Prevalence of experiences of domestic violence among psychiatric patients: systematic review

S. Oram,* K. Trevillion,* G. Feder and L. M. Howard

Background
Domestic violence has been linked with many mental health problems including anxiety, depression, post-traumatic stress disorder, eating disorders and psychosis. Prospective studies have shown that psychiatric disorder can increase vulnerability to domestic violence, and that domestic violence is associated with both risk and chronicity of mental disorder. A systematic review of domestic violence prevalence studies noted that when comparing the mean lifetime prevalence across various healthcare settings, studies conducted in psychiatric clinics and obstetrics and gynaecology clinics recorded the highest prevalence of physical violence (30–50%) and sexual violence (30–35%), whereas the highest mean lifetime prevalence of psychological violence was reported by studies conducted in psychiatric clinics and emergency departments (65–87%). Other reviews have also suggested a high prevalence of being a victim of domestic violence among psychiatric patients, for example, reported that the lifetime prevalence of severe domestic violence ranged from 30% to 60% among female psychiatric in-patients and 33% (IQR 21–53) among female out-patients. Among male patients, one high-quality study reported a lifetime prevalence of 32% across mixed psychiatric settings. No study included a control group.

Aims
To estimate the prevalence (adult lifetime and past year) of different types of domestic violence experienced by men and women receiving psychiatric treatment.

Method
In a systematic review, a search of 18 electronic databases was supplemented by hand searching, citation tracking and updating a recent systematic review of criminal victimisation in psychiatric populations. Two reviewers independently extracted data and appraised study quality.

Results
Forty-two studies were included. The median prevalence of lifetime partner violence reported in high-quality papers was 30% (interquartile range (IQR) 26–39) among female in-patients and 33% (IQR 21–53) among female out-patients. Among male patients, one high-quality study reported a lifetime prevalence of 32% across mixed psychiatric settings. No study included a control group.

Conclusions
Psychiatric patients experience a high prevalence of domestic violence but there is limited information on family (non-partner) domestic violence, the prevalence of emotional abuse and the extent of risk compared with non-psychiatric controls.

Declaration of interest

Selection criteria
Studies were eligible for inclusion if they included male or female psychiatric patients who were 16 years or older; presented the results of peer-reviewed research based on experimental studies (e.g. randomised controlled trials, non-randomised controlled trials, parallel group studies), before and after studies, interrupted time series studies, cohort studies, case–control studies or cross-sectional studies; and measured the prevalence or risk of adult lifetime and/or past year domestic violence, or collected data from which these statistics could be calculated. Mental health services were defined as secondary or tertiary care specialist services (in-patient, out-patient or community-based) providing psychiatric care and support to people with mental disorders. Domestic violence was defined as ‘any incident of threatening behaviour, violence or abuse (psychological, physical, sexual, financial or emotional) between adults who are or have been intimate partners or family members regardless of gender or sexuality’. When the review identified multiple eligible papers from the same study only the main paper reporting the largest number of participants with data of relevance to the objectives of the review was included.

Method
Studies were eligible for inclusion if they included male or female psychiatric patients who were 16 years or older; presented the results of peer-reviewed research based on experimental studies (e.g. randomised controlled trials, non-randomised controlled trials, parallel group studies), before and after studies, interrupted time series studies, cohort studies, case–control studies or cross-sectional studies; and measured the prevalence or risk of adult lifetime and/or past year domestic violence, or collected data from which these statistics could be calculated. Mental health services were defined as secondary or tertiary care specialist services (in-patient, out-patient or community-based) providing psychiatric care and support to people with mental disorders. Domestic violence was defined as ‘any incident of threatening behaviour, violence or abuse (psychological, physical, sexual, financial or emotional) between adults who are or have been intimate partners or family members regardless of gender or sexuality’. When the review identified multiple eligible papers from the same study only the main paper reporting the largest number of participants with data of relevance to the objectives of the review was included.

Search strategy
Our search strategy followed Meta-analysis of Observational Studies in Epidemiology (MOOSE) guidelines. The protocol for this review was registered with the PROSPERO international database of prospectively registered systematic reviews in health and social care (www.crd.york.ac.uk/prospero), registration number CRD42011001281. Eighteen bibliographic databases were searched from date of inception to 31 March 2011 using a combination of Medical Subject Headings (MeSH) and text words...
(see Appendix 1 for a list of the databases used). Terms for domestic violence were adapted from published Cochrane protocols and previous literature reviews.9,15,16 No language restriction was used and potentially eligible papers were translated and assessments conducted using the English translated versions. The search strategy used for the Medline, EMBASE and PsycINFO databases is shown in online Appendix DS1. These searches were supplemented by citation tracking, hand searches, re-examining and updating an earlier review of victimisation among psychiatric populations,17 and expert recommendations.

**Study selection and data extraction**

Two reviewers (K.T. and S.O.) screened the downloaded titles and abstracts against the inclusion criteria; references were taken forward to the next stage of screening if it was unclear whether they met the inclusion criteria. The same two reviewers then assessed the full text of potentially eligible studies in terms of the inclusion criteria. If it was considered that studies had collected data on the prevalence and odds of domestic violence but had not presented it, authors were contacted for further information. Data on study design, sample characteristics, measurement of domestic violence and outcomes were extracted by the two reviewers from the included papers and entered in an electronic database. The outcomes of interest for the review were the prevalence and odds of adulthood lifetime and past year domestic violence among psychiatric patients. Where possible, outcome measures were extracted separately by gender, mental health setting and type and severity of violence.

**Quality appraisal**

The quality of included studies was independently appraised by two reviewers (K.T. and S.O.) using criteria adapted from validated tools.18–20 The reviewers compared scores and resolved any disagreements before calculating a final appraisal score. The quality appraisal checklist is shown in online Appendix DS2 and includes items to assess study design, the representativeness of study samples, the criteria used to measure domestic violence and the methods of statistical analysis. Scores for overall study quality and for questions relevant to selection bias and measurement bias are reported for all studies (see online Table DS1). High-quality papers were defined as those scoring 50% or above on questions assessing selection bias.

**Statistical analysis**

Information about the study design, study sample and the definition and measurement of domestic violence was summarised. Prevalence estimates (adult lifetime or past year) of domestic violence were calculated separately by gender and psychiatric setting when appropriate data were available. Odds ratios were not calculated because primary studies did not include control groups.

