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Correspondence

US law enforcement crowd control tactics at anti-racism protests: a public health threat

George Floyd's murder by Minneapolis police on May 25, 2020, the latest of many such extrajudicial killings of African Americans and Native Americans, triggered protests throughout the USA and beyond. Many law enforcement agencies have responded with excessive force, raising serious health and human rights concerns.

Numerous videos document law enforcement officers' indiscriminate use of chemical irritants and kinetic impact projectiles (KIPs); striking peaceful protesters, and even journalists, with batons, fists, and vehicles; and corralling crowds in confined areas, making physical distancing impossible.

Chemical irritants, including tear gas and pepper spray, have been lobbed at protests nationwide. In one well publicised incident, officers used chemical irritants to chase peaceful protesters from a square near the White House to clear a path for President Trump to attend a photo opportunity. Such weapons, which are banned in warfare, carry substantial risks. A systematic review¹ of 31 studies found that among 9261 injuries from chemical irritants, 8.7% were severe, two were lethal, and 58 caused permanent disabilities. Because chemical irritants provoke coughing and sneezing, their use during the COVID-19 pandemic raises particular concern about viral spread.

The use of KIPs such as rubber bullets and bean bag rounds, sometimes shot from standard firearms, raises even more serious health concerns. A 2017 review² of 26 studies involving 1984 individuals wounded by KIPs showed that 3% died and 15.5% suffered permanent disabilities, including vision loss and surgical abdominal injuries. In the last 3 days of May, 2020, alone, at least twelve protesters incurred grave

injuries from KIPs according to media reports (appendix); several required intensive care, and five suffered severe ocular trauma resulting in partial or complete loss of vision.

Mass arrests of protesters, often for curfew violations, raise additional concerns. The USA incarcerates more people than any other nation, and its overcrowded jails have functioned as incubators for COVID-19. As many as 15% of COVID-19 cases in Illinois may be attributable to the cycling of community members into and out of jails.³ Mass arrests, particularly combined with indiscriminate use of chemical irritants, risk accelerating the pandemic's spread.

The medical profession must join in demanding an end to human rights abuses by law enforcement. Police murders of people of colour and assaults on peaceful protesters must stop. A moratorium on the use of tear gas is needed.⁴ KIP use should be banned. Some of the US\$115 billion spent annually on law enforcement in the USA⁵ would be better spent on alternatives to policing, such as health, educational, and social programmes.

All authors declare serving as leaders in Physicians for a National Health Program, a non-profit organisation that favours coverage expansion through a single-payer programme. AWG is reimbursed for some travel on behalf of the organisation; all other authors receive no compensation from the organisation.

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- 1 Haar RJ, Iacopino V, Ranadive N, Weiser SD, Dandu M. Health impacts of chemical irritants used for crowd control: a systematic review of the injuries and deaths caused by tear gas and pepper spray. BMC Public Health 2017; 17: 831.
- 2 Haar RJ, Iacopino V, Ranadive N, Dandu M, Weiser SD. Death, injury and disability from kinetic impact projectiles in crowd-control settings: a systematic review. BMJ Open 2017; 7: e018154.
- 3 Reinhart E, Chen D. Incarceration and its disseminations: COVID-19 pandemic lessons from Chicago's Cook County Jail. Health Affairs 2020; published online June 4. DOI:10.1377/ hlthaff 2020.00652.

- American Thoracic Society. Tear gas use during COVID-19 pandemic irresponsible; moratorium needed, says American Thoracic Society.
 June 11, 2020. https://www.thoracic.org/about/newsroom/press-releases/journal/2020/teargas-use-during-covid-19-pandemic-irrespon sible-moratorium-needed,-says-americanthoracic-society.php (accessed June 17, 2020).
- 5 Urban Institute. Police and corrections expenditures. Oct 20, 2017. https://www.urban. org/policy-centers/cross-center-initiatives/ state-and-local-finance-initiative/state-andlocal-backgrounders/police-and-correctionsexpenditures (accessed June 7, 2020).



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Lockdown is not egalitarian: the costs fall on the global poor

We support Richard Horton's call for a post-COVID-19 health recovery programme,¹ but his lack of attention to so-called lockdown victims is disappointing.

Evidence of avoidable non-COVID-19 deaths (eg, cancer deaths,² child deaths from measles,³ women dying in labour⁴) is mounting. We are disappointed by the false dichotomy implicit in the assertion that there "should be no trade-off between health and wealth". The wealthy might profit from the economy, but the poor live by it.

Like UNICEF⁵ and others, we believe that lockdowns kill people through disruption of health services and deprivation of livelihoods. At the bottom of the global pile, recession is not just a matter of having less: it is a matter of life and death.

When we lockdown, we cause deaths in the developing world to prolong lives in the developed world. Too poor to weather the storm, and lucky to make it to adulthood (according to UNICEF, over 5 million children under age 5 years die annually, and according to UN World Population Prospects 2019 data, the median age in Africa is 19.7 years), those near or below the poverty line stand to benefit little from lockdown, but they bear the lion's share of the cost. Children are especially vulnerable to malnutrition and diseases of poverty-and especially not vulnerable to COVID-19.





