Journal of Affective Disorders 198 (2016) 230–236

Contents lists available at ScienceDirect

Journal of Affective Disorders

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

Review article

Similarities between emotional dysregulation in adults suffering from ADHD and bipolar patients

Hélène Richard-Lepouriel [a,*], Bruno Etain [d,e,f,g], Roland Hasler [a], Frank Bellivier [g,h,i], Sébastien Gard [g,j], Jean-Pierre Kahn [g,k], Paco Prada [a], Rosetta Nicastro [a], Stefano Ardu [b], Alexandre Dayer [a,c], Marion Leboyer [d,e,f,g], Jean-Michel Aubry [a,c], Nader Perroud [a,c], Chantal Henry [d,e,f,l]

[a] Service of psychiatric specialties, Department of mental Health and Psychiatry, University Hospitals of Geneva, Geneva, Switzerland
[b] Department of Cardiology and Endodontology, Treatment Plan Unit and Division of Operative Dentistry, Dental School, University of Geneva, Geneva, Switzerland
[c] Department of Psychiatry, University of Geneva, Geneva, Switzerland
[d] Inserm, U955, Equipe Psychiatrie Translationnelle, Créteil 94000, France
[e] Université Paris Est, Faculté de Médecine, Créteil 94000, France
[f] AP-HP, Hôpitaux Universitaires Henri Mondor, DHU Pepsy, Pôle de Psychiatrie et d'Addictologie, Créteil 94000, France
[g] Fondation Fondamental, Créteil 94000, France
[h] AP-HP, GH Saint-Louis - Lariboisière - Fernand Widal, Pôle Neurosciences, 75010 Paris, France
[i] Université Paris Diderot, UMR-S 1144, 75006 Paris, France
[j] Hôpital Charles Perrens, Service de psychiatrie adulte, Pôle 3-4-7, 33000 Bordeaux, France
[k] Service de Psychiatrie et Psychologie Clinique, CHU de Nancy, Hôpitaux de Brabois, Vandoeuvre Les Nancy 54500, France
[l] Institut Pasteur, Unité Perception et Mémoire, 75015 Paris, France

ARTICLE INFO

Article history:
Received 7 December 2015
Received in revised form
2 February 2016
Accepted 12 March 2016
Available online 15 March 2016

Keywords:
Psychiatry
ADHD
Mood disorders
Emotion
Affective lability
Affective intensity

ABSTRACT

Background: Emotional dysregulation in subjects with attention deficit and hyperactivity disorder (ADHD) is a topic of growing interest among clinicians and researchers. The present study aims at investigating components of emotional dysregulation in adults ADHD compared to subjects suffering from bipolar disorder (BD).

Methods: A total of 150 adults ADHD, 335 adults BD subjects and 48 controls were assessed using the Affective Lability Scale (ALS) and the Affect Intensity Measure (AIM), measuring respectively emotion lability and emotion responsiveness.

Results: ADHD and BD subjects scored significantly higher on the ALS compared to controls ($p=0.0001$). BD subjects scored above ADHD ones (3.07 (SD=0.66) *vs.* 2.30 (SD=0.68); $p<0.0001$). The average total scores achieved on the AIM were significantly different for the three groups ($p=0.0001$) with significantly higher scores for ADHD subjects compared to BD ones (3.74 (SD=0.59) *vs.* 3.56 (SD=0.69); $p<0.0001$).

Limitations: Suspected cases of ADHD in the BD and control groups were derived from the Wender Utah Rating Scale (WURS). This study is a retrospective one.

Conclusion: Our study thus highlights the importance of emotional dysregulation in adults suffering from ADHD, showing that they display higher emotional intensity than bipolar disorder subjects and controls. Although the current diagnostic criteria of ADHD do not contain an emotional dimension, a better recognition of the significance of emotional responsiveness in ADHD patients can improve the care afforded to these patients, beyond the inattentive and hyperactive/impulsive components.

Contents

* Corresponding author.
E-mail address: helene.richard-lepouriel@hcuge.ch (H. Richard-Lepouriel).

