DAT? Provide more detail on this scale.*
  - We selected the DS-DAT because we wanted to replicate and extend Buffum et al.'s findings. By using the same measures, we controlled for the possibility that different findings could be attributed to different measures. Another reason for using the DS-DAT is that we were mainly interested in discomfort, a broader concept than pain and for which only a limited number of measures are available. Despite its limitations, the DS-DAT has been used in several studies (Herr et al., 2006).
  - The average score on the DS-DAT in our sample (4.2) is lower than average scores found in some studies but similar to that of other researchers (Miller et al., 1996; Young, 2001). For example, an average score of 4.64 was reported by Miller et al. (1996) when their participants were assessed in situations of unlikely discomfort (the



equivalent of what Hurley et al. (1992) refer to as *baseline discomfort*). Also, the range of scores on the DS-DAT reported in Table 1 is broad (0 – 14), suggesting that the DS-DAT is sensitive to various levels of discomfort in our sample. This is presented in the revised manuscript (p. 14).

- As indicated in the manuscript (p. 10), RNs received detailed instructions for administering and scoring the DS-DAT. These included Hurley et al. (1992)'s instructions regarding the timing of the assessment. The RNs also had the opportunity to practice scoring during the meeting with the principal investigator. We did not check reliability because of restrictions in the availability of the RNs. We acknowledge this as a limitation of the study in the discussion. We also point out that this limitation does not seem to pose a threat to our conclusions since the results confirm our hypotheses and are consistent with those of other researchers (p. 15).
- *Provide more detail on the CMAI.*
  - The scoring of the CMAI (i.e., likert-type scale and scores ranging from “never” to “several times per hour” ) and the period covered by the assessment (i.e., two weeks ) are the same as described by Cohen-Mansfield (p. 8). Staff members were asked to rate the past two weeks based on their recollection.
  - Looking at other’s work, we found that CMAI scores are reported for clinical samples in which participants are selected because they present agitation (Kunik et al., 2001; Rabinowitz et al., 2005). These scores are higher than for the participants in our study who were not selected on the basis of agitation. For example, mean CMAI total scores range between 65 and 78 across different samples in which participants present at least mild behavioral symptoms (Rabinowitz et al., 2005) compared to 41 in our sample. However, this mean score is similar to what we found previously in a separate but similar sample (mean scores of 41 and 40 at two separate times)( Deslauriers et al., 2001). Although there is no official cutoff for agitation on the CMAI, the range of scores (29-90) is quite broad and suggests that some participants presented some agitation while others did not. This is presented in the revised manuscript (p. 14)
- *Differences between RNs and CNAs in the assessment*
  - Only RNs participated in the study.
- *It is difficult to discern how the tables and text relate to one another.*
  - We now provide more details on the tables in the text (pp. 11-12). Note that the statistics reported in the tables are recommended for describing multiple regression analyses (see the Publication Manual of the American Psychological Association (5<sup>th</sup> ed.), 2001, p. 160-161).
- *The meaning of the scores on the assessments need to be explained in terms of patient functioning.*
  - We provide additional details for most assessments in the results section (p. 11). For the DS-DAT and the CMAI, details are provided in the discussion (p. 14).
  - We collected data on the number of daily analgesics for control purposes. If no discomfort had been found in the residents, we would then have explored the relationship between analgesics and discomfort as a possible explanation. We report information on analgesics, as a descriptive variable, on page 11.
- The missing author from the Buffum et al. reference was added.





UNIVERSITÉ  
LAVAL

- Minor essential revisions have been done. Note that both the SMAF and the FAST can be completed by nurses familiar with the residents.

Dr Conn

- *Diagnosis of dementia.*
  - It is unclear exactly how the diagnosis was made in each case. For this reason, we decided to refer to dementia in general throughout the paper as suggested by Dr Conn. However, we specify at page 7 that all selected residents had a diagnosis of DAT in their file.
- *Add a list of the 9 behavioural indicators of discomfort.*
  - This list has been added to the text (p. 9)

We sincerely hope that this response and the revised version of the manuscript are satisfactory. We look forward to a decision regarding publication in *BMC Geriatrics*.

Sincerely,

Philippe Landreville, Ph.D.



