

## Counting the dead in Gaza: difficult but essential

By June 19, 2024, 37 396 people had been killed in the Gaza Strip since the attack by Hamas and the Israeli invasion in October, 2023, according to the Gaza Health Ministry, as reported by the UN Office for the Coordination of Humanitarian Affairs.<sup>1</sup> The Ministry's figures have been contested by the Israeli authorities, although they have been accepted as accurate by Israeli intelligence services,<sup>2</sup> the UN, and WHO. These data are supported by independent analyses, comparing changes in the number of deaths of UN Relief and Works Agency (UNRWA) staff with those reported by the Ministry,<sup>3</sup> which found claims of data fabrication implausible.<sup>4</sup>

Collecting data is becoming increasingly difficult for the Gaza Health Ministry due to the destruction of much of the infrastructure.<sup>5</sup> The Ministry has had to augment its usual reporting, based on people dying in its hospitals or brought in dead, with information from reliable media sources and first responders. This change has inevitably degraded the detailed data recorded previously. Consequently, the Gaza Health Ministry now reports separately the number of unidentified bodies among the total death toll. As of May 10, 2024, 30% of the 35 091 deaths were unidentified.<sup>1</sup>

Some officials and news agencies have used this development, designed to improve data quality, to undermine the veracity of the data. However, the number of reported deaths is likely an underestimate. The non-governmental organisation Airwars undertakes detailed assessments of incidents in the Gaza Strip and often finds that not all names of identifiable victims are included in the Ministry's list.<sup>6</sup> Furthermore, the UN estimates that, by Feb 29, 2024, 35% of buildings in the Gaza Strip had been destroyed,<sup>5</sup>

so the number of bodies still buried in the rubble is likely substantial, with estimates of more than 10 000.<sup>7</sup>

Armed conflicts have indirect health implications beyond the direct harm from violence. Even if the conflict ends immediately, there will continue to be many indirect deaths in the coming months and years from causes such as reproductive, communicable, and non-communicable diseases. The total death toll is expected to be large given the intensity of this conflict; destroyed health-care infrastructure; severe shortages of food, water, and shelter; the population's inability to flee to safe places; and the loss of funding to UNRWA, one of the very few humanitarian organisations still active in the Gaza Strip.<sup>8</sup>

In recent conflicts, such indirect deaths range from three to 15 times the number of direct deaths. Applying a conservative estimate of four indirect deaths per one direct death<sup>9</sup> to the 37 396 deaths reported, it is not implausible to estimate that up to 186 000 or even more deaths could be attributable to the current conflict in Gaza. Using the 2022 Gaza Strip population estimate of 2 375 259, this would translate to 7.9% of the total population in the Gaza Strip. A report from Feb 7, 2024, at the time when the direct death toll was 28 000, estimated that without a ceasefire there would be between 58 260 deaths (without an epidemic or escalation) and 85 750 deaths (if both occurred) by Aug 6, 2024.<sup>10</sup>

An immediate and urgent ceasefire in the Gaza Strip is essential, accompanied by measures to enable the distribution of medical supplies, food, clean water, and other resources for basic human needs. At the same time, there is a need to record the scale and nature of suffering in this conflict. Documenting the true scale is crucial for ensuring historical accountability and acknowledging the full cost of the war. It is also a legal requirement. The interim measures set out by the International Court

of Justice in January, 2024, require Israel to "take effective measures to prevent the destruction and ensure the preservation of evidence related to allegations of acts within the scope of ... the Genocide Convention".<sup>11</sup> The Gaza Health Ministry is the only organisation counting the dead. Furthermore, these data will be crucial for post-war recovery, restoring infrastructure, and planning humanitarian aid.

MM is a member of the editorial board of the *Israel Journal of Health Policy Research* and of the International Advisory Committee of the Israel National Institute for Health Policy Research. MM was co-chair of the Institute's 2016 6th International Jerusalem Conference on Health Policy, but writes in a personal capacity. He also collaborates with researchers in Israel, Palestine, and Lebanon. RK and SY declare no competing interests. The authors would like to acknowledge study team members Shofiqul Islam and Safa Noreen for their contribution to collecting and managing the data for this Correspondence.

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## Drug use among young people in Sierra Leone

Sierra Leone, a sub-Saharan African country with a median population age of 19 years and 75% of its entire population younger than 35 years,<sup>1</sup> is experiencing an exponential increase in synthetic substance misuse among its young people.<sup>2</sup> Many Sierra Leoneans live through multi-dimensional poverty that is exacerbated by the psychosocial distress they experienced during the decade-long civil war (1991–2002) and the 2014–16 Ebola epidemic in west Africa.<sup>3</sup> These catastrophic events mediate a strong, bidirectional link between these traumatic experiences and substance abuse, which have contributed to the drug abuse crisis.

Reports of substance misuse among young people have increased concern, with an estimated treatment gap for severe mental illness at 98% in 2012.<sup>4</sup> More recently, the rise in kush abuse among young people in Sierra Leone has been particularly distressing.<sup>2</sup> Kush, a synthetic, cannabinoid-like substance mixed with formalin, acetone, and human bones in some cases, induces long-lasting hypnosis and unexplained skin ulcers and continues to wreak havoc among Sierra Leone's young people. Sierra Leone is thought to be

an epicentre and potential exporter of this synthetic substance to regional countries in west Africa, as was reported in The Gambia, where kush is considered a major public health concern.<sup>5,6</sup>

Although there are no disaggregated data available on kush substance abuse, a 2024 report from Sierra Leone shows that mental health facilities and rehabilitation centres in the country have exceeded their capacity by three-fold and the only psychiatric hospital has seen a surge by almost 4000% since 2020 of people presenting with drug addiction.<sup>3</sup> Despite these exponentially rising numbers of drug abuse cases, mental health services and public health engagement are pitiful. Mental health services are centralised and delivered at the only tertiary psychiatric facility in the country, a facility that is highly stigmatised.

This dismal kush reality in Sierra Leone highlights the pressing need for focused attention and resources through a community-based approach to tackle the exploding problem of substance misuse among Sierra Leone's young people. This disenfranchised group is not receiving adequate attention due to political tokenism and competing priorities. Key strategies include an urgent need for increased investment in prevention, treatment, and harm reduction strategies, which should include expanding access to evidence-based interventions, such as counselling, rehabilitation, and mental health support, as well as strengthening regulations to control the availability and distribution of kush. These strategies should be implemented through a multi-sectoral approach and active community engagement. Without prompt intervention, the country risks a further exponential surge in cases that might lead to a broader regional epidemic.

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## Disease burden descriptions in trial protocols

It is well known that historical clinical trials do not routinely report the race of enrolled participants nor do they enrol groups across demographic spectra (notably race and sex) in proportion to real-world disease burden.<sup>1,2</sup> Over time, only modest improvements to representative enrolment have been observed.<sup>2</sup> This form of selection bias is problematic since evidence from such trials typically informs clinical guidelines. A lack of representation might lead to under-surveillance of safety and efficacy outcomes, predisposing under-enrolled demographic groups to inadvertent harms upon mainstream implementation of an intervention. Furthermore, populations in countries