

Media coverage of the “violence epidemic” in England and Wales: are we adding fuel to the fire?

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Abstract

Media coverage of spiralling rates of violence in England and Wales has been ubiquitous over recent weeks and months. Reports of dramatic increases in ‘serious violence’ have generated intense political and public debate, motivating a search for drastic measures to curb the problem. In this paper we discuss recent trends in violence, showing that the media coverage of the ‘violence epidemic’ has largely overstated the magnitude of recent changes in patterns of violence. The resulting coverage has been overly reliant on police data, often without reference to alternative data sources that fail to show corresponding increases. Furthermore, media reports ignore important changes to recording practices that help to explain why police-recorded violence may have seen an increase when other measures remain stable. Rather than improving matters, sensationalised media coverage of increases in violence could heighten safety concerns and intensify the problem.

Introduction

In early 2019, England and Wales were gripped by intensive media coverage regarding dramatic increases in violence. Responding to growing public concern, Home Secretary, Sajid Javid, called on the Government to convene an urgent Cabinet Office (COBR) meeting to discuss the “national emergency” in serious violence. A public discussion of complex social problems, like violence, manifesting in urban communities is long overdue. But the extent to which the present situation constitutes a “national emergency” should be considered carefully. Hospital injury data and the Crime Survey for England and Wales (CSEW) suggest that violence continues to follow a downward trend, as it has for over 20 years.¹ While there are concerning recent increases in the rates of stabbings in some metropolitan areas, the amplification of this problem as a “national emergency” may intensify safety concerns and may even provoke more self-protective behaviours (e.g. carrying weapons) among the wider population.

Do recent trends in serious violence constitute a national emergency?

Recent media coverage has described the country as being in the midst of a “violence epidemic”. According to reports, police-recorded violent crime is estimated to have increased by 19% in the last year, however the estimated magnitude of the increase varies depending on the reference period and the specific definition of violence (e.g. homicide, serious violence, knife crime, etc.).² Recent coverage relies heavily on police-recorded crime to document an increase in serious violence since 2014. In this paper we examine the consistency of police-recorded trends in serious violence in England and Wales using injury data from several medical datasets: (1) homicides from the Office for National Statistics (ONS) Mortality Statistics (based on medical death certificates);³ (2) hospital admissions for injuries inflicted through serious assault from the NHS Digital’s Hospital Episode Statistics (HES);⁴ and (3) estimates of attendances to A&E Departments due to violence-related injury from the National Violence Surveillance Network, Cardiff University.⁵ Medical records provide a useful resource for monitoring patterns of serious violence, as the most severe cases (inc. bleeding, fractures or head injuries) will usually require medical attention.

Box 1 here

Mortality and HES data are not yet publicly available for the latest calendar and financial year (2018-2019), respectively. But, contrary to media reports, we find little evidence of dramatic increases in violence over the last 17 years (Figure 1a). Homicide and violence resulting in hospital admission remain comparatively stable, while violent injuries presented at A&E departments follow a notable decline over time. These patterns are consistent with reductions found in the Crime Survey for England and Wales (CSEW, hereafter ‘crime survey’), as well as reductions in violence widely documented in the psychological, criminological, and sociological literature.^{6,7}

Figure 1 a & b

Figure 1b shows a subset of violent injury specifically for knife inflicted injuries, which has been a particular concern in recent media coverage. The data show that knife-related homicides declined between 2002 and 2017. While patterns of hospital admissions for knife injury do see an increase from 2014 onwards, the interpretation of this increase requires careful consideration. First, although a 35% increase in rates of knife-related injury since 2014 is justifiably alarming, it is generated by comparing 2017 rates against rates during a historic low in admissions for knife-related injuries in 2014. Comparison with 2006, for instance, when rates were higher, would result in an estimated 13% *reduction* in knife-related injuries.

