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Possible Overestimation of Comorbid Oppositional Defiant Disorder in Autism Spectrum Disorder

Annio Posar[1,2], Paola Visconti[1]

[1]IRCCS Istituto delle Scienze Neurologiche di Bologna, UOSI Disturbi dello Spettro Autistico, Bologna, Italy
[2]Department of Biomedical and Neuromotor Sciences, University of Bologna, Bologna, Italy

According to the *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (*DSM-5*), oppositional defiant disorder (ODD) has been included in the chapter named "Disruptive, Impulse-Control, and Conduct Disorders." The *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition criteria for ODD consist of an usually early-onset (during preschool age), persisting angry and irritable mood (e.g., easily annoyed, often angry), with frequent argumentative and defiant behaviors (e.g., often argues with adults, refuses to comply with rules), or vindictiveness, shown during interaction not only with a sibling. Oppositional defiant disorder leads to distress in the same affected individual or in other persons in his/her social context (e.g., parents), impacting negatively on educational and social functioning. The estimate of ODD average prevalence is around 3.3%, although the data in this regard are rather conflicting.[1]

Oppositional defiant disorder is one of the many neuropsychiatric comorbidities reported in individuals with autism spectrum disorder (ASD), along with intellectual disability, attention-deficit/hyperactivity disorder (ADHD), anxiety disorders, and depressive disorders.[2,3] Depending on the studies available in the literature, the recurrence of ODD reported in children and adolescents with ASD varies greatly from approximately 7% to 75%, most likely due to the different methodologies used. However, according to most studies, it is higher than 20%.[2,4-7] Given this very frequent comorbidity, a question based on clinical experience with individuals with ASD arises: when the symptoms that characterize ODD are present in a child with ASD, do they always constitute a real comorbidity or, at least in some cases, are they part of the same autistic symptomatology? Indeed, the symptoms that characterize ODD could at least partly find an explanation in the context of the complex clinical picture presented by individuals with ASD. For example, when a child with ASD perceives very unpleasant sensations (e.g., in a crowded and noisy environment or when faced with highly disturbing visual stimuli) due to his/her own sensory abnormalities (so frequent in these patients),[3,8] he/she may present intense and stubborn manifestations of rejection toward the situation experienced, associated with apparently inexplicable reactions of anger toward the persons around him/her. These symptoms can mimic the clinical picture of ODD, particularly in younger children who are unable to communicate verbally. But in these cases, the symptoms that mimic ODD are the direct consequence of the "core" symptoms of autism, and making a diagnosis of comorbid ODD would be very questionable. At the same time, many of the symptoms of ODD could be due to an impairment of language comprehension, which is very frequent in ASD, leading to the failure of these children to follow directions as well as to their outbursts of anger due to difficulties in understanding the verbal messages of others. Even the possible comorbid presence of an intellectual disability in a child with ASD (reported in around 38% of cases according to the most recent literature data),[9] particularly when it is severe or profound, can mimic some symptoms of ODD, mainly due to the verbal and non-verbal communication deficits present in these children, leading to the inability to understand the messages of others and at the same time to express one's own messages to them. Furthermore, ADHD, which as mentioned above constitutes a well-known and frequent neuropsychiatric comorbidity in ASD, presents some symptoms that can be confused with ODD, particularly the failure to comply with others' requests; to complicate matters,

Corresponding author:
Annio Posar
✉ annio.posar@unibo.it
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ADHD and ODD are often described as comorbid with each other. Finally, another possible neuropsychiatric comorbidity in ASD is depressive disorder, which often involves negative affect as well as irritability, thus mimicking the clinical picture of ODD. Consequently, also in these cases, the diagnosis of comorbid ODD in ASD should not be made.[1]

The considerations made above, therefore, cast doubt on the fact of the high recurrence of ODD in children with ASD and suggest that the frequency of this comorbidity should probably be scaled back. All this has implications that are not simply of academic value, but may have relevant repercussions regarding the treatment. In fact, it is one thing to treat 2 or more pathological conditions that are considered simultaneously present in one child (see the concept of comorbidity); another thing is to find a common understanding of the various behaviors of the individual and try to influence them. Formulating a diagnosis of comorbid ODD in children with ASD based on interviews or inventories administered to parents or teachers, as often happens in literature studies, without analyzing each individual case in detail and trying to understand what is at the basis of the child's behavior, risks leading to an overestimation of this comorbidity in ASD. Finally, the above-mentioned could have an even broader value, not limited only to ODD, as it suggests caution in using in general the concept of comorbidity in a clinically complex and heterogeneous pathological condition such as ASD.[3,10] A global (so to speak, "holistic") approach to the child with ASD, which allows the various problems present to be addressed without keeping them separate, appears to be the most appropriate to meet the needs that this condition entails.

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REFERENCES

1. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 5th ed (DSM-5). Arlington, VA: American Psychiatric Publishing; 2013.
2. Salazar F, Baird G, Chandler S, et al. Co-occurring psychiatric disorders in preschool and elementary school-aged children with autism spectrum disorder. *J Autism Dev Disord*. 2015;45(8):2283-2294. [CrossRef]
3. Posar A, Visconti P. Autism spectrum disorder in 2023: a challenge still open. *Turk Arch Pediatr*. 2023;58(6):566-571. [CrossRef]
4. Leyfer OT, Folstein SE, Bacalman S, et al. Comorbid psychiatric disorders in children with autism: interview development and rates of disorders. *J Autism Dev Disord*. 2006;36(7):849-861. [CrossRef]
5. Gadow KD, Devincent CJ, Drabick DA. Oppositional defiant disorder as a clinical phenotype in children with autism spectrum disorder. *J Autism Dev Disord*. 2008;38(7):1302-1310. [CrossRef]
6. Simonoff E, Pickles A, Charman T, Chandler S, Loucas T, Baird G. Psychiatric disorders in children with autism spectrum disorders: prevalence, comorbidity, and associated factors in a population-derived sample. *J Am Acad Child Adolesc Psychiatry*. 2008;47(8):921-929. [CrossRef]
7. Witwer AN, Lecavalier L, Norris M. Reliability and validity of the children's interview for psychiatric syndromes--parent version in autism spectrum disorders. *J Autism Dev Disord*. 2012;42(9):1949-1958. [CrossRef]
8. Posar A, Visconti P. What underlies autism spectrum disorder? *Turk Arch Pediatr*. 2022;57(4):467-468. [CrossRef]
9. Maenner MJ, Warren Z, Williams AR, et al. Prevalence and characteristics of autism spectrum disorder among children aged 8 years - Autism and Developmental Disabilities Monitoring Network, 11 sites, United States, 2020. *MMWR Surveill Summ*. 2023;72(2):1-14. [CrossRef]
10. Posar A, Visconti P. Autism spectrum disorder and the Diagnostic and Statistical Manual of Mental Disorders-Fifth Edition (DSM-5): the experience of 10 years. *Turk Arch Pediatr*. 2023;58(6):658-659. [CrossRef]