



Behaviour Problems Among Children And Adolescents With Intellectual Disability And Functional Psychosis

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ABSTRACT

Background

Children with intellectual disability (ID) and functional psychosis are at heightened risk for behaviour problems. Likewise, parents of children with ID and functional psychosis are more stressed than parents of typically developing children. Research on behavioural phenotypes suggests that different syndromes of ID and functional psychosis may be associated with distinct child behavioural risks. In the present study, parental reports of child behaviour problems were examined for syndrome-specific differences.

Aim & Objective: The purpose of this study was to assess and compare the behavior problems in children with intellectual disability and functional psychosis.

Participants and Methods: This study was a cross-sectional hospital based study. The study samples were selected through purposive sampling technique. The sample size was 40 parents among which 20 parents of children and adolescent with intellectual disability and 20 parents of children and adolescent with functional psychosis taken from Erna Hoch Child and Adolescent Psychiatry Unit and Charak Outpatient Department, of the Central Institute of Psychiatry, Kanke, Ranchi. "Eyberg Child Behavior Inventory" ⁽¹⁾ scale was used for the data collection. Data were analysed by Statistical Package for Social Sciences (SPSS-21 Version).

Result & Conclusion: Results indicated no significant group differences in ratings of "Eyberg Child Behavior Inventory" ⁽¹⁾.

Keywords: Behaviour Problems, Psychosis, Intellectual Disability

Introduction

Behaviour Problems: It is generally acknowledged in the research on behavioral problems in children that externalizing and internalizing behavior are the two main components that may be identified ^(2, 3,4,5). A behavior called as externalizing behavior can result from uncontrollably expressing emotions and desires.

This behavior can be hostile, rebellious, and disruptive. When compared to individuals in their immediate vicinity, such parents or siblings, the child often suffers less. An excessive level of control over feelings and impulses is a defining characteristic of activities referred to as "internalist behavior." Shyness, timidity, fear, inhibition, avoidance, and oversensitivity are a few examples of these behaviors in social situations. When children internalize, they usually suffer more than other kids in the neighborhood. There has been a range of terminologies employed, such as antisocial behavior, delinquency, acting out behavior, conduct disorders, and violence.

People with intellectual disabilities and functional psychosis are prone to behavioral problems that include behavior that can be classified as stereotyping, challenging or disruptive behavior, aggressive behavior toward others, behaviors that cause injury to oneself or others, and property destruction (7,8). Both the individual experiencing them and those who care for and work with them have difficulties as a result of them.

Intellectual Disability: Previously referred to as "Mental Retardation," intellectual disability is a condition that begins during the formative stage. Intellectual disabilities and challenges with day-to-day functioning in areas like social/interpersonal skills, academics, job, leisure, health, and safety, as well as communication, self-care, and home living are included (9).

The American Association on Mental Retardation (AAMR) defines mental retardation as "significantly below average general intellectual functioning that results in or is associated with concurrent impairments in adaptive behavior and manifests during the developmental period" (10).

ICD-10(11) defines mental retardation, also known as intellectual disability, as a state in which the mind is either fully developed or arrested. It is particularly distinguished by the impairment of skills that are demonstrated during the developmental stage and which contribute to the total level of intelligence, such as cognitive, language, motor, and social abilities.

Psychosis: Psychosis is a difficult term to define, therefore it's sometimes necessary to be clear if we're speaking to the psychodynamic, psychiatric, or author's perspective definition. Numerous meanings are available: "loss of affective contact with reality," "temporary or permanent withdrawal from objective reality," "a severe psychic disturbance that eventually leads to the deterioration of personality structures," "a pathological exacerbation of constitutional tendencies," "an extensive personality disorganization," "a severe mental disorder or pathological reactions, which vary and involve all forms of adaptation," "the final outcome of the confluence of several noiceptive factors on the psychic apparatus" or more "fragmented personality" (12).

Aim of the Study: This study was planned to explore and compare behaviour problems among children and adolescents with intellectual disability and functional psychosis.

Objective of the Study:

- ✓ To evaluate and compare behavioral issues in children and adolescents with both intellectual disabilities and functional psychosis.

Hypotheses:

- ✓ There will be no significant difference between behaviour problems among children and adolescents with intellectual disability and functional psychosis.

Method and Materials:

This investigation was carried out in the Central Institute of Psychiatry's Charaka outpatient clinic and Erna Hoch Child and Adolescent Psychiatry Unit in Kanke, Ranchi. This investigation was cross-sectional and conducted at a hospital. Purposive sampling was the method used to choose the research samples. The study included 40 parents, 20 of whom were from the Central Institute of Psychiatry's Kanke, Ranchi; these parents included 20 whose children and adolescents had been diagnosed with intellectual disability and 20 whose children and adolescents had been diagnosed with functional psychosis. After taking inclusion and exclusion criteria into consideration, 32 children and adolescents with intellectual disabilities were screened on DST(13) and VSMS₍₁₄₎ and 29 children and adolescents with functional psychosis were tested on BPRS-C₍₁₅₎.

Inclusion and Exclusion Criteria:

Those with moderate to profound mental retardation, as defined by ICD-10-DCR, aged 6 to 17 were included in the category of children and adolescents with intellectual disabilities ⁽¹⁶⁾. The study excluded children and adolescents with significant physical disabilities, addictions (apart from nicotine and caffeine), disorders other than mental retardation, and ages less than six and greater than seventeen. Additionally, children and adolescents diagnosed with acute and transitory psychosis, bipolar disorder, or schizophrenia between the ages of 6 and 17 were placed in the functional psychosis category according to the ICD-10-DCR. Children and adolescents with co-morbid psychiatric diagnoses, mental retardation, significant physical impairment, drug addiction (apart from nicotine and caffeine), and ages less than six and greater than seventeen were excluded.

Similarly, parents who provided written consent for the study and were between the ages of 30 and 55 and educated up to at least Class 8 were included. In all groups, parents who were younger than 30 or older than 55, had less education than a Class 8, or had not provided written, informed consent for the study, were not allowed to participate in the research.

Tools used for data collection:

1. Socio-demographic & clinical data sheet"
2. "Development Screening Test (DST)" ⁽¹³⁾
3. "Vineland Social Maturity Scale (VSMS)" ⁽¹⁴⁾
4. "Brief Psychiatric Rating Scale for Children (BPRS-C)" ⁽¹⁵⁾
5. "Eyberg Child Behavior Inventory" ⁽¹⁾

Descriptions of Tools:

- 1. Socio-Demographic & Clinical Data Sheet:** The age, gender, and educational attainment of the chosen children and their parents, as well as their residence, religion, ethnicity, family history, and behavioral and psychopathological issues, were all recorded on a data sheet.
- 2. Development Screening Test (DST):** The Developmental Screening Test was created by Bharath Raj in 1977 and 1983 with the aim of assessing children's developmental stages from birth to fifteen years old. It has 88 items that correspond to the age-appropriate behavioral traits. Items are selected from behavioral domains, such as motor development, speech, language, and personal-social development, at each age level. A parent or someone who is familiar with the child can appraise the child in a semi-structured interview. The child's developmental stage is determined by the scores they receive on these tests using an IQ calculator.
- 3. Vineland Social Maturity Scale (VSMS):** This scale has eighty-nine items. Since A. J. Malin's 1992 Indian adaption of the Vineland social maturity scale, which was first created by E. A. Doll in 1935, the exam has been utilized across the nation. This scale shows the social advantages and deficiencies in a developing child in addition to social age and social quotient measurements. Ages 0 to 15 are the target audience. Finding intellectually disabled individuals is crucial.
- 4. The Psychiatric Rating Scale for Children:** The Brief Psychiatric Rating Scale for Children, often known as the BPRS-C scale, is a clinician-based rating scale consisting of 21 items that is used to assess mental health issues in children and adolescents. It was created to offer a descriptive profile of symptoms that could be used to a wide spectrum of mental problems in children and adolescents. It is becoming more and more popular as an outcome measure in managed care, research, and clinical settings for children and adolescents in the public sector. A seven-point Likert scale is used to rate items, with 0 representing "Not Present" and 6 representing "Extremely Severe" (15, 16).
- 5. Eyberg Child Behaviour Inventory (ECBI):** The 36 items in the ECBI parent-report behavioral rating scale evaluate problem behaviors on two different scales: a yes/no problem scale that indicates whether or not the child's behavior is upsetting to the parent, and a seven-point intensity scale that indicates how frequently the behavior occurs. A popular, valid, and dependable instrument for evaluating children's behavior is the ECBI.

Procedure: Parents of children and adolescents diagnosed with both intellectual disability and functional psychosis according to ICD-10 (DCR) criteria were included in compliance with the study's inclusion and exclusion criteria. Initially, all parents who agreed to participate in the research had to provide written informed consent. Following that, a sociodemographic profile was filled out, and then the Development Screening Test (DST)¹³ along with the Vineland Social Maturity Scale (VSMS)¹⁴ was administered to children with intellectual disabilities, and the Brief Psychiatric Rating Scale for Children (BPRS-C)¹⁵ was administered to children with functional psychosis. Subsequently, the "Eyberg Child Behavior Inventory" (1) was administered to parents of children with intellectual disabilities and functional psychosis.