**Results**

The study selection process is presented in Fig. 1. Our literature search yielded 29,707 unique references, of which 28,584 references were excluded following title and abstract screening. Of the 1123 references that met – or potentially met – the inclusion criteria, 59 (56 dissertations and 3 journal articles) could not be located. Thus, 1064 full papers were retrieved and assessed. Forty-two papers were included in the review (online Table DS1) and 1022 were excluded. Of the 42 included papers, 32 were identified from searches of electronic databases, 7 from citation tracking, 1 from hand searching and 2 from expert recommendations. Only 1 of the 42 included papers was published in a language other than English. We excluded 10 non-English language papers after screening full-text translations, most often because they did not measure domestic violence and instead reported on general victimisation.

**Key features of included papers**

Of the 42 papers that examined the prevalence of domestic violence among psychiatric patients, 36 reported on domestic violence perpetrated by an intimate partner only (including 7 papers in which the definition was limited to violence perpetrated by a spouse) and 6 reported on violence perpetrated by either an intimate partner or other family member. Thirty-two studies measured lifetime experiences of domestic violence only, 7 past year domestic violence only and 3 both lifetime and past year experiences of domestic violence. Further details about the instruments used to assess domestic violence and the methods of data collection are provided for each study in online Table DS1.

Regarding study participants, 13 studies included either psychiatric in-patients only or presented data separately for this group.21–33 16 studies presented data for psychiatric out-patient samples.22,28,34–47 and 4 studies presented data for patients attending emergency psychiatric departments.48–51 Seven studies were conducted across a range of psychiatric settings and did not provide data disaggregated by service type.31–37 In 5 papers it was not clear from which type of psychiatric service participants...
were recruited. Twenty-seven studies were conducted with women-only samples; one study was conducted with an all-male sample; 14 studies included both male and female participants but only 9 provided gender-disaggregated data on domestic violence.

**Psychiatric in-patient samples**

**Partner violence**

**Adult lifetime violence.** The prevalence of any adult lifetime partner violence among psychiatric in-patients ranged from 16% to 94% among women and from 18% to 48% among men (see online Table DS1). Excluding studies that scored below 50% on quality appraisal questions relating to selection bias, the median prevalence of lifetime partner violence was 30% (interquartile range (IQR) 26–39, range 26–56) among women.21–23,29 No high-quality paper was identified that reported on lifetime partner violence among male psychiatric in-patients. Findings for specific types of partner violence were as follows:

(a) **Physical violence:** seven studies reported on the lifetime prevalence of physical partner violence among psychiatric in-patients.21,22,26–31,33 Among high-quality papers the median prevalence for female in-patients was 26% (IQR 26–41, range 26–56),21,22,29–31 One poor-quality paper presented data for men and reported a lifetime prevalence of 18%.30

(b) **Sexual violence:** one study reported a specific count on the lifetime prevalence of sexual partner violence, which was 16% among female in-patients; this paper scored below 50% on quality appraisal questions relating to selection bias.25

(c) **Psychological violence:** one study reported a specific count on the lifetime prevalence of psychological partner violence, which was 94% among female in-patients; this paper scored below 50% on quality appraisal questions relating to selection bias.31

**Past year violence.** Past year prevalence of physical partner violence ranged in three studies from 33% to 93%;24,26,32 none of these studies scored 50% or more on selection bias. One high-quality paper reported that the prevalence of past year physical violence among female psychiatric in-patients was 18%, but this estimate combined violence from partners and family members.28

**Psychiatric out-patient samples**

**Partner violence**

**Adult lifetime violence.** The prevalence of any adult lifetime partner violence among out-patients ranged from 7% to 81% among women and from 2% to 6% among men (online Table DS1). Excluding studies that scored below 50% for selection bias, the median prevalence was 33% (IQR 21–53, range 15–81) among women.22,38,40,42 No high-quality paper was identified that reported on domestic violence among men in this group. Findings for specific types of violence were:

(a) **Physical violence:** ten studies assessed lifetime physical partner violence among women out-patients and reported prevalence rates of 8–80%22,28,37–43,47 and two studies reported prevalence estimates of 2% and 6% among male out-patients.41,46 Among high-quality papers the median prevalence in female out-patients was 43% (IQR 25–51, range 8–60).22,40,42

(b) **Sexual violence:** estimates of the lifetime prevalence of sexual violence among women in the out-patient group were highly variable.37,39,40,43 In the only high-quality study the prevalence for women was 3%,40

(c) **Psychological violence:** lifetime prevalence of psychological violence among women out-patients ranged in three studies from 9% to 72%.40,41,43 Prevalence in the only high-quality study was 9%.40

**Past year partner violence.** Fewer data were available on past year domestic violence. Two high-quality studies assessed past year physical abuse among female out-patients: one reported a prevalence of 16% for physical partner violence,42 the other reported a prevalence of 11% but combined data for violence from partners and family members.28

**Family violence**

**Past year family violence.** Bengtsson-Tops et al reported that 4% of a mixed sample of male and female psychiatric out-patients had been abused in the past year by a family member; however, this study scored below 50% on quality appraisal questions relating to selection bias.34

**Psychiatric emergency department samples**

**Partner violence**

**Adult lifetime violence.** The prevalence of adult lifetime domestic violence ranged from 42% to 60% among women attending psychiatric emergency departments and was estimated at 8% among men attenders (see online Table DS1). Only one paper scored 50% or over on selection bias; this study estimated that the prevalence among women was 60%.50 No high-quality paper was identified that reported on domestic violence amongst men attenders.

**Past year violence.** One high-quality study assessed past year experiences of partner violence among women attending psychiatric emergency departments and reported the prevalence rates of past year physical and sexual violence to be 20% and 16% respectively.50

**Mixed psychiatric settings**

**Partner violence**

**Adult lifetime violence.** Seven studies collected data across a range of psychiatric settings (e.g. in-patient, out-patient, community, emergency and forensic mental health services) and did not disaggregate their results according to setting (online Table DS1). Excluding studies that scored below 50% on quality appraisal questions relating to selection bias, the median prevalence of lifetime partner violence among men and women patients was 26% (IQR 20–44, range 26–63).52,53,57 Two high-quality papers also reported gender-specific prevalence estimates. The first, a large Swedish cross-sectional study that attempted to question all adult women using psychiatric in-patient and
out-patient services over a 1-week period about their experiences of violence, additionally estimated that 26% women had ever experienced violence from a current partner and 23% from a previous partner. The second, conducted in the USA, estimated that 63% of female psychiatric patients had ever experienced partner violence (including 50% physical violence and 32% sexual violence). The latter study also estimated that 32% of male psychiatric patients had experienced partner violence (including 18% physical violence and 4% sexual violence).

