Reviewer’s report

Title: The interrelation between premenstrual syndrome and major depression: results from a population-based sample

Version: 1 Date: 3 February 2011

Reviewer: Rebecca Klatzkin

Reviewer’s report:

This manuscript seeks to better understand the relationship between PMS and major depression, two commonly comorbid diagnoses. The authors obtained data from the Swiss Health Survey to determine the characteristics that define each diagnosis as well as those characteristics that are shared not only between women with PMS and women with major depression, but in women with both disorders. Of major concern is the diagnosis of PMDD, which can only be performed with prospective daily ratings, as well as the use of oral contraceptives in many women surveyed.

Discretionary Revisions

1. In the results section of the abstract, the authors should specify which group reported more alcohol consumption, psychotropic drug consumption, oral contraception and work dissatisfaction. Currently, the authors only write that there was a difference but do not indicate directionality.

2. Throughout the manuscript, including the abstract, when the authors write, “both, PMS/PMDD and major depression” they include an unnecessary comma after “both.” Thus, it should read, “both PMS/PMDD and major depression” without the comma.

3. In the methods portion of the abstract, instead of, “Included into analysis” it should read, “Included in the analysis.”

4. In the results section of the abstract, it should read, “oral contraceptive use” instead of simply, “oral contraception.”

5. In the third paragraph of the Background, lack of energy is mentioned twice, and is thus redundant.

6. In the recruitment and participants section, the numbers in parentheses should have a comma and not an apostrophe. Also, do the authors mean that the written questionnaire was completed by 80% of the 66% who completed the telephone interview? If so, please state this more explicitly.

7. In the strengths and limitations section, the authors write, “the validity of the diagnosis PMDD” when it should read, “the validity of the diagnosis of PMDD.”

Minor Essential Revisions
1. In the first paragraph of the Background, the authors discuss the high comorbidity between PMDD and mood disorders despite the fact that PMDD is a mood disorders not otherwise specified. Please specify which mood disorder or simply insert “other” prior to “mood disorders.”

2. In the middle of the second paragraph of the Background, the authors use the term “mental disorders.” I suggest using the more current term “psychological disorder” to reflect the multidimensional model of causality (i.e. not strictly of mental cause).

3. In the third paragraph of the Background (and perhaps throughout the manuscript), the authors seem to use PMS and PMDD interchangeably, when clearly they are distinct. Please clarify which disorder is meant to be stated.

4. In the third paragraph of the Background, the authors bring anxiety into the discussion. Either elaborate more on the role of anxiety in PMDD and major depression, or eliminate it completely, seeing as though it is not a dependent variable of the current study.

Major Compulsory Revisions

1. This manuscript lacks discussion of previous findings regarding the argument as to whether PMDD and major depression represent distinct clinical entities. For a review of this literature and support for PMDD and major depression as clinically distinct disorders, see Klatzkin et al., (2010). Histories of major depression and premenstrual dysphoric disorder: Evidence for phenotypic differences. Biol Psychol, 84(2): 235-47.

2. The Background lacks explanation as to why the authors’ questions are important (i.e. implications). The authors address the supposed gap in the literature, but do not express why filling this gap is important clinically.

3. The authors address the lack of consensus in the literature as to whether or not prior major depression is more common in PMDD, but do not include a measure of prior major depression in their sample to support or refute this idea.

4. The authors describe the PMS questions that were dropped, including the questions on interference of symptoms with relationships with co-workers and with family. These questions deal with functional impairment and are essential to the diagnosis of PMDD. The authors then mention that they used the screening tool by Steiner et al. to diagnose severe PMS, which includes impairment criteria. However, some questions were not used and need to be removed from the description of the screening tool.

5. The most important comment regarding this manuscript is the use of the term “PMDD.” As the authors mention in their limitation section, PMDD can only be diagnosed with prospective daily ratings, which was not done in this study. Thus, “severe PMS” needs to be used instead of “PMDD” throughout the manuscript.

6. The authors describe 4 groups that they are comparing in this study, two of
which are women with PMS and major depression and women with only major depression. How do we know that the women who self-diagnose as having PMS and major depression do not suffer from premenstrual exacerbation of major depression? It is my experience that this is very common. This should be discussed as a limitation in the discussion section.

7. Discussion of the fact that approximately 1/3 of the participants were using oral contraceptives needs to be included in the limitations section. Diagnosis of PMDD cannot be performed if women are taking exogenous hormones. Furthermore, oral contraceptives are used as treatment for PMDD. Thus, oral contraceptive use is a major confound here, particularly since women with major depression only were significantly more likely to be taking them than women with PMS/PMDD only. Any comparison between these groups may be due to oral contraceptive use and not to diagnosis.

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

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests