Documenting deaths in the Syrian war

The Syrian civil war, now in its 7th year, has inflicted a grave toll on the country's population and public health system. The conflict has destroyed Syria’s public health infrastructure, inflicted marked excess direct and indirect mortality, and forced widespread displacement of more than half of the Syrian population. Despite these acknowledged impacts, documentation and analysis of its population effects are challenged by inadequate and broken data systems, insecurity for both health staff and researchers, reporting bias, and the so-called fog of war.

Documentation of conflict-related deaths is particularly challenging in the context of a multifaceted civil war in which diverse groups of combatants have a vested interest in under-reporting deaths among their own forces and inflating mortality of opponents. Furthermore, deliberate armed attacks on civilians are war crimes that combatants on all sides often wish to obscure. The difficulty in distinguishing civilian versus combatant deaths and the prevalent reliance on aerial warfare and heavy ground shelling in the conduct of war make documentation of civilian deaths even more difficult.

In *The Lancet Global Health*, Debarati Guha-Sapir and colleagues provide one of the most comprehensive analyses of this conflict to date. They rely on data collected in real time from the Violations Documentation Center (VDC) to analyse the demographics, cause of death, and temporospatial patterns of 143,630 direct deaths occurring from 2011 to 2016 in the Syrian war. Although the VDC is only one of several human rights groups documenting deaths in the Syrian conflict, it is the only one that explicitly attempts to categorise conflict-related deaths by civilian or combatant status, that takes high risks in doing so within hours of attacks, and has managed to maintain this documentation system over the duration of the conflict. On the basis of data from the VDC, Guha-Sapir and colleagues present a novel analysis that offers a contemporaneous depiction of conflict-related mortality in Syria over space and time. Furthermore, this study captures important trends in the Syrian conflict, including the use of barrel bombs and the increasing reliance on aerial bombardment over the course of the conflict, showing how these trends have resulted in rising direct deaths among civilians as well as combatants. An important finding of the study is the differential impact that the use of aerial munitions have had on civilian deaths in the conflict. This study documents the transition of cause of civilian deaths from shooting early in the conflict, to shelling in 2013, to primarily wide-area explosive weapons late in the conflict, a transition reflected across geographical space as well as across time. Importantly, civilian deaths from barrel bombs—a widely reported phenomenon—represented almost all of the deaths from barrel bombing (7351 [97·2%] of 7566). The 2007 children killed by barrel bombs constituted 27·3% of these deaths. These data raise pressing questions regarding efforts of the warring parties to distinguish between civilians and combatants in their war fighting decisions.

Despite the study’s careful analysis, several important questions remain. As the study authors state, the VDC dataset includes data “on conflict-related violent deaths from all governorates in Syria, regardless of the perpetrator” however, as the authors acknowledge, “information on victims in government-controlled areas can be difficult to obtain” and so the study’s results only describe deaths in areas outside of government control. As such, their analysis represents only a partial account of the total conflict-related mortality in Syria. Finally, the authors present detailed information on opposition combatants but their dataset includes no deaths among Syrian Government forces.

The Syrian war is typical of many recent internal wars characterised by a large number of child combatants. This development presents particular challenges for researchers attempting to distinguish between civilian and combatant casualties. The documentation of combatant status and the high degree of completeness of such data (99%) in this dataset helps to alleviate criticisms that this category of civilian deaths might here be overestimated (although the assignment of age is acknowledged by the VDC to be on occasion only an estimate). Adherence to international definitions...
of the child within the Convention on the Rights of the Child helps to standardise such reported data. The observation method used by the VDC researchers could result in an underestimation of casualties, particularly among collapsed structures and rubble created by heavy bombardment and shelling. In this study, Guha-Sapir and colleagues provide a model of how to report on and analyse these useful yet potentially problematic datasets. Future research should follow this model to provide for future comparative analyses of war-related deaths and injuries among civilian populations as well as combatants.

Documentation of the health impact of war and conflict is one of the most difficult yet important public health challenges. An essential effort is to arrive at a robust estimate of who has been killed and injured, by what means, over the duration of hostilities. Countries that descend into conflict frequently have inadequate vital statistics systems and woefully incomplete death registries prior to that descent. Wars further vitiate any attempt at accounting. Yet, the health and population impact of conflicts is dramatic and their effects long lasting. Any attempt to understand these events requires careful data collection and contemporaneous analysis to capture data that would otherwise be lost. Only through collection efforts such as those mounted by the VDC and analyses like the one presented by Guha-Sapir and colleagues can propel researchers and policymakers into recognising the true costs of current wars and the need to mitigate such consequences in the future.

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We declare no competing interests.

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