



Youth Psychosis and the other Mental Illness: A Challenged Diagnosis

Marcos Altable^{1†}, Juan Moisés de la Serna², Emilio Díaz Moreno³, Adnan Srifi Hasnaoui⁴

Received date: 22-Dec-2022, Manuscript No. NPY-21-39853; **Editor assigned date:** 24-Dec-2022, PreQC No. NPY-21-39853(PQ); **Reviewed date:** 03-Jan-2022, QC No NPY-21-39853; **Revised date:** 14-Jan-2022, Manuscript No. NPY-21-39853(R); **Published date:** 21-Jan-2022, DOI: 10.37532/1758-2008.2022.12(1).618

ABSTRACT

Studies using standardized diagnostic interviews report particularly high comorbidity rates in children and adolescents with schizophrenia. However, the volume of symptoms other than those required to make the diagnosis of schizophrenia remains the subject of controversy. The question is to consider these symptoms as an additional diagnosis, or as associated characteristics. Be that as it may, the frequency of these symptoms highlights the problems of differential diagnosis encountered in early-onset schizophrenia, particularly during the initial phase of the disorder.

Keywords

schizophrenia, substance abuse, comorbidity, behavioral disorders, psychosis, child, adolescent

Introduction

Many studies raise the problem of possible kinship and the diagnostic limits between schizophrenia and autistic disorder. In the study by Asano and Ben-Meir, four of the schizophrenic children studied (23.5%) also had an associated diagnosis of pervasive developmental disorder [1-5]. Other studies also highlight the frequency of children who met the diagnostic criteria for autism before the onset of schizophrenia: 23% of cases in the study by Cantor [6] and 39% in the analysis by Watkins [7]. In the study by Alleghany-Rad, 35% of schizophrenic children studied had shown signs of Pervasive Developmental Disorder (PDD), including 13% with the complete criteria for autistic disorder [8].

Russell also found in 26% of children before the onset of schizophrenia, various symptoms, such as echolalia and motor stereotypies, usually observed in pervasive developmental disorders, without that these children nevertheless have all the criteria necessary for the diagnosis of autistic disorder [9]. It appears that a large number of schizophrenic children manifest early developmental delays and behavioral abnormalities that do not meet the strict diagnostic criteria for autistic disorder. Thus, Kalvin notes that while echolalia is found in 6% of schizophrenic children, 49% show a delay in psychomotor development, and 46% a delay in language [10]. However, other studies show that the risk of schizophrenia is no higher in children with a pervasive developmental disorder than in the general population [11,12]. Since schizophrenia appears to be a neurodevelopmental disorder, it may share

¹Department of Neurology, University Hospital Marqués de Valdecilla, Ceuta, Spain

²Department of Education, International University of La Rioja (UNIR), Madrid, Spain

³Department of Neuropsychology, Private Practice of Neuropsychology, HC Marbella, Ceuta, Spain

⁴Department of Psychiatry, Private Practice of Psychology, Health Center of INGESA, Ceuta, Spain

[†]Author for Correspondence: Marcos Altable, Department of Neurology, University Hospital Marqués de Valdecilla, Ceuta, Spain
email: maraltable@gmail.com

common signs and symptoms with autistic disorder, even if the current data clearly distinguishes the two disorders [13,14], multiple and complex developmental disorders. In the same way, several authors have identified a group of children with marked impairment in functioning in multiple areas (particularly on the cognitive and social levels) in whom the diagnosis of schizophrenia was often wrongly posed. All of these children have presented with delays or developmental problems in early childhood. All of them presented, to varying degrees, neuropsychological deficits affecting the visuo spatial domain, attention, impulse control, regulation of emotions, and language, in particular in its receptive aspect. All had significant social adjustment difficulties, but without presenting the qualitative changes in social interactions characteristic of pervasive developmental disorders. Clinically, one or more symptoms corresponding to various diagnostic categories, such as borderline or schizotypal personality disorders or conduct disorder, were generally found; however, they had not met all the required criteria.