Statistical Analysis: The statistical package for social sciences, or SPSS (Statistical Package for Social Sciences)-21, was used to analyze the raw data. Different features of the sample were described using descriptive statistics. To describe and compare categorical data, the chi square test was employed. For characterizing and contrasting continuous data, the Mann Whitney U Test was employed. In order to examine the relationship between continuous and categorical variables, respectively, Spearman's correlation and point bi serial correlation coefficient were obtained.

Results:

Table-1: Comparison of socio-demographic variables of patients and parents with Intellectual disability and Functional Psychosis

Variables		Groups N=40		χ^2 /Fisher's Exact Test#	df	p
		Intellectual Disability N=20, n (%)	Functional Psychosis N=20, n (%)			
Sex of the patients	Male	11(45.8)	13(54.2)	.417	1	.519
	Female	9(56.2)	7(43.8)			
Religion	Hindu	17(48.6)	18(51.4)	.230#	-	1.000
	Other	3(60)	2(40)			
Father Occupation	Farmer	5 (35.7)	9 (64.3)	8.744#	-	.090
	Labourer	6 (75)	2 (25)			
	Business	2 (28.6)	5 (71.4)			
	Private Job	5 (83.3)	1 (16.7)			
	Gov. Job	0 (0)	2 (100)			
	Unemployed	2 (66.7)	1 (33.3)			
Mother Occupation	Employed	0 (0)	1 (100)	1.412#	-	1.000
	Unemployed	20 (51.3)	19 (48.7)			
Parental Status	Both parents	18 (48.6)	19 (51.4)	1.204#	-	1.000
	Single parent	1 (50)	1(50)			
	Separated	1 (100)	0 (0)			
Family Type	Nuclear	12 (44.4)	15 (55.6)	2.553#	-	.301
	Joint	8 (66.7)	4 (33.3)			
	Extended	0 (0)	1 (100)			
Socio-economic Status	Lower	15 (53.6)	13 (46.4)	.476	1	.490
	Middle	5 (41.7)	7 (58.3)			

Table 1 shows comparison of socio-demographic variables of patients and parents of children and adolescents with intellectual disability and functional psychosis. Most of the patents were male and Hindu by religion in both groups. It was found that majority of the fathers were farmer by profession in functional psychosis group. Results also shows that most of the mothers were unemployed (51.3% & 48.7%) in the both groups respectively. It was also found that majority of the families with children and adolescent with intellectual disability, and functional psychosis were belonging to lower socio-economic status and nuclear family. There was no significance difference with regards to sex, religion, father's occupation, mother's occupation, marital status, family type and socioeconomic status in both the groups.

Table-2: Comparison of clinical variables of parents with Intellectual Disability and Functional Psychosis.

Variables		Groups N=40		χ^2 /Fisher's Exact Test#	df	p
		Intellectual Disability N=20, n (%)	Functional Psychosis N=20, n (%)			
Past History	Present	0 (0)	12 (100)	21.949#	-	.000
	Absent	20 (71.4)	8 (28.6)			
Family History	Present	5 (33.3)	10(66.7)	2.667	1	.102
	Absent	15(60)	10 (40)			

***P<.001

Table 2 shows clinical profile of the children and adolescent with intellectual disability and functional psychosis. There was a significance difference in the past history of mental illness of children and adolescents of intellectual disability and functional psychosis. No significance difference was found in the family history between intellectual disability and functional psychosis.

Table-3: Comparison of patient's age, education, age of onset, duration of illness, number of hospitalization and duration of pharmacological treatment in patients with Intellectual Disability and Functional Psychosis.

Variable	Groups N=40		Mann Whitney U Test	P
	Intellectual Disability (Mean Rank) N=20	Functional Psychosis (Mean Rank) N=20		
Age	13.12	27.88	52.500	.000
Education	11.30	29.70	16.000	.000
Age of onset	10.50	30.50	00.000	.000
Duration of illness	29.98	11.02	10.500	.000
Number of hospitalizations	12.60	28.40	42.000	.000
Duration of pharmacological treatment	18.82	22.18	166.500	.340

***p<.001

Table 3 shows the socio demographic and clinical profile in patients with intellectual disability and functional psychosis. There was significantly higher in age (***p<.000), education (***p<.000), age of onset (***p<.000), and number of hospitalizations (***p<.000) in functional psychosis as compared to intellectual disability. Results also found duration of illness (***p<.000) was significantly higher in intellectual disability as compared to functional psychosis.

