

A LITTLE LOVE A DAY CAN KEEP THE DOCTOR AWAY

Researchers at UKZN are showing how a little bit of love can reduce the long-term impact of maternal stress on toddlers. We report on how early-life stress enhances the paediatric disorder known as febrile seizures.



Oxytocin, also referred to as the 'love' or 'cuddle' hormone, is released by the brain, and stimulates maternal bonding between

mother and child. This hormone also plays a role in uterine contraction during child birth and the ejection of milk during breastfeeding.

Our research, using an animal model, explored the role of oxytocin in offspring exposed to febrile seizures/convulsions. We found that in offspring who were exposed to early-life stress, which in humans can be in the form of trauma, low socio-economic conditions or violence during pregnancy, the duration of febrile seizures experienced were longer than in offspring who had not experienced stress. In addition, offspring exposed to early life-stressors displayed anxious behavior which was accompanied by lowered oxytocin levels. When oxytocin was subsequently administered, the anxiety improved, suggesting that the 'love hormone' could play a role in reducing the impact of stress in infants. Importantly, the study suggests that a loving and nurturing environment, which stimulates the natural release of oxytocin in infants, could prevent the effects of stress in infants and warrants further study of the role of oxytocin and oxytocin-stimulating actions in preventing and or treating the effects of stress in young children.

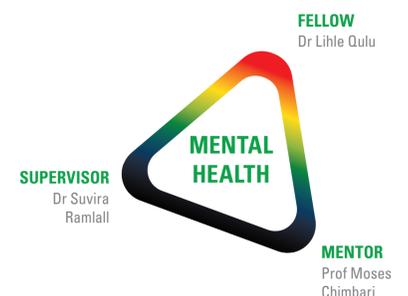


Towards Research Leadership

DRILL fellow Dr Lihle Qulu is a Neuroscientist and a lecturer in the discipline of Human Physiology at the School of Laboratory Medicine and Medical Sciences at the University of KwaZulu-Natal. She is working on developing an animal model of sexual defeat to assess behavioral and neuronal changes of both victims and offenders.

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