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Prevalence and correlates of domestic violence among people seeking treatment for self-harm: data from a regional self-harm register

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Disclaimer

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Abstract

BACKGROUND: Previous research suggests that there is an association between domestic violence (DV) and self-harm (SH). Yet, the prevalence and clinical significance of DV among individuals presenting acutely to hospital with self-harm in the UK is unknown.

METHODS: We conducted a cross-sectional ~~study using registry data~~ survey in order to describe the prevalence of DV within a UK population of individuals presenting to ~~the emergency department (ED) hospital~~ with SH (n=1142).

RESULTS: 11.1% (95% CI 9.4% – 13.1%) of the sample reported DV. Those reporting DV were more likely to be female and separated from a partner. DV was associated with self-poisoning ~~and with previous occurrence of SH, as well as the occurrence of previous SH,~~

CONCLUSION: ~~Our findings suggest that DV victimisation is more prevalent among those presenting to ED with self-harm compared the general population of ED attenders, and suggesting that the presence of DV may signify increased risk among those presenting to emergency departments~~ ED with SH.

Introduction

Self-harm (SH) and domestic violence (DV) are global problems associated with substantial health burden. DV is a violation of human rights that damages physical and mental health, and is associated with suicidal behaviour and SH^{1,2}. The present study aims to expand knowledge of this relationship by measuring the prevalence and correlates of DV among patients presenting to hospital with SH.

Methods

We used data from Bristol's Self-Harm Surveillance Register (BSHSR). This register identifies hospital attendances for SH using electronic searches of the Emergency Department (ED) records at the Bristol Royal Infirmary, ~~with a specific set of pre-specified search terms (available on request)~~. An internal validation exercise in 2015 showed that this approach identified 95% of all cases of SH³. Data about the episode ~~was is~~ extracted from the liaison psychiatry team's assessment forms, the hospital patient administration system, and the local mental health trust's patient administration system (RiO). ~~Most data fields are unambiguous, and any potentially ambiguous information (e.g. precipitants for a presenting episode) is extracted using a shared protocol.~~ The study population comprised anyone presenting with SH to this central Bristol ED department.

DV is defined within BSHSR as any physical or sexual violence by a partner or family member. DV data are captured in the standardised assessment matrix completed by ED staff ("Is the patient at risk of domestic violence?" to which the assessor is required to document "yes", "no" or "unknown"); ~~ED staff completing the assessments state that they typically select "yes" if the patient reports experiencing domestic violence.~~ Data on presence of DV is also extracted from free text in the liaison psychiatry assessment.

The date the DV occurred is not recorded, although it is assumed to be ~~current or~~ recent for it to emerge in the history in this acute setting. DV has been recorded on the BSHSR since 1st January 2016 and we used data from all ED presentations for self-harm occurring between 1st January 2016 and 31st December 2016. Where individuals presented multiple times during the year, we used demographic data from the index presentation only, and generated a variable indicating subsequent repeat attendance for self-harm. Individuals were included in the DV group if DV was identified at any attendance during the study period ~~altogether~~.

924 individuals had missing DV data (i.e. ~~risk-assessment-matrix~~ DV field had been left blank). Having confirmed that there were no significant differences in age, sex or ethnicity between those with missing DV data and those who reported no DV, for the purposes of these analyses we

(conservatively) assumed that those with missing DV data had not been exposed to DV. This approach was supported by reports from clinicians completing the assessments, who indicated that the DV item is left blank when DV was absent or not inquired about.

Simple descriptive analyses and Chi² [square](#) tests were performed using Stata⁴.

Ethical approval for the register was obtained from the NHS Health Research Authority via NRES Committee South West—Central Bristol.

Results

There were 1471 assessments carried out in 2016. With repeat attendances removed, 1142 individuals presented with SH during the study period, of whom 127 (11.1%, 95% CI: 9.4-13.1) reported DV on one or more occasions; [see Table below](#).

Those reporting DV were more likely to be female (81% vs. 60%; $p < 0.001$), and separated from a partner (~~44.13%~~ vs. ~~47.6%~~; $p = 0.03$) [than those who did not report DV](#). They were also more likely to have ~~a history of previously self-harmed~~SH (49% vs. 35%; $p = 0.003$), ~~to~~ have a personality disorder diagnosis (~~27% vs. 15%~~; $p = 0.02$) and use self-poisoning as a method of ~~SHself harm~~ (87% vs. ~~76.9%~~; $p = 0.04$).

