Violence in England and Wales in 2016

An Accident and Emergency Perspective

V Sivarajasingam, DJJ Farnell, S Moore, *N Page, JP Shepherd

Violence Research Group, Crime and Security Research Institute, Cardiff University, Heath Park, Cardiff, CF14 4XY

Correspondence to Professor Jonathan Shepherd

Tel: 02920 744215 (office); 0777 9490022 (mobile)

Email: shepherdjp@cardiff.ac.uk

Executive Summary

- This national report on serious violence in England and Wales 2016 is based on data from a structured sample of 152 Emergency Departments (EDs), Minor Injury Units (MIUs) and Walk-in Centres – all are certified members of the National Violence Surveillance Network (NVSN).
- Overall, an estimated 188,803 people attended EDs in England and Wales for treatment following violence in 2016, 21,437 fewer than in 2015; a 10% decrease.
 This continues the overall steady reductions seen since 2002.
- There were an estimated 124,230 fewer ED violence-related attendances in England and Wales in 2016 compared to 2010, a reduction of 40%.
- In 2016, males (4.7 per 1,000 residents) were two and a half times more likely than females (1.9 per 1,000 residents) to receive ED treatment following injury in violence.
- Violence related ED attendances of adolescents (11-17 years) did not change in 2016 but increased by 10% among children aged 0-10 years, compared to 2015.
 Violence affecting those aged 18 years and over decreased; by 15% among 18-30 year olds, by 10% among 31-50 year olds and by 5% among those aged 51 years and over.
- As in previous years, those most at risk of violence-related injury were males and those aged 18 to 30 and violence-related ED attendance was most frequent on Saturdays and Sundays and during the months of May, July and October.

The methods used here and findings in previous years have all been subject to peer review and have been published¹.

*N Page is a Senior Research Assistant at the University of South Wales, Pontypridd, CF37 1DL.

Introduction

Since 2000, the National Violence Surveillance Network (NVSN) of Emergency Departments (ED) has been a valuable source of information on community violence in England and Wales^{1,2,3}. Since 2012, NVSN membership has grown steadily to include over 150 EDs, minor injury units (MIUs) and walk-in centres in 2016, thereby representing approximately half of emergency units in England and Wales. The collection and synthesis of violence-related ED attendances has allowed triangulation with violence data from official sources: the Crime Survey for England and Wales (CSEW) and police records. In 2014, the UK Statistics Authority withdrew the gold standard "national statistics" status from police records due to accumulating evidence that data on crimes recorded by the police may be unreliable⁴. Over the same period, measurement of violence from an NHS perspective has become more practical and consistent, especially since the publication by NHS Digital of the local standard (ISB 1594) Information Sharing to Tackle Violence (ISTV) and mandatory data collection in EDs in England under the provisions of the standard NHS contract⁵.

Now in its 17th year, NVSN continues to represent a harm-based source of information on violence, i.e. violence which results in injury serious enough for the injured to seek medical treatment. NVSN data have been found to be both valid and reliable. The low cost and relative simplicity of ED data collection, including information about violence time, date, location, weapon use and number of assailants, has helped justify making the recording of these data a mandatory requirement from September 2017 in Type 1 EDs in England (EDs with consultant led 24 hour services which include resuscitation capability)⁶. Types 2, 3 and 4 EDs (type 2 = mono speciality hospitals; type 3 = other ED/minor injury units; type 4 = National Health Service walk-in centres) are not yet bound by the same requirements.

The aim of this report is to describe overall gender and age specific violence-related injury rates and violence trends according to ED data in England and Wales over the twelve month period ending 31st December 2016.

Methods

Emergency Departments

Violence-related attendance data including date of attendance, and age and gender of patients were collected from 152 certified member NVSN EDs in all nine regions of England (East of England, East Midlands, London, North East, North West, South East,

South West, West Midlands, Yorkshire and Humberside) and Wales for the twelve month period ending 31st December 2016. EDs were recruited on the basis that they were able to share prospective electronic data on violence-related attendance and that they complied with the provisions of the 1998 Data Protection Act and Caldicott guidance.

For patients reporting injury in violence, the first point of contact was usually with ED triage personnel prior to registration by ED receptionists. Reason for attendance, in this case violence-related injury, is entered by receptionists using standard ED software. For every new incident a new record was created.

