Reviewer’s report

Title: Descriptive epidemiology of stigma against depression in a general population sample in Alberta

Version: 1 Date: 10 July 2009

Reviewer: Larissa Wolkenstein

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Major Compulsory Revisions:

(1) The authors do not report if the two case vignettes have been equally distributed among the categories of the demographic and socioeconomic variables. This information would help drawing conclusions about the validity of the data.

(2) Concerning the analyses of the data, it is not clear why the authors chose to report descriptive statistics rather than to run more sophisticated analyses (e.g. regression analyses or ANVOAS). The authors should also clearly state what kind of statistical analysis has been used (probably chi-square test, but this is not mentioned and the #2-statistic and the degrees of freedom are not reported). Some problems emerge from or are related to that approach:

(3) Firstly there is a potential information loss due to this approach: In the beginning the authors used five point Likert scales as dependent variables, but then they combined two answering categories and based their analysis only on this combination without providing a rational for this proceeding.

(4) Secondly, although the authors set the # -level at 0,005 to account for the multiple comparisons, the problem of type I error might still remain as there are not 9 tests that have been conducted, but 9 tests for each demographic and socioeconomic variable considered. Furthermore, it has not been accounted for the dependency of the independent variables (age, gender,....).

(5) Thirdly, because of the large sample size, significant differences are more likely to emerge. It seems necessary to therefore provide effect size estimates to properly interpret the results.

(6) A related issue is that it is not clear on what the authors base their conclusions, e.g.: “With respect to whether depression was a real medical illness, those below 24 years of age and over 65 were more likely (12.1% and 15.0% respectively) to endorse that depression was not a real illness, compared to those aged 25-64 (7.0%).“ Although this statement sounds reasonable given the sample size, it would be helpful for the reader to know on what they based their conclusions (e.g. standardised residuals of the #2-test?)

(7) The data concerning the employment status, living setting, and the (mental) health professionals are not completely presented. This should be completed.

(8) Overall the discussion and conclusions seem balanced and linked to the data,
but some specific changes are recommended. For example the authors state: „Data from this study showed that these stigmatizing attitudes were not related to the levels of mental health literacy of the participants, whether they were in agreement with health professionals in treatment and whether they had personal contacts with individuals with depression (21).“ This has not been specifically examined or presented anywhere in this specific study.

(9) Furthermore, the authors state: „Given the gender difference in depression literacy and the correlation between mental health literacy and stigma (20-22), the gender differences in the stigmatizing attitudes observed in this study were expected.“ This could be completed and discussed, considering studies showing rather the opposite effect or no gender effect (e.g. Gaebel, Baumann, Witte & Zäske, 2002; Schnittker, 2000). Furthermore, adding effect size estimates might makes changes of such conclusions necessary.

(10) The authors state: „Age differences existed in three of the nine items of depression stigma and three different trends emerged. However, other stigmatizing attitudes did not differ by age. These results indicated that young people should be the target for stigma reduction interventions as they tended to have more stigmatizing attitudes towards depression than middle aged participants.“ This conclusion is not supported by the data presented. Thus, the conclusion made in the abstract concerning the age should be reconsidered.

(11) Furthermore, even if this conclusion would have been based on the data it could be put into question if there would be any possibility that an alternative interpretation is that younger people are answering ‘less politically correct’. A similar explanation might be made with regard to the data concerning the educational level of the subjects, because social desirability or answering in a politically correct way might be a general issue here as well as Wolkenstein and Meyer (2008) have discussed. Perhaps individuals with higher educational level know better than individuals with lower educational level what is social desirable and thus respond accordingly.

Minor Compulsory Revisions:

(12) The authors provide sufficient information which allows to understand their methodology. The authors conducted a cross-sectional telephone survey, using a random phone number selection process. Participants were presented a case vignette describing a depressed individual (either male or female) and responded to a 9-item stigma questionnaire. Demographic and socioeconomic variables of 3047 participants were collected and analyzed in relation to stigma response. With respect to the age categories, it would be helpful to know if the authors could provide a rational why they chose exactly the categories they have been chosen.

(13) Overall the authors adhere to the relevant standards. However, it would be appreciated if the authors could note below the tables presented that they combined the categories “strongly agree” and “agree” for each item to indicate the presence of personal stigma. Otherwise it is difficult to understand the data presented in the tables without reading the text.
Overall the write-up is totally acceptable but minor re-wording here and there might be needed. For example Page 12: “Compared to those who were born in Canada, individuals not born in Canada were more likely than individuals born in Canada to endorse that individuals could “snap out” of their depression (29.6% vs. 15.1%), perceive depression as a sign of personal weakness (26.0% vs. 7.3%), or believe it best to avoid individuals with depression (9.0% vs. 2.3%)” This sentence sounds a bit awkward and is difficult to understand without reading it at least twice.

In the title of Table 2 the word “Age” should not be capitalized.

The titles of the tables could better be formulated more consistently “various stigmatizing attitudes” instead of “stigma attitudes” (Table 1)

Discretionary Revisions:

The objective of this study was clearly defined and focused on attitudes toward depression in the general population and to their relation to demographic and socioeconomic variables. But the authors state that there are only few studies investigating stigmatizing attitudes towards depression in the general population. This is a statement not everyone might agree with (e.g. Angermeyer & Matschinger, 2003, 2004; Wolkenstein & Meyer, 2008).

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

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests.