Conclusion

In conclusion, the most common diagnosis of the cases being recurrent bronchitis with obstructive syndrome. In consideration to the age distribution, it can be concluded that both males and females aged 3–6 years suffer from bronchitis approximately equally often. The most often correlated associated disease diagnosed in both males and females being adenoiditis and secondly acute respiratory viral infection. As aimed, this study sheds light on the intricate relationships between bronchitis and various associated diseases in pediatric patients. The findings indicate a significant prevalence of comorbid conditions such as acute respiratory viral infections, allergic rhinitis, rhino pharyngitis, adenoiditis, and post-inflammatory pneumofibrosis among children diagnosed with bronchitis. Each of these conditions contributes to the complexity of bronchitis, influencing its onset and exacerbating its symptoms such as nasal congestion, coughing that may worsen at night, fever mainly due to infection, persistent dry or productive cough, runny nose, dyspnea and recurrent respiratory infections like pneumonia, bronchitis, increased susceptibility to cold and others more prone in pediatric population. Understanding these connections is crucial for clinicians, as it highlights the need for a comprehensive approach to diagnosis and treatment. By addressing not only bronchitis but also its associated diseases, healthcare providers can improve overall patient outcomes and enhance the quality of life for affected children.

LITERATURE

1. Stanford Medicine : Acute Bronchitis in Children: https://www.stanfordchildrens.org/en/topic/default?id=acute-bronchitis-in-children-90-P02930 –2025. – URL: https://www.stanfordchildrens.org/en/topic/default?id=acute-bronchitis-in-children-90-P02930 (date of access: 15.03.2025).

2. Medscape : Upper respiratory tract infection clinical presentation : https://emedicine.medscape.com/article/302460-clinical?form=fpf#b3 –2024. – URL: https://emedicine.medscape.com/article/302460-clinical?form=fpf#b3 (date of access: 15.03.2025).

3. Springer nature : Respiratory syncytial virus : A comprehensive overview. – 2013. – № 45. – P. 331–379.

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IMPACT OF SCREEN TIME ON CHILD'S GROWTH AND NEUROPSYCHOLOGICAL DEVELOPMENT OF THE CHILD

Introduction

In recent years, the proliferation of digital devices has significantly transformed the daily lives of children, leading to increased screen time for entertainment, education, and social interaction. This trend has raised concerns among parents, educators, and health professionals regarding its potential impact on children's growth and neuropsychological development. Research indicates that excessive screen time may be associated with various adverse outcomes, including diminished physical activity, disrupted sleep patterns, and impaired cognitive and emotional development [1,2]

The American Academy of Pediatrics recommends limiting screen time for children, yet many children exceed these guidelines, often spending several hours a day engaged with screens [3]. This increase in screen exposure is particularly concerning given the critical nature of early childhood development, a period during which the brain undergoes significant

growth and maturation [4]. Studies have suggested that excessive screen time may contribute to attention problems, behavioral issues, and reduced academic performance [5].

Moreover, the type of content consumed and the context in which screens are used play vital roles in determining the effects on children [6]. As such, understanding the multifaceted relationship between screen time, growth, and neuropsychological development is essential for formulating effective guidelines and interventions aimed at promoting healthy development in children.

Goal

To study the impact of screen time on child's growth and neuropsychological development of the child.

Material and methods of research

An anonymous online questionnaire survey was conducted with 150 random respondents. The questionnaire consisted of the following questions: age, relationship with the child, hours spent on screen, type of content consumed, behavioural changes, sleep issues related to screen use, time impact on child's attention span, effect on child's academic performance, screen time management, and measures aimed at educating families about screen time where parents should pay attention to their child's neuropsychological growth.

The results of research and their discussion

In age distribution, there were 50 (33.3%) children aged 11–13 years, 30 (20%) children aged 5–7 years, 60 (40%) children aged 2–4 years and 10 (67%) children aged under 2 years.

The result of the survey found that 90 (60%) children spend 1–2 hours on screen, 50 (33.3%) children spend 3–4 hours on screen, and 10 (6.7%) children spend 5 or more hours on screen. Figure 1 presents a pie chart showing the number of hours on average a child spends on screen.

