Author's response to reviews

Title: Risk factors for mental disorders in women survivors of human trafficking: a historical cohort study

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Author's response to reviews: see over
Dear Dr Odenwald,

Re: MS:1642894083866192 (Risk factors for mental disorders in women survivors of human trafficking: a historical cohort study Melanie Abas, Nicolae V Ostrovschi, Martin Prince, Viorel I Gorceag, Carolina Trigub and Sian Oram)

Thank you for the opportunity to revise and resubmit the above manuscript. We have revised the manuscript in line with the reviewer’s report, as detailed below. Page numbers correspond to the revised manuscript with changes accepted.

**Reviewer’s report**

1.  
   a. *In the description of the social support questionnaire, the second sentence seems to be incomplete.*

Response: Thank you for highlighting this error. We have corrected the text (page 10) which now reads:

“The questionnaire includes three items relating to affective support (such as “I get love and affection”) and five items relating to confidante support (such as “I get chances to talk to someone I trust about my personal and family problems”), each scored from 1 to 5 ranging from *much less than I would like* (scored as 1) to *as much as I would like* (scored as 5).[33]”

b. *As the social support questionnaire sub-scales achieved unsatisfactory reliability scores in the studied sample, in my eyes, it does not make sense to*
report in the results on the established sub-scales at all (seems that the authors have reported just on a total scale). However, it is unclear whether you used one of the subscale scores or a total score in your results section and regression analysis. Please clarify and – if correct – mention the total scale and its coefficients in the methods section. You can justify this in the limitations’ section by mentioning that the group differences support the validity of the sum scale.

Response: Thank you for highlighting the need for clarification on this point. We have amended the text of the Methods (page 11) and Discussion (page X) as follows:

[Methods] “In this study, Cronbach’s alphas of 0.04 and 0.09 were recorded for the affective support and confidante support subscales, respectively. As the Duke Functional Social Support Questionnaire subscales achieved unsatisfactory reliability scores in this sample, analyses used the total social support score (i.e. the sum of the eight items). Cronbach’s alpha for the sum scale was 0.12.”

[Discussion] “In contrast to the CTS subscales and the CANSAS-SF, which had high Cronbach’s alpha scores, the Duke Social Support Questionnaire subscales had very low internal consistency and descriptive and regression analyses instead used the sum Duke Social Support Questionnaire score. Although the internal consistency of the sum scale was also low, its use was supported by the observed group differences. The low internal consistency may reflect the complexities of social support for these women survivors of human trafficking: participants had returned to their country of origin and received crisis support from the IOM, but may have also experienced rejection from their families and friends and may not have accessed longer-term support….”

2. Please mention (in the statistics section and in Table 5) what variables were used for adjustment in the final regression model.

Response: Thank you for highlighting the need for a clearer discussion of the final regression model. The final multivariable regression model of risk factors for DSM-IV mental disorder was created using a backwards stepwise selection procedure. Variables which should an association (p<0.1) with mental disorder in univariable analyses were considered in the backwards stepwise selection procedure. Variables were retained in the model if the covariate showed an association (p<0.1) with mental disorder when adjusted for the other
retained covariates. Four variables were retained in the multivariable regression model (duration of exploitation, childhood sexual abuse, social support, and unmet needs) and are reported in Table 5. We have amended the relevant text in the Abstract, (page 2), Methods (page 12), Results (page 15) and the title and footnote to Table 5 (page 31) accordingly:

[Abstract] “Methods: A historical cohort study of women survivors of trafficked women aged 18 and over who returned to Moldova and registered for assistance with the International Organisation for Migration (IOM). Women were approached by IOM social workers and, if they gave informed consented to participate in the study, interviewed by the research team. At 2-12 months post-return to Moldova, a psychiatrist assessed DSM-IV mental disorders blind to information about women’s pre-trafficking and post-trafficking experiences using the Structured Clinical Interview for DSM-IV (SCID). A backwards stepwise selection procedure was used to create a multivariable regression model of risk factors for DSM-IV mental disorder measured at an average of 6 months post-return”.

[Methods] “Finally, a multivariable regression model of risk factors for DSM-IV mental disorder at an average of 6 months post-return was created using a backwards stepwise selection procedure. Pre-trafficking, trafficking, and post-trafficking variables which showed an association with mental disorder in univariable analyses (p<0.1) were considered in the backwards stepwise selection procedure. Exposure variables were retained in the model if the covariate showed an association (p<0.1) with DSM-IV mental disorder measured at an average of 6 months post-return, when adjusted for the other retained covariates. Backwards stepwise selection was used because of the exploratory nature of the analysis and also because high levels of collinearity within the dataset precluded the creation of a model that included all relevant variables.”

[Results] “Eleven variables were associated (p<0.1) with mental disorder at an average of 6 months post-return in univariable analyses. A multivariable regression model was created using a backwards stepwise selection procedure which considered ten of these variables; post-trafficking marital status was not included in the backwards stepwise selection procedure because its effects were seen to be driven by very small numbers (see Table 1). The subsequent multivariable regression model retained four variables, which remained significant at p<0.1 whilst adjusted for the other retained covariates. Significant independent risk factors for mental disorder at an average of 6 months post-return included: childhood sexual
abuse (AOR 4.68, 95% CI 1.04-20.92); social support score (AOR 0.64; 95% CI 0.52-0.79); and number of unmet needs (AOR 1.80; 95% CI 1.28-2.52) (see Table 5). Duration of trafficking showed a borderline association with mental disorder (AOR 1.12, 95% CI 0.98-1.29)."

[Table 5: title] “Table 5: Multivariable regression model of risk factors for mental disorder at an average of 6 months post-return among women survivors of human trafficking (n=120)”

[Table 5: footnote] “Multivariable regression model using a backwards stepwise selection procedure considering the following variables: education status, pre-trafficking employment status, urban/rural residence, childhood emotional abuse, childhood physical abuse, childhood sexual abuse, duration of exploitation, post-trafficking employment status, number of unmet needs, and social support score. Variables were retained in the model if the covariate showed an association (p<0.1) with mental disorder measured at 6 months post-return. Four variables were retained and are reported above.”

Thank you for your time in considering our revised manuscript. We are pleased that the article is considered to be an article of importance in its field, and hope that the manuscript is now suitable for publication in BMC Psychiatry.

Yours sincerely,

Melanie Abas, Nicolae Ostrovski, Martin Prince, Carolina Trigub, and Siân Oram.