BORDERLINE PERSONALITY DISORDER AND REACTIVE ATTACHMENT DISORDER – A LITERATURE REVIEW

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ABSTRACT

This article is review of medical literature comparing different aspects of Borderline Personality Disorder (BPD) and Reactive Attachment Disorder (RAD). Both are complex diagnoses and need attention from the psychiatrist so that early intervention can take place. Empirically, the two disorders have a lot in common. We selected recent studies on specific topics to see whether the empirical answer has basis in medical literature.

Keywords: Borderline personality disorder, Reactive attachment disorder, Disinhibited social engagement disorder, attachment, trauma, neuroimaging, self-harm.

INTRODUCTION

Borderline personality disorder is one of the personality disorders included in the cluster B and consists of a pervasive pattern of instability regarding interpersonal relationships, self-image, affects as well as marked impulsivity, beginning by early adulthood [1]. Epidemiologically, studies from 2007 and 2008 estimated the prevalence of BPD at 1,6% in the general population and at 5,9% lifetime prevalence [2, 3]. Although many clinicians are reluctant to diagnose it before the age of 18, it is clear that patterns of behaviour are observable in adolescents. Screening for BPD is feasible and should take place for outpatient youth, thus helping psychiatrists in recognizing the disorder and treating it accordingly. The first criterion, according to the DSM-5 is the effort that the person makes in order to avoid real or imagined abandonment [1, 4].

So, does that mean that every person diagnosed with BPD has Reactive Attachment Disorder?

Disinhibited Attachment Disorder of Childhood (called Disinhibited Social Engagement Disorder or DSED in the DSM-5), is a specific type of RAD considered as a Disorder of Social Functioning, according to the ICD10. This diagnosis requires a failure to show selective social attachments, while social interactions with unfamiliar people are poorly modulated [5]. Unfortunately, there is very little data in the current literature regarding the prevalence and incidence of RAD and DSED, more studies are needed so we can have a better understanding of the real number of children at risk.

Both BPD and RAD are disorders that include a disorganized pattern of attachment in early childhood.

BORDERLINE PERSONALITY DISORDER AS A DISORDER OF ATTACHMENT

Early life maltreatment and neglect can be predictors for psychiatric problems in

the general population [6]. Secure attachment ensures that the future adult turns to healthy relationships, learns how to trust and has a better sense of self-esteem. In contrast, according to Bowlby and Ainsworth, the other three form of attachment are: Ambivalent, Avoidant and Disorganized [7].

When the primary caregiver shows interest in the child's mental state and provides a secure environment where exploration and curiosity are encouraged, we can expect an emotionally healthy child and future adult. There is a great importance given to the concept of mentalizing, described by Bateman and Fonagy as the ability to understand mental states in self and others. On one hand when the caregiver contingently mirrors the child's emotional state, we can expect a coherent sense of the self being internalized; on the other hand, a failure in mirroring the emotional state can possibly conduct to a misinterpretation of the actions and intentions, this explaining core symptoms of BPD (such as instability in interpersonal relationships and irritability) [8, 9].

The emphasis put on the theory of attachment and the important role that the caregiver has in providing a nurturing environment and a secure base for emotional and stress regulation are relevant in the case of adolescents and young adults with BPD, emotional dysregulation being a key feature of the disorder.

Out of the three forms of undesirable types of attachment, disorganized attachment has been pointed at as being a contributing factor to the development of BPD [10].

In short, disorganized attachment is described as the lack of ensuring comfort from the caregiver when the child is under a stressful situation, the infant's behaviour being unsure or helpless towards said caregiver, prolonged freezing or stilling of the child can be expected in these situations [11].

According to Khoury et al. individuals with BPD were more likely to have disorganized interactions and attachment with their caregiver, in this case, the mother, compared to other diagnoses (such as anxiety, depression or substance abuse) or no diagnoses [12].

TRAUMA – A KEY FACTOR BETWEEN BPD AND RAD

A traumatic experience is defined by the 5th edition of the Diagnostic and Statistical Manual of Mental Disorders as follows: "exposure to actual or threatened death, serious injury, or sexual violence in one or more of the following ways: (1) Directly experiencing traumatic events, (2) witnessing, in person, the events as it occurred to others, (3) learning that the traumatic events occurred to a close family member or close friend, (4) experiencing repeated or extreme exposure to aversive details of the traumatic events [1]."

The implications of traumatic events have a major say in the outcome of the mental health of an individual.

When talking about BPD the etiology is a case of interaction between innate aspects of the individual (especially temperamental vulnerabilities) and biopsychosocial factors (such as traumatic events experienced by the individual as a child) [13].