Similarly, Attention Deficit Hyperactivity Disorder (ADHD) was frequently found. Finally, all these children reported intermittent or subclinical psychotic symptoms: hallucinatory experiences, excessive and age-inappropriate fantasies, and mood instability [15-17]. In the absence of a precise diagnostic category for these children, Tobin proposed the term “multiple and complex developmental disorders” [18]. However, the question remains whether this clinical picture can be considered an autonomous diagnostic entity or whether it is only the early expression of a later evolution towards schizophrenia or other psychotic troubles [19]. Therapeutically, these children would not respond to antipsychotic treatment.

Mood disorders

Mood disturbances are usually reported in early-onset schizophrenia, with a frequency of about 27% to 83% [20-22]. Studies that have used standardized diagnostic interviews find mood disorders characterized by depressive type (depression, dysthymia) in children and adolescents with schizophrenia in 30% to 37% of cases, and in manic type in 4% of cases. Schizophrenia and affective psychoses share many common symptoms in children and adolescents, of atypical and psychotic nature [23,24]. All these data raise the problem of the diagnostic boundaries between schizophrenia, bipolar disorder, and schizoaffective disorder. They can also account for the fre-

quency of diagnostic errors observed at this age of life [25-28]. About 50% of adolescents with bipolar disorder are first diagnosed as schizophrenic [29]. Several elements can help in the differential diagnosis between schizophrenia and affective psychoses. Clinically, several studies show that in children and adolescents, the onset of disorders most often appears insidious in schizophrenia, while in bipolar disorder it is most often acute, marked by disturbances of not only more frequent but also more severe moods. Similarly, the duration of the psychotic episode appears longer in schizophrenia, and the post-critical status is significantly more altered [30,31]. The study of premorbid history may also have some diagnostic value. In general, the premorbid history of schizophrenic children and adolescents shows significantly higher disturbances (developmental delays and disorders, social withdrawal, deterioration in peer relationships) than in children and adolescents with bipolar disorder or a schizoaffective disorder [32,33]. Finally, the study of family history shows that a history of schizophrenia is significantly more frequently found in the first-degree parents of schizophrenic children and adolescents, while in the first-degree parents of children and adolescents with a disorder bipolar or schizoaffective disorder are more frequently observed with a history of mood disorders [34,35].

Non-psychotic emotional and behavioral disorders Several studies emphasize the frequency of emotional and behavioral disorders observed in schizophrenic children and adolescents, the most frequently found diagnoses including, in order of decreasing frequency, attention deficit hyperactivity disorder, the Oppositional Defiant Disorder (ODD), separation anxiety disorder, generalized anxiety disorder and simple phobias [36].

At the same time, numerous studies emphasize the frequency of apparently psychotic symptoms (hallucinations, relational instability, affective instability, disorganized behavior) found in children and adolescents with non-psychotic emotional and behavioral disorders, the latter possibly being wrongly diagnosed as schizophrenic [37-39]. Compared to schizophrenic children and adolescents, they have little or no negative symptoms, behavioral irregularities, and disturbances in the thought process [40]. Follow-up studies show that they tend to progress more towards non-psychotic personality disorders, in particular of the borderline or antisocial type [41]. Furthermore, psychotic symptoms are frequently reported in mistreated

children and adolescents, in particular in those with post-traumatic stress disorder [42]. Again, these children and adolescents can be misdiagnosed as schizophrenic, especially since a history of abuse is not uncommon in early-onset schizophrenia.

The psychotic symptoms reported in children and adolescents with post-traumatic stress disorder correspond to anxious and dissociative phenomena, including fears and intrusive thoughts as well as feelings of unreality or depersonalization [43].

Substance abuse

Numerous studies have highlighted the frequency of substance abuse found among schizophrenic adolescents, with comorbidity rates of up to 50%. They also show that it is not uncommon for substance abuse to be observed when first psychotic symptoms appear [44-46]. In these cases, the question may arise of a psychotic disorder induced by the substance or substances consumed. The persistence of symptoms after a sufficiently long period of abstinence (generally more than a week) should suggest the diagnosis of schizophrenia. However, it now seems demonstrated that substance abuse can precipitate the onset of schizophrenia in adolescents at risk, presenting in particular schizotypal personality characteristics or a family history of schizophrenia [47-51].

