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# Prevalence Of Attention Deficit Hyperactivity Disorder (ADHD) Among School Children- A Descriptive study

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# ABSTRACT

According to WHO, Attention deficit hyperactivity disorder (ADHD) is one of the most common neurodevelopmental disorders of childhood that affects learning, concentration, and behaviour especially in school children.<sup>1</sup> The prevalence of ADHD among children and adolescents ranges from 1.30% to 37.8%. ADHD, if undiagnosed is found to persist into adulthood in 50% to 60% of the cases. ADHD cannot be prevented, but if detected in advance, early initiation of appropriate treatment is possible.<sup>2</sup> So, the present study was carried out to assess the ADHD symptoms among school children in a selected school. The descriptive research design was selected and consecutive sampling in which 120 school children were screened through their mothers. The data were collected using NICHQ Vanderbilt assessment scale- parent informant and analyzed by descriptive statistics. The result reveals that five out of 120 children were found to be symptomatic for ADHD, one child (0.8%) was found to have combined ADHD, another child (0.8%) was predominantly hyperactive ADHD, three others (2.5%) were identified as predominantly inattentive ADHD, whereas 115 (95.8%) of them are normal. No significant association was found between the study variables and the selected baseline details of the participants.

Keywords: attention deficit hyperactivity disorder, prevalence

### INTR<mark>ODUCTI</mark>ON

Attention deficit hyperactivity disorder is a result of complex transactions between genetic, environmental, developmental traits and genetic factors are credited for determining about 80% of the cases.<sup>3</sup> Children with ADHD are at risk of dropping out of school, becoming pregnant as a teenager, and committing criminal behaviour. Untreated ADHD increases the risk for future complications such as poor academic performance and learning delay, low self-esteem, poor social skills, and increased susceptibility to physical injury in childhood.<sup>4</sup> ADHD usually presents during childhood, and its diagnosis is most often made in school-aged children. However, many children with disorder continue to experience symptoms as they enter adolescence (60-85%) and adult life (40%).<sup>5</sup>

#### Objectives

- To assess ADHD symptoms in children by relying on information provided by their mothers.
- To find the association between Attention deficit hyperactivity disorder(ADHD) among school children and their selected baseline variables.

# Methodology

A quantitative research approach and a descriptive research design were adopted for the study. The study was conducted among school children through their mothers. The setting of the study was a selected school in Tiruvalla. The population selected for the study was school children studying in third to fifth standard aged between 8 to 12 years. The sample size was 120. Non- probability consecutive sampling technique was used by the researcher to get the pre-determined size of the sample. Samples were selected based on the study criteria and given NICHQ assessment scale to mothers to fill the format. In this study, researcher used a standardized tool to assess ADHD.

Tool: Vanderbilt parent informant rating scale to assess ADHD symptoms among school children.

#### MAJOR FINDING OF THE STUDY

Table 1.1 frequency and percentage distribution of school children based on their age, gender, birth history and past medical history.

Variable	f	%
Age of the child		
8 years	31	25.8
9 years	23	19.2
10 years	31	25.8
11 years	20	16.7
12 years	15	12.5
Gender of the child		
male	71	59.2
female	49	40.8
Birth history of the child		
normal	101	84.2
low birth weight	16	13.3
neonatal jaundice	2	1.7
squint	1	0.8
Past medical history		
Normal	113	94.2
Head injury	2	1.7
others	5	4.0

#### Assessment of ADHD among school children



Fig- 1.1 Pie diagram on frequency and percentage distribution of children withADHD

The study reveals that one (0.8%) child had combined ADHD, one (0.8%) had predominantly hyperactive ADHD and three (2.5%) of them had predominantly inattentive ADHD whereas 95.8% (115) of them were found normal as per NICHQ Vanderbilt Assessment Scale Parent Informant.

#### Association between ADHD and selected baseline variables

The association between ADHD among school children and their selected baseline

variables was assessed using Fisher's Exact Test because more than 20% of the cells had expected frequency less than five.

N=120

Child age         Image: State 10 years         83         3         0.621           8 to 10 years         32         2         Image: State 10	Baseline variable	Normal	ADHD	<b>P</b> #
8 to 10 years       83       3       0.621         10 to 12 years       32       2         Gender       -       -         Male       67       4       0.647         Female       48       1       -         Birth history       16       0       -         Normal       96       5       1.0       -         Low birth history       16       0       -       -         Neonatal jaundice       2       0       -       -         Others       1       0       -       -       -         Normal       113       5       1.0       -       -       -       -       -         Normal       113       5       0       -       <	Child age			
10 to 12 years       32       2         Gender       -       -         Male       67       4       0.647         Female       48       1       -         Birth history       -       -       -         Normal       96       5       1.0       -         Low birth history       16       0       -       -         Normal jaundice       2       0       -       -         Others       1       0       -       -       -         Normal injury       2       0       -	8 to 10 years	83	3	0.621
Gender         Image         67         4         0.647           Male         67         4         0.647           Female         48         1         Image           Birth history         6         5         1.0           Normal         96         5         1.0           Low birth history         16         0         Image           Normal         113         5         1.0           Past medical history         Image         Image         Image           Normal         113         5         1.0           Head injury         2         0         Image           Others         5         0         Image           Town         30         3         0.127           village         120         2         Image           Town         30         3         0.127           Village         120         2         Image           MR         104         4         0.415           MR         1         0         Image           Heath workers         11         0         Image           Itaelers         11         0         Image	10 to 12 years	32	2	
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Birth history         96         5         1.0           Normal         96         5         1.0           Low birth history         16         0 $\end{tabular}$ Neonatal jaundice         2         0 $\end{tabular}$ Others         1         0 $\end{tabular}$ Normal         113         5         1.0           Head injury         2         0 $\end{tabular}$ Others         5         0 $\end{tabular}$ Mormal         113         5         1.0           Head injury         2         0 $\end{tabular}$ Others         5         0 $\end{tabular}$ Others         5         0 $\end{tabular}$ Village         120         2 $\end{tabular}$ Nil         104         4         0.415           ADHD         9         1 $\end{tabular}$ Home makers         91         4         0.241           Health workers         11         0 $\end{tabular}$ Iteachers         11         0 $\endteabets$	Female	48	1	
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Low birth history       16       0         Neonatal jaundice       2       0         Others       1       0         Past medical history	Normal	96	5	1.0
Neonatal jaundice       2       0         Others       1       0         Past medical history	Low birth history	16	0	
Others       1       0         Past medical history       .       .         Normal       113       5       1.0         Head injury       2       0       .         Others       5       0       .         Place of residence       .       .       .         town       30       3       0.127         village       120       2       .         Family history       .       .       .         Nil       104       4       0.415         ADHD       9       1       .         MR       1       0       .         Developmental delay       1       0       .         Mother's occupation       .       .       .         Home makers       91       4       0.241         Health workers       11       0       .         others       2       1       .         Mormal       109       5       1.0         Others       2       1       .         Dothers       2       1       .         Outhers       2       1       .         Outhers	Neonatal jaundice	2	0	
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The above table reveals that there is no significant association between ADHD and selected baseline variables.

# CONCLUSION

This study aims to assess ADHD among school children Thus, the present study found 4.1% of children have ADHD symptoms of which 0.8% are predominantly hyperactive, 0.8% are combined ADHD and 2.5% are predominantly inattentive. Thereby the study helped to find undiagnosed cases which is an essential step

towards initiating early treatment and management that can prevent or improve the development of the disorder and help to reduce or prevent its long-term consequences or impact of untreated and undiagnosed ADHD.

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