The third semester human fetus may be protected from prenatal stress and programmed adult mental illness

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There is evidence, primarily from animal models, that prenatal stress has long-term effects on the animal as an adult. Most of the literature is on fetal exposure to physiological stressors from drugs, endotoxins and infectious agents leading to aberrant adult behaviors. However, maternal restraint, loud noise and other psychosocial stressors have been shown to induce depression-like, anxiety-like and other atypical behavioral phenotypes in the offspring as an adult animal. Translation to humans is supported by retrospective and prospective studies revealing increased risk of psychopathology in children of women exposed to war, bereavement or other cognitively perceived stressors during their pregnancies, especially during the first and second trimesters. The presumed mechanism is excess levels of corticosteroids released from stressed mothers into fetal circulation that bind the glucocorticoid receptor and induce neural changes underlying psychiatric diseases. Collectively, the data have suggested a fetal programming disease model that perinatal insults, including maternal stress, can predispose the individual to develop adult pathology, including mental illness. We propose that the animal findings of prenatal, psychosocial stress are best applied to the first and second trimester human fetus. The third trimester human fetus is unique and has evolved unique features that may largely protect the fetus from excess corticosteroid and from later psychopathology.

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The identification of factors involved in psychological stability and protection from psychological injury while working in high-risk police roles

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Specialist police who investigate sexual offence, child abuse and child exploitation need a psychological robustness to meet the demands of their role. Drawing on research in the field of trauma as it relates to specialist police, this research examined the factors involved in maintaining the psychological robustness and reducing the psychological impact of working in these roles. 29 specialist police from three different specialist groups were compared with 19 general duties police in two separate studies. The first study involved the examination of the relationship between factors of personality, coping strategies, empathy, psychological distress, symptoms of post-traumatic stress disorder, compassion satisfaction, compassion fatigue and job satisfaction. The second study involved individual semi-structured interviews, which were undertaken to ascertain the frequency of exposure to sexually explicit and violent images and to understand the motivation for general duties and specialist police to undertake and remain in their respective roles. This research provides evidence that the risk of psychological injury is mitigated by productive coping strategies, particularly those of problem solving, using professional, personal and collegiate support and the use of emotional distancing, an empathic style that is not emotionally-based. Although, this research provides a focus on one employee group, it is relevant to other professionals who work in the area of child protection and child exploitation as reduction of the psychological impact of their work is crucial to the maintenance of their wellbeing and their ongoing capacity to undertake these essential roles.

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