Family violence

One high-quality paper reported that, among patients in mixed psychiatric settings, the prevalence of adult lifetime violence by a family member was 11%.52

Discussion

The review findings suggest a high prevalence of experiences of domestic violence among psychiatric patients. Among female patients, being a victim of lifetime partner violence was reported by about a third of in-patients and out-patients. Only one high-quality paper reported the prevalence of being a victim of domestic violence among male patients: Chang et al surveyed patients across a range of psychiatric settings and estimated that 18% had experienced lifetime physical partner violence and 4% had experienced lifetime sexual partner violence.53

The review identified six studies on the prevalence of violence perpetrated by family members, of which only two were of high quality; these two studies reported that 11% of a mixed sample of male and female psychiatric out-patients reported family violence, and that 9% and 6% of female in-patients reported adult lifetime physical violence by a father or brother respectively.21

No study included non-psychiatric controls representative of the general population. Thus, although most of the reviewed studies reported higher estimates of the prevalence of domestic violence than have been reported for general population samples, quantifying the extent to which psychiatric populations are at greater risk of domestic violence remains difficult.

Strengths and limitations

The review employed a comprehensive search strategy following MOOSE guidelines. We identified a number of methodological and conceptual issues in the primary studies that weaken the estimates of prevalence. Half of the included studies were judged to score poorly on questions relating to selection bias. We found that most studies used non-probability sampling and did not provide information on the representativeness of their samples, the potential impact of non-participation, or study power. Furthermore, few studies reported detailed exclusion criteria or provided information about participants’ primary diagnoses. We have therefore carried out a further systematic review to examine the prevalence and risk of domestic violence in people with specific psychiatric disorders using different sources of data (PROSPERO database registration number CRD42011001241 (yet to be published)). The most rigorous study that we identified in this review, which attempted to survey all women attending psychiatric in-patient and out-patient services over a 1-week period about their experiences of domestic violence, reported that a quarter had experienced abuse from their current partner.21

The exclusion, however, of individuals who were not able to give informed consent means that the findings cannot be generalised to the most severely ill patients.

The reliability and comparability of primary studies were also limited by the methods of data collection and instruments used to assess domestic violence. Data collection methods varied between studies and included researcher-administered questionnaires during face-to-face interviews, self-completed questionnaires and case file reviews. Face-to-face interviews were used in more than half of the included studies but may contribute to the under-detection of violence: a randomised controlled trial of methods of screening for domestic violence in various healthcare settings found that women preferred the use of self-completed questionnaires over face-to-face interviews when the same questionnaires were used.65 Case file reviews are also likely to underestimate the prevalence of domestic violence experienced by psychiatric patients: the underdetection and poor recording of domestic violence, even where routine enquiry has been implemented, is well documented.10,42,65,66 Future studies should consider using self-completed questionnaires to assess domestic violence.

Studies also varied with regard to the instruments used to measure domestic violence. Among studies that employed a validated instrument to detect domestic violence, the most commonly used tool was the Conflict Tactics Scale (CTS). However, authors frequently reported that they made modifications to this and other instruments without describing how, if at all, the adapted instruments had been validated. The reliability and comparability of study findings are likely to have been reduced by this practice. In addition, although the CTS is one of the most widely used measures of violence, it has been criticised for its measurement of acts out of context (i.e. it does not make it clear whether acts of violence were in attack or in defence), its gender neutrality and its failure to measure other forms of partner violence, although sexual violence has been partly addressed in the revised version.

In 11 papers, authors reported having developed their own measures to assess domestic violence, and in a further 10 no details were provided about the instrument used to assess violence. Moreover, several studies did not enquire specifically about domestic violence but instead asked participants about their general experiences of violence. We included those studies in our review if they reported the identity of the perpetrator and the age at which abuse occurred. Studies thus differed with regard to which forms of violence and specific behaviours were enquired about, which contributed to the observed variation in the prevalence of victimisation.

Implications of findings

Our review highlights the high prevalence of domestic violence among people using a range of psychiatric services. It also, however, draws attention to the lack of high-quality evidence on domestic violence among psychiatric populations and to the absence of research comparing psychiatric patients’ risk of domestic violence with that of other clinical populations or the general population. Further evidence gaps are also apparent. First, despite evidence that emotional abuse is strongly associated with poor health outcomes,60,71 few studies collected data on psychiatric patients’ experiences of psychological violence. Second, few studies included violence from family members within their definition of domestic violence. The prevalence of victimisation by family members in the few studies in which it was measured, however, suggests that family-perpetrated domestic violence may be an issue of relevance for some psychiatric patients, as it is for the general population: in 2010–2011, a fifth (22%) of all homicides in London were domestic-related, with the murder of a parent by a son being the most prevalent. Finally, and despite evidence that suggests that men with severe mental illness
are at increased risk of violent victimisation,\textsuperscript{11,12} few studies collected data on the prevalence of domestic violence in male patients. Professionals who work with psychiatric patients across a range of settings should be aware of the high prevalence of victimisation among men and women in this group and be able to identify violence and respond appropriately to their patients’ needs.

