

'Enervements' under Extreme Heat. Social Mechanisms linking Heat Exposure to Maternal Mental Distress in Matam, **Northern Senegal**

JM Goudet^a, Makhan Danfakha^b, Fatimata Sow^a, Mor Diop^b, Pauline Gluski^c, Emmanuel Bonnet^c, Adama Faye^b, Valéry Ridde^a

^a Université Paris Cité and Université Sorbonne Paris Nord, IRD, Inserm, Cepad, Paris, France

^b Université Cheikh Anta Diop, Dakar, Sénégal

^c UMR 215 Prodig, CNRS, Université Paris I Panthéon-Sorbonne, AgroParisTech, Institut de recherche pour le développement (IRD), Aubervilliers, France

Introduction

- Extreme heat (EH) increases stress, aggression, irritability, and suicide
 - Social mechanisms remain poorly understood, especially among mothers in the Global South
 - This study investigates **how EH impacts the mental well-being of pregnant women and mothers of young children in northern Senegal** (SPRINT-Sen project)
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- EH affects maternal mental health through:
 - **direct pathways**: physiological, psychological, behavioral
 - **indirect pathways**: socioeconomic and relational
 - Local vernacular terms '*énervements*': **nervous strain, irritability**, and **conflict** in response to environmental and social stressors

Methods

Study design	Ethnographic fieldwork embedded in the SPRINT-Sen intervention
Study Sites	2 urban neighborhood (Matam city and Ourrossogui) 1 village (20km from Matam)
Participants	60 in-depth interviews (with pregnant and breastfeeding women and their relatives, health workers) 8 FGD (pregnant and breastfeeding women and their relatives)
Data collection	2023 (december, cooler season), 2024 (october, 2nd peak of heat), 2025 (may, hot season)
Analysis	Abductive analysis Baecker et al. 2025 Nvivo software

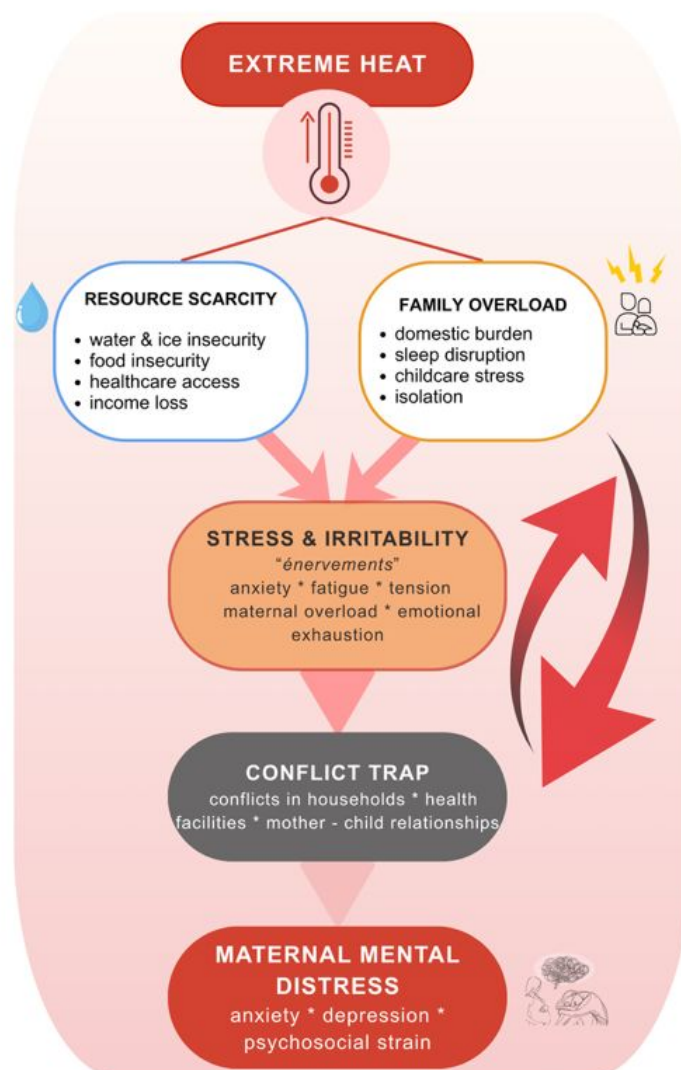
Results

Two key social mechanisms link EH to maternal mental distress

- **Ressources scarcity**: less access to **vital resources** (water, ice, food, and health care) and income
 - **Family overload**: childcare, domestic burden, sleep disruption
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- Women bearing the **burden of domestic labor, childcare**
 - **Survival strategies** to face intensified stress, fatigue, and sleep deprivation during heat episodes.
 - '*Enervements*' result from the intersection of physical discomfort, material scarcity, and cumulative social overload
 - **Conflict trap** across households, health facilities, & mother-child relationships

Conclusion

- **Social mechanisms** are key pathways
- **Responses should combine**:
 - **system-level**: cooling infrastructure, access to water and healthcare
 - **community-level**: psychosocial support tailored to women's needs & gender realities



Funding Sources