As in previous years, ED attendances were categorised by gender and five age groups: 0–10, 11–17, 18–30, 31–50 and 50+ years. Since half of EDs in England and Wales are not members of the NVSN; attendances were weighted using a Coverage Ratio (CR) representing the proportion of EDs sampled in England and Wales in 2016, so that comparison can be made with NVSN findings in previous years. Essentially, CR is equal to total annual all-cause ED attendances sampled divided by the total annual all-cause ED attendances for all EDs (including those sampled) in England and Wales. Hence, a CR equal to 1 indicates full national coverage. A detailed method for calculating appropriate weights has been published¹.

Annual violence injury rates (number of injured per 1,000 resident population) were computed separately for both genders and the five age groups. Injury rates for 2016 were compared to injury rates in previous years. It was assumed in these calculations that the CR was the same for both genders and all age groups.

Results

Violence-related ED attendances

Violence-related attendance data from 152 hospitals are included in this report (table 1). Of these, 49 hospitals provided data that could only be used in aggregate form (data on age and gender were not available in these EDs). Data from sixteen hospitals could not be used as they were incomplete. In total, 58,876 violence-related attendances were recorded in the 152 hospitals across England and Wales between 1st January 2016 and 31st December 2016 (table 2).

Disaggregation by age and gender indicated that patients were predominantly male (n = 41,609,71%) and aged between 18 and 30 years (n = 26,878,46%); similar to NVSN findings in previous years (table 2).

Violence injury rates

Overall, in England and Wales, 3.3 per 1,000 residents attended EDs for treatment of violence-related injury in 2016. Males (4.7 per 1,000 residents) were two and a half times more likely than females (1.9 per 1,000 residents) to have received ED treatment following injury in violence (table 2). Disaggregation by age group showed higher rates of violence-related injury for males than females (more than double for those aged 11 years and over) across all five age groups studied. Those at highest risk were aged 18 to 30 years (8.6 per 1,000 residents) followed by those aged 11 to 17 (4.3 per 1,000 residents), those aged 31 to 50 (3.8 per 1,000 residents), those aged 51 and over (0.9 per 1,000 residents) and those aged 0 to 10 (0.2 per 1,000 residents).

Trends in serious violence

Overall, serious violence decreased by 10% in 2016 compared to 2015; there were an estimated 21,437 fewer violence-related attendances in 2016 (table 3 and figure 1). Violence affecting males and females decreased by 11% and 9% respectively in 2016, compared to the previous year. Violent injury among those aged 18 years and over decreased (table 4); the largest decreases were among those aged 18 to 30 years (15%), followed among those aged 31 to 50 years (10%) and those 51 years and over (5%). Serious violence affecting those aged 11-17 years remained unchanged from 2015.

However, according to 2016 ED data violence in which children aged 10 years and below were injured increased by 10% compared to the previous year (table 4). Overall, violence-related ED attendance was greatest on Saturdays and Sundays, mainly reflecting violence late on Fridays and Saturdays. Violence peaked in May, July and October (figures 2a and 2b respectively).

Discussion

This national study demonstrated a further overall substantial decrease in violence-related attendances for both males and females in 2016 compared to 2015⁷. An estimated 188,803 ED patients reported injury in violence in 2016, down 10% from 210,240 the previous year. Following a year of no change in violence-related ED attendances in 2015

according to NVSN data, the overall decline in violence in England and Wales has resumed. In comparison, the latest report from the CSEW to the year ending September 2016 showed no significant change in rates of overall violent incidents in England and Wales compared to the previous 12 months. According to CSEW, violence resulting in injury and violence without injury decreased by 8% (similar to the decrease according to ED data) and increased by 16% respectively⁸. Overall, as in previous years, trends in violence according to CSEW and ED data are reassuringly very similar. Comparison of NVSN findings with police records is difficult due to changes in police recording practices and action taken by police forces to comply with the National Crime Recording Standards and changed definitions of "violence with injury". In most police force areas, compliance has increased recording of violence⁴.

According to NVSN data, violence in England and Wales fell by an estimated 124,230 ED attendances in 2016 compared to 2010 – a steady six year decline of 40% interrupted only by no change in 2015. Furthermore, this year-on-year decrease was the third largest since 2006-7. To put this into context, around three in every 1,000 residents in England and Wales attended emergency units for treatment of injuries sustained in violence in the year ending 31st December 2016 compared with around six in every 1,000 residents in 2010. Hence, violence in England and Wales that resulted in ED treatment has halved since 2010. This is a notable achievement in the context of steadily increasing demands on EDs from other causes.

