

Demography of disaster and displacement contexts

Session organisers: Rosanna Le Voir (LSE), Prof. Brienna Perelli-Harris (University of Southampton) and Dr. Orsola Torrisi (NYU Abu Dhabi & LSE)

5:30 - 7:00 Tuesday 12 September: Demography of disaster and displacement contexts

Ethnic and regional inequalities in the Russian military fatalities in the war in Ukraine

Alexey Bessudnov - University of Exeter

The paper explores ethnic and regional inequalities in mortality in the Russian army during the 2022-23 war in Ukraine. The analysis is based on a crowdsourced data set containing the names of about 20,000 Russian military killed in Ukraine from February 2022 to April 2023. The data set was collected by a team of volunteers from the social media and other available sources. I estimate mortality rates and relative risks by ethnic group and region and fit a linear model assessing the contribution of population ethnic composition and socio-economic factors to regional fatality rates. There are large inequalities in the military fatality rates across Russian regions, with the highest mortality of soldiers originating from poor regions in Siberia and the Russian Far East and the lowest from Moscow and St.Petersburg. Some ethnic minority groups, in particular Buryats and Tuvans, are overrepresented among the fatalities, compared to their population share. Once regional inequalities are taken into account, ethnic gaps in mortality are reduced substantially. Regional and ethnic fatality gaps appear to be driven by socio-economic inequalities: young men in poorer regions see the career in the military as more attractive.

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Menarche and intensity of conflict: A comparative analysis

Tiziana Leone and Reem Ladadwa - LSE; Rula Ghandour Daoud and Weeam Hammoudeh - Birzeit University

Conflicts pose threats to public health, human security, and wellbeing. At the end of 2021, more than 450 million children – or one in six – were living in a conflict zone, the highest number in 20 years. The number of children living in a conflict area has increased by 20% during the last few years. Exposure to stress and conflict generally has a negative impact on the onset of menarche which usually is delayed in high intensity of conflict settings. Exposure to violence has been found to have a negative effect on age at menarche. However, the evidence is inconclusive and primarily relies on ad hoc studies. Furthermore, there is a big gap in the literature on analyses comparing different timings and types of conflicts. Using data from 6 countries, we analyse standardised DHS data along with the UPSALA intensity of conflict information to examine the relationship between the timing of menarche and the timing of conflict. With the help of pseudo-longitudinal and multilevel techniques we model data starting from the 1950s in at least 6 countries to demonstrate that locality and socio-economic differences mitigate the impact of conflict. This work is situated within the wider research focus on the indirect impact of conflicts on health. The paper calls for further research and for the need to exploit past data to understand how different types of conflicts might have an impact on child development.

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Obstetric violence in the context of community armed violence: The case of Mexico

Orsola Torrisi - NYU Abu Dhabi, Signe Svallfors - Stanford University and Maria Gargiulo - London School of Hygiene and Tropical Medicine

Although progress has been made in identifying, documenting, and responding to violence against women in armed conflict, obstetric violence (OV) remains neglected in research and policy concerned with large-scale violence. Defined as disrespectful and abusive treatment that women experience from healthcare providers during pregnancy, childbirth, and the postpartum period, OV bears significant long-term health consequences for survivors/victims and their children. This study aims to examine the relationship between exposure to local community violence and women's experiences of OV in Mexico, where the War on Drugs has led to an unprecedented rise in the homicide rate and one-third of women report having suffered some form of abuse

from medical personnel during their latest birth. We leverage unique individual-level information on experiences of OV from the 2021 Mexican National Survey on Household Relationship Dynamics, combined with homicide data disaggregated by month and municipality. We construct indicators of obstetric violence—physical violence, abandonment and neglect, non-dignified and non-consensual care—to investigate different repertoires of OV. We also investigate how the relationship between local community violence and OV varies between population subgroups and across different temporal measures of local violence. Preliminary results suggested a consistently higher risk of various domains of OV linked to local community violence, particularly a greater probability of experiencing non-consensual care among women exposed to more recent homicide violence before delivery, and physical abuse during delivery in areas with persistently high levels of homicide rates. These relationships appear stronger for adolescents, single women, and women delivering in public health facilities.

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Nowcasting daily population displacement in Ukraine through social media advertising data

Doug Leasure, Ridhi Kashyap, Francesco Rampazzo, Claire Dooley, Benjamin Elbers, Maksym Bondarenko, Mark Verhagen, Arun Frey, Jiani Yan, Evelina T. Akimova, Masoomali Fatehikia, Robert Trigwell, Andrew Tatem, Ingmar Weber and Melinda Mills

In times of crisis, real-time data mapping population displacements are invaluable for targeted humanitarian response. The Russian invasion of Ukraine on February 24, 2022 forcibly displaced millions of people from their homes including nearly 6 million refugees flowing across the border in just a few weeks, but information was scarce regarding displaced and vulnerable populations who remained inside Ukraine. We leveraged social media data from Facebook's advertising platform in combination with pre-conflict population data to build a real-time monitoring system to estimate sub-national population sizes every day disaggregated by age and sex. Using this approach, we estimated that 5.3 million people had been internally displaced away from their baseline administrative region in the first three weeks after the start of the conflict. Results revealed four distinct displacement patterns: large scale evacuations, refugee staging areas, internal areas of refuge, and irregular dynamics. While the use of social media provided one of the only quantitative estimates of internal displacement in the conflict setting in virtual real-time, we conclude by acknowledging risks and challenges of these new data streams for the future.

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