According to Widom et al. traumatic experiences in early childhood are a major predictor for the development of BPD compared to controls. The most incriminated are, however, physical abuse and neglect, while child sexual abuse was not found to majorly increase the chance of developing BPD; another important observation that came out of the study was that growing up in lower income families is not a good predictor for the emergence of BPD.

All this being taken into consideration and, of course, given the appropriate importance to the exposure to adverse childhood events, the conclusion was that not all

individuals with BPD have been exposed to trauma in early childhood [14].

While traumatic experiences can take variable forms, neglect and maltreatment are important aspects of it. For no attachment relationship to form, the child needs to have extreme living conditions and environments [15].

Trauma is, without a doubt, the direct effect of pathogenic care. In the case of RAD, however, it is very hard to make a pure distinction between direct exposure to adverse life experiences and a lack of normal and healthy care; neglect rather than actual harmful behaviours from the caregiver conduct to the development of RAD. Of course, it's not a case of either/or, neglect and maltreatment are often simultaneous; PTSD and RAD can be, in this case, comorbid [16, 17].

SUICIDALITY AND SELF HARM IN BPD AND RAD

Self-harm or self-injury is described as an intentional injury produced on one's skin tissue, usually without the intent of committing suicide.

BPD is a very complex disorder, hard to manage and hard to treat, frequently associated with feelings of emptiness, that patients describe as "hard to be filled by something". Individuals with this disorder can associate self-harmful behaviours as a mean to adapt to the world they live in, a world they feel doesn't accept or understand them; a very descriptive way in which one of our patients in the clinic talks about self-harm is that the soul hurts so much, that the body needs to feel pain in order to cope with the feelings.

Self-harm is one of the core features of BPD, approximately 89% of them presenting these types of behaviours, while studies show that it appears in only 4% of the general population and 21% of the clinical population [18, 19].

It is considered to be a type of maladaptive behaviour and while it isn't present in all the individuals diagnosed with BPD, unfortunately, if present, it is associated with a negative prognostic. Patients with BPD and self-harm issues have a greater risk of suicidal ideation and suicide attempts. At the same time hospitalization in these cases is significant [20, 21].

RAD and DSED are challenging diagnoses, even for experienced health care professionals. Studies have shown that there can be tendency to misdiagnose these disorders by either under or over identification. This can be a serious issue because receiving the correct diagnoses usually means receiving the correct treatment and thus improving health in general and mental health especially [22, 23].

In a very recent study, it was observed that in the sample selected for the study, children with a larger number of symptoms of RAD had a greater chance of developing internalization issues, such as anxiety and depression, as well as greater odds for self-harm and suicidal thoughts. There is very little data about suicidality or self-harmful behaviours in children with DSED. In adolescents risk-taking behaviours can take the form of self-harm. Further research is needed to better understand maladaptive behaviours in children with stress related disorders such as RAD and DSED [24, 25].

NEUROIMAGING IN BPD AND RAD

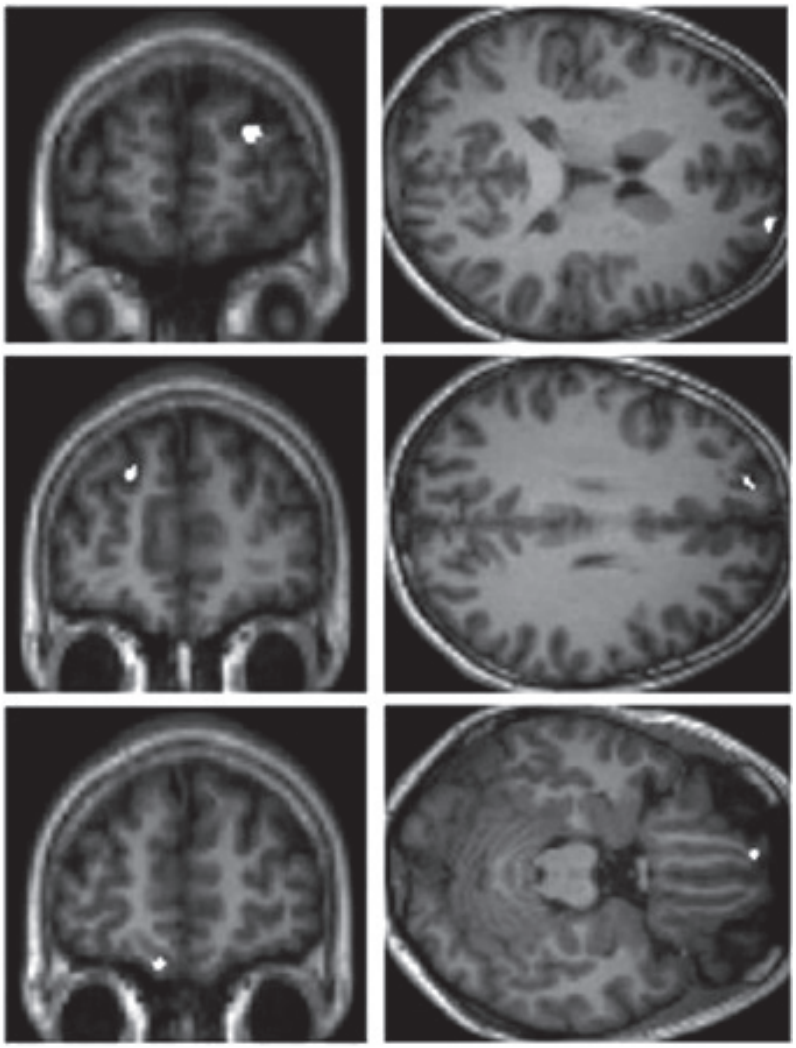
Regarding BPD, several neuroimaging studies have been made. The main alterations that were found, were regarding the limbic circuits and the frontal cortex. Impulsivity, emotional dysregulation are main traits of the disorder, traits that directly correlate with the brain regions that were found to be altered in these studies.

