

## Psychiatric morbidity in school going children of Bikaner

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### Abstract

**Background:** Psychiatry morbidity is a reality in our present day society. Its measurement requires a proper, standardized, screening tool and an extensively researched classification of psychiatric ailments. This study aims to determine prevalence of psychiatric disorders and pattern of psychiatric disorders, associated socio demographic variables in school going children. **Methods:** The study was undertaken during 2004-2005. The sample of 500 children was drawn from children in the age group of 4-11 years from schools of Bikaner. All children in the selected sample were subjected to a screening for psychiatric symptoms by interviewing the parents of the children using childhood psychopathology score (CPMS). A score of 10 or above indicates the possibility of psychiatric morbidity among Indian children. All collected data were tabulated and statically analyzed. **Results:** prevalence of psychiatric disorders in children was found to be 10.2%. conduct disorder was most common psychiatric disorder observed (31.4%) followed by anxiety disorders (21.6%).prevalence was more in children of male sex, nuclear families, higher birth orders and higher educated parents. **Conclusion:** epidemiological studies should start early in childhood and carried longitudinally for development of preventive, promotive and curative programme in the community.

**Keywords:** Psychiatry, Children, Morbidity, School, CPMS

### Introduction

World health organization defines health as a state of physical, mental and social well being and not merely an absence of disease or infirmity [1]. Contrary to what many people believe, mental ill health is not limited to adults, children are afflicted with it as much. The population prevalence studies on rates of psychiatric disorders in children in India have shown that, depending upon method of assessment, definition and type of psychiatric disorders, about 7% children have a significant disorder at a given time [2,3,4]. Considering that children constitute 40% of our total population, the burden of morbidity due to psychiatric disorders in children and adolescents in country is enormous. Child psychiatry needs to be provided a status of discipline, independent and separate from adult psychiatry, paralleling a logical distinction between the disciplines of paediatrics and internal medicine.

development of cognitive, linguistic, social, emotional and moral functions and competencies in a child. However, in the contemporary system of education, schools have seriously marginalised and compromised their role in guiding and regulating the psychological development of children they have to cope with heavy syllabus and curricula, poor teaching facilities and highly competitive examinations. School education has become a serious stress for children and parents. School phobia, psychosomatic complaints, emotional/behavioural problems, poor sleep and appetite, difficulties in coping and declining scholastic performance are common manifestation of stress in school children.

The mental health of children is intricately rooted in the socio-cultural milieu and environment which they live. It is, therefore, imperative to consider both the risks and protective aspects of the given environment in which the children live. There are also certain innate or intrinsic factors within children such as high level of

The school plays a crucial and a formative role in the

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intelligence, an easy temperament or certain positive and protective reflexes in the environment that contribute towards their resilience. Psychiatric evaluation of children is imperative for full understanding of the health issue of the children. This study was conducted to assess psychiatric morbidity in the school children of Bikaner.

## Materials and Methods

The study was undertaken during 2004-2005. The sample of 500 children was drawn from children in the age group of 4-11 years from schools of Bikaner (250 children from government schools and 250 children from private schools) randomly. A self designed performa having different socio demographic variables and a measurement schedule to assess childhood psychopathology was given to parents. All children in the selected sample were subjected to a screening for

psychiatric symptoms by interviewing the parents of the children using childhood psychopathology score (CPMS).

CPMS is an Indian adaptation of Achenbach's child behaviour check list (1983) developed by Savita Malhotra et al [4,5,6] consisting of 5 symptoms yielding 'Yes' or 'No' response from the interviewee. The sensitivity and specificity of the tools is 82% and 87% respectively and has been found to be valid and reliable tool for screening psychiatric morbidity among Indian children. A score of 10 or above indicates the possibility of psychiatric morbidity among Indian children. The children screened positive for psychiatric morbidity were subjected to diagnostic assessment as per criteria in ICD-10 (WHO, 1992) [7] in the presence of a consultant psychiatrist. All collected data were tabulated and stastically analysed.

