Received: 15 February 2021 | Accepted: 16 February 2021

DOI: 10.1111/ppe.12764

COMMENTARY

Paediatric and Perinatal Epidemiology WILEY

Police violence and preterm birth—Moving towards antiracism in our research on racism

Lynne C. Messer[1] | Dawn M. Richardson[2]

[1]Community Health and Epidemiology, Graduate Academic Affairs, OHSU-PSU School of Public Health, Portland, OR, USA

[2]Community Health, Social Justice, OHSU-PSU School of Public Health, Portland, OR, USA

Correspondence: Lynne C. Messer, Community Health and Epidemiology, Graduate Academic Affairs, OHSU-PSU School of Public Health, Portland, OR, USA.
Email: lynne.messer@pdx.edu

A goldfish that is swimming inside a bowl does not question the bowl. Maybe that is because the container is invisible to the goldfish, or maybe it is because it is all it has ever known, or maybe the goldfish simply does not care to know. Vast differences in complexity aside, we are not unlike the goldfish in many ways: importantly, we also rarely question the confines of our structure. And therein lies the problem.

In this issue of *Paediatric and Perinatal Epidemiology*, Goin and colleagues[1] address a relatively unconsidered element of our goldfish bowl by asking whether neighbourhood exposure to fatal police violence increases risk for preterm birth, and whether this hazard differs by race/ethnicity. In doing so, these authors advance an important analysis investigating the role of police violence as a potential driver of preterm birth in California, finding that fatal police violence was associated with an increased hazard of late preterm birth. Additionally, in race-concordant analyses, in which the victim's race or ethnicity matched that of the birth parent, the associations were stronger for Black and Hispanic women, especially for female infants.

If this manuscript had been published in 2019 (or before), it would likely have been counted among the papers investigating various aspects of neighbourhood conditions in which people gestate and infants are born. But we cannot unsee what we have seen: 2020 is a year forever characterised by the Black Lives Matter (BLM) movement, a campaign against violence and systemic racism that began in 2013 following the acquittal of the police officer who killed Trayvon Martin and exploding in 2020 as the country watched George Floyd be killed on a sidewalk in Minneapolis by a white police officer who is now charged with his murder. And while it is the case that the Minneapolis police use force against Black people at 7 times the rate of white people,[2] they are not unique among law enforcement in their practices. In fact, one in every 1000 Black men can expect to be killed by police,[3] with Black Americans—especially Black men—more likely to be killed by police than any other racial group, and more than twice as likely as white Americans. Our fishbowl is not built of glass, but rather of white supremacy and structural racism.

The contribution made by Goin et al[1] to our understanding of how social and structural conditions are associated with preterm birth is remarkable. Because while there are—quite clearly—public health researchers who recognise the links between police violence, structural racism, and health inequities,[4] the field is not unified in this understanding. As the authors note, the American Public Health Association (APHA) released a policy statement in 2018 acknowledging that law enforcement violence is a public health issue but did so only after APHA's governing council voted against adopting the initial policy statement in 2017. This limited disciplinary unification persists in the face of documented impacts of racism on health, growing evidence on the effects of forceful policing,[5] and an increasing body of research linking police violence to adverse outcomes including anxiety,[6] stress, and mental health trauma,[7] even among people of colour not directly affected. We commend the authors for their choice of research question in exploring the role of exposure to fatal police violence in population-level inequities in risk for preterm birth. We would further encourage both these authors, and the reproductive and perinatal community more broadly, to specifically situate these research questions in the explicit political and social framework from which these questions arise.

The authors cleverly employed two exposure data sources—death records and the Fatal Encounters database—to produce this much needed and previously unexplored research. Prior work noted above indicates systemic oppression exists, is experienced by Black, Hispanic, and other persons of colour, and has important health effects—regardless of whether the police kill someone in the census tract in which an index individual resides. The work conducted by Goin and colleagues[1] highlights the additional risk associated with exposure to a police force killing, the effects of which were greater in race-concordant settings.

Limitations associated with the Goin et al paper are mostly a function of data availability and the state of the literature. In terms of outcome data, exposure to violence may perturb the hypothalamic-pituitary-adrenal (HPA) axis, leading to maternal and placental stress, which may, in turn, increase the risks of both spontaneous membrane rupture and labour onset, leading to spontaneous preterm delivery (of course, stress may be a precursor to other obstetrical complications which, in turn, may increase the risk of clinician-initiated preterm delivery too).[8] Therefore, it would be helpful to separate clinician-initiated deliveries from spontaneous preterm deliveries, but as the authors note, these data are not routinely available from birth records. On the exposure side of the equation, the investigators used counts of fatal police violence events per census tract, rather than calculating a proportion or rate. While they indicated that the small numbers of police violence events precluded them from calculating stable rates at the census tract, we contend that a greater concern for valid inference or conclusion-drawing results from unequal population sizes explaining the variability of violent events per census tract.

In terms of the literature, the authors reference work that highlights the role of racial residential segregation in creating primarily Black neighbourhoods with decreased municipal investment, and limited educational and economic opportunities, which may result in increased crime and subsequent police surveillance. However, recent illumination of racialised policing patterns demands that we ask: Does law enforcement surveillance in Black neighbourhoods reflect a true need for policing due to high levels of crime, or do these patterns reflect racist, white supremacist orientations to policing Black people in Black neighbourhoods? Disentangling the effects of racist systems from the conditions that those racist systems produce is not a topic that can be addressed by epidemiologist alone, but instead requires interdisciplinary perspectives, in collaboration with communities, to unpack effects of causation from those of consequences.

