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Original Research Paper

Prevalence of Oppositional Defiant Disorder and Conduct Disorder in Primary School Children

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Abstract

There is a lacuna of studies on Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD) in the Indian context. Present study is undertaken as a cross sectional study of school aged children selected from four different schools in Indore district. Nine hundred children aged between 6 and 11 years were selected from four schools of Indore city after obtaining informed consent from their parents and the school authorities. The presence of ODD and CD was assessed by using Rutter CBQ and those who were screened positive were subjected to DSM-IV-TR criteria for the final diagnosis.

The prevalence of ODD among primary school children was found to be 7.73%. Prevalence was found to be equal among male and female. The prevalence of CD among primary school children was found to be 5.48. Prevalence was found to be higher among the males (66.67%) as compared to that of females (33.33%). The present study shows a high prevalence of CD among primary school children with a higher prevalence among the males than the females and in ODD no difference was found.

Key Words: Oppositional Defiant Disorder, Conduct Disorder, Child Behavior Questionnaire (CBQ), Diagnostic Statistical Manual-IV-Text Revised (DSM-IV-TR)

Introduction:

Children under the age of 15 years constitute about 40% of the population of the developing countries. [1] While infant and childhood mortality rates are declining, rising rates of intellectual and psychological morbidity has been observed. [2] As a result child psychiatric epidemiology is on the threshold of an important future in its capacity to investigate the psychological health of large aggregate of children. [3]

The family, the school and other social institute exercise a significant influence on the process of child development. [4] During middle childhood, children increasingly separate from parents and seek acceptance from teachers and from peers. Self esteem becomes a central issue as children develop the cognitive ability to consider at the perception of how others see them.

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For the first time, they are judged according to their ability to produce socially valued output i.e. good academic grades and desirable behavior. The focus on accomplished as described by Erickson, Crisis between industry and inferiority. [5]

Psychiatric morbidity in children as defined by Rutter et al [6] comprises abnormality in developmentally inappropriate and of sufficient duration and severity to cause persistent suffering or handicap to the children and/ or distress to the family or community.

Further handicap or impartment is defined in form of poor relationship with family members, neighbors, peer and teachers. Though Rutter pointed out that psychiatric disorder in childhood is quantitative departure from the normal qualitative abnormalities in reciprocal social interaction and communications are manifested in pervasive developmental disorders do not consist of disease entities and most behavioral disturbances also occur in otherwise normal functioning children. [7]

Cameron put forward the 'Principle of continuity' [8] and stated that abnormal behavior should not be alienated from the spectrum of normal behavior and all attitudes and responses found in the behavioral pathology are in some way related to and derived from normal social behavior. The differences in prevalence in these types of problems in community are in part due to differences in extent to which practitioners

diagnose problems that are poorly addressed in medical education like situational disturbances, social maladjustment and parent child problem. Pediatricians are often likely to miss psychiatric disorders. Dulcan et al in 1990 [9] reported that 8.3% of 52 children with a psychiatric diagnosis were not identified by the pediatrician as having a psychiatric disorder.

The school is an important catchment area and therefore, school mental health survey can provide an excellent opportunity for estimating prevalence of childhood psychiatric disorders. The learning situation in school is full of problems like coping up with school work, scholastic backwardness, or loss of face in front of peer group.

Education has been considered as a foundation of human resource development but unfortunately rather than focusing on a more holistic approach to child development, most of the focus is on academics. All these can precipitate or aggregate emotional or behavioral deviance. However schools often deal with such students with a disciplinary approach, least realizing about the existing psychiatric morbidity and significance of early intervention.

Ideally, school is a specialized setting for child development can obviate the need for the clinic proper attention paid here will be fruitful in preventing psychiatric and social morbidity. Along with facilities of positive mental health, early diagnosis and proper treatment of psychiatric morbidity will enable these children to remain in the main stream of education system and deal with their disability positively.

This study is planned at a point of time when government policies are being framed regarding educational problems and disabilities in children and it may further provide the database for possible consolidation of other similar studies.

There is only a limited source of information regarding the prevalence of ODD and CD in the Indian context. Hence, the current study aims at selecting primary school children from a community sample.

The objectives of the study were**:**

(i) To identify the prevalence of ODD and CD in primary school children,

(ii) To identify the gender difference in the prevalence of ODD and CD.

Oppositional, negativistic behavior, in moderation, is developmentally normal in early childhood and adolescence. Epidemiologic studies of negativistic traits in nonclinical populations found such behavior in 16 to 22 percent of school age children.

According to the text revision of the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR), prevalence rates for this disorder range from 2 to 16 percent. Although oppositional defiant disorder can begin as early as 3 years of age, it typically is noted by 8 years of age and usually not later than adolescence.

Oppositional defiant disorder has been reported to occur at rates ranging from 2 to 16 percent. The disorder seems more prevalent in boys than in girls before puberty and the sex ratio appears to be equal after puberty.

One authority suggests that girls are classified as having oppositional disorder more frequently than boys because boys more often receive the diagnosis of conduct disorder. No distinct family patterns have been noted, but many parents of children with the disorder are themselves overly concerned with issues of power, control, and autonomy.

