



## Event Summary Note Measuring mortality in complex emergencies

Counting who dies is both a technical exercise and a political one. Within emergency contexts, the technical exercise revolves around designing and deploying methods to count excess deaths—often probabilistically. Within these methods, Casey Breen and his team at Oxford University have been developing a way of estimating deaths within an individual's social network, which, results in a population estimate as you scale up. Not surprisingly, the type of network used may yield very different results. A kinship network approach, although more accurate—people tend to have an obvious idea of who their family is and who amongst them has died—must consist of a large sample to be statistically significant. Methodologies that rely on self-reporting, however, tend to inflate mortality estimates. According to Dr. Breen, a possible explanation can be the fact that reporting death is associated with receiving more aid. This reality hints at the political implications behind mortality estimation, which, similarly to other statistical exercises of national interest, can be viewed as a tool for policymaking.

A fundamental part of mortality estimation in emergencies, as Satchit Balsari reminds us, involves attribution. Excess death is defined in contraposition to mortality outside of crisis, which leads to the question of whose deaths get counted and when that counting starts and stops. As was the case with Hurricane Maria in Puerto Rico, there often is a prolonged tail of mortality and morbidity in the aftermath of a crisis. A study conducted around this hurricane, led by Satchit Balsari and Caroline Buckee, estimated four thousand deaths and wide confidence intervals, which became the subject of ample controversy. This fuzziness inherent to mortality estimation presents difficulties to policymakers, and academics are presented with the question of how to relate to public-interest results. According to Danielle Poole, a way through this is to increase transparency in the methods and the definitions being used. This includes decisions about how to handle missing data. In the context of armed conflict, for instance, it is often the case that people go missing, and it takes time to determine what happened. Backward integration of this information into mortality estimates is not straightforward.

As mentioned above, whose deaths get counted poses another potentially polarizing exercise for academics. Dennis Feehan, a trainee demographer, tells us that there are often particular demographic patterns in mortality trends depending on the context. The other side of this coin is that these demographics can be used to define attribution. As an example, in the setting of war, age, and gender are used to determine who is counted as a civilian and who is counted as a combatant. It is not difficult to see how contentious these definitions can be, as they feed back into the narrative behind a given conflict. This leads to exceptionalism by which specific conflicts, and by extension inevitable deaths, are more likely to get counted. Research financing is particularly susceptible, as can be seen by the example of the ongoing war in Palestine, where mortality studies are struggling to get financed, and similar studies for the war in Ukraine have been expedited. More than anything, this reflects the geopolitical standing of the funding institutions. There might be a place for academic neutrality when it comes to the rigor behind the technical exercise of mortality estimation, but as Danielle Poole reminds us, as an academic, even the decision of which emergencies to study, is political.