

IMPACT OF EXTREME HEAT ON PERINATAL MENTAL HEALTH-

A Case Series

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Aim and Hypothesis

To review cases from a perinatal mental health service to explore the effect of extreme heat on perinatal mental health. We expect that women in the perinatal period may present with ill mental health due to the impact of extreme heat.

Method

Two clinical cases were reviewed.

Results

A woman was reviewed early postnatally in a postnatal unit. She was presenting with paranoid thoughts with extreme worry about her baby being removed and auditory hallucinations. She had stayed overnight in an extremely hot room for observation of physical health concerns. After she had been moved to a cooler room, she presented anxious but no longer psychotic the following day. These symptoms were attributed to a transient psychotic episode, aggravated by sleep deprivation due to ward's hot environment.

The second case was a woman who was reviewed in early postnatal period. She was presenting with low mood, suicidal ideations, nightmares and difficulty bonding with baby. Both baby and mum were unable to sleep due to the extremely hot temperature despite having three fans in the room. Significant concerns were raised by the perinatal mental health team of increased risk of Sudden Infant death, as well as concerns for the baby and the mother's mental health as a result of overheating.

Background

Climate change is an ongoing threat with psychological implications. A briefing paper by Grantham Institute found that there is clear evidence for severe distress as a result of climate change, including following extreme weather events. One study found a clear relationship between increased temperatures and number of suicides. Heatwaves are related to increased incidence of hospital admissions around the world.

According to a federal report published by American Psychological Association, pregnant and postpartum women are among the groups at a higher risk of mental health consequences from weather related disasters. Women's ability to thermoregulate is altered during the pregnancy. There is limited understanding of how heat waves impact maternal mental health.

Conclusion

Hot environments may have contributed to adverse mental health outcomes in both cases. With rising annual temperatures and extreme heat events becoming more frequent, there is a need for collection of data on the relationship between extreme weather events and mental health outcomes in the perinatal period as a high risk life span.

References: Cianconi, P., Betrò, S., & Janiri, L. (2020), Grantham Institute "The Impact of Climate Change on Mental Health: A Systematic Literature Review." *Journal of Climate Change and Health*. American Psychological Association (2017) Psychology and Global Climate Change: Addressing a Multi-faceted Phenomenon. Eckersley, R. (2017). "The Impact of Climate Change on Mental Health: An Epigenetic Perspective." *Nature Climate Change*. Gonzalez, A., & Smith, L. (2019). "Wildfire Smoke Exposure and Mental Health: A Review." *International Journal of Environmental Research and Public Health*. Bennett, A. C., & Smith, A. (2021). "Addressing Mental Health in Climate Change Adaptation Plans." *Global Environmental Change*.