Early screening during pregnancy for maternal psychopathology reduced post-partum depressive symptoms and improved mother-infant attachment

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**Background**

Depressive mood disorders affected approximately between 8.5% and 10% women in pregnancy and between 6.5% and 12.9% in the first postpartum year [1]. Disordered mother-infant relationship has been reported in 10–25% of women referred to psychiatrists [2]. Both perinatal depression [3] and mother-infant attachment [4] are critical to infant's social, emotional and cognitive development. Therefore, early interventions aimed at reducing maternal depression and improving mother-infant attachment seem to be important for the well-being of both mother and child.

**Objective**

The aim of the study was to compare a group of women enrolled at the first month of pregnancy (antenatal group) and a group of women enrolled at the first month post-partum (post-partum group), to investigate the role of antenatal screening on post-partum maternal psychopathology and post-partum bonding, while evaluating the quality of mother-infant attachment, the presence of anxious and depressive symptoms, as well the presence of the known risk factors for post-partum depression at the first month post-partum.

**Method**

One hundred and eleven women enrolled in the antenatal group and 239 women in the post-partum group were evaluated using the Edinburgh Postnatal Depression Scale (EPDS), the State-Trait Anxiety Inventory (STAI) and the Postpartum Depression Predictors Inventory-Revised (PDPI-R) to assess depressive and anxious symptoms and the presence of the known risk factors for postpartum depression. The quality of maternal attachment at the first month post-partum was assessed by means of the Maternal Postnatal Attachment Scale (MPAS). All the scales were administered at three time-points during the three trimester of pregnancy in the antenatal group and at five time-points up to the 12th month post-partum in both groups. A tailored psychological support was offered to all the women in the antenatal group who exhibited high level of anxiety (STAI≥74) and depression (EPDS≥13) or risk factors for postpartum depression (PDPI-R≥4) during pregnancy. T-test was used for independent samples to compare EPDS, STAI, PDPI-R and MPAS score at the first month post-partum between the two groups.

**Results**

Mean score of the PDPI-R at the first month post-partum was significantly lower (p<0.001) in the antenatal group (3.5±3.4) than in the post-partum group (4.95±3.6). Mean EPDS score at the first month post-partum was significantly lower (p<0.001) in the antenatal group (3.37±3.8), than in the post-partum group (6.37±4.2). MPAS score was significantly lower (p=0.005) in the post-partum group (77.5±6.2) than in the antenatal group (79.5±5.9). No statistically significant difference between the two groups was found regarding post-partum anxiety.

**Conclusion**

Women screened during pregnancy showed a lower vulnerability to the known risk factors for post-partum depression, had less depressive symptoms and higher quality of attachment than the women enrolled at the first month post-partum. Preliminary data of our study confirmed the role of early screening during pregnancy in reducing post-partum depressive symptoms and improving mother-infant attachment.

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