http://dx.doi.org/10.1016/j.jad.2016.03.047
0165-0327/

1. Introduction

Attention deficit hyperactivity disorder (ADHD) is a disabling neurodevelopmental disorder. It is estimated that 2.5–5% of the general adult population suffer from this disorder (Fayyad et al., 2007; Ginsberg et al., 2014; Kessler et al., 2006; Simon et al., 2009). The diagnosis is harder to establish for adults than it is with children since it shares numerous symptoms with other psychiatric pathologies (Ginsberg et al., 2014). Emotional dysregulation can be defined by excessive expression and experience of emotions with rapid and poorly controlled shift in emotions and abnormal allocation of attention to emotional stimuli. Emotional dysregulation is frequently encountered in ADHD patients (Robison et al., 2008) and is also common in other disorders such as bipolar disorder (BD) or borderline personality disorder (BPD). Furthermore, the emotional dysregulation, and other related dimensions such as impulsiveness, might explain the high rate of comorbidity between ADHD and these two disorders. Indeed, among patients suffering from BPD, approximately 16% also suffer from ADHD and more than 40% had ADHD symptoms during childhood (Philipsen et al., 2008). Additionally, approximately 20% of subjects suffering from BD also suffer from ADHD (Perroud et al., 2014; Wingo and Ghaemi, 2007). Some authors even suggested the existence of a common diathesis rendering subjects vulnerable to BD and ADHD (Baud et al., 2011).

Emotional dysregulation has been extensively studied among patients suffering from BD and is marked essentially by emotional hyper-responsiveness (Henry et al., 2012; Henry et al., 2008), poor recognition and acceptance of emotions and difficulties in adapting behaviours to experienced emotions (Van Rheenen et al., 2015). During manic or mixed episodes, patients show a very high degree emotional hyper-responsiveness. During depressive phases, two types of patients are identified: those who show emotional hypo-responsiveness and those who show emotional hyper-responsiveness; with the latter being probably more at risk of experiencing mixed episodes (Henry et al., 2012). This emotional dysregulation continues during euthymic phases and is related with an increase in the frequency of relapses (M'Bailara et al., 2009). Moreover, the severity of symptoms during manic, mixed or depressive episodes is correlated with the severity of the pre-existing emotional dysregulation during euthymic phases (Van Rheenen et al., 2015). Finally, patients with impulsiveness issues are more at risk of relapsing into an hypomanic or manic mode, whereas patients who lacks strategies to regulate their emotions are more at risk of relapsing into a depressive mode (Van Rheenen et al., 2015).

Concerning ADHD, clinicians and researchers are increasingly interested in the issue of emotional dysregulation (Shaw et al., 2014). Indeed, besides the two traditional domains of attention deficits and hyperactivity/impulsivity, more and more researchers support the view of a third dimension characterized by poor emotional regulation (Shaw et al., 2014).

Although several scales are available to measure emotional dysregulation, no consensus has been reached to define the best measurement to be used in research settings. However, as the Affective Lability Scale (ALS) (Harvey et al., 1989) and the Affect Intensity Measure (AIM) (Flett et al., 1988; Larsen and Diener, 1985, 1986; Mathieu et al., 2014) are the most commonly used scales to assess emotional dysregulation in borderline and in bipolar patients, diseases in which emotional dysregulation is particularly salient (Marwaha et al., 2014), we decided to choose these scales for our study to assess this dimension. Although these two scales examine different aspects of emotional dysregulation, responsiveness for the AIM and lability for the ALS, they are strongly correlated: the higher the lability, the higher the responsiveness, and inversely (Henry et al., 2008). For patients suffering from ADHD, emotional lability, as measured by the ALS, has only been studied by one group (Skirrow and Asherson, 2013; Skirrow et al., 2014), while the degree of emotional responsiveness measured by the AIM has never been examined (Marwaha et al., 2014). Our aim is therefore to assess emotional dysregulation among subjects suffering from ADHD, by comparison with subjects suffering from BD and control subjects, with a focus on two dimensions: emotional lability (ALS) and emotional responsiveness (AIM). Furthermore, we are also keen to test the internal validity of these two scales for ADHD sufferers.

2. Method

2.1. Participants

One hundred and fifty subjects suffering from ADHD were recruited in the Psychiatric Specialties Service of Geneva's University Hospitals (Switzerland), in an ambulatory unit specialized for adult ADHD that offers assessing and medical care. Patients are referred to this unit by general practitioners and private or hospital psychiatrists for diagnostic assessment and possibly care. Patients are assessed by psychiatrists specialized in adult ADHD according to the criteria of the DSM-IV-TR (American Psychiatric Association, 2000) and on collected clinical and anamnestic data. Anamnestic data refers to medical histories, family history, onset of the disorder and previous treatments usually collected during the interview with patient The patients also fill in self-reported questionnaires, the Adult ADHD Self-Report Scale (ASRS v1.1) (Adler et al., 2006; Kessler et al., 2005) and the Wender Utah ADHD Rating Scale (WURS) (Romo et al., 2010; Ward et al., 1993) and undergo structured clinical interviews, the Diagnostic Interview for ADHD in adults (DIVA 2.0) and the French version of the Diagnostic Interview for Genetic Studies (DIGS) (Nurnberger et al., 1994; Preisig et al., 1999). The DIVA 2.0 was used to ascertain the number of attentional and/or impulsive/hyperactive symptoms according to DSM-IV criteria and help in deciding whether or not