Reviewer's report

Title: Voice disorders in teachers: results from a French survey

Version: 3 Date: 18 December 2008

Reviewer: Henry C Thode

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MAJOR COMPULSORY REVISIONS

In epidemiology, the standard acceptable response rate is considered to be 80%; in this study the overall response rate was 53%, although the response rate for teachers was not stated and could be higher or lower. Assuming that the response rate for teachers is about the same as the overall rate, this study has a major limitation.

Indicate how age was used in the logistic regression adjustments; voice disorders are not linear with respect to age (Figure 1), so it should not be assumed age is linear with respect to mental health outcomes.

It is unclear why an analysis between voice disorders and mental health was conducted. Although there were some references in the literature to such associations, this study jumped from an epidemiologic descriptive study to a comparative study of voice disorders and mental health. Since the MGEN survey includes physical health measures and healthcare usage, why was mental health singled out? It is almost as if it was decided that since there was data on mental health, it should be used. At the very least some discussion of voice disorders and mental health should be put in the Background section so that the analysis doesn’t come as a surprise.

In the first paragraph of Results, there is a comparison of teachers and non-teachers. Since there is no description of the non-teacher group, it cannot be determined what the comparison means. This should preferably be excluded, or the population of non-teachers defined.

The MH5 score is higher in both men and women when comparing those with and without voice disorders. While statistically significant, the difference in both men and women is only 5: is this a clinically meaningful difference, or is the statistical significance just an artifact of a large sample size?

On the questionnaire in the appendix, the primary question is whether the teacher had one of the following symptoms. It doesn’t state what period of time this question covers (ever? in the last year? in the last month?).

MINOR REVISIONS

Numerical information should be included in the abstract rather than just indicating that, for example, “Psychological distress was greater in teachers who
reported voice disorders…”.

Please indicate over what period of time the survey was administered.

The median test is not used to compare means (end of Methods section).

Is the difference in vocal training between women and men (18% vs 10%) statistically significant?

In Results, I was confused by the statement that voice problems occurred more often “at the end of the term and at the start of the year”. Is the start of the year January 1, or the beginning of the academic year? When is the end of the term? How many terms are there in an academic year?

In the analysis of mental health outcomes, “The OR estimated from univariate models” is shown after adjustment for age and gender. Adjusting for age and gender makes it a multivariate model.

It is my understanding that the MH scale is the 5 item mental health measure from the SF-36, and that the MH5 is the fifth item in that group. Unless the terminology has changed, use MH instead of MH5 when referring to that score.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests