Diagnosis Based on Parent and Teacher Rating for Attention Deficit Hyperactivity Disorder

Shabnum Rivees, A Wahid Khan*, AG Madhosh**, Abdul Rouf[#], Zeba[†]

Psychiatric Diseases Hospital, Jammu, *Department of Psychiatry, SKIMS Medical College, Srinagar., **Department of Education University of Kashmir, [#]Distt. Hospital, Handwara. [†] Doranda College, Jarkhand, Ranchi

ABSTRACT

Parents and teachers play a significant role in the diagnosis of ADHD in children in the clinical setting. With the same in consideration a study was conducted to compare the perception between parents and teachers on the rating scales for ADHD children. The study was conducted on a sample of parents and teachers of 100 children diagnosed as having ADHD as per ICD-10 diagnostic criteria. A newly constructed and standardized parent rating scale for parents of ADHD children and attention deficit comprehensive teacher rating scale for teachers was administered on the target sample. Results indicate that there was statistically no significant difference in the rating of perception between parents and teachers on four dimensions, viz (i) attention (ii) hyperactivity (iii) social skills (iv) oppositional behaviour of ADHD children. To verify these findings, positive correlation was found between parents and teachers perception on all the four dimensions. *J Med Sci. 2010; 13(1):11-14*

Key words: Parents and teacher's perception of ADHD Children.

Introduction

The diagnostic criteria for attention-deficit hyperactivity disorder (ADHD) have undergone considerable evaluation from DSM-II "Hyperkinetic Syndrome of Childhood" to DSM-IV-TR "Attention deficit hyperactivity disorder" (ADHD), and ICD-9 did not base its definition upon symptom counts but upon a matching of the whole symptom pattern to a written description of psychopathology. Extreme over-activity had to be present, the inability to attend was a necessary part of the diagnosis, but impulsiveness did not attend into the description. As per ICD-10, the severe and pervasive inattentiveness and over-activity must be present but the severity required

seems less extreme than in ICD-9. ICD-10 also includes research diagnostic criteria that are closer to the format of a symptom list with a cut-off in the number of symptoms required (World Health Organization-1993). The result of its use is likely to be an increase in the number of children who receive the diagnoses of ADHD. These changes in classifications over the years do not reflect ambivalence on the part of professionals who develop these classifications and guidelines. They reflect the rapidly expanding knowledge about this disorder. ADHD characteristics suggest that the disorder is present from birth; they have been noticed since early infancy by their parents. Honey Oberoi 1995 epidemiological studies show that hyperkinesis is the single most chronic behaviour disorder in the pre-adolescent age group, being more common in boys than girls, with the ratio ranging from 5:1 to 9:1 and the ratio ranging between 1% to 6%. The prevalence ratio of hyperactivity in school going children to be 4.67% with boys 4.7 times more hyperactive than girls Gada(1987).

Reprint request:
Dr. Abdul Rouf
Assistant Surgeon
District Hospital, Handwara,
Kashmir.

For assessing children's behaviour there are some ratings scales. These rating scales might be completed by parents and teachers. Teachers must understand and accept the clinical findings and need to understand what measures should be taken for these children. As classroom teachers recognizing the underlying problems, they describe a child's inability to still stay on task or the child's impulsive behaviours such as interrupting or fighting. The important information can be obtained in an efficient way, the type of behaviour which professionals want to rate. The behavioural rating scales using nomenclatures instruments for the evaluation of children and adolescence (Barkely *et al* 1990). Despite the limited utility of rating inventories for diagnoses (Hodges, 1993) as well as methodological problems endemic to their design and related data analyses, the advantages of using these rating inventories include ease of administration and convenience of obtaining impressions of child normative behaviours in home and school settings from adult informants. The Conner's (1998-a, 1998-b) series of parent and teacher rating scales are probably the most popular Attention Deficit Disorder Comprehensive teachers rating scale, originally by Ullmann (1984), contributing to and derived from these sources continue to be used widely as assessment.

Aims & Objectives

The aim of the present study was to assess whether the hyperkinetic children's parents and teachers have the same perception with regard to attention, hyperactivity, social skills and oppositional behaviour of hyperkinetic children and what psychological management can be suggested for the parents and teachers of such children.

Material & Methods

The present study consisted of parents and teachers of one hundred children with the age range of six to eleven years with the diagnosis of ADHD as per ICD-10 were included in the study. Since ADHD patients are less common, data were collected from the child psychiatry unit of a) Central Institute of Psychiatry, Ranchi b) National Institute of Mental Health and Neuro-sciences, Bangalore c) Jammu & Kashmir Psychiatry Hospitals d) Institute of Human Behaviour and Allied Sciences, New Delhi. Children with gross neurological disorder, mental retardation, major psychosis and other psychiatric disorders were excluded from the present study.

Tools:

- A self constructed parents rating scale for diagnosis of ADHD children. This is a 32 item scale constructed by the first author. The scale has four dimensions:
 - Attention
 - Hyperactivity
 - Social skills
 - Oppositional behaviour.

