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A Study on the Prevalence of Mental Disorders among the Mentally Retarded Adolescents of Karaj

Mahrokh FATHI[1, *], Shahla PEZESHK[2], Janet HASHEMI AZAR[2]

[1]*Msc of Psychology And Education Of Exceptional Children In Allameh Tabatabaii University*

[2]*Assistant Professor Of Psychology And Education Of Exceptional Children In Allameh Tabatabaii University*

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Abstract. The goal of this research is to study the prevalence of mental disorders among the educable mentally retarded people. The method is descriptive and the statistical population includes all the educable mentally retarded adolescents in Karaj aging between 12 and 18. The sample size includes 200 educable mentally retarded adolescents who were the patients of the well-being residential centers and special schools and who were chosen based on convenience sampling. The research tool is “the Riss Screen for dual diagnosis in children” that evaluates 10 mental disorders. The data is analyzed using descriptive statistics (frequency distribution, mean, standard deviation). Based on the results, in the aggregate, the prevalence of mental disorders in mentally retarded adolescents is estimated 29. 5 percent. Among the disorders, the anger/Self Control disorder, attention deficit disorder and conduct disorder had the highest prevalence among the sample educable mentally retarded adolescents, respectively. Based on the research, it is recommended that in addition to cognitive problems, the psychological problems of these children should be taken into consideration.

Keywords: Prevalence, Mental retardation, Mental Disorder

1. INTRODUCTION

Intellectual disability (ID) is a complex manifestation of a heterogeneous set of impairments and conditions that result in cognitive limitation (McDermott, Durking, Schupf & Stein, 2007). In general public, as well as many professionals, believes a number of common misconceptions about individuals who are labeled as being mentally retarded (szymanski, 1994). Common myth is the widely held notion that maladaptive behaviors exhibited by persons with mental retardation are primarily the result of the intellectual deficit of mental retardation (szymanski, 1994). Research and clinicians familiar with this population know, however, that behavior problems and psychiatric disorders can cause or contribute to the interaction of biological, social, and psychological factors, just as these factors can affect individuals in the general population, indeed, individuals with mental retardation suffer from the same types of mental disorders as those found in the general population (sovner, 1986).

Dual diagnosis is defined as the co-occurrence of intellectual disability and psychopathology (Matson & Sevin, 1994). The prevalence of mental health problems for persons with intellectual disabilities dual diagnosis is much higher than for the general population (Borthwick-Duffy, 1994; Campbell &Malone, 1991; Menolascino & Fleisher, 1991; Moss, 2001). People with intellectual disabilities seem to be vulnerable to most if not all mental health disorders as defined by the major classification systems like the DSM or ICD (Borthwick-Duffy, 1994).

Research clearly indicates that persons with mental retardation can develop the same or similar kinds of psychopathologies that affect the general population (Horwitz, 2003; VanderSchie - Bezyak, 2003). Diagnosing psychiatric and behavioural conditions in individuals

*Corresponding author. *Email address: m.fathi_1363@yahoo.com*

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with an intellectual disability may be challenging because the presentation of symptoms in this population may differ from that found in diagnostic criteria manuals, such as the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) or the *International Classification of Diseases* (ICD) (Campbell & Malone, 1991). Most diagnostic criteria may not be suitable for use with individuals with intellectual disabilities, as these individuals may lack the ability to describe their symptoms. The appropriateness of mental illness diagnostic criteria for adults with intellectual disabilities is often dependent on the level of functioning of the individual (Bouras & Holt, 2007). Consequently, clinicians and researchers have attempted to create diagnostic manuals that reflect the presentation of mental illnesses in individuals who have intellectual disabilities. Such examples include the *Diagnostic Criteria for Psychiatric Disorders for Use with Adults with Learning Disabilities* in Britain (Campbell & Malone, 1991; Bouras& Holt, 2007).

According to Drake (2001), services for individuals with mental retardation and psychopathology are often nonexistent. The identification and treatment of people with mental retardation and psychopathology have been inconsistent, fragmented and inadequate (Jacobson, 1999; Joop, 2001). Reiss (1994) concluded from his investigation that persons involved with diagnosis or treatment referral, such as mental health professionals and social workers, are less likely to diagnose a mental disorder once they are aware that the clients is labeled as mentally retarded. He refers to this phenomenon as diagnostic overshadowing. the literature now supports the conclusion that diagnostic overshadowing negatively affects the accuracy of judgments by professionals concerning the concomitant psychopathology in individuals with mental retardation. in the view of Fletcher (1993), persons with mental retardation and mental illness are not even offered services similar to those available to individuals with only mental retardation or only psychiatric disorders.

