Reviewer’s report

Title: Chronic fatigue syndrome after Giardia enteritis: clinical characteristics, disability and long-term sickness absence.

Version: 1 Date: 23 April 2011

Reviewer: Peter White

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The authors describe a case series of 96 patients referred and admitted to a clinic complaining of fatigue, who had laboratory confirmed giardiasis some two years previously. On this basis, they conclude that a proportion of these patients are the only ones of a much large incident cohort (n > 1200) who have chronic fatigue syndrome and that giardiasis was the cause.

Major Compulsory Revisions

How many of the original inception cohort were not admitted for clinical assessment – over 1100? Only those referred were assessed. It is difficult to conclude anything about causation from this. It is not possible to state accurately the prevalence of CFS (4.6%) on the basis of examining a referred selected small sample of the original cohort. We do not know the prevalence of CFS in those not assessed.

How were life events and psychiatric history assessed? Were standardised measures used? If not, data may not be reliable or valid.

The threshold for clinical depression and anxiety on the Hospital Anxiety Depression sub-scales is 11+, not 15. These figures need recalculating.

The 1994 CDC criteria for defining CFS have been superseded by the international (CDC) criteria (Reeves WC et al, 2003).

Minor Essential Revisions

Please give the range of FSS in methods.

Discretionary Revisions

Abstract: Please give percentage figures to nearest integer for those improving or depressed, et cetera. A decimal point percentage figure lacks meaning with a denominator of only 58.

1. Is the question posed by the authors well defined?
   Yes

2. Are the methods appropriate and well described?
   No. The study of prevalence of a condition in an inception cohort requires
examination of either the whole cohort or a random selection of the original cohort, not a selected sample referred to a clinic. Relying on population norms, sometimes from different countries is not a reliable way to examine a control group. There is no assessment of whether patients were fatigued before onset of giardiasis, so no relationship to giardiasis can be interpreted. Similarly, a significant proportion developed their fatigue some months after infection, casting doubt on the relationship between fatigue and the infection.

3. Are the data sound?

Yes, in so far as they describe a case series.

I would advise rewriting as a case series, but not making conclusions about the relationship to giardiasis, and outlining the limitations of such a design.

**Level of interest:** An article of limited interest

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

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

**Declaration of competing interests:**

I have done consultative work for the UK Department for Work and Pensions and a re-insurance company.