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Psychiatric syndromes comorbid with mental retardation: Differences in cognitive and adaptive skills

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Abstract

The study concerns the specific cognitive and adaptive skills of persons dually diagnosed with mental retardation (MR) and comorbid pathologies, as schizophrenia, personality and mood disorders, pervasive developmental disorders, epilepsy and ADHD. The sample was composed of 182 subjects, diagnosed as mild or moderate MR level, age range from 6 years 8 months to 50 years 2 months, mean age 17.1 (standard deviation 7.9). All the subjects were inpatients in a specialized structure for the diagnosis and the treatment of MR. The instruments of the study were Wechsler Intelligence Scale (WAIS-R or WISC-R according to the chronological age of subjects) and Vineland Adaptive Behavior Scale (VABS). Results confirm that comorbidity is a factor differentiating among mentally retarded subjects. Both verbal processes requiring memory retrieval and visuo-spatial processes are involved as differentiating features. ADHD strongly increases the impairment of cognitive skills, while behavioral disorders are less damaging in MR performance. In adult samples, the differentiating role of comorbid syndromes in MR individuals is reduced for cognitive skills, and limited to some basic verbal abilities, more impaired in mood disorder, less in schizophrenic disorder. The areas of adaptation and socialization, motor and daily living skills, are impaired more in generalized development disturbances than in comorbid schizophrenic and personality and mood disorders. An accurate psychological assessment of dual diagnoses is useful in detecting the specific underlying processes differentiating the comorbid syndromes, and in planning an appropriate rehabilitative treatment.

Keywords: Cognition; Adjustment; Pathological syndromes; Mental retardation; Comorbidity

1. Introduction

Comorbidity in mental retardation (MR) is an intriguing puzzle for researchers and professionals. From a theoretical point of view, it is of great relevance to know what comorbidity 'adds' to basic cognitive impairment, or what interaction happens between impaired cognitive development and behavioral disorders of attention, mood, personality, and thought processes. In the perspective of the practitioner, early and accurate differential diagnosis and intervention may have a profound impact on the quality of rehabilitative processes.

The comorbidity between MR and psychological pathology has been widely debated in the literature (Jacobson, 1990; Fletcher and Dosen, 1993; Matson and Barrett, 1993; Berrios, 1994; Rojahn and Tasse, 1996; Tonge and Bouras, 1999). Comorbidity is high in intellectually disabled adults (Moss and Glidden, 2001), children and adolescents (Gillberg et al., 1986; Dekker and Koot, 2003, for a review, Wallander et al., 2003). Overall, the international classification systems (e.g., ICD-10) and other studies (Masi, 1998; Szymanski and King, 1999; Rush et al., 2004) report that the prevalence of psychopathology in subjects with MR is nearly 4 times

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higher than that found in the general population. Confirming these epidemiological data, a recent review on the mental health status of people with MR (Kerker et al., 2004) pointed out that available evidence reveals inconsistent estimates of the prevalence of behavioral specific syndromes.

Quite surprisingly, Cowley et al. (2004) found that a lower incidence of any psychopathology was associated with more severe MR, presence of epilepsy, and residence with the family. As regards epilepsy, despite prevalence rates of this pathology are 30 times higher in MR than in the general population, there are few studies on its relationship with cognitive and adaptive impairments typical of mentally disabled people (Espie et al., 2003).

Little is known also about concomitant behavioral and emotional problems in children with MR and attention deficit disorder with hyperactivity (ADHD) (Pearson et al., 2000). Indeed, there is evidence that ADHD is more common in this population than among the non MR population, and that rates of hyperactivity increase with severity of disability (Masi, 1998; Seager and O'Brien, 2003). Handen et al. (1994) demonstrated significant differences in classroom behavior between groups of MR children with and without ADHD.

More studies focused on the co-occurrence between MR and psychopathological disturbances, i.e., attention to mood, personality, and thought disorders. Although MR may be viewed as confounding the diagnosis and treatment of psychiatric illness, the knowledge about the development of this co-occurrence of pathologies is a challenge to modify the developmental outcomes of children with MR (Sachs et al., 2000). The impact of MR on personality development is confirmed by the high psychopathological vulnerability of the mentally disabled (Masi, 1998).

Some attempts have been made to establish objective diagnostic criteria for psychiatric disorders in persons with MR. Mood or schizophrenic disorders, and a wide range of emotional and behavior disorders often coexist with MR at different ages (Barrett et al., 1992; Fuller and Sabatino, 1998; Masi et al., 1999). The presence of the full range of affective disorders has been demonstrated in persons with MR (Sovner and Hurley, 1983), but, if affective disorders do occur in all forms in persons with MR, in turn the presence and degree of intellectual disability modify manifestations of these disorders (Girimaji, 2000). More generally, there is an established relationship between social skills and maladaptive behaviors (Rojahn et al., 2004); according to Bielecki and Swender (2004) social skills deficits and excesses are a defining aspect of MR.

Examining recent research evidence and reviews about personality disorder in intellectual disability, Torr (2003) underlines that research has been limited by methodological shortcomings, as reduced reliability and validity of the tools used for the assessment. This reflects the lack of conceptual clarity about the fundamental constructs of personality disorder in intellectual disability.

There is good evidence that the prevalence rates of psychiatric and behavioral disorders are increased in this population but the factors that contribute to increased risk or are protective have not been established (Holland, 1999). So, the causal direction of the relationship between these variables is still unclear: mental retardation involves strengths and limitations in cognitive adaptive functioning that may coexist with or lead to impairment in emotional and social role functioning. In mental health crisis, on the other hand, the inappropriate use of cognitive abilities is a primary component of psychiatric disorders. Researchers have traditionally emphasized prevalence issues, but an etiological approach should be promoted (Dykens, 2000; Dykens and Hodapp, 2001).

From an applied point of view, standard practice in the clinical care of individuals with MR has often undervalued impairments in mental health and behavioral functioning (Fuller and Sabatino, 1998). Although several methods have been devised to obtain empirical classifications of behavioral problems in MR subjects (e.g., Brown et al., 2004) there is still a tendency to under diagnose psychiatric disorders in the developmentally retarded population (Rush et al., 2004).

A number of studies demonstrate that the social competence of individuals with MR and comorbid psychopathology can be enhanced with social skills training. However, to design an effective training, an accurate assessment of adaptive and social functioning must first be conducted (Bielecki and Swender, 2004). The assessment of psychiatric disorders in MR persons is important to validate the dual diagnosis, and to plan appropriate mental health services (Reiss, 1994). When signs of a comorbid mental disorder are identified in MR, further diagnostic assessment will permit differential diagnosis and a specific etiological treatment (Weisblatt, 1994).

Beyond the well-established conclusion that comorbidity, in general, reduces performance and adjustment, if compared with non comorbid 'pure' MR matched by age and severity of cognitive impairment, it is of interest to search for specific differences in cognitive strengths and challenges and adaptive skills among different mental health syndromes comorbid with MR.

2. Method

2.1. Sample

The sample was composed of $n = 184$ subjects, 103 males (56%) and 81 females (44%), diagnosed as mild ($n = 124$, 67.4%) or moderate ($n = 60$, 32.6 %) MR level.