Medical conditions

Many medical conditions are likely to induce psychotic disorders: epilepsies, lesions of the central

nervous system (brain tumors, congenital malformations, traumatic brain injuries), neurodegenerative diseases, metabolic diseases and genetic abnormalities (endocrinopathies, Wilson disease), toxic encephalopathies, and infectious diseases (encephalitis, meningitis, infection with the human immunodeficiency virus). Some of these conditions may have an etiological role in the onset of schizophrenia, as is the case, for example, for bicycle-cardio-facial syndrome [52].

Conclusion

Studies using standardized diagnostic interviews report particularly high comorbidity rates in children and adolescents with schizophrenia. It appears that a large number of schizophrenic children manifest early developmental delays and behavioral abnormalities that do not meet the strict diagnostic criteria for autistic disorder. Lack of an accurate diagnostic category capable of accounting for these children's clinical picture, to bin proposed the term "multiple and complex developmental disorders". The premorbid history of schizophrenic children and adolescents shows significantly higher disturbances than in children and adolescents with bipolar disorder or a schizoaffective disorder. Compared to schizophrenic children and adolescents, they have little or no negative symptoms, behavioral irregularities, and disturbances in the thought process. The persistence of symptoms after a sufficiently long period of abstinence (generally more than a week) should suggest the diagnosis of schizophrenia.

References

1. Petty LK, Ornitz EM, Michelman JD, et al. Autistic children who become schizophrenic. *Arch. Gen. Psychiatry*. 41(2), 129-135 (1984).
2. Randal GR, Shari Heinlein, Hope Tregellas, et al. High rates of comorbidity are found in childhood-onset schizophrenia. *Schizophr. Res.* 88(1-3), 90-95 (2006).
3. Hollis C. Schizophrenia and allied disorders: In Rutter's child and adolescent psychiatry: Fifth Edition. *Wiley. Online. Library.* (2009).
4. McClellan J, Sandra S. Practice parameter for the assessment and treatment of children and adolescents with schizophrenia. *J. Am. Acad. Child. Adolesc. Psychiatry*. 52(9), 976-990 (2013).
5. Rosenbaum AJ, Ben-Meir S. Children with schizophrenia spectrum and depressive disorders: A comparative study of premorbid adjustment, onset pattern and severity of impairment. *J. Child. Psychol. Psychiatry* .29(4), 477-488 (1988).
6. Cantor S, Evans J, Pearce J, et al. Childhood schizophrenia: Present but not accounted for. *Am. J. Psychiatry*. 139(6), 758-762 (1982).
7. Watkins JM, RF Asarnow, PE Tanguay, et al. Symptom development in childhood onset schizophrenia. *J. Child. Psychol. Psychiatry*. 29(6), 865-878 (1988).
8. J Alagband-Rad, K McKenna, CT Gordon, et al. Childhood-onset schizophrenia: the severity of premorbid course. *J. Am. Acad. Child. Adolesc. Psychiatry*. 34(10), 1273-1283 (1995).
9. Russell AT, L Bott, C Sammons, et al. The phenomenology of Schizophrenia occurring in childhood. *J. Am. Acad. Child. Adolesc. Psychiatry*. 28(3), 399-407 (1989).
10. Kolvin I. Studies in the childhood