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Appendix 1

Electronic databases searched for systematic review

Biomedical databases

Academic Search Complete, British Nursing Index, CINAHL, Cochrane, EMBASE, Health Management Information Consortium (HMIC), Medline, Maternity and Infant Care, PsyCINFO, Science Direct, Web of Science (including Science Citation Index, Social Sciences Citation Index, Arts & Humanities Citation Index, and Conference Proceedings Citation Index for Science and for Social Science and Humanities)

Social sciences databases

Applied Social Sciences index and Abstracts, International Bibliography of the Social Sciences, JSTOR, Sociological Abstracts

Theses and dissertations

DART-Europe E Theses Portal, Electronic Theses Online Service (ETHOS), Networked Digital Library of Theses and Dissertations

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Data supplement

Appendix DS1

Search strategy for electronic searches of the Medline, EMBASE and PsycINFO databases

1. Domestic violence/
2. Family violence/
3. Partner abuse/
4. Partner violence/
5. Spouse abuse/
6. Battered women/
7. (abuse$ OR batter$ OR violen$ OR beat$) adj5 (domestic OR partner$ OR family OR families OR spouse OR woman OR women OR men OR man OR female$ OR male$ OR wife OR wives OR husband$ OR boyfriend$ OR girlfriend$ OR elder$ OR brother$ OR sister$ OR father$ OR mother$ OR daughter$ OR son$ OR carer$).mp)
8. (domestic adj5 homicid$).mp
9. 1 OR 2 OR 3 OR 4 OR 5 OR 6 OR 7 OR 8
10. Mental Disorder/
11. Mental illness/
12. Mental health/
13. (Mental$ adj2 (problem$ OR difficult$ OR disorder$ OR ill$ OR health).mp.)
14. Mental health services/
15. Community Mental Health Services/
16. (mental OR psychiatrist$ OR psycholog$) adj3 (inpatient$ OR outpatient$ OR hospital$ OR clinic$ OR service$ OR ward$ OR healthcare).mp)
17. Psychiatr$
18. Psycholog$
19. Schiz$
20. Psychos$
21. Psychot$
22. Bipolar
23. Depress$
24. Mania$ OR manic$
25. Neurosis OR psychoneurosis
26. Personality disorder/ OR anankastic personality disorder/ OR antisocial personality disorder/ OR avoidant personality disorder/ OR borderline personality disorder/ OR compulsive personality disorder/ OR dependent personality disorder/ OR histrionic personality disorder/ OR narcissistic personality disorder/ OR obsessive compulsive personality disorder/ OR paranoid personality disorder/ OR passive-aggressive personality disorder/ OR schizoid personality disorder/ OR schizotypal personality disorder/ OR (anankastic OR asocial OR antisocial OR avoidant OR borderline OR dependent OR dissocial OR histrionic OR narcissistic OR obsessive OR compulsive OR paranoid OR passive-aggressive OR psychopath$ OR sadist$ OR sadomasochistic OR schizo$ OR sociopath$) adj person$.tw. OR (personality AND disorder$) OR psychopath$.tw OR sociopath$.tw
27. Eating disorders/ OR Anorexia Nervosa/ OR Binge-Eating Disorder/or Bulimia Nervosa/ OR ((anorexi$ OR bulimi$) AND nervosa) OR eating disorder$ OR binge-eat$ OR (bing$ adj eat$) OR (compulsive adj (eat$ or vomit$ or purg$))
28. ((Delusional OR paranoid$ OR mood OR neurotic OR stress OR reactive OR combat OR somatoform OR somatization OR somatisation OR anxiety OR phobic OR obsessive-compulsive OR adjustment OR dissociat$) adj2 disorder$)
29. 10 OR 11 OR 12 OR 13 OR 14 OR 15 OR 16 OR 17 OR 18 OR 19 OR 20 OR 21 OR 22 OR 23 OR 24 OR 25 OR 26 OR 27 OR 28
30. 9 AND 29
### Appendix DS2

**Quality appraisal instrument**

Scoring: 0 – study does not meet criteria/answer question; 1 – study partially meets criteria/gives a partially satisfactory answer to the question; 2 – study fully meets criteria/gives a fully satisfactory answer to the question.

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<td>1 Did the study ask a clearly focused question?</td>
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<td>2 Is the study design appropriate for the research question?</td>
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<td><strong>Continue only if the score on each of the above questions is 1 or more</strong></td>
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<th>Part 2 Risk of selection bias</th>
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<td>3 Is the sampling method appropriate for the research question?</td>
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<td>4 Are participant criteria appropriate?</td>
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<td>5 Is the sample size appropriate?</td>
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<td>6 Is the study sample representative of the population of interest?</td>
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<td>7 Does the level of non-participation risk introducing bias?</td>
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<td>8 Are suitable/standard criteria used for measurement of domestic violence?</td>
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<td>9 Are known confounders accounted for by study design?</td>
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<td>10 Are known confounders accounted for in the analyses?</td>
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<td>11 Are the statistical tests used to assess the main outcomes appropriate?</td>
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<td>12 Are the estimates reported with confidence intervals and in detail by sub-group (if appropriate)?</td>
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<td>13 Are statistically non-significant results presented?</td>
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<td>14 Are data for relevant variables complete?</td>
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<th>Part 4 Additional questions</th>
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<td>15 Was the conduct of the fieldwork appropriate to the study setting?</td>
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<td>16 Were ethical considerations appropriately considered?</td>
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<tr>
<td>17 Do the findings support the conclusions?</td>
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<tr>
<td>18 Are the strengths and weaknesses of the research discussed?</td>
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### Table DS1 Characteristics and reported outcomes of included studies

