

Intellectual disability among Bhutanese refugees referred to psychiatric service of BPKIHS

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Abstract

Background: Intellectual disability plays a significant role, especially in the field of rehabilitation. It becomes more important when people live in refugee camp for a long duration.

Objective: To assess the level of intelligence and disability; and to sort out the illnesses co-morbid with mental retardation in the Bhutanese refugees in eastern Nepal.

Methods: Hospital based descriptive study was done using purposive sampling. Instruments used were: vineland social maturity scale, developmental screening test, seguin form board, standard progressive matrices and colored progressive matrices.

Results: Samples were 42 with 64% females. Age range was 11-20 years. Among these referred cases, 45% had speech disorder and hearing loss and 31% had neurological disorders, including seizure disorders. Sixty-six percent had mild, 9% moderate and 19% severe mental retardation.

Conclusion: Majority of the intellectually disabled Bhutanese refugees had mild mental retardation, followed by severe one. Seizure was a common co-morbidity in mental retardation.

Key words: Intelligence, intelligence quotient (I.Q.), mental retardation, seizure

Introduction

Intellectual disability, also known as mental retardation (MR) is defined in the fourth edition of the diagnostic and statistical manual of mental disorders (DSM-IV of

American Psychiatric Association, 1994)¹ on the basis of 3 essential features: subnormal intellectual functioning, characterized by an intelligence quotient (IQ) lower than 70 and commensurate deficits in adaptive functioning (capacities for social and personal sufficiency and independence) and onset before 18 years. The measurement of intelligence is presumed to be based in most cases on the administration of an appropriate standardized

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assessment of intelligence. Deficits in adaptive skills are generally measured on instruments such as the recently re-revised vineland adaptive behavior scale. The approach to the definition of MR is fundamentally the same in the tenth edition of the International Classification of Diseases (ICD-10) (World Health Organization, 1992).² Various levels of MR are specified in the DSM-IV: mild (IQ 50 to 69), moderate (IQ 35 to 49), severe (IQ 20 to 34) and profound (IQ <20). Persons with IQ level 70 to 79 are termed as having borderline intelligence and those with IQ level 80 to 89 are termed as having dull average intelligence. Most persons with MR (approx. 85% of cases) in childhood have mild MR; followed by moderate (approx. 10%), severe (approx. 4%) and profound MR (1-2%) (Szymanski and King, 1999).³ Prevalence of mental retardation varies across countries and also within countries across different population. One of the oldest and most cited study, 'the Isle of Wight study' (Rutter and colleagues, 1976)⁴ noted that, about 2.5% of 9-11 years old children would be classified as mentally retarded if IQ were the sole criterion but if the prevalence were based on those receiving services, this rate would be cut almost by half (1.3%). Subnormal intellectual functioning is characterized by an intelligence quotient (IQ) lower than 70, based in most cases on the

administration of an appropriate standardized assessment of intelligence. Deficits in adaptive skills, which involve one's social and personal sufficiency and independence, are generally measured with instruments such as the recently re-revised vineland adaptive behaviour scale (Sparrow, 2005).⁵ Mental retardation is among the world's most complex and challenging problems. It is a multi dimensional phenomenon involving bio-psycho-social factors. All developmental disorders tend to be 'stigmatizing disabilities'.

Methods

The study was undertaken in department of Psychiatry, B.P. Koirala Institute of Health Sciences, Dharan, Nepal, a tertiary care hospital of Eastern Nepal with subject enrollment during the period from July 2009 to June 2010. The study design was a hospital based descriptive one with a purposive and convenient sampling.

The hospital runs a psychiatry outpatient clinic. Bhutanese people living in refugee camps of Eastern Nepal with suspected subnormal intelligence were referred by primary health workers of the camps to the Psychiatry clinic of the hospital. All subjects were first assessed by a psychiatrist and then referred to psychologist for formal testing of Intelligence with Intelligence quotient (IQ).

Different IQ assessment instruments were used depending on the age of the subjects as follows-

Age group below 5 years

1. Developmental screening test
2. Vineland social maturity scale
3. Seguin form board

Below 5 to 12 years

1. Colored progressive matrices
2. Developmental screening test
3. Vineland social maturity scale
4. Seguin form board (SFB)

Above 12 years

1. Standard progressive matrices
2. Others depending on the performances

Relevant information was recorded in a predesigned proforma. Co-morbid conditions

were recorded as per the diagnoses of the departments referring or referred to as deemed necessary during the psychiatric assessment. A total of 42 subjects were assessed during the study period. All cases accompanied by at least one attendant and willing to cooperate with the study procedures were included in this study. Data was analyzed with appropriate descriptive statistics using SPSS 17.

Results

Out of total 42 subjects, 15 were male and 27 female. Majority of the subjects were young children, adolescents and youth below 20 years of age. Most of the subjects were unmarried (85.7%), with 66.6% illiterate and 88.2% unemployed (Table 1).