- psychoses. I. Diagnostic criteria and classification. *Br. J. Psychiatry.* 118(545), 381-384 (1971).
11. Burd L, Kerbeshian J. A North Dakota Prevalence Study of Schizophrenia Presenting in Childhood. *J. Am. Acad. Child. Adolesc. Psychiatry.* 26(3), 347-350 (1987).
 12. Volkmar FR, DJ Cohen. Comorbid association of autism and schizophrenia. *Am. J. Psychiatry.* 148(12), 1705-1707 (1991).
 13. Harris JC. Schizophrenia: A neurodevelopmental disorder. *Dev. Neuropsychol.* 2(8), 404-426 (1998).
 14. Sporn AL, Anjené MA, Nitin G, et al. Pervasive developmental disorder and childhood-onset schizophrenia: Comorbid disorder or a phenotypic variant of a very early onset illness? *Biol. Psychiatry.* 55(10), 989-994 (2004).
 15. Kumra S, LK Jacobsen, M Lenane, et al. Multidimensionally impaired disorder: Is it a variant of very early-onset schizophrenia? *J. Am. Acad. Child. Adolesc. Psychiatry.* 37(1), 91-99 (1998).
 16. McKenna K, CT Gordon, M Lenane, et al. Looking for childhood-onset schizophrenia: The first 71 cases screened. *J. Am. Acad. Child. Adolesc. Psychiatry.* 33(5), 636-644 (1994).
 17. Towbin KE, EM Dykens, GS Pearson, et al. Conceptualizing borderline syndrome of childhood and childhood schizophrenia as a developmental disorder. *J. Am. Acad. Child. Adolesc. Psychiatry.* 32(4), 775-782 (1993).
 18. Sprong M, Becker HE, Schothorst PF, et al. Pathways to psychosis: A comparison of the pervasive developmental disorder subtype multiple complex developmental disorder and the 'At Risk Mental State'. *Schizophr. Res.* 9(1), 38-47 (2008).
 19. Green WH, Campbell M, Hardesty AS, et al. A comparison of schizophrenic and autistic children. *J. Am. Acad. Child. Adolesc. Psychiatry.* 23(4), 399-409 (1984).
 20. Kydd RR, Werry JS. Schizophrenia in children under 16 years. *J. Autism. Dev. Disord.* 12(4), 343-357 (1982).
 21. Volkmar FR, Cohen DJ, Hoshino Y, et al. Phenomenology and classification of the childhood psychoses. *Psychol Med.* 18(1), 191-201 (1988).
 22. McClellan JM, Werry JS, Ham M. A follow-up study of early onset psychosis: Comparison between outcome diagnoses of schizophrenia, mood disorders, and personality disorders. *J. Autism. Dev. Disord.* 23(2), 243-262 (1993).
 23. Werry JS, McClellan JM, Chard L. Childhood and adolescent schizophrenic, bipolar and schizoaffective disorders: a clinical and outcome study. *J. Am. Acad. Child. Adolesc. Psychiatry.* 30(3), 457-465 (1991).
 24. Bailly D. Un diagnostic méconnu: la schizophrénie chez l'enfant. *Ann. Med. Psychol.* 161(5), 652-659 (2003).
 25. Calderoni D, Wudarsky M, Bhangoo R, et al. Differentiating childhood-onset schizophrenia from psychotic mood disorders. *J. Am. Acad. Child. Adolesc. Psychiatry.* 40(10), 1190-1196 (2001).
 26. Lofgren DP, Bemporad J, King J, et al. A prospective follow-up study of so-called borderline children. *Am. J. Psychiatry.* 148(11), 1541-1547 (1991).
 27. McClellan J, McCurry C. Early onset psychotic disorders: Diagnostic stability and clinical characteristics. *Eur. Child. Adolesc. Psychiatry.* 8(1), 13-19 (1999).
 28. Joyce PR. Age of onset in bipolar affective disorder and misdiagnosis as schizophrenia. *Psychol. Med.* 14(1), 145-149 (1984).
 29. Eisenberg L. The Natural History of Psychiatric Disorder in Children. *Psychol. Med.* 17(10), 784-786 (1987).
 30. Gochman P, Rachel M, Judith LR, et al. Childhood-onset schizophrenia: The challenge of diagnosis. *Curr. Psychiatry. Rep.* 13(5), 321-322 (2011).
 31. Hollis C. Child and adolescent (juvenile onset) schizophrenia. A case control study of premorbid developmental impairments. *Br. J. Psychiatry.* 166(4), 489-495 (1995).
 32. McClellan JM. Neurocognitive pathways in the development of schizophrenia. *Semin. Clin. Neuropsychiatry.* 3(5), 320-332 (1998).
 33. Erlenmeyer-Kimling L, Adamo UH, Rock D, et al. The New York high-risk project: Prevalence and comorbidity of axis I disorders in offspring of schizophrenic parents at 25-year follow-up. *Arch. Gen. Psychiatry.* 54(12), 1096-1102 (1997).
 34. John S W. Child and adolescent (early onset) schizophrenia: A review in light of DSM-III-R. *J. Autism. Dev. Disord.* 22(4), 601-624 (1992).
 35. Hafner H, Wan der heiden. Epidemiology of schizophrenia. *Can. J. Psychiatry.* 42(2), 139-151 (1997).
 36. Beccaro MAD, Burke P, McCauley E, et al. Hallucinations in children: A follow-up study. *J. Am. Acad. Child. Adolesc. Psychiatry.* 27(4), 462-465 (1988).
 37. Garralda ME. Hallucinations in children with conduct and emotional disorders: I the clinical phenomena. *Psychol. Med.* 14 (3), 589-596 (1984).
 38. Hornstein NL, Putnam FW, et al. Clinical phenomenology of child and adolescent dissociative disorders. *J. Am. Acad. Child. Adolesc. Psychiatry.* 31(6), 1077-1085 (1992).
 39. Garralda ME. Characteristics of the psychoses of late onset in children and adolescents (A comparative study of hallucinating children). *J. Adolesc.* 8(2), 195-207 (1985).
 40. Thomsen PH. Schizophrenia with childhood and adolescent onset: A nationwide register-based study. *Acta. Psychiatr. Scand.* 94(3), 187-193 (1996).
 41. Famularo R, Kinscherff R, Fenton T, et al. Psychiatric diagnoses of maltreated children: preliminary findings. *J. Am. Acad. Child. Adolesc. Psychiatry.* 31(5), 863-867 (1992).
 42. Altman H, Collins M, Mundy P, et al. Subclinical hallucinations and delusions in nonpsychotic adolescents.