<table>
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<tr>
<th>Author (year)</th>
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<th>Method</th>
<th>Definition of domestic violence</th>
<th>Results</th>
<th>Quality scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blyer (1997)</td>
<td>USA</td>
<td>68</td>
<td>Cross-sectional survey</td>
<td>Adulthood lifetime physical or sexual violence by a spouse, intimate partner or nuclear family member</td>
<td>Lifetime physical violence: 17/66 (26%) women reported physical violence by a spouse or intimate partner; 6/66 (9%) women reported physical violence by a father, 4/66 (6%) by a brother. Lifetime sexual violence: 6/66 (9%) women reported sexual violence by a family member. (Disaggregated data on sexual violence by a spouse or intimate partner was not presented).</td>
<td>Total score 24/40, Selection bias 7/14, Measurement bias 8/14</td>
</tr>
<tr>
<td>Carlile (1991)</td>
<td>South Africa</td>
<td>152</td>
<td>Cross-sectional survey</td>
<td>Adulthood lifetime physical violence by a spouse</td>
<td>36/64 (56%) women reported physical violence by a spouse</td>
<td>Total score 24/40, Selection bias 7/14, Measurement bias 9/14</td>
</tr>
<tr>
<td>Carmen (1984)</td>
<td>USA</td>
<td>188</td>
<td>Case file review</td>
<td>Adulthood lifetime physical or sexual violence within a marital relationship</td>
<td>41/122 (34%) women reported violence by a spouse (data not presented for men)</td>
<td>Total score 22/40, Selection bias 7/14, Measurement bias 6/14</td>
</tr>
<tr>
<td>Cascardi (1996)</td>
<td>USA</td>
<td>69</td>
<td>Cross-sectional survey</td>
<td>Past year physical violence by an intimate partner or family member</td>
<td>27 (63%) of the 43 men and women with an intimate partner reported physical violence; 22 (46%) of 48 men and women who lived with a family member reported physical violence. (Data not gender-disaggregated).</td>
<td>Total score 26/40, Selection bias 6/14, Measurement bias 13/14</td>
</tr>
<tr>
<td>Chandra (2003)</td>
<td>India</td>
<td>146</td>
<td>Cross-sectional survey</td>
<td>Adulthood lifetime sexual violence by an intimate partner or a relative</td>
<td>24/146 (16%) women reported sexual violence by an intimate partner; 10/146 (7%) women reported sexual violence by a relative</td>
<td>Total score 19/40, Selection bias 6/14, Measurement bias 7/14</td>
</tr>
<tr>
<td>Heru (2006)</td>
<td>USA</td>
<td>110</td>
<td>Cross-sectional survey</td>
<td>Past year physical, sexual or psychological violence by an intimate partner</td>
<td>Past year physical violence: 61/66 (92%) women reported physical violence by an intimate partner; 57/66 (86%) women reported severe physical violence; 41/44 (93%) men reported physical violence by an intimate partner; 39/44 (89%) men reported severe physical violence. Past year sexual violence: 12/66 (18%) women reported sexual violence by an intimate partner; 13/44 (30%) men reported sexual violence by an intimate partner. Past year psychological violence: 61/66 (92%) women reported psychological violence by an intimate partner; 36/44 (82%) men reported psychological violence by an intimate partner.</td>
<td>Total score 26/40, Selection bias 6/14, Measurement bias 12/14</td>
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<tr>
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</thead>
<tbody>
<tr>
<td>Hoffman (1988)</td>
<td>Canada</td>
<td>50 male and female psychiatric in-patients (25 men, 25 women)</td>
<td>Cross-sectional survey</td>
<td>Domestic violence assessed during interviews using the Conflict Tactics Scale</td>
<td>Adulthood lifetime physical, sexual and psychological violence by an intimate partner</td>
<td>19/25 (76%) women reported any violence by an intimate partner; 12/25 (48%) men reported any violence by an intimate partner</td>
</tr>
<tr>
<td>Hudson Scholle (1998)</td>
<td>USA</td>
<td>317 female householders who screened positive for depression and reported on their use of mental health services in the past year (11 reported previous in-patient admission)</td>
<td>Cross-sectional survey</td>
<td>Domestic violence assessed during interviews using the Conflict Tactics Scale</td>
<td>Adulthood lifetime and past year physical violence by an intimate partner or family member</td>
<td>Lifetime physical violence</td>
</tr>
<tr>
<td>Husain (1983)</td>
<td>USA</td>
<td>23 female forensic psychiatric patients</td>
<td>Cross-sectional survey</td>
<td>Domestic violence assessed during interviews by social workers and psychiatrists; no instrument specified</td>
<td>Adulthood lifetime physical violence by a spouse</td>
<td>6/23 (26%) women reported physical violence by a spouse</td>
</tr>
<tr>
<td>Post (1980)</td>
<td>USA</td>
<td>60 male and female psychiatric in-patients (22 men, 38 women)</td>
<td>Cross-sectional survey</td>
<td>Domestic violence assessed during interviews using the authors’ questions</td>
<td>Adulthood lifetime physical violence by an intimate partner</td>
<td>29/60 (48%) men and women reported physical violence by an intimate partner; 25/38 (66%) women reported physical violence by an intimate partner; 4/22 (18%) men reported physical violence by an intimate partner</td>
</tr>
<tr>
<td>Sansone (2007)</td>
<td>USA</td>
<td>113 female psychiatric in-patients (missing data for 4 participants)</td>
<td>Cross-sectional survey</td>
<td>Domestic violence assessed by self-administered questionnaire using the Sexual Violence Against Women Scale (non-zero score)</td>
<td>Adulthood lifetime physical or psychological violence by an intimate partner</td>
<td>Lifetime physical violence: 91/109 (83%) women reported physical violence by an intimate partner; Lifetime psychological violence: 103/109 (94%) women reported psychological violence by an intimate partner</td>
</tr>
<tr>
<td>Weizmann-Henelius (2004)</td>
<td>Finland</td>
<td>91 female violent incarcerated or hospitalised offenders or community controls (12 women were forensic psychiatric in-patients)</td>
<td>Case-control study (cases were female violent offenders incarcerated or hospitalised during a 12-month period and controls were non-offender women recruited from community education or evening courses); Domestic violence assessed during interview using the authors’ questions</td>
<td>Domestic violence assessed during interviews using the Abuse History Interview; domestic violence derived from information on perpetrator of violence</td>