Table 1: Gender, marital status, educational status, age and occupation distribution

Categories		Number of subjects	Percentage
Gender	Male	15	35.8%
	Female	27	64.2%
Marital status	Unmarried	36	85.7%
	Married	06	14.3%
Educational status	Illiterate	28	66.6%
	Literate	14	34.3%
Age	5 – 10 years	08	19.0%
	11 – 15 years	13	31.0%
	16 – 20 years	10	23.8%
	21 – 25 years	02	04.7%

	26 – 30 years	04	09.4%
	31 – 35 years	02	04.7%
	36 – 40 years	01	02.3%
	Above 40 years	02	04.7%
Occupation	Unemployed	37	88.2%
	Laborer	03	07.1%
	Tailoring	02	04.7%

Mild MR was the most common type/level among the intellectually disabled Bhutanese refugees of eastern Nepal visiting psychiatry service of BPKIHS (Table 2).

Table 2: Levels of mental retardation

Level of intelligence	Range of I.Q.	No.	%
Dull average intelligence	80 – 89	01	2.3
Borderline intelligence	70 – 79	01	2.3
Mild MR	50 – 69	28	66.6
Moderate MR	35 – 49	04	9.4
Severe MR	20 – 34	08	19.0
Profound MR	Below 20	00	0.0

Majority of the subjects (81%) had lack of competency, as revealed in the assessment (Table 3).

Table 3: Competency (average functioning) distribution

Competency (Average functioning)	No.	%
Household work	4	9.4

Hygiene and self help	3	7.1
Painting	1	2.3
Lack of competency	34	81.2
Total	42	100.0

Seizure disorder was the most common disease and speech difficulty the impairment (Table 4).

Table 4: Co-morbid disorders and impairments

	Disorders	No.	%
Co morbidities	Seizures	04	9.4
	Tuberculosis	01	2.3
	ADHD	02	4.7
	GAD	01	2.3
Other deficits	Speech difficulty	13	31.1
	Hearing impairment	07	16.6
	Neurological deficit	02	4.7

Discussion

In our study, 42 patients assessed with the I.Q. test during the study period were included. They were refugees from Bhutan living in nearby shelter camps in eastern Nepal. Most of them had come to Pediatric OPD and were referred to Psychiatric OPD of BPKIHS for check up. After being examined by the psychiatrists, those with learning disabilities and delayed milestones, i.e. subnormal intelligence were referred to psychology section for intelligence assessment. Mental retardation is reported as common diagnosis among child and adolescent out-patients of this department.⁶ An intensive study about its severity and associated disability among Bhutanese refugees referred for psychiatry service is expected to throw light on some important issues.

We had more (1.8 times) female subjects with intellectual disability in this study. Literacy rate was 34.3%. In our study, 50% of the cases were below 16 years which resembles the study of Shrestha SM (1999)⁷ in Nepal where 40% of the mentally retarded were below 14 years of age. Seizure disorder was found to be 9.4% in the present study, which is similar to findings of Izuora (1985)⁸ where 12.5% epilepsy cases were found. Corbet et al (1975)⁹ surveyed all severely mentally retarded children (whether in hospital or outside) originating from a London

suburb. One third of these children had experienced seizures at some time or the other, and one fifth had at least one episode of seizure in the year before the enquiry. And, a report from this department shows that mental retardation was found in 4% of seizure cases visiting its clinic service.¹⁰ Gelder M (1993)¹¹ reported autism and over activity syndromes to be common among the mentally retarded children and our study has 4.7% with ADHD.

In our finding, majority (66%) had mild MR keeping with most reports.^{1,2,11} And, 28.4% were moderate to severe mentally retarded which was close to findings of Ramma S (2004)¹² with 20% with grade V on Raven's progressive Matrices, i.e. equivalent to moderate-severe mental retardation. A study in department of Pediatrics and adolescent medicine, BPKIHS categorizing the MR subjects into only 2 categories, i.e. mild and severe reported the ratio of mild to severe of 1:2. This also indicates the preponderance of mild type of MR though there is a slight variation in proportions of the types of MR. Since all suspected MR in refugee camps were referred in our study, the proportion of mild cases were relatively more than in the study of Gauchan et al.¹³

We had limitations in this study with: 1. small sample size, 2. biased sample in a way since the subjects were referred intensively for intelligence assessment, 3. inability to explore

in depth into the etiological factors and 4. Heterogeneous sample in terms of referral sources in the institute (main being Pediatric OPD).

Conclusion

Mild mental retardation was the most common type among Bhutanese refugees seeking help from BPKIHS. Seizure disorder was the main co-morbid illness among MR patients; along with hearing disability, speech defects and other neurological deficits. A multi-disciplinary approach and community based study are needed for further evaluation and intervention to reduce the distress and disability of these refugees.

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