New research from McMaster University has found that psychiatric help for mothers with postpartum depression results in healthy changes in the brains of their babies.

The study, published in the journal *Depression and Anxiety* this week, found treating mothers who had postpartum depression with cognitive behavioral therapy (CBT) not only helped the moms, but resulted in adaptive changes in the brains and behavior of their infants.

More specifically, after the mothers' treatment, their infants showed healthy changes in their nervous and cardiovascular systems, and they were observed to better regulate their behaviors and emotions by both mothers and fathers.

"In fact, we found that after their moms were treated that their infant's brain activity normalized to the levels seen in our healthy infants," said Ryan Van Lieshout, senior author of the study, a psychiatrist, and associate professor of psychiatry and behavioral neuroscience at McMaster's Michael G. DeGroote School of Medicine.

He added that it is well-known that the children of women with postpartum depression have changes in the functioning of their brains that make it more likely that they will develop emotional and behavioral problems later in life. However, it had not been known before if treating the mother's postpartum depression could reverse these changes.

"We believe that this is the first time that anyone has shown that treating moms' postpartum depression can lead to healthy changes in the physiology of the brains of their infants, a finding that we think provides a lot of good news," he said.

"This study shows that cognitive behavioral therapy, a treatment that is short, cost-effective and preferred by women, could potentially reduce the intergenerational transmission of risk from mother to child."

For the study 40 infants of women diagnosed with postpartum depression were matched with 40 infants of non-depressed mothers on infant age, gender and socioeconomic status. The mothers with postpartum depression received nine weeks of group CBT. The infants were all tested before the treatment and nine weeks later, including a questionnaire on the infant behavior completed by the mother and her partner.


Provided by McMaster University