Importantly, not all age groups studied showed reductions in harm: violence related ED attendances were substantially reduced among those aged 18 years and over in 2016 compared to the previous year, with the highest reductions in attendances among those aged 18 to 30 years. However, ED recording of violence as a cause of injury in children aged 0 to 10 years increased by 10% in 2016 compared to 2015. This apparent increase in violence among younger children reverses the decreases reported in 2015 (9%) and 2014 (18%). Although NVSN provides the only national measure of violence in which children aged 0 to 10 years are injured, the circumstances of these injuries are not clear, i.e. whether they were sustained in schools, at home or in public places. Furthermore, due to the limited number of children sampled in the study (n = 551), this apparent increase need to be treated with caution as estimates can fluctuate over time making interpretation of trends difficult. CSEW now includes surveys of children aged 10 to 15 years to determine their experiences of crime. The latest CSEW data, for the year ending September 2016, showed that of a total of 780,000 crimes experienced by

these children, 52% were categorised as violent crimes (404,000); a similar proportion to previous years⁸. There had been no significant change compared with the year ending September 2015.

NVSN data in England and Wales show decreases in violent injury among those aged 18 years and over and apparent increases among those aged 10 years and under. Reasons for these national trends are unclear. However, in their report on 'How safe are our children – the most comprehensive overview of child protection in the UK 2016', the National Society for the Prevention of Cruelty to Children (NSPCC) stated that there had been an increase in reporting and recording of child abuse, cruelty and neglect offences in England and Wales⁹. Taken together these findings suggest increased awareness of harm among children in England and Wales and increased ascertainment by relevant agencies, including EDs. Crucial in tackling violence affecting children must be the need and availability of data relating to circumstances of violence-related harm that is not routinely recorded in EDs in England and Wales. The introduction of ISTV data in the new Emergency Care Data Set (ECDS) in English EDs from October 2017 will go some way towards addressing this need⁵.

The reasons for the continuing decline in the number of adults injured in violence are also not clear. These reasons are likely to be multifactorial including better detection and reporting, better targeted policing, improved sharing of data by emergency departments and local interagency collaboration to tackle violence in domestic settings, on the streets and in licenced premises. Violence-related ED attendances varied during the week with more serious violence concentrated at weekends; lowest assault-related attendances were in February and November and highest levels were in May, July and October. These findings are similar to those in previous years.

As in previous years, sampling precludes reliable disaggregation of data to the level of individual regions, towns and cities.

References

- 1. <u>Sivarajasingam V</u>, Page N, Wells J, <u>Matthews K, Moore S</u>, <u>Shepherd JP</u>. Trends in violence in England and Wales 2010-2014. *Journal of Epidemiology and Community Health* 2015;0:1-6. doi:10.1136/jech-2015-206598.
- Sivarajasingam V, Page N, Morgan P, Matthews K, Moore S, Shepherd J. Trends in community violence in England and Wales 2005-2009. *Injury*. 2014;45:592-598.
- 3. Sivarajasingam V, Morgan P, Matthews K, Shepherd J, Walker R. Trends in violence in England and Wales 2000-2004: an accident and emergency perspective. *Injury*. 2009;40:820-825.
- UK Statistics Authority. Assessment of compliance with the code of practice for official statistics: statistics on crime in England and Wales. London: Office for National Statistics, 2014.
- 5. Information Sharing to Tackle Violence. Centre of Excellence for Information Sharing.
 - informationsharing.org.uk/wp-content/uploads/2014/10/ISTV.pdf (date accessed 24th April 2017)
- 6. Department of Health. Information Sharing to Tackle Violence guidance for Community Safety Partnerships on engaging with the NHS. London: Department of Health, 2012.
- 7. Sivarajasingam V, Moore S, Page N, Shepherd JP. Violence in England and Wales in 2015. An Accident and Emergency Perspective.
- 8. Crime in England and Wales: year ending sept 2016. http://www.crimesurvey.co.uk/SurveyResults.html
- 9. How safe are our children? the most comprehensive overview of child protection in the UK 2016. NSPCC, 2016.
 - https://www.nspcc.org.uk/.../how-safe-children-2016-report.pdf (date accessed 24th April 2017)

