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

Journal:	*BMJ*
Manuscript ID	BMJ-2019-050778
Article Type:	Analysis
BMJ Journal:	BMJ
Date Submitted by the Author:	20-May-2019
Complete List of Authors:	Humphreys, David; University of Oxford, Department of Social Policy and Intervention Degli Esposti, Michelle; University of Oxford, Department of Social Policy and Intervention Gardner, Frances; University of Oxford, Department of Social Policy and Intervention Eisner, Manuel; University of Cambridge, Institute of Criminology Shepherd, Jonathan; Cardiff University, Crime and Security Research Institute
Keywords:	Violence, Injury, Homicide

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

Dr. David K. Humphreys[†1,2], Dr. Michelle Degli Esposti[†1], Prof. Manuel P. Eisner[3], , Prof. Frances Gardner[1], Prof. Jonathan Shepherd[4]

[1] Department of Social Policy and Intervention, University of Oxford, [2] Green Templeton College, University of Oxford, [3] Institute of Criminology, University of Cambridge, [4] Crime and Security Research Institute, Cardiff University.

[†]Authors contributed equally (see authorship contribution)

Words: 1798
Figures: 3
Boxes: 1

Correspondence addressed to:

Dr. David K. Humphreys, 32 Wellington Square, Oxford, OX1 2ER. Email: david.humphreys@spi.ox.ac.uk; Tel: +44(0)1865 280339

Competing interests:

We have read and understood BMJ policy on declaration of interests and have no relevant interests to declare.

Abstract

Coverage of spiralling rates of violence in England and Wales has been ubiquitous in British media 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 increases in violence. In this paper we discuss recent trends in violence in England and Wales, showing that the coverage of the recent 'violence epidemic' has largely overstated the magnitude of recent changes to violence patterns. This coverage is overly reliant on police data, ignoring important changes to recording practices that help to explain the national increases of police-recorded violence. Misleading and inaccurate media coverage of violence trends could fuel further increases in violent injury if it causes individuals to carry weapons in response to heightened safety concerns.

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. 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 crisis" may serve to intensify safety concerns and increase the practice of carrying lethal weapons for self-defence among the broader 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 violence statistics 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) rates of homicide from the Office for National Statistics (ONS) Mortality Statistics (based on medical death certificates);[3] (2) rates of 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 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 no 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 per cent increase in rates of knife-related injury since 2014 is justifiably alarming, it is generated by comparing 2017 rates of injury 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 per cent *reduction* in knife-related injuries in 2017.

Second, it is important to underline that during the last 17 years the absolute risk of being a victim of a stabbing is extremely low. The figures from HES data 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 per cent increase between 2014 and 2017 would translate to fewer than five additional admissions for serious knife-related injuries per year. While hospital data are not without their own limitations, they are widely considered to be a more reliable violence surveillance resource than police data, which can 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 raw numbers of police-recorded violence, often with little scrutiny of the complexities and limitations of these data. For example, in 2013, the UK Statistics Authority downgraded police-recorded crime statistics, removing its gold standard "national statistics" status following substantial evidence of inaccurate recording.[9] A resulting inspection in 2014 by Her Majesty's Inspectorate of Constabulary and Fire and Rescue Services (HMICFRS) found widespread failures in reporting by police forces, with an estimated 800,000 offences per year going unreported. Violent and sexual crimes were the offence categories most severely affected, with under-recording estimated to be around 33 per cent for violent offences.[10,11]

Such criticism 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 since 2014.[12] This has resulted in police forces tightening practices around recording crimes, as well as 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. a social workers) without confirmation from the victim. Furthermore, changes in definitions of violent crime, like the inclusion of death by dangerous driving or 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 changes to practice, or from genuine increases in violent behaviour. 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.[13] 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 2013 downgrading by UK Statistics Authority 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.[14] This suggests that at least some of the increases in violent crime are fuelled by changes in police recording practices.

Figure 2

Given the complexities inherent within violence surveillance data, recent media coverage has overstated increases in violence without properly contextualising these increases within a 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. It is thus important to reassure the public that these levels of violence are a historical low, and that the observed increases are small in absolute numbers and often restricted geographically and demographically (e.g. young men in urban areas). Calls for an appropriate response to increases in knife crime should be met with concerted efforts to prevent further harms, particularly for those communities most acutely affected. But preventive efforts must be based on a rigorous assessment of the extent of the problem, for which recent media coverage has fallen short of achieving.