Table-4: Characteristics of father age, mother age and number of family members in families with Intellectual disability and Functional Psychosis.

Variable	Groups N=40		Mann Whitney U Test	P
	Intellectual Disability (Mean Rank) N=20	Functional Psychosis (Mean Rank) N=20		
Fathers age	14.85	26.15	87.000	.002**
Fathers education (in years)	16.70	24.30	124.000	.035*
Mothers age	12.82	18.18	46.500	.000***
Mothers education (in years)	11.40	29.60	18.000	.000***
Number of family member	18.30	22.70	156.000	.229

Table 4 shows socio demographic profile of parents and families of children and adolescents with intellectual disability and functional psychosis. There was significantly higher in father's age (.002**) and mother's age (***) $p < .000$, fathers' education (.035*) and mothers' education (.000***) functional psychosis as compared to intellectual disability. No significant difference was found in the number of family member in intellectual disability as compared to functional psychosis.

Table-5: Eyberg Child Behaviour Inventory in children and adolescent with intellectual disability and functional psychosis.

Variable (Eyberg Child Behaviour Inventory)	Groups N=40		Mann Whitney U Test	p
	Intellectual disability (Mean Rank) N=20	Functional Psychosis (Mean Rank) N=20		
Problem score	20.10	20.90	192.000	.828
Clinical Score	21.22	19.78	185.500	.695

Table 5 shows the comparison of Eyberg child behaviour inventory in parents of children and adolescent with intellectual disability and functional psychosis. Results showed no significant difference in sub domains of problem and clinical score of Eyberg child behaviour inventory in the parents with children and adolescents with intellectual disability and functional psychosis.

Discussion

This study was carried out at the Central Institute of Psychiatry in Ranchi and was a cross-sectional, single-contact study undertaken in a hospital setting. This study evaluated and compared the parental experiences of behavioral problems in children and adolescents with intellectual disabilities and functional psychosis.

Parents of children and adolescents with functional psychosis in the current study reported higher mean scores in the problem score (20.90) and believe that their child's condition is a problem for them. Additionally, parents of children and adolescents with functional psychosis reported higher mean scores in the clinical score (21.22) and believe that these children and adolescents require intervention.

Nonetheless, there was no discernible variation observed in the Eyberg Child Behaviour Inventory's subdomains of issue and clinical score among parents whose children and adolescents suffer from both intellectual disabilities and functional psychosis. In comparison with parents of typically developing children, parents with intellectual disabled children spend more time directly providing care for their children (e.g., bathing, feeding, and toileting) and are frequently obliged to perform physically taxing and unpleasant tasks (e.g., lifting and positioning, administering medication) (19, 20).

Nevertheless, the burden of care for parents rises when a child with functional psychosis also exhibits behavioral issues. This has a ripple effect on the parent's capacity to do the various duties involved in

providing care. Certain parenting duties (such as mealtimes, shopping, and entertaining) might be more challenging for parents of typical children due to contextual considerations such time constraints, the presence of others, the location, and conflicting expectations (21, 22).

These same high-risk parenting responsibilities apply to parents of children with developmental disabilities, but they also have other chores to accomplish that are unique to their child's difficulty. Some of these responsibilities might be helping their children take care of themselves (such washing, eating, and using the restroom) or watching them closely to stop unsafe behaviors (like choking or driving). Nonetheless, there were no appreciable variations in the clinical or issue scale scores between children in these two groups in the present study.

However, concurrently, it was also observed that parents of children with functional psychosis scored higher on clinical measures than parents of children with intellectual disabilities, while parents of children with functional psychosis scored higher on problem scales than parents of children with intellectual disabilities. This may be because children with functional psychosis may be better able to handle those tasks because their problems can be lessened after treatment (i.e. treatment of their psychotic symptoms), whereas children with intellectual disabilities have more difficulty with activities and tasks that require higher or improvised skills.

The major drawback of this study was that it was conducted in a hospital and had a limited sample size. Because it involved referred patients, it may not have been fully representative of the broader community. Even so, it has provided us with a wealth of information on the issues that our clients face; nevertheless, because of the small sample size, it is not able to generalize the findings. A fuller picture of the many variables linked to behavioral issues in children and adolescents with intellectual disabilities and functional psychosis may be obtained from future research using bigger, less selected samples and longitudinal methods.

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