Each dimension is assessed with the help of eight statements on a five point scale, 1-5, with maximum score obtained at 32 indicates less desirable behaviour. Scale has been made linguistically more simplified for better conceptualization.

- Reliability: Reliability of the scale was determined with the test retest method.
- Validity: For ascertaining the validity of the present scale Conner's 1987 parent rating scale revised version was used.

Attention deficit disorder hyperactivity Comprehensive Teacher Rating Scale (ACTeRS) The scale was developed by Ullmann *et al* (1985). The scale assesses four defined content areas (i) inattention (ii) over activity (iii) social competence (iv)Oppositional behaviour. All items are scored on a 5 point scale, with almost never = 1 and almost always = 5. For the items worked positively (attention and social skills) a higher score reflects more appropriate behaviour. For the items worded negatively (over activity and oppositional behaviour) a higher score indicates less desirable behaviour.

Scoring and norms for categorization of parent rating scale:

A. Scoring of Dimension		vs. B. General scoring	
Scores	Explanatory	Scores	Explanatory
30	High	220+	High
20-29	Moderate	160-219	Moderate
10-19	Low	90-159	Low

Procedure:

- Parents: One hundred parents (mothers/fathers) of hyperkinetic children already diagnosed as ADHD as per ICD-10 criteria were contacted for collection of data on parent rating scale of ADHD children in the age range of 6 years to 11 years and an agreement was taken that they will participate in the present study.
- Teachers- School teachers of the same children were requested to rate the children's behaviour on ACTeRS. Children who were not able to be rated by the teachers were rated by the psychiatric social worker in the school in place of the teacher.

Purposive sampling technique was used for the study. The data obtained were analyzed by 't' test and coefficient of correlation.

Statistical analysis:

The data obtained were analyzed by 't' test and coefficient of correlation.

Results & Discussion

Keeping in view the objective of the present study it may be recalled that parents and teachers of one hundred children with the diagnosis of ADHD were studied. Parent rating scale was applied on the parents and hyperactivity comprehensive teacher rating scale was applied on the teachers of these ADHD children. 't' ratio was worked out to assess the differences in the perception of parents and teachers.

As apparent from this Table-1, "t" ratio is not significant, which reveals that there is no difference in perception of various behavioural dimensions of ADHD children between the parents and teachers of these children.

Table 1: "t" Test: Comparison of perception parents and teachers of ADHD

Parents		Teachers	
N	100	N	100
Mean	22.73	Mean	22.44
SD	4.08	SD	4.05

"t" = 0.01 NS at 0.1 level

Similarly is the case when the co-efficient of correlation was worked out to verify the above findings in Table-2.

The data clearly shows that there is a significant positive correlation between the parents' and teachers' perception on four dimensions of ADHD behaviour (Larry B.Silver-2006). Rating scales of parents and teachers are

Table 2: Coefficient correlation perception of parents and teachers of ADHD

Dimension	r	Remarks
Attention	0.93	Significant at 0.1 level High correlation
Hyperactivity	0.94	Significant at 0.1 level High correlation
Social skills	0.78	Significant at 0.5 level Moderate correlation
Oppositional	0.81	Significant at 0.5 level Moderate correlation

popular instruments for assessing the behaviour children, important information can be obtained in efficient way and these findings provide a baseline so that changes can be measured. (Alessandri,1992) on epidemiological studies as well as studies of at-risk and clinically referred preschoolers have found that parents and teachers express concern when preschoolers are inattentive, noncompliant, hyperactive law on impulse control, and aggressive with peers. Objective assessment of these behavioural difficulties has corroborated parent and teacher reports. The present study sensitizes us to the fact that not only parents but teachers can also have a better perception about the behaviour of ADHD children (Biederman et al 1990).

When a parent report leads to a diagnosis of ADHD it is highly likely that the teacher's report will be positive. It may be worth noted that 99% of the present study samples were rated on parents rating scale and teacher rating scale by their mothers or female teachers. Katherine S Ronze(1997) have noted that 99% of female sample give their responses on the rating scales (it may be as mother or other female who have strong emotional commitment with the child) which is supported by the present study.

Overall, the present study has shown that both parents and teachers can be relied upon to provide valuable information through the use of rating scales for the early diagnosis of ADHD, as well as subsequent monitoring of gains on treatment/management. Such an information as obtained through the use of rating scales on both parents and teachers becomes even more valuable especially there is difficulty in proper expression or description of the various symptoms by the parents owing to different reasons e.g some kind of psycho-pathology in themselves or poor educational background that may become impediments in proper description of symptoms. Also, by using rating scales, parents as well as teachers can become sensitized to the possible expectations on various treatment/management strategies that involve modalities such as medication and behavioural treatment from a mental health professional, working with parents and schools to ensure environment conducive to focus and attention. Behavioural therapy or the pro-modification programmes help to increase organization and diminish uncertain expectations. Psychosocial treatments are effective; these include behavioural parent training and behavioural classroom management. The programme for running social skills groups will develop child sensitivity for his or her social problems.

Conclusion

Parents and teachers can be best observer of the child behaviour. Early diagnosis about the ADHD children can help for better treatment plan on the basis of categorization and severity.

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