Second, it is important to underline that the absolute risk of being a victim of a stabbing over the last 17 years has, and continues to be, extremely low. The figures from HES suggest 0.086 per 1000 population are admitted to hospital each year with knife-related injuries. For a medium-sized city with a population of 200,000, a 35% increase between 2014 and 2017 would translate to fewer than five additional admissions for serious knife-related injuries per year. While hospital data have certain limitations, they are widely considered to be a more reliable violence surveillance resource than police data, which fluctuate as a result of recording changes.⁸

Data reliability

Data on long-term patterns of violence, whether from administrative records (police or hospital data) or from victimisation surveys, can be difficult to interpret. Recent media coverage of the “violence epidemic” places considerable emphasis on an increase in police-recorded crime, often with little scrutiny of the complexities and limitations of these data. This is due, in part, to the nature of modern journalism, in which tight deadlines and intense competition for audiences often preclude extensive analysis, reliability checks, or further consultation with experts or other data sources.^{9,10} In these circumstances important caveats or problems with data reliability may be overlooked.

One important concern missing from the recent coverage was the UK Statistics Authority’s (UKSA) decision to downgrade police-recorded crime statistics in 2014, removing its gold standard “national statistics” status following substantial evidence of inaccurate recording.¹¹ A subsequent inspection by Her Majesty’s Inspectorate of Constabulary and Fire and Rescue Services found widespread failures in reporting by police forces, with an estimated 800,000 offences per year going unrecorded. Violent and sexual offences were the offence categories most severely affected, with under-recording estimated to be around 33% for violent offences.¹²¹³

This has led to considerable improvements in police recording practices since 2014, which are believed to be a “significant factor” in the increases in recorded rates of violent crime.¹⁴ Police forces have tightened practices around recording crimes, and made a number of potentially important changes to counting rules. For example, new rules have been created to enable violent crimes to be recorded from professional third parties (e.g. social workers) without confirmation from the victim. Furthermore, there have been changes in definition of violent crime, such as the inclusion of death by dangerous driving and the creation of a “stalking and harassment” sub-category of violence against the person. These changes make it difficult to disentangle whether any increases in police-recorded violence occur as a result of recording changes or from genuine increases in violence. The inconsistency of patterns between police and hospital data are suggestive of the former.

It is possible to further examine the impact of changes to recording practices by comparing police-recorded violence to trends in violent victimisation captured by the crime survey.¹⁵ Figure 2 shows the ratio of a comparable sub-set of police-recorded violence and violent crimes reported in the crime survey. Between 2007 and 2013 the ratio declines below 1, indicating that a significant volume of violent crime was under-recorded in police statistics. Following the 2014 downgrading by the UKSA there was a significant reversal in the ratio, with a growing disparity between numbers of police-recorded violence above what might be expected on the basis of violence reported through victim surveys.¹⁶ This suggests that at least some of the increase in violent crime is fuelled by changes in police recording practices.

Figure 2

Given the complexities inherent in violence surveillance data, recent media coverage has overstated increases in violence without properly contextualising these increases within broader pattern of declining violence, and without reference to important changes to recording practices that limit the interpretation of police-recorded data. While both police and hospital data appear to confirm an increase in knife-related violence since 2014, back to the levels seen between 2009 and 2011, both homicide and injury from serious violence appear to be continually declining.

Are we adding fuel to the fire?

Trends in media coverage of interpersonal violence – particularly specific forms, like knife crime – have increased against a backdrop of declining trends in violence (Figure 3)^a. As we have shown, this coverage is disproportionate to the magnitude of the problem. While this inaccuracy is a cause for concern, equally troubling is the impact this coverage may have in skewing the public debate, the political action it may motivate and the public's perception of safety. The sensationalised coverage could potentially lead to adverse effects, as political institutions or members of the public respond disproportionately to heightened fears of victimisation.

^a Data presented in Figure 3 utilised the Guardian's Application Programming Interface (API) to extract data on coverage of violence and crime in media reports. A further description of the method and code to extract these data are freely available at the Open Science Framework (osf.io/k2v6x)

