

Maternal stress passed on to unborn babies

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Stress suffered by women in pregnancy can affect their unborn children and impair brain development, research suggests.

A study found that the premature babies of women who had stressful pregnancies had reduced development of a brain region that is thought to play a role in anxiety disorders in adults.

Previous studies have suggested that a third of babies are affected by maternal stress. As toddlers they are more prone to aggressive tantrums.

The study by King's College London, published yesterday in *Biological Psychiatry*, is thought to be the first to show an impact on the structure of the brain. The research involved 250 mothers who were given a score based on stressful events, such as taking an exam, moving house or bereavement, in the year before the birth.

The researchers used diffusion tensor imaging, which shows the structure of the white matter in the brain. Mothers with higher stress scores had babies with impaired development of the uncinate fasciculus.

Adults with anxiety disorders also exhibit changes in this brain region, which is known to be vulnerable in the early stages of development and also appears to be implicated in mental health problems. The researchers plan to monitor the children's behaviour.

Alexandra Lautarescu, of King's College London, the lead author of the study, said: "We are trying to emphasise that maternal mental health during pregnancy can affect the baby's brain development which may have an impact later in life. No one is asking these women about stress and hence they don't receive any support."

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