**Reviewer's report**

**Title:** Sleep Assessment in a Population-Based Study of Chronic Fatigue Syndrome

**Version:** Date: 2 December 2003

**Reviewer:** Peter White

**Reviewer's report:**

**General**

1. This is a clinically useful study of a large number of adults, from a population based survey, who report fatigue. The authors report that the large majority of such individuals also report problems consistent with sleep disorders or consequences thereof. The authors correctly suggest the next step is to confirm this very high prevalence of sleep problems with polysomnography and a prospective study. If objective studies support these findings, these data imply that clinicians should carefully assess all patients presenting with abnormal fatigue for the presence of sleep disorders, especially restless legs syndrome, non-restorative sleep and insomnia.

**Discretionary Revisions (which the author can choose to ignore)**

2. It would be useful to know whether there was an association between sleep problems and presenting to a health-care practitioner, if this information is available.

3. The authors found an association between the presence of reported sleep problems and the "wellness" score, but not fatigue itself. It would be interesting and clinically useful to know if there was a significant association between sleep problems and cognitive symptoms or dysfunction. At least one study has suggested that the cognitive symptoms of CFS are related to sleep dysfunction.

4. Table 5 could be included in the text.

5. It would really help the readers to see the SAQ as an appendix, although I note it has a copyright for reproduction.

6. Although the odds ratio is a legitimate statistic to use, these data produce very large ORs, because of relatively small prevalence rates of not having sleep problems. For instance in table 2, the OR (95% CI) of any sleep problem in Medical and psychiatric exclusions is 32.6 (12.9, 82.7). In contrast, the relative risk (95% CI) based on the same figures is 3.2 (2.0, 5.1). Use of the ORs make the risk seem larger than is reasonable. The use of RRs would be easier to interpret.

**Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)**

6. Page 4: The Epworth scale is an interval scale, not continuous.

7. Page 10: "normed" is not a verb in my dictionary!

8. Page 11: Since the groups are not matched, let alone pair-matched, any comparison has to be a group one, not "pair-wise".

9. Table 1: How are the 41 non-fatigued individuals included in the 339 sample of fatigued. These 41
individuals must be carefully chosen and described, since they act as the comparison threshold group for all other comparisons.

10. Table 2: Please put EDS in full: excess daytime sleepiness.

11. General points about tables: If there is space raw figures for prevalence is always valuable.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

12. The Sleep Assessment Questionnaire (SAQ) has been copyrighted. This study has shown that this measure may be clinically useful for assessment. How will clinicians and researchers get access to the SAQ? Do they have a web-site?

**What next?:** Accept after minor essential revisions

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No

**Declaration of competing interests:**

I have provided unpaid consultation to the CDC, which has involved reimbursement of travel and accommodation, while in the USA.