Occasional rule breaking and rebellious behavior is common during childhood and adolescence, but in youth with conduct disorder behaviors that violate the rights of others are repetitive and pervasive. Estimated rates of conduct disorder among the general population range from 1 to 10 percent, with a general population rate of approximately 5 percent.

The disorder is more common among boys than girls, and the ratio ranges from 4:1 to as much as 12:1. Conduct disorder occurs with greater frequency in the children of parents with antisocial personality disorder and alcohol dependence than in the general population. The prevalence of conduct disorder and antisocial behavior is associated with socioeconomic factors.

Material and Method:

Approval from Institutional Human Ethical Committee (IHEC) was obtained before conducting the study. This is a cross sectional study involving 900 primary school children aged between 6 and 11 years (3rd to 5th std.) selected on a random basis from four different schools in Indore district. After obtaining permission from the school Principals, the written informed consent form was given to the parents through the children. Parents of 900 children gave consent for allowing their children to participate in the study.

Children's Behavior Questionnaire (CBQ, Rutter) was given to the teachers of the children identified in the study as having ODD and CD. It consists of two separate questionnaires, namely (i) CBQ‑A, (ii) CBQ‑B. CBQ‑A is used for assessing their academic

performance, reading and writing difficulties, and need for psychiatric guidance, and CBQ‑B is used for assessing their behavioral difficulties, if any.

The diagnostic criteria of DSM-IV-TR given by American Psychiatric Association were followed. Information regarding the nature of the study was communicated to the school authorities. The consent cooperation and active participation of principals and teachers was ensured after allaying their apprehensions about the nature and implication of this study.

Consent of parents was obtained after briefing them during multiple parents-teachers meetings spread over three months. During these meeting the scope and benefits of this study was explained to them and their informed consent was taken. The names of the schools as well as students were kept confidential as per the requests of school authorities and parents. They were given code as School A, School B, School C and School D.

Our Study is a two stage study. In first phase child behavior questionnaire was used, as a screening tool (to be completed by teachers), for the purpose of screening the 'disturbed' from 'non-disturbed' children in the school setting. CBQ was proposed by Rutter in 1967.

Proforma A

Consisted of 9 items which seek information about educational performance, consistency in academic work, attendance, sports, reading and writing difficulties nick names, physical handicap and teachers opinion about the need of psychological help.

Proforma B

It consisted of 26 items, tapping the behavioral and emotional problems, shown by children in school. It was rated in a three step response scale 2, 1, 0 for certainly applies, 'somewhat applies' and 'does not apply'. A score of 9 (total) or more is considered to show evidence of some disorder as suggested by Rutter et al.

For all the children screened positive were asked to follow up in psychiatry department of SAIMS with their parents and diagnosis was made by psychiatrist using DSM IVTR criteria given by American Psychiatric Association.

Statistical analysis was done using SPSS (Statistical Product and Service Solutions) 10 Software. Mean and Standard Deviation and Chi Square Test were used for analysis.

Results:

A total of 900 students of class III, IV & V were screened through child's behaviour questionnaire and 230 were found to be having some psychiatric morbidity.

On further interviewing children along with parents, final diagnosis of psychiatric disorder was made according to DSM-IV-TR criteria. 25.45% of the total subjects were having psychiatric morbidities.

Of the total students in the study population, those who are found positive through Rutter's B Scale total males were 137 and females were 93. The prevalence of Oppositional Defiant Disorder was found to be 7.73%, Conduct disorder 5.48%.

Discussion:

Mental health is the balanced development of an individual's personality and emotional attitudes which enable him to live harmoniously with his fellow men, mental health is not exclusively a matter of relation between persons, it is also a matter of relation of the individual towards the community he lives in, towards the society of which the community is a part and towards the social institution which for a large part guides his life, determine his way of living. Working leisure and the way he earns and spends his money, the way he sees happiness, stability and security. [10]

Children are the most important asset and wealth of a nation. Healthy children make a healthy nation. The children under 15 years of age constitute about 40% of the population and school aged children i.e. 6 to 14 years age constitute 22% of children population. [11] The child is not a miniature, but an individual in his own right. The quality of childhood one has lived will determine the ultimate nature of adulthood. The foundations of child's social attitude and skills are laid in the home. Now days, because of the rapid industrialization and urbanization, majority of young couples are employed, so unavoidably they get less time to look after their children. Under these circumstances, emotional, behaviour and psychiatric problems arc on the rise. [12]

A child is born and brought up in a family. Family dynamics plays a vital role in mental health and illness. Psychologically and physically broken home has been reported in both the depressive and schizophrenic psychopathology. Child rearing practices can retard or accelerate development of child health. Schizophrenogenic parents and refrigerator parents who are cold and apathetic, produce autistic and psychotic child behavior. [13-16]

In our study, 25.45% of the total subjects were having psychiatric morbidities. Of the total students in the study population those

who are found positive through Rutter's B Scale total males were 137 and females were 93. The prevalence of Oppositional Defiant Disorder was found to be 7.73%, Conduct disorder 5.48%.