Figure 3

Social scientists have long recognised the potential for mass media to negatively impact on population perceptions of risk, and this is particularly the case for violence and safety. There is an emerging body of research showing that increased exposure to media coverage of violent crime is associated with increased fears of victimisation.^{17–20} In addition, numerous studies have found that fear of victimisation is an important predictor of weapon carrying, where individuals acquire and carry weapons for self-protection.²¹ To date, few studies have directly examined the effect of media coverage on the uptake of weapons, but several recent US population-level studies have found that extensive media coverage is linked to increases in gun purchases and applications for gun licences in the aftermath of mass shootings.^{22–24} Such findings align with the concept of “probability neglect”—the idea that, when confronted with rare events that provoke strong emotions (e.g. a terror attack), the public adjust their behaviour disproportionately in response, rather than considering the low probability of these events affecting them.²⁵

A second pathway through which the recent coverage could impact negatively on violence is through *imitation*.²⁶ In the field of suicide prevention, researchers have repeatedly found links between mass publicity of celebrity suicides and patterns of copycat suicides in the general population—the so-called *Werther effect*.²⁷ This effect has been shown to exist for other forms of violence, such as mass-shootings and violent disorder.^{28–31} Recently the Metropolitan Police have come under criticism for publishing emotive images of seized weapons on their social media platforms. Community groups argue that this is helping to fuel an arms race among London teenagers who are inspired to acquire and carry more lethal weapons.³² If *imitation* is a pertinent factor in relation to knife crime, the framing of the recent crisis as a national violence “epidemic” in national media could export London’s knife crime problem to towns and cities across the country.³³

The effects of mass media coverage on interpersonal violence is not yet clearly established. But there is sufficient evidence of its impact on other forms of violence (i.e. suicide) to prompt media and health bodies, such as the World Health Organisation

(WHO), to issue guidance to help organisations responsibly communicate information about suicide events to the general public to avoid adverse effects from imitation.³⁴ Similar caution may be required for how we communicate the risks of violent victimisation to the general public. During the recent crisis we have witnessed intensive media coverage of violence based on little systematic analysis and an absence of scrutiny of the accuracy, magnitude and distribution of the problem in the population. This is a precarious starting point for developing evidence-informed policies to address complex social problems.

Conclusion

Every fatality resulting from interpersonal violence is a tragedy, deserving of public attention and swift justice. The increased media attention devoted to the recent violence epidemic has been beneficial in drawing attention to enduring social problems threatening health and safety in some urban communities and the lack of public resources to address them. The recent spate of knife-related homicides in London, for example, is concerning and deserving of public attention and an appropriate political response. But it is important to clarify the scale and concentration of these events so not to inadvertantly alarm the public en masse. As we have shown, the magnitude of the problem has been distorted by recent media coverage, which has failed to acknowledge the limitations of police-recorded violence, as well as the declining rates of violence and injury found in other reliable indices.⁶ Failure to scrutinise recent coverage has allowed the issue to be framed as a national crisis, when this is unlikely to be the case. The consequences of disproportionate media coverage could lead to adverse effects by heightening public safety fears and potentially further compounding the problem.

Summary points

- Media coverage of recent ‘violence epidemic’ in England and Wales has overstated the magnitude of recent increases in violence.
- Examination of trends in injury from violent assault from medical records fails to confirm the recent increases in serious violence found in police-recorded violence data.
- Media coverage fails to acknowledge well-known problems with police-recorded data and recent changes to recording practices, which are likely to explain the observed increases in police-recorded violent crime.
- Misleading media coverage of this problem could unnecessarily heighten safety concerns in the general public, which could have further negative consequences (e.g. weapon carrying).

Contribution statement:

DKH and MDE contributed equally in conceiving the idea, collecting relevant data, analysing and writing up the analysis. The idea was initially presented to FG, ME and JS, all of whom provided detailed insights shaping the subsequent versions of the manuscript. DKH and MDE led the writing of the final draft of the manuscript with substantial contributions to the results, interpretation and arrangement of the final draft by all authors.

Transparency declaration:

The lead author (DKH) affirms that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned (and, if relevant, registered) have been explained.

Ethics:

No ethical approval was required for this study.

Patient and Public Involvement:

This paper does not involve patients or public but is written with the direct intent of providing a balanced assessment of risk to help members of the public interpret the recent media coverage.

Dissemination statement:

Not applicable

Data sharing:

We will make the code and data required for reproducing the graphs available to members of the public via Github.

