Gender Variations and Symptom Expression in Reactive Attachment Disorder

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Abstract
Reactive Attachment Disorder (RAD) is characterized by relational deficits that arise during the formative period and generally attributed to the presence of ‘pathogenic’ care [1]. ‘Pathogenic’ care may encompass primary caregiver maltreatment and/or neglect as well as children raised under the guidance of institutional care. As a mental health illness that can be diagnosed during infancy, early recognition and therapeutic management may prevent progression and/or affect severity of disease; RAD manifestations are observed before the age of 5 [1,2]. Theoretically, intervention programs that are aimed at addressing RAD symptomatology should be based on the premise of the attachment theory framework. Due to the presence of overlapping features found in RAD, ADHD and autism, clinicians are at risk of conflating and/or misdiagnosing these conditions. Thus, it is of prime importance to recognize gender variations in order to adequately delineate RAD from superficially similar conditions. If psychiatric clinicians were to integrate a gender-centric diagnostic approach to RAD assessment, a streamlined, personalized intervention program may be designed in accordance with the patient’s overall symptom profile.

The DSM IV recognizes two distinct variants of RAD expression, namely:

a) Inhibited Behavior: the child abstains from forming relationships or attachments with anyone. This subtype of RAD is often found in children that are vulnerable to maltreatment and/or neglect [3].

b) Disinhibited Behavior: the child seeks the company of any neighboring individual regardless of the level of familiarity. RAD children that are predisposed to this subtype are often placed under the care of a multitude of individuals and may be exposed to a number of contextual disturbances: placement instability, disordered sleep hygiene and dysfunctional peer interactions. Institution children may be predisposed to disinhibited behavior therefore experiencing anxiety, dependence and behavioral dysfunction [3,16].

The prevalence of RAD in institutionalized children has been observed to be out of proportion with the general population. It should be noted that roughly 50% of adopted children from U.S orphanages have exhibited the characteristic symptoms of RAD. Furthermore, when we take into consideration the fact that 40% of children placed in the foster care system also express RAD symptoms, these numbers are a potential cause for alarm and should be addressed, accordingly [17]. As a vulnerable subset of the pediatric patient population, institutional reforms will need to be implemented on a national level [17]. Psychiatrists and other mental health practitioners may expedite the therapeutic process by improving upon diagnostic assessments of RAD based on observable gender differences.

The ICD-10 distinguishes RAD as two discrete disorders and not simply as variants. DSM-5 appears to be following suit and will be re-categorizing the disinhibited behavior subtype as "Disinhibited Social Engagement Disorder". Moreover, if clinicians were to formally recognize and address symptomatology along gender lines, early diagnosis and management may be readily available. A brief literature search yields a number of studies that reveal relevant variations in the presentation of RAD between male and female patients. The authors of this paper are proposing that DSM-5’s recent acknowledgement of Disinhibited Behavior as a discrete diagnostic entity (Disinhibited Social Engagement Disorder) will be instrumental in orienting clinicians in identifying cases of RAD that may have been otherwise overlooked, ultimately leading to a more streamlined assessment and therapeutic management plan. However, in light of these diagnostic changes, it would be prudent for clinicians to further explore gender discrepancies in RAD symptom expression in order to differentiate RAD from similar disorders (e.g. attention deficit hyperactivity disorder, autism, disruptive disorder nos, etc.). Overall, awareness of the complexities in RAD gender expression will allow for greater clinical precision as well as the potential for individualized treatment modalities.

Objective
Reactive Attachment Disorder (RAD) is a poorly understood psychiatric entity that is oft confused with pervasive developmental disorders (e.g. autism) and attention deficit hyperactivity disorder (ADHD). Our goal is to raise awareness for the diagnosis of RAD and to highlight key gender variations with respect to RAD symptomatology. From a clinical perspective, it is of considerable importance to discern the attributes of RAD from autism and ADHD, especially since these conditions may initially appear to have overlapping features.

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Methods

A literature search via PubMed and Google on the topics of Reactive Attachment Disorder and gender variations has been performed.

Discussion

Although, there are numerous overlapping features that exist between RAD, ADHD and autism, the underlying etiology and overall response to therapy are actually quite different. Gender disparities in RAD expression may initially confound clinicians.