In addition to psychopathology, individuals with intellectual disability are also prone to developing problematic and challenging behaviors such as self-injury, aggression, stereotypic behavior and destruction of property (Jacobson, 1982). The relationship between challenging behaviors and psychopathology is still unclear (Rojahn, Borthwick-Duffy, Jacobson, 1993). However, both psychological symptoms and maladaptive behaviors are currently included in common assessment measures of dual diagnosis such as the Psychological Inventory for Mental Retardation in Adults (PIMRA), the Aberrant Behavior Checklist (ABC), the Psychiatricm Assessments Schedule for Adults with Developmental Disabilities (PASS-ADD) and the Reiss Screen for Maladaptive Behaviors (Matson, 2007).

Tow research studies by Reiss(1993, 1994) estimated that between 20% and 60% of persons with mental retardation suffer from some form of diagnosable psychopathology, as compared to a general population´ s prevalence rate of 16% to 20%. More recent research (e. g., Evans & Sullivan, 2001; Vander Schic- Bezyak, 2003) continues to indicate that the percentage rate estimated by Reiss has remained relatively unchanged over the past decade. according to Horwitz(2003), there are still challenges to accurate prevalence estimates of mental health disorders among those with mental retardation.

Signs of mental disorders are not considered as a subset of the characteristics of intellectual disability. Compared with normal adolescents, those adolescents who suffer from intellectual disability are at an increased risk of suffering from psychological traumas. Entering into adolescence period is an effective factor in increased disorders in this group of individuals. Given the nature of mental disorders, the first step in the treatment and education of these individuals is answering this question: What is the prevalence of mental disorders in adolescents with intellectual disability?

Given the 3% prevalence rate of intellectual disability in different communities, this statistical data can be generalized, so the ultimate goal of this research is to evaluate the prevalence of mental disorders among 12 to 18 years old adolescents with educable intellectual disability in welfare centers and special schools for people with intellectual disability in the city of Karaj; first, to draw the attention of experts and officials to the issue of mental illness in people with intellectual disability, and second, to provide statistics in order to improve the readiness of health and education services and facilities. There has not been any research on the prevalence of mental illness in people with intellectual disability in Iran, which further emphasizes the importance and necessity of this research.

2. METHOD

2. 1. Participants

The sample consisted of 12-18 years old adolescents (111 boys and 89 girls)with educable intellectual disability in state special schools and care centers specialized in people with intellectual disability in the city of Karaj.

2. 2. Measures

The Reiss Scales for Children's Dual Diagnosis is a 60-item child and adolescent version of the Reiss Screen for Maladaptive Behavior. This scale is a caretaker rating system of behavior and symptoms. The Reiss Scales screen for mental health problems in children and adolescents with intellectual disabilities. Caretakers rate the extent to which carefully defined symptoms are no problem, a problem, or a major problem. A "no problem" rating is applicable to items where the category does not apply to the child, the child does not engage in the behavior or if the behavior does not occur with sufficient frequency, intensity, or severity to be considered a current problem. A "Problem" rating entails that the behavior interferes with the child's social or school functioning or that the behavior occurs often or with an unusual degree of severity. A "major problem" rating is applicable when the behavior causes a great deal of discomfort/suffering for the child or the behavior occurs with a very high frequency/intensity, or, if the behavior significantly interferes with the child's social adjustment. Each item is then scored with no problem scored as 0, a problem = 1 and major problem = 2. The items contribute to 10 psychometric scale categories including Anger/Self Control, Anxiety, Attention problems, Autism, Conduct Disorder, Depression, Low Self Esteem, Psychosis, Somatoform Behaviors and Withdrawn Behavior. The Scale is also made up of individual significant behavior items that may require intervention including crying spells, enuresis/ encopresis, hallucination, involuntary movements, lying, obesity, pica, fire setting, sexual problem and verbally abusive. For each subscale, the score is then compared to a cut off that indicates significance when exceeded. The total score is used as a measure of dual diagnosis in addition to the psychometric scales. Reiss has two criteria for determining positive results for dual diagnosis; either the total score for the child should be above a value of 29, or, at least two scale scores should exceed the cut off out of the ten psychometric scales.

2. 3. Data analysis

In this research, the descriptive statistics indices (frequency, mean and standard deviation) were used to estimate the prevalence of psychiatric disorders and dual diagnosis.

3. RESULTS

A comparison of the mean subscale scores on the Reiss Scales for Children's Dual Diagnosis yielded Anger / Self control as the highest scoring subscale. This was followed by Conduct Disorder and Attention Deficit. (see Table1). The lowest scoring subscale was poor Self Esteem followed by Depression. Therefore, sample had the highest mean score on the Anger /Self Control subscale, and the lowest mean score on the poor Self Esteem subscale.

Table 1. Group frequency for Reiss Scores

Variables	No Diagnosis		Diagnosis	
	Frequency	%	Frequency	%
Anger/Self Control	170	85	30	15
Anxiety	188	94	12	6
Attention Deficit	183	91. 5	17	8. 5
Autism	189	94. 5	11	5. 5
Conduct Disorder	174	87	26	13
Depression	191	95. 5	9	4. 5
Poor Self Esteem	195	97. 5	5	2. 5
Psychosis	190	95	10	5
Somatoform Behaviors	187	93. 5	13	6. 5
Withdrawn	188	94	12	6
Total Score (RTOT)	141	70. 5	59	29. 5

A comparison of the mean individual significant behavior subscale scores that may require intervention on the Reiss Scales for Children's Dual Diagnosis yielded verbally abusive as the highest scoring subscale.). The lowest scoring subscale was fire setting. (see Table 2).

