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Review

Psychiatric disorders in patients presenting to hospital following self-harm: A systematic review

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ABSTRACT

Background: Psychiatric disorders occur in approximately 90% of individuals dying by suicide. The prevalence of psychiatric disorders in people who engage in non-fatal self-harm has received less attention.
Method: Systematic review using electronic databases (Embase, PsychINFO and Medline) for English language publications of studies in which psychiatric disorders have been assessed using research or clinical diagnostic schedules in self-harm patients of all ages presenting to general hospitals, followed by meta-analyses using random effects methods.
Results: A total of 50 studies from 24 countries were identified. Psychiatric (Axis I) disorders were identified in 83.9% (95% CI 74.7–91.3%) of adults and 81.2% (95% CI 60.9–95.5%) of adolescents and young persons. The most frequent disorders were depression, anxiety and alcohol misuse, and additionally attention deficit hyperactivity disorder (ADHD) and conduct disorder in younger patients. Personality (Axis II) disorders were found in 27.5% (95% CI 17.6–38.7%) of adult patients. Psychiatric disorders were somewhat more common in patients in Western (89.6%, 95% CI 83.0–94.7%) than non-Western countries (70.6%, 95% CI 50.1–87.6%).
Limitations: Heterogeneity between study results was generally high. There were differences between studies in identification of study participants and diagnostic procedures.
Conclusions: Most self-harm patients have psychiatric disorders, as found in people dying by suicide. Depression and anxiety disorders are particularly common, together with ADHD and conduct disorder in adolescents. Psychosocial assessment and aftercare of self-harm patients should include careful screening for such disorders and appropriate therapeutic interventions. Longitudinal studies of the progress of these disorders are required.
Declaration of interests: None.

Contents

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1. Background

Suicide and self-harm can result from a wide range of contributory factors (Hawton and Van Heeringen, 2009; Skegg, 2005). These include genetic, biological, childhood, psychological, psychiatric and social influences. The importance of psychiatric disorders in completed suicide has long been recognised (Barraclough et al., 1974; Harris and Barraclough, 1998) and been confirmed in many psychological autopsy studies (Cavanagh et al., 2003). On average, at least 90% of individuals dying by suicide appear to have psychiatric disorders, with depression and alcohol misuse being the most frequent, although results of recent studies have also highlighted the importance of anxiety disorders (Harris and Barraclough, 1997; Khan et al., 2002). Bipolar disorder and schizophrenia occur in a substantial minority of cases (Goodwin and Jamison, 2007; Palmer et al., 2005). Eating disorders are highly prevalent diagnoses in females dying by suicide (Harris and Barraclough, 1998). Co-morbidity of disorders is common, especially the combination of depression and alcohol misuse (Foster et al., 1997). A similar high prevalence of psychiatric disorders has been found in studies of young people dying by suicide (Shaffer, 1974; Runeson, 1989; Isometsa et al., 1995; Houston et al., 2001) and also in older persons (Harwood et al., 2001; Conwell et al., 2000).

In recent years questions have been raised about the possible less frequent occurrence of psychiatric disorders in people in Asian countries dying by suicide. Thus in a large psychological autopsy study of people dying by suicide in China only 63% were reported as having psychiatric disorders (Phillips et al., 2002). In other Asian studies, however, psychiatric disorders have been found in a similar proportion of individuals to those reported in Western studies (Vijayakumar and Rajkumar, 1999).

Far less attention has been paid to the contribution of psychiatric disorders to non-fatal self-harm (or 'attempted suicide'), in spite of the size of this problem (National Collaborating Centre for Mental Health, 2011) and its association with suicide (Owens et al., 2002). Thus the focus on causal factors in self-harm has tended to be directed towards life events and problems, alcohol misuse, specific psychological characteristics and personality disorders, the latter especially in multiple repeaters of self-harm. Yet where researchers have studied psychiatric disorders in self-harm patients they have usually reported very high prevalence figures (Beautrais et al., 1996; Suominen et al., 1999; Haw et al., 2001a), including in adolescents (Beautrais et al., 1998) and older adults (Dennis and Lindesay, 1995).

We have conducted a systematic review of studies of psychiatric disorders in self-harm patients of all ages presenting to general hospitals. Our main aim was to identify the likely overall proportion of individuals with disorders, including for the two genders separately, and for younger and older people, as well as adults in general. Subsidiary aims were to assess whether the frequency of diagnoses varies between studies in which research or clinical criteria were used, and to find out whether the proportion of self-harm patients with psychiatric disorders differs between Western and non-Western studies.

2. Method

We sought to identify all relevant studies of psychiatric disorders in individuals who had presented to general hospitals following an episode of self-harm. The latter included intentional self-poisoning or self-injury, irrespective of suicidal intent, and also attempted suicide and parasuicide. We included studies of individuals of all ages but aimed to report separately those of adults or mixed samples, those of adolescents and young people (up to age 25 years), and those of older persons (aged 65 years and over).

2.1. Inclusion criteria

We included prospective studies of self-harm patients of any age presenting to general hospitals in which psychiatric disorders had been assessed using either research diagnostic criteria or clinical diagnoses. We excluded studies in which only single specific disorders had been assessed or diagnoses had been made retrospectively (e.g. based on information in case notes). We also excluded studies of patients with learning disability or those in psychiatric hospitals as these would be less relevant to self-harm patients generally seen in general hospitals. The studies were restricted to those published in English.

2.2. Search strategy

The following electronic databases were searched: EMBASE (1980–November 2011), PsychINFO (1806–November 2011) and Medline (1966–November 2011). We used the following search terms: Self harm OR Selfharm* OR Self harm* OR Deliberate harm* OR Parasuicid* OR Attempted suicid* OR Self injur* OR Self-injur* OR Self-cutting OR Overdose* OR Self-inflict* OR Self-poison* OR Self destructive behaviour OR Self-mutilat* OR Self-immolat* OR Auto-mutilat* OR Suicidal behaviour AND Psychopathology OR Mental illness* OR Mental disorder* OR Mental diagnos* OR Mental problem* OR Psychiatric illness* OR Psychiatric disorder* OR Psychiatric diagnos* OR Psychiatric problem* OR Psychological illness* OR Psychological disorder* OR Psychological diagnos* OR Psychological problem* OR Psychiatric history* OR Axis* diagnos* OR Co-morbidit* OR Comorbidit* OR Personality disorder* OR Personality assessment.

Titles and abstracts of papers were screened by two members of the research team. Where either thought a paper might be suitable for inclusion the full paper was obtained. Each paper was also screened independently by two members of the research team. Where there was disagreement about suitability for inclusion the opinion of a third member of the team was sought. Reference lists of included papers were searched for other possibly suitable studies.