<td>Past year physical and sexual violence by an intimate partner</td>
<td>4/12 (33%) women reported any violence by an intimate partner</td>
</tr>
<tr>
<td>Zanarini (1999)</td>
<td>USA</td>
<td>362 male and female psychiatric in-patients (83 men, 279 women)</td>
<td>Cross-sectional survey</td>
<td>Adulthood violence assessed during interviews using the Abuse History Interview; domestic violence derived from information on perpetrator of violence</td>
<td>Adulthood lifetime physical violence by an intimate partner</td>
<td>108/362 (30%) men and women reported physical violence by an intimate partner (data not gender-disaggregated)</td>
</tr>
<tr>
<td>Author (year)</td>
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<tr>
<td>Bengtsson-Tops (2011)</td>
<td>Sweden</td>
<td>174 male and female psychiatric out-patients (75 men, 99 women)</td>
<td>Cross-sectional survey</td>
<td>Domestic violence assessed by self-administered questionnaire using the Composite Abuse Scale and authors’ questions</td>
<td>Adulthood lifetime and past year physical, sexual or psychological violence by a partner or family member</td>
<td>Lifetime partner violence (any) 9/174 (5%) men and women reported any current partner violence 27/174 (16%) men and women reported any violence by a former partner 25/174 (14%) men and women reported any violence by a family member 7/174 (4%) men and women reported any violence by another relative</td>
</tr>
<tr>
<td>Carlile (1991)</td>
<td>South Africa</td>
<td>152 female psychiatric patients (88 out-patients, 64 in-patients)</td>
<td>Cross-sectional survey</td>
<td>Domestic violence assessed during interview using the authors’ questions</td>
<td>Adulthood lifetime physical violence by a spouse</td>
<td>38/88 (43%) women reported physical violence by a spouse</td>
</tr>
<tr>
<td>Ford (2008)</td>
<td>USA</td>
<td>38 female community mental health patients</td>
<td>Cross-sectional survey</td>
<td>Domestic violence assessed during interviews using the Traumatic Events Screening Inventory</td>
<td>Adulthood lifetime violence by an intimate partner; type of violence not specified</td>
<td>20/38 (53%) women reported any violence by an intimate partner</td>
</tr>
<tr>
<td>Goodman (1995)</td>
<td>USA</td>
<td>99 episodically homeless female community mental health patients</td>
<td>Cross-sectional survey</td>
<td>Domestic violence assessed during interviews using the Conflict Tactics Scale and Russell Interview</td>
<td>Adulthood lifetime physical and sexual violence by an intimate partner</td>
<td>Lifetime physical violence 79/99 (80%) women reported physical violence by an intimate partner Lifetime sexual violence 40/99 (40%) women reported sexual violence by an intimate partner</td>
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<tr>
<td>Hatters Friedman</td>
<td>USA</td>
<td>53 female community mental health patients</td>
<td>Cross-sectional survey</td>
<td>Adulthood lifetime violence (physical, sexual or threatened) by an intimate partner</td>
<td>36/53 (68%) women reported any violence by an intimate partner</td>
<td>Total score 19/40</td>
</tr>
<tr>
<td>(2011)</td>
<td></td>
<td></td>
<td>Domestic violence assessed during interviews using the authors’ questions</td>
<td></td>
<td>Selection bias 4/14, Measurement bias 7/14</td>
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<tr>
<td>Herman (1986)</td>
<td>USA</td>
<td>190 psychiatric out-patients (85 men, 105 women)</td>
<td>Case file review</td>
<td>Adulthood lifetime physical and sexual violence by a spouse (data not presented for men)</td>
<td>24/105 (22%) women reported any violence by a spouse</td>
<td>Total score 24/40</td>
</tr>
<tr>
<td>(1998)</td>
<td></td>
<td></td>
<td>Domestic violence assessed on basis of information recorded in case files</td>
<td></td>
<td>Selection bias 10/14, Measurement bias 4/14</td>
<td></td>
</tr>
<tr>
<td>Hudson Scholle</td>
<td>USA</td>
<td>317 female householders screened positive for depression and self-report on past year mental health service use (167 reported previous out-patient visits)</td>
<td>Cross-sectional survey</td>
<td>Adulthood lifetime and past year physical violence by an intimate partner or family member</td>
<td>Lifetime physical violence</td>
<td>Total score 22/40</td>
</tr>
<tr>
<td>(1998)</td>
<td></td>
<td></td>
<td>Domestic violence assessed during interviews using the Conflict Tactics Scale</td>
<td></td>
<td>9/167 (59%) women reported physical violence by an intimate partner/family member</td>
<td>Selection bias 3/14, Measurement bias 11/14</td>
</tr>
<tr>
<td>Johnston-McCabe</td>
<td>USA</td>
<td>46 deaf and hard of hearing female community mental health patients</td>
<td>Cross-sectional survey</td>
<td>Adulthood lifetime physical, sexual or psychological violence by an intimate partner</td>
<td>Lifetime physical violence</td>
<td>Total score 23/40</td>
</tr>
<tr>
<td>(2011)</td>
<td></td>
<td></td>
<td>Domestic violence assessed by interpreter-assisted or self-administered questionnaires using an adapted version of the Conflict Tactics Scale</td>
<td></td>
<td>12/46 (26%) women reported sexual violence by an intimate partner</td>
<td>Selection bias 8/14, Measurement bias 8/14</td>
</tr>
<tr>
<td>(2011)</td>
<td></td>
<td></td>
<td></td>
<td>Lifetime physical violence by an intimate partner</td>
<td>Lifetime psychological violence</td>
<td>Total score 20/40</td>
</tr>
<tr>
<td>Leithner (2009)</td>
<td>Austria</td>
<td>424 female patients from a women’s psychosomatic out-patient clinic</td>
<td>Cohort study</td>
<td>Adulthood lifetime physical, sexual and psychological violence by an intimate partner</td>
<td>Lifetime violence (any)</td>
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<tr>
<td>(2009)</td>
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<td>Domestic violence assessed during interviews; no instrument specified</td>
<td></td>
<td>62/424 (15%) women reported any violence by an intimate partner</td>
<td>Selection bias 6/14, Measurement bias 6/14</td>
</tr>
<tr>
<td>Lipszch (1996)</td>
<td>USA</td>
<td>120 male and female psychiatric out-patients (34 men, 86 women)</td>
<td>Cross-sectional survey</td>
<td>Adulthood lifetime physical violence by a spouse or intimate partner</td>
<td>32/120 (27%) men and women reported physical violence by a spouse/intimate partner</td>
<td>Total score 20/40</td>
</tr>
<tr>
<td>(1996)</td>
<td></td>
<td></td>
<td>Domestic violence assessed by self-administered questionnaire using the Traumatic Events Questionnaire</td>