- J. Child. Psychol. Psychiatry.* 38(4), 413-420 (1997).
43. Kutcher S, Kachur E, Marton P, et al. Substance abuse among adolescents with chronic mental illnesses: A pilot study of descriptive and differentiating features. *Can. J. Psychiatry.* 37(6), 428-431 (1992).
44. Pencer A, Addington J, Addington D, et al. Outcome of a first episode of psychosis in adolescence: A 2-year follow-up. *Psychiatry. Res.* 133(1), 35-43 (2005).
45. Shoval G, Gil Zalsman, Eitan Nahshoni, et al. The use of illicit substances in adolescent schizophrenia inpatients. *Int. J. Adolesc. Med. Health.* 18(4), 643-648 (2006).
46. McGuire PK, P Jones, I Harvey, et al. Morbid risk of schizophrenia for relatives of patients with cannabis-associated psychosis. *Schizophr. Res.* 15(3), 277-281 (1995).
47. Werry, Scott J, Aman, et al. Practitioner's guide to psychoactive drugs for children and adolescents. *Springer.* (1998).
48. Bailly D. Adolescence and schizophrenia. *Encephale.* (2009).
49. Stirling J, Barkus EJ, Nabosi L, et al. Cannabis-induced psychotic-like experiences are predicted by high schizotypy: Confirmation of preliminary results in a large cohort. *Psychopathology.* 41(6), 371-378 (2008).
50. Verdoux H, Tournier M, Cougnard A, et al. Impact of substance use on the onset and course of early psychosis. *Schizophr. Res.* 79(1), 69-75 (2005).
51. Murphy KC, Owen MJ, et al. Velo-cardio-facial syndrome: A model for understanding the genetics and pathogenesis of schizophrenia. *Br. J. Psychiatry.* 179, 397-402 (2001).
52. Usiskin SI, Nicolson R, Krasnewich DM, et al. Velocardiofacial syndrome in childhood-onset schizophrenia. *J. Am. Acad. Child. Adolesc. Psychiatry.* 38 (12), 1536-1543 (1999)