Exploring RAD with ADHD-like attributes

A presumable environmental basis is said to be responsible for the development of attachment disturbances. However, a group of researchers decided to test this common notion by applying factor analysis as well as statistical modeling techniques on 13,472 twins. The results are intriguing for demonstrating a pronounced genetic component for the male gender [4]. Interestingly enough, ADHD is known for having a strong genetic basis and numerous studies have also demonstrated the existence of gender disparities in RAD expression; boys with RAD exhibited a greater frequency of ADHD-like behaviors. It is conceivable that a shared pathway may encompass ADHD and RAD symptomatology in the male gender. In a study involving 38 children from both institutional and foster care settings, researchers aimed to observe and assess the effect of particular rearing contexts on developing symptomatology. The study affirmed the existing literature regarding the susceptibility of institutional children with respect to ‘disinhibited’ type RAD. Moreover, symptom expression for boys was notable for marked features of ADHD, namely, inattentiveness and hyperactivity [5]. Relational deficits that exist between the primary caregiver and the child may also account for symptom expression in the form of reactive attachment disorder. The authors of a literature review reported the presence of inattentiveness, impulsiveness and hyperactive features in children formally diagnosed with RAD. It has been proposed that a wholly distinct neuropsychiatric mechanism may be responsible for the presence of ADHD-like attributes in RAD children. As stated earlier, RAD expression in the male gender may partly be due to the presence of a unique etiological basis. The authors suggest that RAD patients should be evaluated and treated based on a non-categorical system [6]. Previous research has maintained that select genes are responsible for increased risk of developing ADHD. As far as sexual dimorphism is concerned, it has been suspected that COMT and SLC6A4 variants exert an influential effect on ADHD phenotypes in males [10,13]. However, it should be noted, whereas RAD with coexisting ADHD features is associated with inattentiveness in males and conduct issues in females, ADHD, in and of itself, appears to be associated with inattentiveness in females but disruptive behavior in males. Discrepancies in observations may be accounted for by the overwhelming presence of environmental factors (i.e. rearing context) in RAD individuals as opposed to their ADHD counterparts. The impact of gene-environmental interplay should also be acknowledged for RAD individuals [10]. Environmental factors may include prenatal stress, maternal smoking, stress and/or underlying psychopathology, as well as nutritional status [13]. A shared contextual milieu may provide a plausible framework for the development of RAD with ADHD-like attributes.

Exploring RAD with autistic attributes

The authors of an article presented 3 cases involving children that exhibited behavioral dysfunction that resembled autism. It has been suggested that these children could be labeled as having “attachment disorder with autistic withdrawal” [7]. As a means to differentiate RAD from autism, especially with respect to prosocial engagement, the authors of a study suggested raising the quality of diagnostic modalities beyond the level of structured interviews [14]. A number of assessment techniques have demonstrated that individuals with RAD display marked advancements in language and/or cognitive scores than individuals that are exclusively autistic subsequent to education-based programs [8]. Furthermore, RAD individuals tend to respond more readily to therapeutic interventions [7,8]. However, it is worth noting that there exists research that also reported the presence of impaired language and concomitant cognitive deficits in institution based RAD children [15]. Perhaps, inherent issues pertaining to institutional care and/or the existence of RAD comorbidities (e.g. depression) were relevant factors that produced the disturbed cognitive effects in the samples. In conjunction with the aforementioned autistic behavior, adopted females with RAD have been observed to displace aggression towards people and inanimate objects; RAD females exhibited malicious intent and engaged in breaking rules of convention [9]. Although autism occurs four times more often in males than in females, RAD with autistic attributes seem to be found in the female gender. The CNTNAP2 gene, in particular, appears to be associated with an increased risk of autism. CNTNAP2 also seems to portend language dysfunction that is characteristic of autism spectrum disorder (ASD), rendering it as an improbable epigenetic factor for RAD symptom expression in females [11]. Additionally, autism is associated with MET promoter variant rs1858830; diminished MET expression confers a 2-fold overall susceptibility to ASD [12]. In order to investigate the etiological basis for RAD development, systematic studies in epigenetics will need to be undertaken. The aforementioned genes may provide a valuable starting point for further research.

Conclusions

Reactive Attachment Disorder (RAD) is often confused with ADHD and autism as well as learning disorders. Perhaps, it may be prudent to treat RAD children on a case-by-case basis, with individualized treatment plans based on a dimensional model. Alternatively, a categorical shift by DSM-5 may allow for a more focused approach to clinical management. Furthermore, clinical awareness of gender disparities with respect to RAD expression may facilitate the overall therapeutic process. A controversial form of attachment therapy is currently available, but critics maintain that it fails to adhere to the principles of attachment theory. Future investigations should evaluate evidence based therapeutic models in light of DSM-5’s recent recognition of “Disinhibited Social Engagement Disorder” as a distinctive entity relative to RAD. DSM-5’s newfound recognition of “Disinhibited Social Engagement Disorder” as a discrete disorder will only serve to increase our overall awareness and understanding of the underlying pathophysiology as well as envisioning RAD as a homogenous phenotype. This in turn will lead to early diagnosis and expedited clinical management.

References


