

Spectrum of co-morbidities and psychopathology in children with Attention-deficit hyperactivity disorder (ADHD): A Retrospective Study

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INTRODUCTION

- ADHD (Attention Deficit Hyperactivity Disorder) - a common neurodevelopmental disorder of the childhood and adolescent - estimated pooled prevalence of 7.2%¹
- Comorbidities are a distinct challenge in diagnosing and managing children and adolescents with ADHD
- An estimated 60%–100% of children with ADHD also exhibit one or more comorbid disorders that often continue into adulthood²
- The most common co-morbid conditions associated with ADHD are³:
 - Autism spectrum Disorder
 - Sleep problems
 - Intellectual disability
 - Language disorders
 - Anxiety
 - Learning disorders
 - Oppositional defiant disorder
 - Conduct disorders
 - Epilepsy
- It is imperative that co-morbidities are screened, diagnosed and managed to improve the outcome in children with ADHD

OBJECTIVES

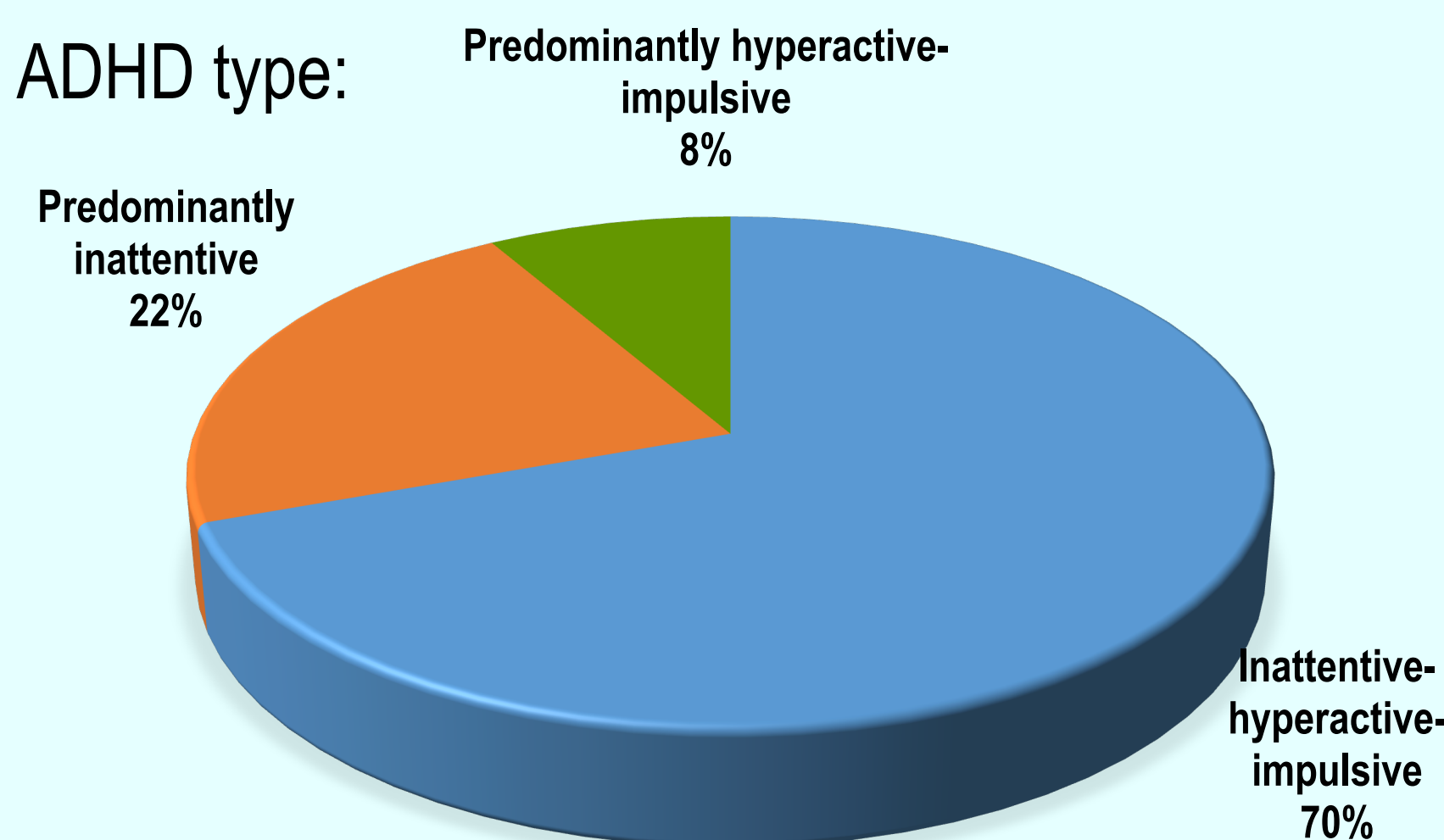
- To correlate the diversity in co-morbidities and psychopathology in children with ADHD

MATERIALS AND METHODS

- Study type: Retrospective analysis
- Place of study: Center of Excellence & Advanced Research For Childhood Neurodevelopmental Disorders, Department of Pediatrics, All India Institute of Medical Sciences, New Delhi, India
- Study period: October 2017-March 2022
- ADHD and co-morbidities were evaluated using the following tools:
 - DSM-V
 - AIIMS-INDT tool for ADHD
 - The Conners' Teacher Rating Scale
 - Mallin's Intelligence Scale for Indian Children (MISIC)
 - Childhood Behaviour Check List (CBCL)
- Data analysis: Data was analysed using the Stata v.15 software
- Spearman and Pearson correlation were used for non-parametric evaluation

RESULTS

- N= 131
- Male-118 (90 %), Female-13 (10 %)
- Mean age-9.48 years
- ADHD type:



- The psychometric parameters (learning problems, executive functioning and peer relation) in CONNER's scale was found significant ($p < 0.001$)
- Co-morbidities were found in 35.1% patients
- Most common co-morbidities were:
 - Specific learning disability (SLD)(29/46)
 - Aggression (4/46)
 - Conduct disorder and Tourette syndrome were predominant in (3/46)
 - Oppositional Defiant Disorder and seizures were the least common co-morbidities (1/46)

CONCLUSIONS

- Spectrum of comorbidities in the children with ADHD is diverse
- The most common co-morbidity observed was (Specific learning disability)SLD in 63 % children
- SLD was most common with combined presentation in both females and males
- Four patients had multiple co-morbidities with ADHD presentation

REFERENCES

- Thomas R, et al. Prevalence of attention-deficit/hyperactivity disorder: a systematic review and meta-analysis. Pediatrics. 2015 Apr;135(4):e994-1001.
- Gillberg C, et al. Co-existing disorders in ADHD -- implications for diagnosis and intervention. Eur Child Adolesc Psychiatry. 2004;13 Suppl 1:180-92.
- Jogia J, et al. Comorbidities Associated With Attention-Deficit/Hyperactivity Disorder in Children and Adolescents at a Tertiary Care Setting. Glob Pediatr Health. 2022;9:2333794X221076607.

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