Journal of Affective Disorders 152-154 (2014) 155–161

Contents lists available at ScienceDirect

Journal of Affective Disorders

journal homepage: www.elsevier.com/locate/jad

Research report

A comparison of vulnerability factors in patients with persistent and remitting lifetime symptom course of depression

Thorsten Barnhofer [a,b,*], Kate Brennan [a], Catherine Crane [a], Danielle Duggan [a], J. Mark G. Williams [a]

[a] University of Oxford, Oxford Mindfulness Centre, Warneford Hospital, Oxford, OX3 7JX, UK
[b] Freie Universitaet Berlin, Dahlem Institute for Neuroimaging of Emotions, 14195 Berlin, Germany

ARTICLE INFO

Article history:
Received 27 June 2013
Received in revised form
2 September 2013
Accepted 2 September 2013
Available online 20 September 2013

Keywords:
Depression
Lifetime course
Chronicity
Experiential avoidance
Childhood adversity

ABSTRACT

Background: Research has suggested fundamental differences between patients with persistent and those with remitting courses of depression. This study investigated whether patients with different lifetime symptom course configurations differ in early risk and cognitive vulnerability factors.
Methods: Patients with at least three previous episodes who were currently in remission were categorized based on visual timelines of their lifetime symptom course and compared with regard to a number of different indicators of vulnerability including questionnaire measures of childhood trauma and experiential avoidance.
Results: Of the $N=127$ patients, $n=47$ showed a persistent course of the disorder with unstable remissions and symptoms most of the time, and $n=59$ showed a course with more stable, lasting remissions. Group comparisons indicated that patients with a more persistent course were significantly more likely to have suffered from childhood emotional abuse, and reported higher levels of experiential avoidance as well as related core beliefs. Experiential avoidance partially mediated the effect of childhood emotional abuse on persistence of symptoms.
Limitations: The study is cross-sectional and does not allow conclusions with regard to whether differentiating variables are causally related to chronicity. Self-report measures may be subject to reporting biases.
Conclusions: The results highlight the detrimental effects of childhood adversity and suggest that experiential avoidance may play an important role in mediating such effects.

1. Introduction

In many patients, depression takes a protracted course, in which symptoms persist or frequently recur, with the most common course characterized by fluctuation between symptoms on levels of full episodes or residual symptoms and times of relative recovery (Judd and Akiskal, 2000; Kennedy et al., 2004). While classification systems differentiate a number of different configurations, it has been suggested that the course of depression may most parsimoniously be described on a continuum of chronicity that takes into account residual levels of symptoms and is relatively orthogonal to depression severity (Klein, 2008; Torpey and Klein, 2008). Consistent with this assumption research has demonstrated fundamental differences between patients with a more persistent course, in which remissions often remain unstable, and patients with a more episodic course, in which remissions are more stable and lasting. However, little is currently known about psychological mechanisms underlying this differentiation. The main aim of the current research was, therefore, to investigate differences in cognitive vulnerability factors between these two groups. Chronic or persistent forms of depression represent a considerable challenge for established treatments (Cuijpers et al., 2010), and knowing about such differences is an important prerequisite for the development of more effective treatments.

There are a number of findings that support the differentiation of patients with more chronic and episodic courses. Compared to those with an episodic course of depression, patients with a more chronic course of the disorder have been found to show higher familiality, are more likely to have suffered from childhood adversity, are characterized by higher levels of temperamental vulnerability, e.g. neuroticism and introversion, are more likely to have suffered from co-morbid anxiety, substance abuse, and personality disorders, in particular of the avoidant type. Furthermore, patients with a chronic course of the disorder are more likely to have

* Corresponding author at: University of Oxford, Oxford Mindfulness Centre, Warneford Hospital, Oxford OX3 7JX, UK. Tel.: +44 1865 613 141.
E-mail address: thorsten.barnhofer@psych.ox.ac.uk (T. Barnhofer).

0165-0327
http://dx.doi.org/10.1016/j.jad.2013.09.001

suffered from suicidality as part of their depression (for an overview see the meta-analysis by Hölzel et al., 2011). At the same time, research comparing different course configurations of chronic forms of depression, i.e. chronic depression, dysthymia, double depression, has found little differences in terms of demographic variables, symptom patterns, treatment response or family history (Klein et al., 2004; McCullough et al., 2003, 2000; Yang and Dunner, 2001). Comparing different definitions of chronicity, Mondimore et al. (2007) found that use of a broader definition in terms of ratings of the lifetime symptom course of the disorder, i.e. differentiating between patients who had suffered from symptoms most or all of the time versus those who had experienced lasting remissions, produced more pronounced differences in familiality than categorization based on DSM-IV criteria of chronic depression. The current study followed these findings by adopting a lifetime symptom perspective.