Figure Legends

Figure 1a: Trends in injuries from serious violence in England and Wales from 2002 to 2018, including Homicide (light grey triangles) from Mortality Statistics, including cases of undetermined intent; Hospital Admissions for Injury by assault (dark grey diamonds) from Hospital Episode Statistics (HES); and estimates of A&E attendances from violent injury (black circles) from the National Violence Surveillance Network (Cardiff University).

Figure 1b: Trends in injuries from knives from 2002 to 2017, including Homicide by knife (dark grey diamonds) from Mortality Statistics, including cases of ‘undetermined intent’; Hospital Admissions for knife inflicted injuries (light grey triangles) from Hospital Episode Statistics (HES).

Figure 2: Ratio of police-recorded violent crime and Crime Survey for England and Wales reported violent incidents (in a comparable sub-set) in England and Wales, from 2002-2017. Error bars represent 95% confidence intervals based on complex standard errors, which represent the sampling error in the crime survey’s estimates. Source: Office for National Statistics.

Figure 3: Trends in media coverage of reports on increasing violence in the *The Guardian* 2002-2018 overlaid on A&E attendances for injury by assault (light grey).

References

1. ONS. Crime in England and Wales: year ending March 2018 - Office for National Statistics [Internet]. 2018 [cited 2019 Apr 12]. Available from: <https://www.ons.gov.uk/releases/crimeinenglandandwalesyearendingmarch2018>
2. BBC News. Violent crime in England and Wales up 19%. 2019 Jan 24 [cited 2019 Apr 8]; Available from: <https://www.bbc.com/news/uk-46984559>
3. ONS. Deaths registered in England and Wales – 21st century mortality: 2017 - Office for National Statistics [Internet]. 2019 [cited 2019 Apr 8]. Available from: <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/datasets/the21stcenturymortalityfilesdeathsdataset>
4. Herbert A, Wijlaars L, Zylbersztejn A, Cromwell D, Hardelid P. Data Resource Profile: Hospital Episode Statistics Admitted Patient Care (HES APC). *Int J Epidemiol*. 2017 Aug 1;46(4):1093–1093i.
5. Sivarajasingam V, Farnell D, Page N, Moore S, Shepherd J. Violence in England and Wales in 2017: An Accident and Emergency perspective [Internet]. 2018 [cited 2019 Mar 27]. Available from: https://www.cardiff.ac.uk/__data/assets/pdf_file/0019/1162414/National-Violence-Surveillance-Network-Report-2017.pdf
6. Pinker S. *The Better Angels of Our Nature: A History of Violence and Humanity*. London: Penguin; 2012. 1056 p.
7. Eisner M. Long-Term Historical Trends in Violent Crime. *Crime Justice*. 2003 Jan 1;30:83–142.
8. Sutherland I, Sivarajasingam V, Shepherd JP. Recording of community violence by medical and police services | *Injury Prevention*. *Inj Prev*. 2002;8:246–7.
9. Lugo-Ocando J. *Crime Statistics in the News: Journalism, Numbers and Social Deviation*. Basingstoke, UK: Palgrave Macmillan; 2017.
10. Nguyen A. *News, Numbers and Public Opinion in a Data-Driven World*. New York: Bloomsbury Publishing Inc.; 2018.
11. UK Statistics Authority. *Assessment of compliance with the Code of Practice for Official Statistics: Statistics on Crime in England and Wales*. London: Office of National Statistics; 2014.
12. HMIC. *Crime-recording: making the victim count. The final report of an inspection of crime data integrity in police forces in England and Wales*. London: HMIC; 2014.
13. Flatley J. Methodological note: Why do the two data sources show differing trends? [Internet]. London: ONS; 2017 Jul. Available from: <https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/methodologies/methodologicalnotewhydothetwodatasourcesshowdifferingtrends#improvements-to-police-recording-practices-and-processes>
14. ONS. Crime in England and Wales: year ending June 2017 [Internet]. 2017. Available from: <https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/bulletins/crimei>

nenglandandwales/june2017#latest-violent-crime-figures-continue-to-present-a-complex-picture