 $Table\ 1-National\ Violence\ Surveillance\ Network\ (NVSN)\ hospitals\ (n=152)$

Addensbrooke (Cambridge)	Poole	
Alfred Bean, MIU (Driffield)	Prince Charles (Merthyr Tydfil)	
Barnet	Princess Alexandra (Harlow)	
Basildon University	Princess of Wales (Bridgend)	
Bassetlaw	Princess Royal (Haywards Heath)	
Bedford	Princess Royal (Telford)	
Birmingham Children's	Queen Alexandra (Portsmouth)	
Blackpool Victoria	Queen Elizabeth (Birmingham)	
Brecon War Memorial	Queen Elizabeth (Gateshead)	
Broomfield (Chelmsford)	Queen Elizabeth (Woolwich)	
Calderdale Royal (Halifax)	Queen Elizabeth II (Welwyn Garden	
Calderdale Royal (Halliax)	City)	
Chase Farm (Enfield)	Queens Medical Centre (Nottingham)	
Chelsea & Westminster	Queens's (Burton upon Trent)	
Cheltenham General	Royal Albert Edward Infirmary (Wigan)	
Chesterfield Royal	Royal Alexandra Children's Hospital	
City (Birmingham)	Royal Berkshire (Reading)	
Colchester General	Royal Blackburn	
Conquest (St. Leonards-on-Sea)	Royal Bolton	
County (Stafford)	Royal Cornwall	
County Hospital (Wye Valley)	Royal Derby	
Croydon University	Royal Devon & Exeter	
Cumberland Infirmary (Carlisle)	Royal Free (London)	
Darlington Memorial	Royal Glamorgan (Llantrisant)	
Dewsbury & District	Royal Gwent	
Doncaster Royal Infirmary	Royal Liverpool University	
East Surrey	Royal London (Whitechapel)	
Eastbourne District General	Royal Oldham	
Epsom	Royal Shrewsbury	
Fairfield General (Bury)	Royal Stoke University	
Frimley Park	Royal Surrey County	
Furness General	Royal Sussex County (Brighton)	
Glan Clwyd (Rhyl)	Royal United (Bath)	
Gloucestershire Royal	Russell Hall (Dudley)	
Goole & District	Samuel Johnson Community (Lichfield)	
Grantham & District	Sandwell District General	
Harrogate	Sir Robert Peel MIU (Tamworth)	
Heatherwood MIU (Ascot)	South Manchester	
Hillingdon	South Tyneside District	
Hinchingbrooke	Southampton General	
Homerton University	Southmead (Bristol)	
Hornsea Cottage	Southport & Formby District General	
Huddersfield Royal Infirmary	St. Cross UCC (Rugby)	
Hull Royal Infirmary	St. Helier	
Ipswich	St. James's (Leeds)	
James Paget (Great Yarmouth)	St. Marys (Isle of Wight)	
John Radcliffe	St. Peter's (Surrey)	
Kettering General	Stepping Hill (Stockport)	

King's College (London)	Stoke Mandeville
Kings Mill (Sutton-In-Ashfield)	Sunderland Royal
Lancaster Royal	Sussex Eye
Leeds General Infirmary	Tameside
Lewisham University	Tunbridge Wells
Lincoln County	UH Coventry & Warwickshire
Lister (Stevenage)	UH Hartlepool
Llandridnod Wells County War	UH North Durham
Memorial	
Luton & Dunstable	UH North Tees
Macclesfield District General	Victoria Memorial
Maidstone	Walsall Manor
Medway Maritime	Warwick
Milton Keynes	Watford General
Morriston (Swansea)	West Cumberland
Mount Vernon MIU & UCC	West Middlesex University
Musgrove Park	West Suffolk
Nevill Hall	Whipps Cross University (Leytonstone)
New Cross (Wolverhampton)	Whitby MIU
Newham General (Boston)	Whittington
North Devon District (Barnstaple)	William Harvey (Ashford)
North Manchester General	Withernsea Community
Northampton General	Yeovil
Northern General (Sheffield)	Ysbyty Aneurin Bevan MIU (Ebbw
	Vale)
Nottingham City	Ysbyty Cwm Cynon (Mountain Ash)
Ormskirk District General	Ysbyty Cwm Rhondda
Peterborough City	Ysbyty Gwynedd (Bangor)
Pilgrim (Boston)	Ysbyty Maelor (Wrexham)
Pindersfield	Ysbyty Ystrad Fawr (Hengoed)
Pontefract	Ystradgynlais Community (Swansea)

Table 2: ¹Violence-related attendances and injury rates by age and gender 2016: patients who attended NVSN EDs in England and Wales for treatment following violence-related injury.