What are the cognitive factors that differentiate those who develop a more persistent course from those who achieve lasting remissions? Most of the factors listed above are either historical or relate to patients' current or past psychopathology, and few studies to date have investigated factors that might provide further information about cognitive mechanisms. This is surprising given the large body of cognitive research that has elucidated the role of depressive thinking in the maintenance of symptoms, both in terms of its content and process characteristics. On a content level, cognitive research has highlighted the role of enduring dysfunctional beliefs (Kovacs and Beck, 1978) and early maladaptive schemata (Young, 1995), with the latter assumed to represent a broader set of themes that have their origin in childhood. On a process level, research has demonstrated how maladaptive responses to negative mood such as rumination (Nolen-Hoeksema, 1991), suppression (Wenzlaff and Luxton, 2003), and experiential avoidance (Hayes et al., 1996) play an important role in maintaining negative mood with research on rumination also demonstrating effects on length of depressive episodes (Nolen-Hoeksema, 2000). Rumination undermines active attempts at problem-solving, reinforces negative biases and dysfunctional attitudes, and, in line with the idea that the above processes can be considered facets of a more encompassing maladaptive mode of processing (Williams, 2008), has been suggested to serve an avoidant function (Nolen-Hoeksema et al., 2008). Furthermore, research shows that depressed patients tend to frame their experience and thoughts in abstract and general terms. Autobiographical memory overgenerality has been found to be related to history of childhood adversity and abuse, rumination, deficits in interpersonal problem solving, and has been demonstrated to be a significant predictor of time to recovery in those who are currently depressed (for an overview see Williams et al., 2007).

While these cognitive factors are clearly implicated in maintenance of negative mood, there are currently few studies that have investigated the extent to which these are distinguishing characteristics of patients with more or less persistent courses of depression. Riso et al. (2003) compared patients with chronic depression to patients with non-chronic Major Depression and found that, after controlling for current levels of depression, patients with chronic depression showed higher levels of maladaptive core beliefs relating to the themes of disconnection and rejection, impaired autonomy and overvigilance. However, there were no significant differences in ruminative tendencies, attributional style or dysfunctional attitudes, suggesting that chronically depressed patients may differ from others predominantly with regard to factors with a stronger developmental origin. In contrast, a more recent and larger study comparing patients with chronic and non-chronic depression categorized based on the course of the disorder during the last five years (Wiersma et al., 2011) found that chronically depressed patients reported significantly stronger tendencies to respond with ruminative thinking during times when they are feeling low. Additionally, chronically depressed patients showed lower levels of extraversion and higher external locus of control.

One of the reasons for these inconsistencies might have been that these studies investigated patients who were currently suffering from high levels of symptoms. Rumination, memory overgenerality, dysfunctional attitudes and other cognitive vulnerability factors are all positively related to levels of symptoms and the resulting state-related elevation in maladaptive cognitive characteristics may have obscured more lasting differences that may become visible when comparing groups with lower levels of symptoms. A second reason for uncertain results is the use of relatively short timelines to judge the pattern of chronicity.

The current study differed from previous research by testing patients at a time when they were in remission and differentiating them based on their lifetime symptom history. We assessed a sample of patients, recruited for a trial of Mindfulness-Based Cognitive Therapy for relapse prevention, who had a high risk of relapse and a prolonged history of depression, but were in recovery at entry into the trial and at the time of assessment. A previous trial of MBCT that followed participants with similar characteristics prospectively after they had received therapy had found that participants could be meaningfully divided into about equally large groups of patients with stable and unstable remission (Segal et al., 2010). We classified participants with regard to whether they showed a lifetime symptom course that was characterized by good and sustained remissions between episodes or a more persistent course of the disorder where remissions remained unstable, following the procedure developed by Mondimore et al. (2007). Our main aim was to see whether the two groups differed with regard to content and process characteristics of depressive thinking including overgeneral memory, ruminative tendencies, experiential avoidance, dysfunctional attitudes, and core beliefs related to suicidality. We also tested whether the two groups differed with regard to childhood adversity. Furthermore, given previous findings pointing towards developmental origins of cognitive differences, we were interested to explore whether there was evidence for effects of childhood adversity to be mediated through any of the cognitive factors assessed in our study.

2. Method

2.1. Participants

The current sample consisted of participants who were recruited to take part in the Oxford-arm of the Staying Well after Depression-Trial, a multi-center randomized-controlled trial of treatments aimed at reducing risk for relapse to depression. Participants were included in the study if they (a) had a history of three or more major depressive episodes according to DSM-IV-TR criteria in the past, two of which had to have occurred in the past five years and one in the past two years, (b) were currently in recovery, which was defined as not having experienced more than one symptom of depression for more than a week over the last eight weeks, (c) were not currently suffering from an eating disorder or an obsessive-compulsive disorder, had not suffered from bipolar disorder or schizophrenia, and were not having significant problems with substance dependence or substance abuse, (d) were not regularly self-harming, (e) were between 18 and 70 years of age, and (f) were fluent in spoken and written English. Individuals interested in the trial had either made contact with the research team on their own initiative after having heard or read about the study through media advertisements or had been referred through their GPs. First contacts occurred on the phone where potential participants were screened for main inclusion and exclusion criteria. Those who seemed eligible