Magnetic resonance imaging found a 13% reduction of the amygdala and 11%

reduction of the hippocampus in BPD patients compared to controls. However, hippocampal volume differed between the right and left hemisphere. The important question is whether these findings can help aid in the differential diagnoses of BPD and if they can be used as imaging markers of the disorder. It is hard to give a simple answer, but the magnitude of the differences compared to controls seem to point in that direction. More importantly, performing MRIs on first degree relatives of individuals diagnosed with BPD, can point to at-risk patients from a genetic stand point [26].

Aggression and impulsivity in individuals diagnosed with BPD can also be explained by alterations of the cortex, more specifically in the dorsolateral prefrontal cortex (DLPFC) as well as the orbitofrontal cortex, with a decrease in the grey matter in the DLPFC [27].

Interestingly, literature suggests that different modified aspects of the brain can be associated with different stages of the disorder. While the reduction in hippocampal volume can be seen in the later stages of BPD and at the same time in patients that have been subjected to traumatic or adverse life events, alterations of the anatomy in the orbitofrontal cortex and DLPFC can be associated with early stages of the disorder [27-29].



Brunner et al: Gray matter volume reductions in patients with borderline personality disorder relative to healthy control subjects. Volume differences were found in the dorsolateral prefrontal regions bilaterally and in the left orbitofrontal regions [27].

As previously stated, exposure to adverse life events or maltreatment in early childhood can be predictors for future psychopathologies, including RAD. Are the brain's structural abnormalities resulted in maltreatment responsible for the development of RAD?

One Magnetic Resonance Imaging study found a reduced grey matter volume in the left primary visual cortex in children and adolescents diagnosed with RAD, compared to controls. Even more, this was correlated with internalizing issues, but not with other psychiatric symptoms or cognitive abilities. Exposure to adverse life events can intervene in the development of the primary visual system, more specifically in a reduced size of the visual cortex size, observed in individuals diagnosed with RAD. The study suggests that the reduction of grey matter volume in the left visual cortex can be related to the malfunctioning in a neurocircuit responsible for regulating positive emotional images (such as smiling faces), thus explaining a reduced or even an absence of positive emotions being expressed by the child in interaction with the caregiver [30].

It was observed that different types of maltreatment can affect the affect the hippocampus and the amygdala in different ways. Exposure to a single type of maltreatment can be related to a reduction of grey matter volume in the limbic system. This alteration is not observed in children that have been exposed to multiple or complex forms of maltreatment [31].

A failure in regulating negative emotions in the case of children diagnosed with RAD can be explained by the way in which the white matter is developed in children exposed to adverse life events. These events alter the myelination of white matter tracts in children with RAD, compared to typically developed groups [32].

CONCLUSIONS

Both BPD and RAD are complex diagnoses and have multiple repercussions on the mental and emotional wellbeing of an individual.

Empirically, we know that there are similarities between the two diagnoses. A disorganized and unsecure attachment formed in the early years of the individual, characterizes both BPD and RAD. Traumatic experiences can be predictors for the disorders, however there are some differences. While direct trauma can be an indicator for the emergence of BPD, in the case of RAD pathological care, more than abuse can be a predictor for the development of the illness.

Self-harm behaviours are frequent among individuals with BPD. Aggressive thoughts toward oneself can characterize DSED, but more studies are needed in this regard to better understand and prevent these types of maladaptive behaviours.

Neuroimaging can help better understand some of the symptoms of the disorders, but there is a discussion to take place whether it can be an actual marker of the diagnoses. It could be more helpful to conduct MRI studies to direct relatives that can be at risk for developing the illnesses.

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