<td></td>
<td>30/86 (39%) women reported physical violence by a spouse/intimate partner</td>
<td>Selection bias 5/14, Measurement bias 6/14</td>
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<td>2/34 (6%) men reported physical violence by a spouse/intimate partner</td>
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<tr>
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<tr>
<td>Morgan (2010)</td>
<td>UK</td>
<td>71 female community mental health patients (missing data for 1 participant)</td>
<td>Cross-sectional survey Domestic violence assessed by self-administered questionnaire using the authors’ questions</td>
<td>Adulthood lifetime, past year and during pregnancy physical violence by an intimate partner</td>
<td>Lifetime physical violence 42/70 (60%) women reported physical violence by an intimate partner</td>
<td>Total score 32/40, Selection bias 12/14, Measurement bias 11/14</td>
</tr>
<tr>
<td>Ramanathan (1996)</td>
<td>India</td>
<td>332 female psychiatric out-patients</td>
<td>Cross-sectional survey Domestic violence assessed during interviews; no instrument specified</td>
<td>Adulthood lifetime physical, sexual or psychological violence by a spouse</td>
<td>Lifetime physical violence 25/332 (8%) women reported physical violence by a spouse</td>
<td>Total score 18/40, Selection bias 5/14, Measurement bias 9/14</td>
</tr>
<tr>
<td>Surrey (1990)</td>
<td>USA</td>
<td>140 female psychiatric out-patients</td>
<td>Cross-sectional survey Violence assessed by self-administered questionnaire using the Life Experiences Questionnaire; domestic violence derived from information on age at abuse and perpetrator of violence</td>
<td>Adulthood lifetime physical or sexual violence by a spouse</td>
<td>10/140 (7%) women reported any violence by a spouse</td>
<td>Total score 24/40, Selection bias 6/14, Measurement bias 11/14</td>
</tr>
<tr>
<td>Swett (1991)</td>
<td>USA</td>
<td>189 female psychiatric out-patients</td>
<td>Cross-sectional survey Violence assessed by self-administered questionnaire using the Life Experiences Questionnaire; domestic violence derived from information on age at abuse and perpetrator of violence</td>
<td>Adulthood lifetime physical or sexual violence by a spouse</td>
<td>17/189 (9%) women reported any violence by a spouse</td>
<td>Total score 22/40, Selection bias 6/14, Measurement bias 11/14</td>
</tr>
<tr>
<td>Swett (1990)</td>
<td>USA</td>
<td>125 male psychiatric out-patients</td>
<td>Cross-sectional survey Violence assessed by self-administered questionnaire; domestic violence derived from information on age at abuse and perpetrator of violence (no instrument specified)</td>
<td>Adulthood lifetime physical or sexual violence by an intimate partner</td>
<td>Lifetime physical violence 2/125 (2%) men reported physical violence by an intimate partner</td>
<td>Total score 21/40, Selection bias 6/14, Measurement bias 7/14</td>
</tr>
<tr>
<td>Vahip (2006)</td>
<td>Turkey</td>
<td>100 female psychiatric out-patients</td>
<td>Cross-sectional survey Method of assessing domestic violence is unclear, author’s questions used</td>
<td>Adulthood lifetime physical violence by an intimate partner</td>
<td>62/100 (62%) women reported physical violence by an intimate partner</td>
<td>Total score 3/40, Selection bias 5/14, Measurement bias 8/14</td>
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<tr>
<td><em>Psychiatric emergency department sample</em>&lt;br&gt; <strong>Briere (1997)</strong>&lt;sup&gt;8&lt;/sup&gt; USA&lt;br&gt; 93 female psychiatric emergency room attenders</td>
<td>Case file review&lt;br&gt; Domestic violence assessed on basis of information recorded in case files</td>
<td>Adulthood lifetime physical violence by an intimate partner</td>
<td>39/93 (42%) women reported physical violence by an intimate partner</td>
<td>Total score 19/40&lt;br&gt; Selection bias 2/14&lt;br&gt; Measurement bias 10/14</td>
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<tr>
<td><strong>Currier (2000)</strong>&lt;sup&gt;13&lt;/sup&gt; USA&lt;br&gt; 162 male and female psychiatric emergency room attenders (gender-disaggregated data available for 84 participants: 48 men, 36 women)</td>
<td>Cross-sectional survey&lt;br&gt; Domestic violence assessed during interview using the authors’ questions</td>
<td>Adulthood lifetime physical violence by a spouse or intimate partner</td>
<td>35/162 (22%) male and female emergency department attenders reported physical violence by a spouse/intimate partner&lt;br&gt; 17/36 (47%) of women reported physical violence by a spouse/intimate partner&lt;br&gt; 4/48 (8%) men reported physical violence by a spouse/intimate partner</td>
<td>Total score 6/40&lt;br&gt; Selection bias 3/14&lt;br&gt; Measurement bias 8/14</td>
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<tr>
<td><strong>Owens (2007)</strong>&lt;sup&gt;12&lt;/sup&gt; USA&lt;br&gt; 216 female psychiatric emergency department attenders</td>
<td>Cross-sectional survey&lt;br&gt; Domestic violence assessed by self-administered questionnaire using questions derived from the Abuse Assessment Screen, Conflict Tactics Scale and Women’s Experiences of Battering</td>
<td>Adulthood lifetime and past year physical and sexual violence by an intimate partner&lt;br&gt; Adulthood lifetime psychological violence by an intimate partner</td>
<td>Lifetime physical violence&lt;br&gt; 129/216 (60%) women reported physical violence by an intimate partner&lt;br&gt; Past year physical violence&lt;br&gt; 43/216 (20%) women reported physical violence by an intimate partner&lt;br&gt; Lifetime sexual violence&lt;br&gt; 84/216 (39%) women reported sexual violence by an intimate partner&lt;br&gt; Past year sexual violence&lt;br&gt; 34/216 (16%) women reported sexual violence by an intimate partner&lt;br&gt; Lifetime psychological violence&lt;br&gt; 70/216 (32%) women reported psychological violence by an intimate partner</td>
<td>Total score 29/40&lt;br&gt; Selection bias 10/14&lt;br&gt; Measurement bias 10/14</td>
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<tr>
<td><strong>Paranjape (2006)</strong>&lt;sup&gt;11&lt;/sup&gt; USA&lt;br&gt; 153 female hospital patients (10 emergency psychiatric care users)</td>
<td>Cross-sectional survey&lt;br&gt; Domestic violence assessed by interviews using the Index of Spouse Abuse Physical and Non-Physical subscales</td>
<td>Adulthood lifetime violence (physical, sexual or psychological) by an intimate partner</td>
