

Heatstroke in Karachi

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Letter to editors

Dear Editors,

I am writing to urgently address Karachi's escalating heatstroke crisis, which has been exacerbated by recurrent heatwaves and frequent power outages. These outages critically impair residents' ability to use cooling measures, making the situation particularly dire for marginalized groups such as drug users and the elderly.

The extreme temperatures, which have soared up to 40°C, combined with notorious load shedding, have resulted in a staggering death toll. The Edhi Foundation reported receiving 568 bodies in just five days through June 25 due to the severe heat.¹ This crisis is not an isolated event but part of a troubling global trend linked to climate change, which is causing increasingly extreme weather events. The 2015 Karachi heatwave, which led to over 1,200 deaths, highlights the recurring nature of this issue.²

Heatstroke is a severe heat-related illness occurring when the body can no longer regulate its temperature, potentially rising to 106°F or higher within 10 to 15 minutes. This condition can lead to permanent disability or death without prompt emergency treatment.³ Symptoms include confusion, seizures, and loss of consciousness, and untreated heatstroke can result in organ failure, coma, or death.³

Recent reports reveal that many victims are homeless individuals and drug users, who often lack access to essential resources such as water and shelter, exacerbating their vulnerability. According to a recent article, "Most of them were homeless people and drug addicts living on the streets".⁴

The current heatwave is placing immense strain on Karachi's fragile healthcare system. Emergency services are overwhelmed, with hospitals experiencing a 30–50% increase in heat-related admissions.

Keywords

- heatstroke
- heatwave
- human health
- extreme weather conditions

Contribution

- A – Preparation of the research project
- B – Assembly of data
- C – Conducting of statistical analysis
- D – Interpretation of results
- E – Manuscript preparation
- F – Literature review
- G – Revising the manuscript

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This situation underscores the urgent need for immediate and long-term solutions. Improved urban planning, better shelter infrastructure, and increased funding for public health initiatives are essential to mitigate the impact of extreme weather events.

Community organizations and volunteers are playing a crucial role in providing relief and support. Their efforts highlight the importance of a coordinated response to the crisis. Local and national governments must prioritize the development of comprehensive heat action plans, enhanced forecasting, and public awareness campaigns to prepare for future heat waves.

Research indicates that substance abuse significantly impairs thermoregulation. Psychostimulants like methamphetamines and cocaine disrupt the body's ability to regulate temperature effectively by increasing neurotransmitter release, thereby raising the risk of hyperthermia and heatstroke.⁵ This exacerbates the vulnerability of those affected by substance abuse.

In conclusion, addressing the severe challenges faced by homeless individuals and drug users is crucial, given their frequent lack of voice and accountability. Immediate action and robust advocacy are required to drive systemic reforms that address deep-rooted social inequalities. By focusing on these marginalized groups, enhancing emergency resources, and implementing long-term solutions, we can mitigate the effects of the heat wave and address broader systemic issues effectively.

Thank you for your time and consideration in addressing this pressing issue. Your support in amplifying

this message is invaluable for driving the necessary change and ensuring the well-being of our most vulnerable citizens.

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