Discussion

Other UK cross-sectional research has reported that among ED attenders the lifetime prevalence of DV is 21.5%, and past year prevalence is 5%⁵. Without a strict timescale for DV in our data, we are unable to directly compare these figures to our prevalence of 11.1%. However, if we assume that DV in our dataset is recent for it to have emerged in the history in the acute setting, our figures can be cautiously compared to the past year prevalence from the literature; this would suggest that DV victimisation in the study population is double that observed in the whole population of patients presenting to an ED in the UK.

Our demographic findings are consistent with recent literature reporting female sex and recent separation from partner as factors associated with DV⁶. Separating from an abusive partner is thought to escalate risks of violence due to the perceived challenge to the abuser's control⁷.

Our data provides some evidence that those who have experienced DV are a higher-risk group, as they were more likely to have engaged in self-poisoning and to have self-harmed previously; interpretation of the suicidal intent score was compromised by 62% missing data.

The nature of the relationship between DV and self-harm is complex; DV commonly engenders feelings of hopelessness and distress which may in turn lead to self-harm⁸. However, the relationship may also be explained by common childhood vulnerability factors, such as childhood maltreatment which may result in personality vulnerabilities predisposing to both SH and DV victimisation⁹.

In terms of limitations, we observed substantial missing data for a number of variables (see table), including for DV itself. Furthermore, our DV variable lacked a strict timescale, which limits comparison to existing data. It should also be noted that this study included only one component of DV (victimisation), but has not examined DV perpetration. In addition, this was a UK-based study of a global problem, and so our findings may not be generalizable to other settings.

Conclusion

At least one-in-ten people seeking treatment for SH have experienced DV. Furthermore, the presence of DV signals increased likelihood of recurrent SH. If replicated, our results would support the need to routinely enquire about DV among SH populations; this is consistent with the NICE guidelines recommending that DV is included in all comprehensive mental health assessments¹⁰.

Not only would this enhance risk assessment, but it could usefully inform the nature of the treatment and support offered by services. Further work may also examine DV perpetration in relation to self-harm in this setting, to provide a more complete picture of this phenomenon.

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Table: Characteristics of the 1142 people with and without domestic violence, recorded in relation to one or more of their self-harm presentations in 2016

	DV (n=127)	No DV (n=1015)	p-value
Demographics	N (%)	N (%)	
Median Age, years (IQR)	30 (23-43)	30 (22-43)	0.84
<i>Missing</i>	2	4	
Sex – female	103 (81)	612 (60)	<0.001

Ethnicity	White	106	(83)	861	(85)	0.79
	Black	4	(3)	25	(2)	
	Asian	3	(2)	18	(2)	
	Other	0	(0)	10	(1)	
	Mixed	4	(3)	30	(3)	
	<i>Missing</i>	10	(8)	71	(7)	
Marital status	Married	10	(8)	94	(9)	0.03
	Single	98	(77)	767	(76)	
	Separated	17	(13)	65	(6)	
	<i>Missing</i>	2	(2)	89	(9)	
Employment	Employed	27	(21)	229	(23)	0.22
	Full-time education	13	(10)	135	(13)	
	Unemployed	58	(46)	340	(33)	
	Retired/other	6	(5)	46	(5)	
	<i>Missing</i>	23	(18)	265	(26)	
Psychiatric History						
Diagnosis (some patients had multiple diagnoses)	No diagnosis	16	(13)	89	(9)	0.44
	Affective	34	(27)	272	(27)	0.24
	Personality Disorder	34	(27)	154	(15)	0.02
	Other	42	(33)	327	(32)	0.26
	<i>Missing</i>	9	(7)	316	(31)	
History of alcohol or drug misuse		54	(43)	312	(31)	0.29
	<i>Missing</i>	7	(6)	256	(25)	
Previous self-harm		62	(49)	357	(35)	<0.01
Previous psychiatric treatment		85	(67)	590	(58)	0.57
	<i>Missing</i>	12	(9)	568	(56)	
Previous inpatient psychiatric treatment		25	(20)	162	(16)	0.97
	<i>Missing</i>	24	(19)	373	(37)	
Current physical illness		47	(37)	323	(32)	0.37
	<i>Missing</i>	16	(13)	199	(20)	
Characteristics of Self-harm						
Self-harm Method	Self-Poisoning	110	(87)	787	(76)	0.04
	Self-Injury only	17	(13)	214	(21)	
	<i>Missing</i>	0	(0)	14	(1)	
Alcohol with episode		60	(47)	418	(41)	0.59
	<i>Missing</i>	8	(6)	157	(15)	
Median Beck Suicide Intent Score (IQR)		8	(4-12)	7	(4-11)	0.52
	<i>Missing</i>	77	(61)	627	(62)	
Repetition of self-harm in 2016 *		19	(18)	152	(15)	0.42

* 16 individuals in whom DV was identified only upon repeat attendance (rather than at index attendance) were excluded from the analysis of this variable.