Responsible media reporting

Trends in the media coverage of interpersonal violence – particularly specific forms, like knife crime – have increased against a backdrop of declining trends in violence (Figure 2)[a]. Not only does the recent media coverage appear disproportionate to the magnitude of the problem, but there should also be concern for how the reporting of this issue has shaped public debate, the political action it will motivate, and the

[a] Data presented in Figure 2 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)

impact on public perceptions of safety. One particular concern is that this coverage could lead to adverse effects by inducing a *boomerang effect*: prompting individuals to carry weapons in response to heightened fears of victimisation.[15]

Figure 3

Social scientists have long recognised the potential for mass media to negatively impact population-level behaviours, especially concerning self-inflicted violence.[16] 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*.[17] If *imitation* is a pertinent factor in relation to knife crime, the framing of the recent crisis as a national violence "epidemic" could have disastrous effects if weapon carrying were to increase as a result of growing fears prompted by the recent media coverage.[18] In addition, research has shown that fear of victimisation is an important risk factor predicting the uptake of weapon carrying and subsequent violence.[19]

Media and health bodies, such as the World Health Organisation (WHO), have issued guidance to help organisations responsibly communicate information about suicide events to the general public to avoid adverse effects from imitation.[20] Although the effects of mass media coverage on interpersonal violence is not as clearly established, examples have been studied in the context of mass shootings and violent disorder.[21,22] As a consequence, similar caution may be required in the way we communicate the risks of violent victimisation to the general public. During the recent crisis we have witnessed intensive media coverage of increases in 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 many urban communities and the lack of public resources to address them. However, the extent of this problem has been distorted by recent media coverage, which has failed to contextualise increases violence against a sustained long-term decline in violence in England and Wales.[6] Media coverage has failed to acknowledge well-known limitations in police-recorded violent crimes and has allowed the issue to be framed as a national crisis, when this is unlikely to be the case. The consequences of disproportional media coverage are not yet known, but recent coverage could have adverse effects, such as heightening fears of personal safety and potentially fuelling justifications for carrying weapons for self-defence.

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 fuel increases in violence, if it causes individuals to carry weapons in response to heightened safety concerns.

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 JP, 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. Travis A, editor home affairs. Police crime figures lose official status over claims of fiddling. The Guardian [Internet]. 2014 Jan 15 [cited 2019 Mar 26]; Available from: https://www.theguardian.com/uk-news/2014/jan/15/police-crime-figures-status-claims-fiddling

10. 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.

11. 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

12. ONS. Crime in England and Wales: year ending June 2017 [Internet]. 2017. Available from: https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/bulletin

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

13. 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/

14. ONS. User Guide to Crime Statistics for England and Wales. London: ONS; 2018.

15. Byrne S, Hart PS. The Boomerang Effect A Synthesis of Findings and a Preliminary Theoretical Framework. Ann Int Commun Assoc. 2009 Jan 1;33(1):3–37.

16. 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

17. 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.

18. 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.

19. Brennan I, Moore S. Weapons and violence: A review of theory and research. Aggress Violent Behav. 2009;14(3):215–25.

20. WHO. Preventing suicide: a resource for media professionals. Geneva: World Health Organisation; 2000.

21. Baudains P, Johnson SD, Braithwaite AM. Geographic patterns of diffusion in the 2011 London riots. Appl Geogr. 2013 Dec 1;45:211–9.

22. 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.

Box 1: Summary of data in violence in England and Wales

a. Mortality Statistics for England & Wales (Office for National Statistics)

Mortality Statistics are based on information recorded when deaths are certified and registered in England and Wales. Most deaths are certified by a medical practitioner, using the Medical Certificate of Cause of Death. This certificate is taken to a registrar by an informant – usually a near relative of the deceased. There is typically a delay between death and registration of ~5 days.

Includes: **Homicide** – inc. deaths caused by assault (ICD codes X85-Y09) and undetermined intent (ICD codes: Y10-Y34); **Homicide by knife** – inc. deaths caused by assault using a sharp object (ICD code: X99) and undetermined intent with a sharp object (ICD code: Y28). Published each calendar year (Jan to Dec).

b. Hospital Episode Statistics for England (NHS Digital)