## Results

500 children selected for the present study were taken from government and private schools of Bikaner city. The selected children were uniformly distributed in various classes, and represent an appropriate selection of the sample. 51.6% were males and 48.4% were females. 56.8% children were from nuclear family and 43.2% were from joint family. Majority of the children were first born 37.8% and second born 38%. The parents of private schools were more educated and belonged to a higher income group of society as compared to the parents of government schools. 141 children were screened positive on childhood psychopathology measurement schedule (CPMS). On interviewing of these 141 children, 51 fulfilled one or more ICD-10 criteria for psychiatric disorders giving an overall prevalence of 10.2%. Psychiatric problems were more in male children as compared to females (male vs female ratio 31/20). The diagnostic categories according to ICD- 10 were conduct disorder 31.4%, anxiety disorder 21.6%, anxiety depression 19.6%, mild mental retardation 7.8%, epilepsy 7.8%, nocturnal enuresis 5.9%, attention deficit 3.9%, and moderate mental retardation 2%. Conduct disorder was the most common psychiatric disorder (31.4%). Conduct disorder were common in males and anxiety and anxiety depression disorder were common in females. Distribution of children according to birth orders showed that first born children are less affected from psychiatric problem (8.5%) as compared to subsequently born(100% in sixth birth order).

**Table 1: Psychiatric morbidity according to CPMS and ICD-10**

Sr. No.	Results of sample population	No. of children	% of cases
1.	Total no. of children	500	100.0
2.	CPMS score >10	141	28.2
3.	Diagnosed according to ICD-10	51	10.2

**Table 2: Psychiatric morbidity according to their family configuration**

Sr. No.	Family configuration	Total children	No. of diagnosed children	% of diagnosed children
1.	Joint	216	20	9.3
2.	Nuclear	284	31	10.9
	<b>Total</b>	<b>500</b>	<b>51</b>	

\*p = 0.5572

Psychiatric disorders were found to be more prevalent in children belonging to nuclear families (10.9%) than joint families (9.3%). The difference was, however, not significant.

**Table 3: Prevalence of psychiatric problem and their sex wise distribution among children**

Sr. No.	Psychiatric problem	No. of children (%)	No. of males	No. of females
1.	Anxiety	11(21.6)	4	7
2.	Anxiety depression	10(19.6)	4	6
3.	Attention deficit	2(3.9)	2	0
4.	Conduct disorder	16(31.4)	13	3
5.	Mild mental retardation	4(7.8)	2	2
6.	Moderate mental retardation	1(2.0)	1	0
7.	Nocturnal enuresis	3(5.9)	0	3
8.	Epilepsy	4(7.8)	4	0
	<b>Total</b>	<b>51(100)</b>	<b>30</b>	<b>21</b>

**Table 4: Psychiatric morbidity according to parents education**

Sr. No.	Parent education	Total children	No. of diagnosed children	% of diagnosed children
1.	Illiterate	27	1	3.7
2.	Primary	43	2	4.7
3.	Middle	62	4	6.5
4.	Secondary	150	14	9.3
5.	Sr. Secondary	61	9	14.8
6.	Graduate	114	15	13.2
7.	Post graduate	43	6	14.0
	<b>Total</b>	<b>500</b>	<b>51</b>	

Distribution of children according to parent education showed that psychiatric morbidity is more among children of higher educated parents

## Discussion

The prevalence of childhood psychiatric disorders in school children of Bikaner has come out to be 10.2% which is in accordance with several studies conducted in western countries as well as Indian subcontinents.[8,9,10,11]. Regarding pattern of these psychiatric illnesses, conduct disorder was found to be most common (31.4%), anxiety disorder 21.6%, anxiety depression 19.6%, mild mental retardation 7.8%, epilepsy 7.8%, nocturnal enuresis 5.9%, attention deficit 3.9% and moderate mental retardation 2%.

This study also suggests that males were more affected from psychiatric problem as comparison to female and on looking into diagnosis, conduct disorder were common in males and anxiety and anxiety depression disorders were common in females. Nuclear family set up was commonly associated with psychiatric morbidity as compare to joint family. An increasing birth order was also associated with psychiatric morbidity. Higher educated parents children were also found to be commonly affected from psychiatric illnesses.

## Conclusion

In view of above, it is highly imperative that such epidemiological studies should start early in childhood and carried longitudinally for development of preventive, promotive and curative programme in the community.

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**Conflict of Interest:** None

**Permission from IRB:** Yes

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