Epicentre / Doctors Without Borders (MSF)

Retrospective Mortality Survey in Gaza

Background and objective

After more than 15 months of the genocidal campaign carried out by the Israeli forces in Gaza, Epicentre/Médecins Sans Frontières (MSF) conducted a retrospective mortality survey among part of its Palestinian staff in Gaza and their household members. The aim was to quantify mortality and morbidity within this group, understand access to healthcare services, and provide evidence for advocacy efforts to call for a ceasefire, which we have repeated for months.

The primary objective of the survey was to estimate the crude mortality rate and identify the main causes of death among MSF national staff and their families in Gaza since 7 October 2023. Secondary objectives included assessing the prevalence of injuries and recent illnesses and describing access to care (including treatment of chronic conditions) during the conflict.

Methodology

- Study Design: Cross-sectional retrospective mortality survey.
- **Population:** 436 Palestinians households, all from MSF's national staff. These households comprise a total of 2,523 individuals. Eligible households included all individuals living in the home one week before the war began, as well as children born during the conflict period.
- Survey Period: January 29 March 26, 2025.
- Recall Period: October 7, 2023 interview date.
- **Data Collected:** The structured questionnaire collected information on household composition, deaths, injuries, recent illnesses, chronic diseases, and maternal care. Deaths reported by survey respondents were matched (by ID, name and birth date) with the Gaza Ministry of Health's publicly available database of violent deaths.

Key Findings

Mortality Rates

- The **crude mortality rate** was **0.41 deaths per 10,000 persons per day**, which is approximately **five times higher** than pre-war estimates from the Gaza Ministry of Health for the entire population.
- The **under-five mortality rate** was **0.70 per 10,000 per day**, around **ten times higher** than prewar levels.
- The **neonatal mortality rate** was calculated at **42.3 deaths per 10,000 live births**, roughly **six times higher** than previous figures.

Causes and Demographics of Death

- The majority of deaths (74%) were due to trauma, predominantly from blast injuries (98%).
- 40% of deaths caused by violence occurred among children under the age of ten.
- Deaths were evenly distributed by sex
- As the conflict endured, we observed an increase in non-violent deaths over time
- Among trauma-related deaths with an ID number, 88% were matched to entries in the Ministry of Health's official registry of violent deaths. Notably, no deaths attributed to non-violent causes from our survey were present in the Ministry's list.

Morbidity and Injuries

- **44%** of all household members reported at least one illness in the month preceding the interview.
- 7% of all household members were injured, 9 out of 10 by bomb explosions and gunshots.

Access to Care

- 86% of injured were treated, mainly in hospitals and field hospitals.
- Among those diagnosed with a chronic illness, **68**% experienced one or more interruptions in treatment during the conflict. On average, the longest interruption lasted nearly 120 days.

Forced displacement and housing

- Half of MSF staff and their families were forced to change their houses five times or more in 15 months.
- Because 98% of MSF staff houses were partially (39%) or completely destroyed (59%), many families were forced to live in tents.

Conclusions

The findings of this survey underscore the devastating impact of the Israeli forces' genocidal campaign in Gaza on MSF Palestinian staff and their families in the Strip.

Despite their roles as healthcare providers responsible for caring for countless injured patients and witnessing daily fatalities, they have also been forcibly displaced numerous times. Many are currently living in tents due to the partial or complete destruction of their homes.

Mortality rates among their families have risen dramatically, particularly among children and neonates. Deaths within MSF families were mainly caused by blasts from bombs and gunshots, with young children disproportionately affected.

Most violent deaths recorded in the survey corresponded to entries in the Ministry of Health's list of warrelated violent deaths, while no non-violent deaths were identified in that list, thereby supporting the validity of the reported death toll.

It is important to note that this survey is not representative of the general population in Gaza and does not reflect the renewed escalations of violence that have occurred after the ceasefire ended in March 2025. Nevertheless, it provides a critical snapshot of the human toll of the conflict and highlights the **urgent need for protection of civilians and healthcare workers and an immediate ceasefire in Gaza**.