<td>5/10 (50%) women reported any violence by an intimate partner</td>
<td>Total score 28/40&lt;br&gt; Selection bias 5/14&lt;br&gt; Measurement bias 13/14</td>
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<tr>
<td><strong>Mixed psychiatric settings</strong>&lt;br&gt; <strong>Bengtsson-Tops (2005)</strong>&lt;sup&gt;2&lt;/sup&gt; Sweden&lt;br&gt; 1362 female psychiatric in-patients and outpatients</td>
<td>Cross-sectional survey&lt;br&gt; Domestic violence assessed by self-administered questionnaire using the authors’ questions&lt;br&gt; Domestic violence derived from information on age at abuse and perpetrator</td>
<td>Adulthood lifetime physical, sexual, psychological or economic abuse by a current/former partner or family member</td>
<td>349/1362 (26%) women reported any violence from a current partner&lt;br&gt; 315/1362 (23%) women reported any violence from a former partner&lt;br&gt; 151/1362 (11%) women reported any violence from relatives</td>
<td>Total score 27/40&lt;br&gt; Selection bias 11/14&lt;br&gt; Measurement bias 8/14</td>
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<tr>
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<tbody>
<tr>
<td>Chang (2011)**(3)</td>
<td>USA</td>
<td>428 male and female psychiatric in-patients, out-patients and emergency room attenders (158 men, 270 women)</td>
<td>Cross-sectional survey Domestic violence assessed by self-administered questionnaire using the Abuse Assessment Screen</td>
<td>Adulthood lifetime physical, sexual or psychological violence by an intimate partner Past year physical or sexual violence by an intimate partner</td>
<td>Lifetime violence (any) 169/270 (62%) women reported any violence by an intimate partner 50/138 (32%) men reported any violence by an intimate partner</td>
<td>Total score 29/40 Selection bias 7/14 Measurement bias 12/14</td>
</tr>
<tr>
<td>Da Silva (1991)**(5)</td>
<td>Portugal</td>
<td>40 female patients recruited from a psychiatric day hospital and in-patient unit</td>
<td>Cross-sectional survey Domestic violence assessed during interview using the authors' questions</td>
<td>Adulthood lifetime physical violence by an intimate partner</td>
<td>20/40 (50%) women reported physical violence by an intimate partner</td>
<td>Total score 16/40 Selection bias 4/14 Measurement bias 7/14</td>
</tr>
<tr>
<td>Dienemann (2000)**(3)</td>
<td>USA</td>
<td>82 female psychiatric in-patients, out-patients and members of community support group for people with depression (missing data for 1 participant)</td>
<td>Cross-sectional survey Domestic violence assessed during interview using the Abuse Assessment Screen</td>
<td>Adulthood lifetime and past year physical and sexual violence by an intimate partner</td>
<td>Lifetime violence (any) 50/81 (61%) women reported any violence by an intimate partner Past year violence (any) 11/81 (13%) women reported any violence by an intimate partner Lifetime physical violence 30/81 (37%) women reported physical violence by an intimate partner Past year physical violence 10/81 (12%) women reported physical violence by an intimate partner Lifetime sexual violence 24/81 (29%) women reported sexual violence by an intimate partner Past year sexual violence 5/81 (6%) women reported sexual violence by an intimate partner</td>
<td>Total score 22/40 Selection bias 3/14 Measurement bias 10/14</td>
</tr>
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</tr>
</thead>
<tbody>
<tr>
<td>McPherson (2007)</td>
<td>USA</td>
<td>379 female psychiatric in-patients and out-patients</td>
<td>Cohort study (baseline data extracted)</td>
<td>Past year physical violence by an intimate partner</td>
<td>72/379 (19%) women reported physical violence by an intimate partner</td>
<td>Total score 32/40</td>
</tr>
<tr>
<td>Paranjape (2005)</td>
<td>USA</td>
<td>153 female hospital patients (49 non-emergency psychiatric care users)</td>
<td>Cross-sectional survey</td>
<td>Adulthood lifetime violence (physical, sexual or psychological) by an intimate partner</td>
<td>31/49 (63%) female non-emergency psychiatric care users reported any violence by an intimate partner</td>
<td>Total score 28/40</td>
</tr>
<tr>
<td>Yellowlees (1994)</td>
<td>Australia</td>
<td>567 men and women receiving psychiatric care in community, hospital and prison</td>
<td>Case file review</td>
<td>Adulthood lifetime physical violence by an intimate partner</td>
<td>83/567 (15%) men and women reported physical violence by an intimate partner (data not gender-disaggregated)</td>
<td>Total score 22/40</td>
</tr>
<tr>
<td>Brown (2009)</td>
<td>Australia</td>
<td>98 male and female youth mental health service attenders (45 male, 53 female)</td>
<td>Cross-sectional survey</td>
<td>Past year physical domestic violence by an intimate partner</td>
<td>6/53 (11%) female attenders reported physical violence by an intimate partner</td>
<td>Total score 27/40</td>
</tr>
<tr>
<td>Osgood (2000)</td>
<td>USA</td>
<td>59 female patients from two psychiatric facilities</td>
<td>Case file review</td>
<td>Adulthood lifetime physical or sexual violence by an intimate partner</td>
<td>14/59 (24%) women reported any violence by an intimate partner</td>
<td>Total score 23/40</td>
</tr>
<tr>
<td>Tham (1995)</td>
<td>UK</td>
<td>184 men and women presenting to psychiatric services</td>
<td>Cross-sectional survey</td>
<td>Past year violence by an intimate partner; type of violence not specified</td>
<td>45/184 (24%) women reported any violence by an intimate partner (data not presented for men)</td>
<td>Total score 19/40</td>
</tr>
<tr>
<td>Waller (1991)</td>
<td>UK</td>
<td>67 female patients being treated by psychiatrist for eating disorder</td>
<td>Cross-sectional survey</td>
<td>Adulthood lifetime sexual violence by an intimate partner</td>
<td>8/67 (12%) women reported sexual violence by an intimate partner</td>
<td>Total score 18/40</td>
</tr>
<tr>
<td>Weingourt (1990)</td>
<td>USA</td>
<td>53 women being treated for anxiety or depressive disorder</td>
<td>Cross-sectional survey</td>
<td>Adulthood lifetime sexual violence by an intimate partner</td>
<td>33/53 (62%) women reported sexual violence by an intimate partner</td>
<td>Total score 22/40</td>
</tr>
</tbody>
</table>
Prevalence of experiences of domestic violence among psychiatric patients: systematic review
S. Oram, K. Trevillion, G. Feder and L. M. Howard
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