Gender wise estimation of psychiatric morbidities in study population is as follows:-

ODD	Males	Female	Chi square	P Value
Present	41 (8.89%)	30 (6.83%)	1.313	0.252 Significant
Absent	420 (91.11%)	409 (93.17%)		

When this data was analyzed statistically it was found to be insignificant: **(P = 0.252>0.05)** Epidemiologic studies of negativistic traits in nonclinical populations found such behavior in 16 to 22 percent of school age children. According to the text revision of the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR), prevalence rates for this disorder range from 2 to 16 percent. The disorder seems more prevalent in boys than in girls before puberty and the sex ratio appears to be equal after puberty.

CD	Males	Female	Chi square	P Value
Present	36 (7.81%)	13 (2.96%)	10.265	.001 Significant
Absent	426 (92.19%)	426 (97.04%)		

Estimated rates of conduct disorder among the general population range from 1 to 10 percent, with a general population rate of approximately 5 percent. The disorder is more common among boys than girls, and the ratio ranges from 4:1 to as much as 12:1.

Summary and Conclusion:

Behaviour or emotional problems cause discomfort in childhood and disrupt family and social activities. Children with behaviour or emotional problems are more likely to have similar problems later in life. It is said that *Quality of life one has lived in childhood, will determine ultimate nature of adulthood it gets differentiated into*. Thus, behavioural problem in childhood could be the stepping-stones to more serious problems in the form of adult psychiatric disorders. However, unlike physical illness, which in most of the cases has clear-cut symptomatology, any deviation from normal mental development or behaviour in children may not be easily identified by the parents except from grave observable changes.

Studies done in both developing and developed countries have shown similar prevalence rates of psychopathology among children emphasizing the universality of the problem. In a community setting, poor response for such studies has been a major limitation and therefore, majority of the studies on the magnitude of mental health problems have been conducted either on adult population or some specific group of children like those attending child guidance clinics.

On summarizing the study total of 900 students of class III, IV & V were screened through child's behaviour questionnaire and 230 were found to be having some psychiatric morbidity. On further interviewing the child along with parent's final diagnosis of psychiatric disorder was made using DSM-IV-TR criteria's. Study was carried out in four schools of Indore district. Appropriate statistical tests were applied to the result obtained and found that 25.45% of the total subjects were having psychiatric morbidities.

Of the total students found positive in the screening test of the study population total males were 137 and females were 93. The prevalence of Oppositional Defiant Disorder was found to be 7.73%, Conduct disorder was found to be 5.48%. In this study group students were not having any intellectual disabilities, as mental retardation in children was excluded from the study.

In our country where we have limited resources, the approach mentioned in this study would minimize the financial and skilled manpower required for detection of problem children. Feed backs from the study can be used as a pilot project for sensitizing and training all school teachers and also for larger community based studies to prevent psychiatric morbidity and create a more resilient society.

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Table 1: Sex wise Distribution of Cases

Sex	No. of Children	Percentage
Male	137	59.56%
Female	93	40.43%
Total	230	100%

Table 2: Prevalence of Various Types of Psychiatric Morbidities in Study Population

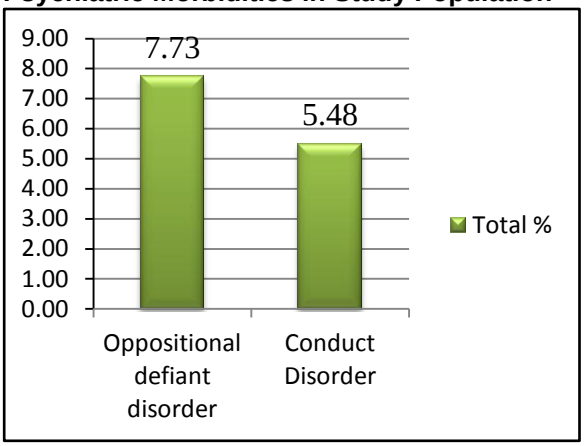

Table 3: Gender wise Estimation of Psychiatric Morbidity in Study Sample

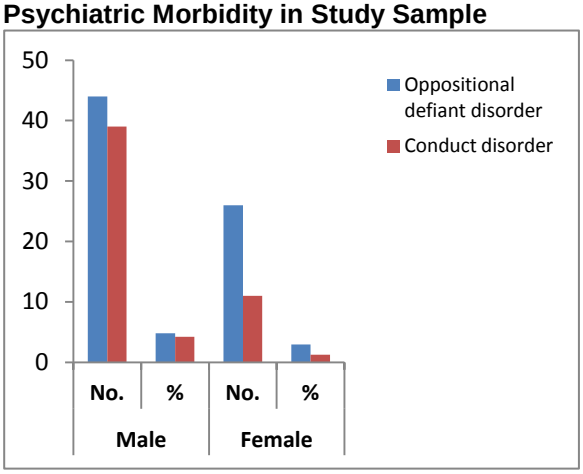

Table 4: Gender Wise Differentiation