Developing a screening tool for perinatal post-traumatic stress disorder: a pilot study
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AIM The aim of our pilot study was to identify a set of items that could serve as an initial step in the development of a screening tool for perinatal post-traumatic stress disorder (PN-PTSD) according to the DSM5 diagnostic criteria.

METHODS The research and clinical team developed an initial pool of items targeting all DSM5 criteria for PTSD. After consultation with a diverse group of researchers, clinicians, and customers, 25 items (in addition to a set of questions addressing criterion A, presence of traumatic experience) were defined.

Women attending their mid-pregnancy appointment in a public hospital in Brisbane were invited by research nurses to participate in the study. Those reporting a traumatic event related to the present or a previous perinatal period were invited to complete a phone clinical interview (PTSD Symptom Scale, PSSI-5, Foa et al, 2016) for the diagnosis of PTSD.

Logistic regressions were conducted to identify the items from the questionnaire which best predicted the PTSD diagnosis according to the clinical interview. We took into account the accuracy in classification (the percentage of records correctly classified by the model) and the sensitivity (the percentage of PTSD cases correctly predicted by the model) of the model.

RESULTS A total of 271 women (mean age 28.5, SD 5.2, range 18-41) completed the questionnaire. Of these, 108 reported a traumatic event and 69 agreed to participate in the clinical interview (64 completed to date). According to the clinical interviews, 16 women presented with PN-PTSD. The analyses were conducted with N = 16 cases and 48 exposed controls.

Given high collinearity, items with variance inflation factor analysis (VIF) >= 5 were iteratively eliminated. To identify the best subset of items of the 17 remaining, a logistic regression using backward stepwise selection (Wald method) was conducted.

The most reduced model kept 4 items, one for each DSM5 cluster (see panel A of table). These items presented an accuracy of 86% and a sensitivity of 54%. Since our priority was to identify the higher number of PTSD cases with the lower number of items, a good compromise was a model including 10 items, with an accuracy of 93% and a sensitivity of 70% (see panel B for additional items).

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