

## **Becoming mothers after cancer: resilience is a protective factor for prenatal attachment and for negative moods during pregnancy**

Ionio, C.<sup>1</sup>, Bonassi, L.<sup>2</sup>, Mascheroni, E.<sup>1</sup>, Faccio, F.<sup>3</sup>, Liuzzo, A.<sup>2</sup>, Pisoni, C.<sup>4</sup>, Peccatori, F. A.<sup>5</sup>, von Wunster, S.<sup>6</sup>, Nastasi, G.<sup>2</sup>, Pravettoni, G.<sup>3</sup>

<sup>1</sup> Università Cattolica del Sacro Cuore di Milano, Dipartimento di Psicologia, CRIdee, Milano

<sup>2</sup> ASST Bergamo Est, Dipartimento medico U.O. Oncologia, Seriate

<sup>3</sup> Istituto Europeo di Oncologia, Applied research division for cognitive and psychological science, Milano

<sup>4</sup> Fondazione IRCCS Policlinico San Matteo, Neonatal Unit and Neonatal Intensive Care Unit, Pavia

<sup>5</sup> Istituto Europeo di Oncologia, Fertility & Procreation Unit, Division of Gynecologic Oncology, Milano

<sup>6</sup> ASST Bergamo Est, Dipartimento medico U. O. Ostetricia e Ginecologia, Alzano Lombardo

**Background:** Resilience can be defined as the ability to positively deal with adverse conditions, to overcome stress and difficulties while maintaining relatively good psychological and physical health (Rutter, 1987). Although few studies have explored the psychological aspects of cancer during pregnancy (Vandenbroucke et al., 2016) it is plausible that a diagnosis of cancer might interfere with factors that are necessary to deal positively with an ongoing or future gestation. Our aim is to investigate the possible protective role of resilience in the construction of the mother-fetus relationship and in the intensity of negative moods in pregnant women with a previous or concomitant cancer diagnosis.

**Methods:** 26 pregnant women (25 with breast cancer, 1 with hepatic PEComa) have been enrolled during the last trimester of pregnancy. 20 had a pregnancy after cancer diagnosis, while 6 had cancer occurring during pregnancy. After informed consent, women filled out questionnaires to measure resilience with the Resilience Scale for Adults, prenatal attachment with the Prenatal Attachment Inventory, and affective states with the Profile of Mood States.

**Results:** Analyses showed positive correlations between resilience factors and prenatal attachment and negative correlations between resilience factors and negative mood states. In particular there was a significant correlation between Social resources and (a) quality of prenatal mother-fetus relationship ( $r=.44, p=.046$ ), (b) intensity of attachment ( $r=.45, p=.036$ ); a correlation between Planned future and (a) anxiety ( $r=-.52, p=.016$ ), (b) fatigue ( $r=-.43, p=.046$ ); a correlation between Family cohesion and (a) anxiety ( $r=-.71, p<.001$ ), (b) depression ( $r=-.56, p=.006$ ), (c) anger ( $r=-.67, p=.001$ ); a correlation between Social resources and (a) anxiety ( $r=.45, p=.001$ ).

**Conclusions:** These preliminary data indicate that, it is important to assess resilience and family support in pregnant women with current or past experience of oncological diagnosis. Detailed

analysis of which strategies and resources are activated will provide vital information for targeted interventions.