The one limitation of this paper—that not a function of data or prior work—is the authors' missed opportunity to situate this publication inside the larger pandemic of police violence. For instance, their use of "fatal police violence" to describe police killings of residents may be technically correct, but that is, of course, not all that contemporary gestating parents are reacting to. The Goin et al paper[1] speaks to the impact that homicides committed by police offices have on gestating infants, who are growing while our media feeds are filled with images of white supremacist targeting of black and brown bodies. Language matters and has implications for the solutions we can conceive. Solutions to "fatal police violence", for instance, might include less lethal means of subduing someone or body cameras. Solutions to racist policing, however, would require us to go further upstream, to the origins of policing or contemporary officer training. Fatal police violence reads like an unfortunate consequence of a police encounter, which it may sometimes be. Increasingly we understand that racist policing or the disproportionate homicide against black and brown bodies is the norm, and represents the explicit context within which this work is housed.

One task of a commentary is to situate a paper in the larger body of work, thereby providing a context for the research. The context of Goin et al's work is reproducing itself almost weekly on the national and international stage. Further, the urgency of antiracism demands this work be situated outside the academic literature and instead placed in our larger racial and political conversations. Epidemiologists investigating the impact of racism on health (manifest through multiple mechanisms, including police violence) should help ensure that their work connects to antiracist action. Research with the power to compel progressive policy, procedure, and programming has utility for advocates, policymakers, and interventionists. Concretely, partnerships between social epidemiologists and community-engaged researchers are one way to ensure such impact[9]; strategic dissemination of these findings through summary statements targeted to policymakers is another.[10]

Some might claim that actions like those suggested above are those of advocacy, not of science, and instead run counter to notions of objectivity or neutrality. In the case of racist policy or practice, however, the stance of neutrality is not value-neutral but instead supports the status quo, which is structural racism and white supremacy. Clearly, it is time to not only re-examine our bowl, but also to reimagine it.

ABOUT THE AUTHORS

Lynne C. Messer is Associate Professor of Health Promotion and Epidemiology and the Assistant Dean for Graduate Academic Affairs in the OHSU-PSU School of Public Health. She is a social epidemiologist whose research explores the intersection of social-environmental justice and residential segregation in exacerbating maternal and child health disparities among vulnerable populations. Early work focussed on better characterising the built and social environments for population-based epidemiologic research whereas later work incorporated other non-social area-level exposures, including air pollution and environmental contaminants, for maternal and child health. Her most recent research includes a project examining the role of documentation status on immigrant women's health and their birth outcomes.

Dawn M. Richardson is an Associate Professor of Health Promotion and the Associate Dean for Social Justice in the OHSU-PSU School of Public Health. She is a social epidemiologist whose research examines the role of structural racism as a driver of health inequities via chronic stress. Her work is influenced by community-based participatory research principles, and she engages with communities to advance health equity through upstream interventions and policy change efforts. Her most recent research efforts focussed on maternal health and includes a project examining the role of documentation status on immigrant women's health, an evaluation of paid family leave policies on family health, and the impact of racism and discrimination on Latino chronic stress.

ORCID

Lynne C. Messer https://orcid.org/0000-0002-7332-6170

REFERENCES

1. Goin D, Gomez A, Farkas K, et al. Occurrence of fatal police violence during pregnancy and hazard of preterm birth in California. *Paediatr Perinat Epidemiol*. 2021.
2. Oppel RA Jr, Gamio L. *Minnepololis police use force against Black people at 7 times the rate of Whites*. New York Times. NY: New York Times, Inc; 2020.
3. Edwards F, Lee H, Esposito M. Risk of being killed by police use of force in the United States by age, race-ethnicity, and sex. *Proc Natl Acad Sci USA*. 2019;116:16793-16798.
4. Mesic A, Frankilin L, Cansever A, et al. The relationship between structural racism and black-white disparities in fatal police shootings at the state level. *J Natl Med Assoc*. 2018;110:106-116.
5. Feldman J. Public health and the policing of black lives. Harvard Public Health Review. 2015;7.
6. Geller A, Fagan J, Tyler T, Link B. Aggressive policing and the mental health of young urban men. *Am J Public Health*. 2014;104:2321-2327.
7. Schmool J, Yonas M, Newman O, et al. Identifying perceived neighborhood stressors across diverse communities in New York City. *Am J Commun Psychol*. 2015;56:145-155.
8. Wadhwa P, Entringer S, Buss C, Lu M. The contribution of maternal stress to preterm birth: issues and considerations. *Clin Perinatol*. 2011;38:351-384.
9. Wallerstein N, Yen I, Syme S. Integration of social epidemiology and community-engaged interventions to improve health equity. *Am J Public Health*. 2011;101:822-830.
10. Izumi B, Schulz A, Israel B, et al. The one-pager: a practical policy advisory tool for translating community-based participatory research into action. *Progr Commun Health Partnership*. 2010;4:141-147.

How to cite this article: Messer LC, Richardson DM. Police violence and preterm birth—Moving towards antiracism in our research on racism. *Paediatr Perinat Epidemiol*. 2021;00:1–3. https://doi.org/10.1111/ppe.12764