

Universidad de Granada

## Study finds that resilience protects women against the negative effects of stress in pregnancy

17/09/2019

Research news

 Researchers from the University of Granada have, for the first time, analysed the protective role of resilience in pregnancy, by studying the levels of cortisol present in the expectant mother's hair, along with her psychological state. This novel approach enables objective analysis of the amount of cortisol—the stress hormone—secreted by the woman in recent months



 Resilience is the set of personal resources that help people deal effectively with adversity, protecting them from the negative health effects of stress

Resilience—understood as the set of personal resources that help individuals deal effectively with adversity, protecting them from the negative health effects of stress—is receiving increasing attention from researchers. However, it remains understudied in such a sensitive time of life as pregnancy.

Previous studies have found that pregnancy is a crucial period during which exposure to stress can negatively affect the health of both mother and baby. Stress has been linked to a range of adverse consequences, including premature birth or post-partum depression.

Researchers from the University of Granada (UGR)—from the Mind, Brain and Behaviour Research Centre (CIMCYC) and the Faculty of Psychology—have analysed for the first time the protective role of resilience during pregnancy. They studied the psychological state of the mother and measured the levels of cortisol in her hair—a

novel approach that enables objective analysis of the amount of cortisol, the stress hormone, secreted by the woman in recent months.

## A study among 151 pregnant women

In this study, 151 pregnant women were assessed, both in the third trimester and following childbirth, on the basis of psychological variables related to pregnancy stress and also hair cortisol concentrations.

When comparing pregnant women with a high level of resilience to those with a low level of resilience, the researchers found that the more resilient participants perceived themselves to be less stressed, had fewer pregnancy-related concerns, and experienced greater general psychological wellbeing overall. After childbirth, they also presented fewer symptoms of postpartum depression. The cortisol hormone tests demonstrated that the more resilient pregnant women also had lower levels of the stress hormone.

Based on these results, the researchers concluded that resilience exerts a clear protective role against the negative effects of stress, both psychological and biological—an effect that can occur during pregnancy and also after the birth.

Significantly, as these are the first-ever data on the protective role of resilience in pregnancy, the results raise questions about its potential protective role in the health of the baby. This calls for further research on this phenomenon. Studies on the effectiveness of training programmes designed to provide pregnant women with stress-management skills are also needed, to help improve the health of both the pregnant woman and her baby.

## **Bibliography:**

Maria Ángeles Garcia León, Rafael A. Caparros González, Borja Romero González, Raquel González Perez, and María Isabel Peralta Ramírez, 2019. "Resilience as a protective factor in pregnancy and puerperium: Its relationship with the psychological state and with hair cortisol concentrations." Midwifery, 75: 138–145. DOI:10.1016/j.midw.2019.05.006.

## Media enquiries:

Mª Ángeles García León

Mind, Brain and Behaviour Research Centre (CIMCYC)

Email: magleon@ugr.es