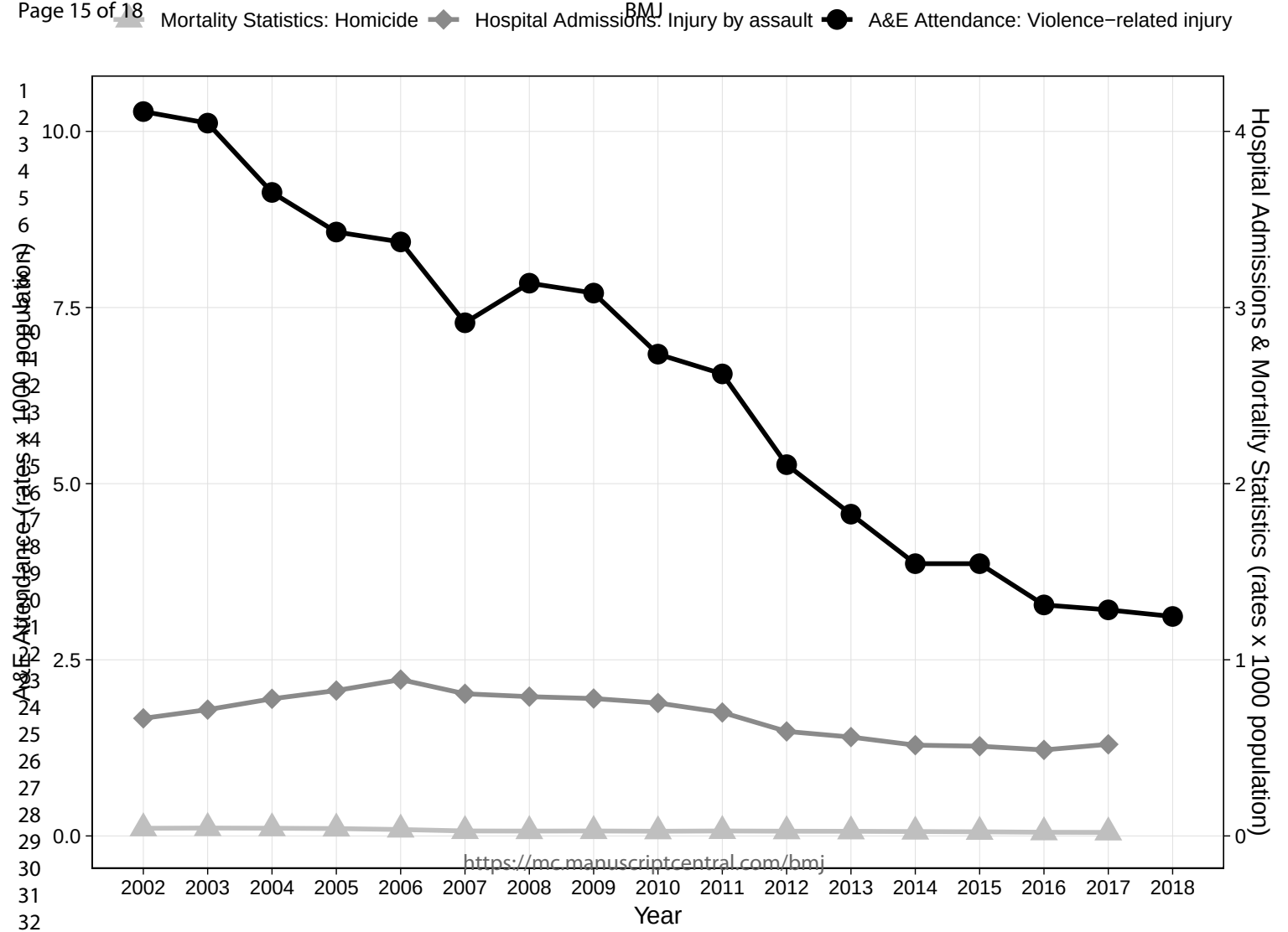
Hospital Episode Statistics (HES) are based on all records of admissions, appointments and attendances for patients at NHS hospitals in England.

Includes: **Injury by assault** – External injury caused by assault (ICD codes X85-Y09); **Injury by assault by knife**: Assault with a sharp object (ICD code: X99). Published each financial year (Apr to Mar).

c. Attendances to Emergency Departments in England & Wales (National Violence Surveillance Network, Cardiff University)

Information relating to violence-related attendances were retrieved from 169 NVSN Emergency Departments (EDs) in all nine regions of England and Wales. Using a coverage ratio representing the proportion of EDs sampled each year, the attendance data are weighted to obtain national estimates.

Includes: **Violence-related injury –** Attendances to EDs due to violence-related injury. Published each calendar year (Jan to Dec).


Mortality Statistics: Homicide
Hospital Admissions: Injury by assault
A&E Attendance: Violence−related injury
A&E Attendance (rates x 1000 population)
Hospital Admissions & Mortality Statistics (rates x 1000 population)
10.0
7.5
5.0
2.5
0.0
4
3
2
1
0
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
Year
https://mc.manuscriptcentral.com/bmj