Gender	N	%	
Male	41,609	71	
Female	17,267	29	
Total	58,876	100	
Age group (years)	N	%	
0 to 10	551	0.99	
11 to 17	6,608	11.22	
18 to 30	26,878	45.65	
31 to 50	19,204	32.62	
50+	5,635	9.57	
Total	58,876	100	

	Annual violence injury rate	
	(per 1,000 residents)	
Males	4.71	
Females	1.91	
Total	3.30	
0 to 10	0.23	
11 to 17	4.31	
18 to 30	8.66	
31 to 50	3.87	
50+	0.96	

¹ Violence-related ED attendances by age and gender were provided by 103 EDs.

Table 3: Percentage change in serious violence in England and Wales. Emergency Department (ED) and Minor Injury Unit (MIU) data.

0 1	` /		
	Males	Females	Total
2007 - 2008	5	10	6
2008 – 2009	-0.3	-1.8	-1.3
009 – 2010	-9.5	-5.7	-9
2010 – 2011	-5.3	-1	-4
2011 – 2012	-14	-14	-14
012 – 2013	-12	-12	-12
2013 – 2014	-9.9	-9.5	-9.9
2014 – 2015	-2	1.5	0
2015 – 2016	-11	-9	-10

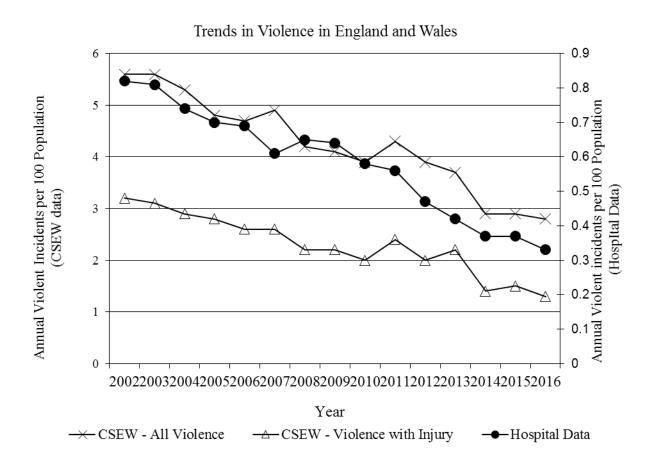
Table 4: ²Estimated violence related ED and MIU attendances by age and gender in England and Wales.

Age	20	15	2016		
Groups					
	Males	Females	Males	Females	
0 to 10	1,053	516	1,158	609	
11 to 17	14,767	6,128	15,033	6,157	
18 to 30	74,286	26,661	62,305	23,887	
31 to 50	46,954	20,911	42,522	19,061	
50+	12,799	6,165	12,414	5,657	
Total	149,859	60,381	133,431	55,372	

_

² Violence-related ED attendances by age and gender were provided by 103 and 91 EDs in 2016 and 2015 respectively.

Figure 1



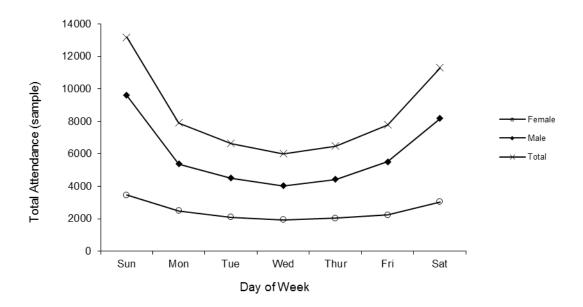
Note: CSEW violence data for 2013, 2014, 2015 and 2016 are for twelve month periods ending 30^{th} September. Before 2013, CSEW violence data are for twelve month periods ending 31^{st} March.

Figure 2a and 2b

(Year ending 31st December 2016)

2a

Trends in Violence-related Injury in England and Wales by Day



2b

Trends in Violence-related Injury in England and Wales by Month