Table 2. Group frequency for Reiss Scores.

Variables	absent		present	
	Frequency	%	Frequency	%
Crying Spells	192	96	8	4
Enuresis/ Encorpesis	188	94	12	6
Hallucination	193	96. 5	7	3. 5
Involuntary Movements	186	93	14	7
Lying	192	96	11	5. 5
Obesity	189	94. 5	11	5. 5
Pica	197	98. 5	3	1. 5
Fire Setting	199	99. 5	1	0. 5
Sexual Problem	193	96. 5	7	3. 5
Verbally Abusive	181	90. 5	19	9. 5

Table 3. Group frequency for Dual Diagnosis.

Varible	absent		present	
	Frequency	%	Frequency	%
Dual Diagnosis	152	76	48	24

Table 4. Group frequency for Reiss subscales based on Dual Diagnosis.

Reiss Subscales	Group Dual Diagnosis absent		Present	
	Frequency	%	Frequency	%
Anger/Self Control	23	47. 5	25	52. 1
Anxiety	37	97. 1	11	22. 9
Attention Deficit	31	64. 6	17	35. 4
Autism	37	77. 1	11	22. 9
Conduct Disorder	28	58. 3	20	41. 7
Depression	39	81. 3	9	18. 7
Poor Self Esteem	43	89. 6	5	10. 4
Psychosis	38	79. 2	10	20. 8
Somatoform Behaviors	37	77. 1	11	22. 9
Withdrawn	38	79. 2	10	20. 8

Table 5. Inter-correlations of Reiss Scales:

	Ang	Anx	Att	Aut	Con	Dep	Sel	Psy	Som	Wit
Anger	-									
Anxiety	6	-								
Attention	9	5	-							
Autism	8	5	6							
Conduct Disorder	10	4	11	-						
Depression	5	3	2	3	-					
Poor Self Esteem	4	1	2	2	3	2	-			
Psychosis	5	4	4	3	5	0	2	-		
Somatoform Behaviors	5	4	3	3	2	5	1	2	-	
Withdrawn	6	4	3	3	2	2	1	1	1	-

4. DISCUSSION

This study had several findings about the nature of mental disorders and dual diagnosis in the population of people with intellectual disability. The main objective was to answer the following question:

What is the prevalence of mental disorders in adolescents with educable intellectual disability?

This study had several findings about the nature of mental disorders and dual diagnosis in the population of people with intellectual disability. The main objective was to answer the following question:

What is the prevalence of mental disorders in adolescents with educable intellectual disability?

According to the results, the prevalence rate of mental disorders among adolescents with intellectual disability was estimated to be 29. 5 percent. This prevalence rate was consistent with the results of a research which reported this rate in children and adolescents with intellectual disability between 20 to 35 percent (Ruedrick & Menolascino, 1984; Emerson, 2003). This prevalence rate indicates that the similar types of mental disorders that affect the general population, can also occur in people with intellectual disability, and that the mental and behavioral disorders are not considered among the characteristics of people with intellectual disability and as a direct result of the cognitive defects in this group of people. Almost one-third of people with intellectual disability suffer from a diagnosable mental disorder (Reiss, 1994). A high percentage of children and adolescents with intellectual disability who have the diagnosable signs of mental illnesses do not receive diagnosis and treatment for their psychological problems, and this fact is problematic for those who suffer from "dual diagnosis" and to society in general (Horwitz, 2003; O´Connell & Beyer, 2002; Voelker & Goldsmith 2002). Mental disorders in people with intellectual disability increases their chance of becoming institutionalized, suffer cognitive impairment or cause them to avoid vocational, training and rehabilitation programs (Davidson, Morris & Cain, 1999).

The Individuals who help people with intellectual disability should be familiar with the concept of "dual diagnosis" and should also facilitate the conditions for diagnostic and therapeutic services. Unfortunately, people with intellectual disability continue to suffer from misconceptions, stereotyping and negative attitude toward them, which ultimately leads to the lack of referral to mental health services, or to using treatment programs that are ineffective or unsuitable. Experts should be aware of the negative effects of "overshadowed diagnosis" on the accuracy and precision of their clinical judgment and they should also note that in DSM, mental disorders and intellectual disability are placed on two separate axes and they must pay attention to the importance of "dual diagnosis" and treatment of mental disorders in people with intellectual disability. If clinicians, social workers and educators receive the necessary training on the issue of "dual diagnosis", they can offer higher level of mental health services to patients suffering from this issue and prevent further cognitive impairment in this group of special people.

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