15. Hales G. Crime is up – blame the police? [Internet]. The Police Foundation. 2018 [cited 2019 Apr 25]. Available from: <http://www.police-foundation.org.uk/2018/03/crime-blame-police-crime-survey-england-wales-tells-us-police-crime-recording-practices-exposes-limitations/>
16. ONS. User Guide to Crime Statistics for England and Wales. London: ONS; 2018.
17. Smolej M, Kivivuori J. The Relation Between Crime News and Fear of Violence. *J Scand Stud Criminol Crime Prev*. 2006 Dec 1;7(2):211–27.
18. Chiricos T, Eschholz S, Gertz M. Crime, News and Fear of Crime: Toward an Identification of Audience Effects. *Soc Probl*. 1997 Aug 1;44(3):342–57.
19. Altheide DL. *Creating Fear: News and the Construction of Crisis*. Abingdon, UK: Routledge; 2002.
20. Intravia J, Wolff KT, Paez R, Gibbs BR. Investigating the relationship between social media consumption and fear of crime: A partial analysis of mostly young adults. *Comput Hum Behav*. 2017 Dec 1;77:158–68.
21. Brennan I, Moore S. Weapons and violence: A review of theory and research. *Aggress Violent Behav*. 2009;14(3):215–25.
22. Liu G, Wiebe DJ. A Time-Series Analysis of Firearm Purchasing After Mass Shooting Events in the United States. *JAMA Netw Open*. 2019;2(4):e191736.
23. Turchan B, Zeoli AM, Kwiatkowski C. Reacting to the Improbable: Handgun Carrying Permit Application Rates in the Wake of High-Profile Mass Shootings. *Homicide Stud*. 2017 Nov 1;21(4):267–86.
24. Lowry DT, Nio TCJ, Leitner DW. Setting the Public Fear Agenda: A Longitudinal Analysis of Network TV Crime Reporting, Public Perceptions of Crime, and FBI Crime Statistics. *J Commun*. 2003 Mar 1;53(1):61–73.
25. Sunstein CR. Terrorism and Probability Neglect. *J Risk Uncertain*. 2003 Mar 1;26(2):121–36.
26. Tarde G. *The Laws of Imitation* [Internet]. Redditch: Read Books Ltd; 2014 [cited 2019 Apr 12]. Available from: https://www.amazon.co.uk/Laws-Imitation-Gabriel-Tarde/dp/1447402545/ref=sr_1_3?keywords=gabriel+tarde&qid=1555091790&s=gateway&sr=8-3
27. Niederkrotenthaler T, Fu K, Yip PSF, Fong DYT, Stack S, Cheng Q, et al. Changes in suicide rates following media reports on celebrity suicide: a meta-analysis. *J Epidemiol Community Health*. 2012 Nov 1;66(11):1037–42.
28. Murray JL. Mass Media Reporting and Enabling of Mass Shootings. *Cult Stud ↔ Crit Methodol*. 2017 Apr 1;17(2):114–24.
29. Towers S, Gomez-Lievano A, Khan M, Mubayi A, Castillo-Chavez C. Contagion in Mass Killings and School Shootings. *PLOS ONE*. 2015 Jul 2;10(7):e0117259.

30. Kostinsky S, Bixler EO, Kettl PA. Threats of School Violence in Pennsylvania After Media Coverage of the Columbine High School Massacre: Examining the Role of Imitation. *Arch Pediatr Adolesc Med*. 2001 Sep 1;155(9):994–1001.
31. Baudains P, Johnson SD, Braithwaite AM. Geographic patterns of diffusion in the 2011 London riots. *Appl Geogr*. 2013 Dec 1;45:211–9.
32. Honny T. The Reader: Met photos of blades are fuelling ‘knife arms race’ [Internet]. *Evening Standard*. 2019 [cited 2019 Jul 19]. Available from: <https://www.standard.co.uk/comment/letters/the-reader-met-photos-of-blades-are-fuelling-knife-arms-race-a4190996.html>
33. Thompson RR, Jones NM, Holman EA, Silver RC. Media exposure to mass violence events can fuel a cycle of distress. *Sci Adv*. 2019 Apr 1;5(4):eaav3502.
34. WHO. Preventing suicide: a resource for media professionals. Geneva: World Health Organisation; 2000.