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For **UNICEF child mortality estimates** see https://childmortality.org/

For **UN World Population Prospects 2019 data** see
https://population.un.org/wpp/
DataQuery/

Submissions should be made via our electronic submission system at http://ees.elsevier.com/ thelancet/ It is unhelpful to characterise lock-down scepticism as a neoliberal political stance. Lockdown is demonstrably not egalitarian in either its costs or its benefits. We must assess lockdowns and other measures holistically, fremembering that the costs will mostly fall, as ever, on the global poor.

We declare no competing interests.

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- Horton R. Offline: CoHERE—a call for a post-pandemic health strategy. Lancet 2020; 395: 1242.
- 2 Thomson A. Cancer treatment will be the next NHS crisis. April 14, 2020. https://www. thetimes.co.uk/edition/comment/forgottenillnesses-will-be-the-nhss-next-crisis-lxtqggt8l (accessed April 18, 2020).
- 3 Roberts L. Why measles deaths are surging—and coronavirus could make it worse. April 7, 2020. https://www.nature.com/articles/d41586-020-01011-6 (accessed April 18, 2020).
- 4 Biryabarema B. In Uganda, mothers in labour die amidst coronavirus lockdown. April 9, 2020. https://www.reuters.com/article/us-healthcoronavirus-uganda/in-uganda-mothers-inlabour-die-amidst-coronavirus-lockdownidUSKCN21R2FA (accessed April 18, 2020).
- UNICEF. Protecting the most vulnerable children from the impact of coronavirus: an agenda for action. April 3, 2020. https://www.unicef.org/coronavirus/agendafor-action (accessed April 20, 2020).
- Walker D, Chi Y-L, Glassman A, Chalkidou K. More harm than good? The net impact of COVID-19 policies is what matters for health. May 15, 2020. https://www.cgdev.org/blog/ more-harm-good-net-impact-covid-19policies-what-matters-health (accessed June 17, 2020).



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Ethnic disparities in COVID-19 mortality: are comorbidities to blame?

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On June 2, 2020, Public Health England (PHE)¹ reported on the disparities in the risk and outcomes of COVID-19. After adjusting for sex, age, deprivation, and region, people from a Black, Asian, and Minority Ethnic (BAME) background

had a higher risk of death from COVID-19 than White British people. This analysis did not adjust for comorbidities, and the PHE report highlighted this to be an important limitation as comorbidities were postulated to be "more commonly seen in some BAME groups".1

PHE¹ refers to a study from the COVID-19 Clinical Information Network (CO-CIN), led by Harrison and colleagues,² of the difference in survival from COVID-19 associated with membership of an ethnic group. In this study,² once comorbidities were accounted for, there was no difference in COVID-19 mortality between ethnic groups. This initially appears to support PHE's conclusion that differences in the distribution of comorbidities may account for the increased COVID-19 mortality of BAME patients.

However, in CO-CIN's analysis² of more than 14000 patients with COVID-19 admitted to UK hospitals, BAME patients were more likely to have diabetes, but less likely to have other comorbidities such as chronic cardiac, pulmonary, kidney, and neurological disease, malignancy, and dementia. In the multivariate analysis of risk factors for COVID-19 mortality, the adjusted hazard ratio for diabetes (1.11) was less than that for chronic cardiac (1.20), pulmonary (1.24), and kidney disease (1.28), and dementia (1.40), and equal to the adjusted hazard ratio for malignancy (1.11).

Furthermore, age was by far the largest contributor to risk of death, with an adjusted hazard ratio of 9.09 for patients aged 70–79 years and 11.72 for those aged 80 years and older, compared with people younger than 50 years. 60.7% of White patients admitted to hospital with COVID-19 were aged 70 years and older, compared with 30.7% of Black, 29.2% of Asian, and 35.2% of Minority Ethnic patients.

As patients from a White ethnic background were more likely to be older and have comorbidities associated with a higher risk of dying from COVID-19, it is very concerning that the case fatality at 30 days after hospital admission for COVID-19 appears to be the same in Black and White patients.² The lack of association between ethnicity and COVID-19 mortality after adjustment for comorbidities is not reassuring. This suggests that research into ethnic disparities in COVID-19 mortality must consider social as well as biological factors.

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- 1 Public Health England. Disparities in the risk and outcomes of COVID-19. June 2, 2020. https://assets.publishing.service.gov.uk/ government/uploads/system/uploads/ attachment_data/file/889861/disparities_ review.pdf (accessed June 2, 2020).
- 2 Harrison E, Docherty A, Semple C. Investigating associations between ethnicity and outcome from COVID-19. April 24, 2020. https://assets.publishing.service.gov.uk/ government/uploads/system/uploads/ attachment_data/file/886433/so238-co-cinreport-ethnicity-outcomes-250420-sage29. pdf (accessed June 2, 2020).

The ongoing torture and medical neglect of Julian Assange

On Feb 17, 2020, Doctors for Assange demanded an end to the torture and medical neglect of Julian Assange.1 Yet no responsible authority has acted. Nils Melzer, the UN Special Rapporteur on Torture and other Cruel, Inhuman or Degrading Treatment or Punishment, and two medical experts visited Mr Assange in prison in May, 2019, concluding that his treatment constituted psychological torture, a form of torture aimed at destroying the personality of an individual.2 The situation has deteriorated since then, with continued abuses of Mr Assange's fundamental rights and the medical risks posed by COVID-19.