



Research report

Self-harm in bipolar disorder: Findings from a prospective clinical database



Caroline Clements^{a,*}, Steve Jones^b, Richard Morriss^c, Sarah Peters^d, Jayne Cooper^a, David While^a, Navneet Kapur^a

^a Centre for Mental Health and Risk, Institute of Brain, Behaviour and Mental Health, The University of Manchester, UK

^b Spectrum Centre for Mental Health Research, School of Health and Medicine, Lancaster University, UK

^c Department of Psychiatry and Community Mental Health, The University of Nottingham, UK

^d School of Psychological Sciences, The University of Manchester, UK

ARTICLE INFO

Article history:

Received 29 May 2014

Received in revised form

6 October 2014

Accepted 7 October 2014

Available online 23 October 2014

Keywords:

Self-harm

Suicidal behaviour

Bipolar disorder

ABSTRACT

Background: People with bipolar disorder may be at increased risk of suicidal behaviour but there are few prospective studies of self-harm in this group. Our aim was to describe the characteristics and outcome (in terms of repetition) for individuals with bipolar disorder who presented to hospital following self-harm.

Method: A nested case-control study was carried out using a large prospective self-harm database (1997–2010) in Manchester, UK. Characteristics of bipolar cases and non-bipolar controls were compared using conditional logistic regression, and outcomes were assessed via survival analyses.

Results: Bipolar cases ($n=103$) were more likely to repeat self-harm than controls ($n=515$); proportion with at least one repeat episode 58% vs. 25%, HR 3.08 (95% CI; 2.2–4.18). Previous self-harm, unemployment, contact with psychiatric services and sleep disturbance were all more common in cases than controls. Even after adjustment for known risk factors, the risk of repetition remained higher in the bipolar group (adjusted HR 1.68; 95% CI; 1.10–2.56).

Limitations: The study covers cases from hospital sites in Manchester, UK, and therefore only includes self-harm that was serious enough to present at hospital emergency departments.

Conclusion: People with bipolar disorder who self-harm have a higher risk of repetition than people who self-harm more generally. Adjusting for some known risk factors moderated, but did not abolish, this finding. Other factors, such as impulsivity, may also be important.

© 2014 Elsevier B.V. All rights reserved.

1. Introduction

People with bipolar disorder are known to be at increased risk of self-harm and suicide; up to 60% of people with bipolar disorder will self-harm at least once during their lifetime (Goodwin and Jamison, 2007; Baldessarini et al., 2006) with at least 5% of the bipolar population eventually dying by suicide (Nordentoft et al., 2011; Tondo et al., 2007). Studies have shown that previous self-harm is a particularly important risk factor for suicide in bipolar populations (Cassidy, 2011; Hawton et al., 2005; Rihmer, 2007), and approximately 60% of those who die by suicide have previously self-harmed (Oquendo et al., 2004; Clements et al., 2013). Given the high risk of

self-harm in bipolar disorder and the association with more dangerous methods in these patients (Simon et al., 2007), it is important that those most at risk can be identified early, and treated appropriately. Studies seeking to describe the characteristics of this high risk group could help to inform clinical practice as well as contributing to the research base on the prevention of suicidal behaviour in clinical populations. However, previous work has been subject to a number of methodological limitations; samples are often restricted to a single bipolar subtype, to small sample sizes, inpatient status, or geographical area (Hawton et al., 2005); retrospective patient self-report measures (Lopez et al., 2007); short follow-up times and lack of comparison groups (Goodwin and Jamison, 2007). These limitations have made it difficult to establish how bipolar patients differ from other people who have self-harmed (Hawton et al., 2005). The aims of this study were to describe the characteristics of people with bipolar disorder who self-harmed and to examine outcome in terms of repetition. We compared the

* Correspondence to: Centre for Mental Health and Risk, Jean McFarlane Building, The University of Manchester, Oxford Road, Manchester, M20 2UT, UK.
Tel.: +44 161 275 0735.

E-mail address: caroline.v.clements@manchester.ac.uk (C. Clements).

bipolar sample to a matched sample of non-bipolar controls using data from a large prospective database of hospital attendances for self-harm.

2. Method

2.1. The Manchester Self-Harm Project

The analyses used data from the Manchester Self-Harm (MaSH) Project (further information is available at: <http://www.bbmh.manchester.ac.uk/cmhr/research/centreforsuicideprevention/MaSH>). The project is a collaboration, between the University of Manchester, local mental health service providers, and the general hospitals that serve the population of the City of Manchester. Established monitoring methods are used to identify consecutive episodes of self-harm, presenting to the study hospitals. These include detailed searches of emergency department (ED) computer systems, using inclusive search terms (e.g. 'neck injury', 'psychiatric', 'left department'), in order to maximise capture of possible episodes of self-harm.

The nomenclature used in research on suicidal behaviour and self-harm varies between countries, research studies, and over time, and has been widely discussed within the literature (Silverman et al., 2007a, 2007b; Skegg, 2005). In this study we used the same definition of self-harm as the MaSH project ('any intentional self-poisoning or self-injury, irrespective of motivation,' Hawton et al., 2003). Motivations for acts of self-harm can be multiple, fluctuating, and difficult to identify even for the patient and reliably differentiating between those with or without suicidal intent can be problematic (Kapur et al., 2013a). Suicidal intent can change over time, even within the same self-harm episode and people who self-harm with apparently low intent are still at increased risk of repeat self-harm and suicide in the future (Kapur et al., 2013a). We therefore included all types of self-harm, regardless of whether the patient intended to die or not, or medical seriousness. This is also in line with the definition used by the National Institute for Health and Care Excellence (NICE) in clinical guidance on the management of self-harm in the UK (NICE, 2004, 2011).

Sociodemographic data (age, sex, postcode and ethnicity) and details on method of self-harm are collected from ED notes, for all episodes, by research clerks. Detailed clinical information is then collected for patients who were assessed by mental health specialists and/or by ED doctors (including previous self-harm, drug or alcohol misuse, past psychiatric treatment, current mental state assessment, a risk assessment and clinical follow-up arrangements), as well as precipitating factors and circumstances of the act.

Case ascertainment is essentially complete. Our data covered all self-harm presentations between September 1997 and December 2010. Levels of data completeness for individual variables are also high (Kapur et al., 2013b). Although the MaSH database records each presentation separately, each episode is linked to an identification number, which represents individual patients, and makes it possible to identify those who present repeatedly.

2.2. The nested case-control sample

The MaSH database is suited to a nested case-control design, as it represents a well defined source population (of those in the Manchester area who attend hospital following self-harm), of known size, where cases and controls can be selected from a matched and relevant risk set. This method makes optimal use of the data available, for what is a relative rarely recorded event (e.g. self-harm by people with a diagnosis of bipolar disorder).

Bipolar cases were any individual with bipolar disorder recorded in the diagnosis field of the MaSH database. Diagnosis is generated by the assessing clinician, based on current mental state, and/or the patient's medical records. This information is then extracted from these paper assessments and electronic records and entered onto the MaSH database into broad diagnostic categories. The coding for a diagnosis of bipolar disorder on the MaSH database does not therefore distinguish between bipolar subtypes (e.g. bipolar I, bipolar II, rapid cycling etc.), and all diagnoses of bipolar disorder are included together in the analyses. Individuals with any conflicting diagnosis recorded in any other presentations were excluded from the bipolar group (i.e. three individuals were excluded at this point due to a conflicting diagnosis of schizophrenia). Cases and controls were matched only on date of self-harm. Inclusion of all demographic and clinical variables was considered important in order to identify all systematic differences between bipolar and non-bipolar self-harmers. Where there were less than five controls available for a particular date, controls were selected from the following day, and so on, until there were a total of five controls for each case. Matching by date also reduces the impact of any time critical factors that could influence results (e.g. changes in diagnostic criteria, treatment, or assessment protocols). It is common to use multiple controls for each case in nested methodologies, in order to optimise statistical power (Goldstein and Zhang, 2009). In this study we used five controls for each case and power calculations indicated this would give 99% power to detect a 30% difference at a 0.05 level of significance.

2.3. Ethics statement

Systematic monitoring of self-harm in Manchester is conducted as part of the local NHS clinical audit programme. It is fully compliant with the UK Data Protection Act 1998. The MaSH Project's use of patient identifiable information without individual patient's consent was supported under the Section 251 of the NHS Act 2006 and approved by the National Information Governance Board for Health and Social Care. The local NHS research ethics committee ratified the project as an audit.

2.4. Analysis

All statistical analyses were conducted using Stata/IC 12.1 (StataCorp LP, USA).

2.4.1. Characteristics of self-harm in bipolar disorder

Simple descriptive statistics were used to describe the demographic and clinical characteristics of cases and controls. For proportions, the denominator was the number of valid responses for that item, 'unknown' responses were removed from each analysis.

Variables were examined individually, in a series of univariate conditional logistic regressions, controlling for age and gender (an examination of the distribution of the age variable indicated it was not normally distributed; therefore, age groups were used instead of a continuous age variable). All variables that were significant (at a p value of ≤ 0.05) from the initial analyses were entered simultaneously into a multivariate conditional logistic regression, to investigate important discriminators between cases and control.

2.4.2. Repetition of self-harm

The MaSH database allows repeat presentations to be linked to an individual patient, thereby providing a robust outcome measure of repeat self-harm, over a variable follow-up period. To make full use of these data we carried out survival analyses. First, the number of

Download English Version:

<https://daneshyari.com/en/article/6231853>

Download Persian Version:

<https://daneshyari.com/article/6231853>

[Daneshyari.com](https://daneshyari.com)