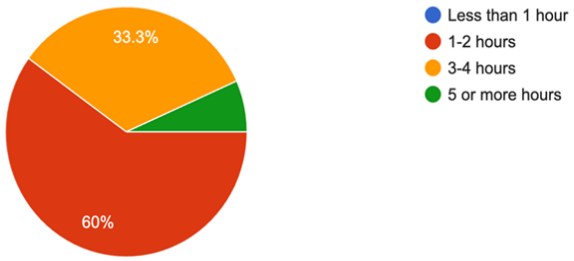

Figure 1 – Frequency of number of hours on average, a child spends on screen

Out of 150 responses regarding the type of content children primarily consume, the distribution is as follows: Educational: 30 (20%), Entertainment: 80 (53.5%) and Gaming: 40 (26.7%). This data highlights the varying types of screen content that children are exposed to, emphasizing the need to understand how these categories impact their growth and development

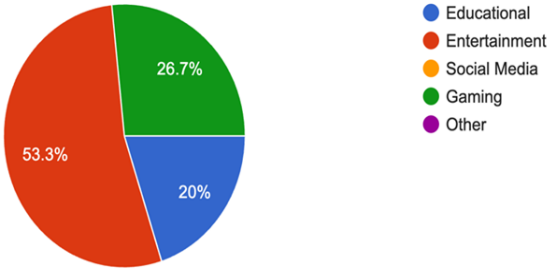

Figure 2 – Type on content children primarily consume

Out of the 150 respondents, 40 (26.7%) of respondents has agreed that their child has experienced behavioural changes due to increased screen time and equally 40 (26.7%) disagrees while 70 (46.7%) is not sure about this situation.

In response to the question, " Do you feel that screen time has affected your child's academic performance?"responses were, 30 (20 %) agreed on a negative performance, 40 (26,7 %) agreed on a positive performance ,30(20%) disagreed, and 50 (33.3 %) is not really sure.

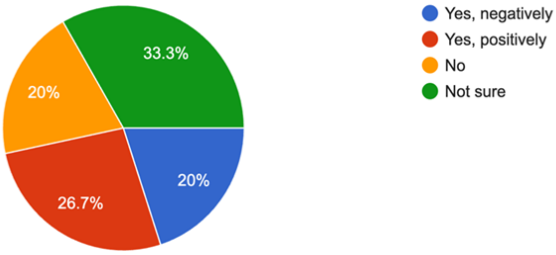

Figure 3 – Pie chart depicting effect of screen time on child's academic performance

Upon requesting for additional comments and insights on screen time and child development; The following comment was found relatable.

"Actually, these data I provided noticing my relative's children on a family gathering. I have noticed behavioral changes of their kids such as aggressive nature, overhyping emotionally, eating thieir food only if they are given the mobile phones, malnutrition because they consider mobile phones over food and current generation parents encourage this because they have a misconception that their child's skills increase if they are exposed to screen at such early ages''

So, as a solution for this prevailing issue the respondents were questioned about resources that would help children learn about managing screen time, where 70 (46.7%) have said about "online guides", 60 (40%) about "workshops", 10 (6.7%) about "printed materials" and 10 (6.7%) about "Mobile apps"

Thus, it is essential to address the impact of screen time on young children, as well as on adults, as excessive exposure may contribute to various neuropsychological disorders and adversely affect the younger generation. This issue warrants further investigation to develop effective preventive measures aimed at reducing screen time and safeguarding future generations from the development of neuropsychological disorders.

Conclusion

1. The study found out that most children experience behavioural changes due to increased screen time.

2. Educational initiatives are needed to help families make informed decisions about screen usage and children's health.

3. Encouraging balance between screen time and activities like play, reading, and outdoor hobbies can make a huge difference.

LITERATURE

1. Screen time and physical activity in preschool children: a longitudinal study / T. Hinkley, V.Carson [et al.] // BMC Public Health. – 2019. – Vol. 19, № 1. – P. 407.

2. The impact of screen time on children: a review of the literature / S. Domingues-Montanari // Child: Care, Health and Development. – 2017. – Vol. 43, № 4. – P. 468–477.

3. Media and Young Minds / American Academy of Pediatrics // Pediatrics. – 2016. – Vol. 138, № 5. – P. 1–8.

4. Playing Around in School: The Role of Play in Early Childhood Learning / A. Fisher, K. Hirsh-Pasek [et al.] // American Educator. – 2013. – Vol. 37, № 1. – P. 4–9.

5. The association between screen time and behavioral problems in preschool children / J. D. Radesky, T. J. Levenson [et al.] // JAMA Pediatrics. – 2016. – Vol. 170, № 4. – P. 401–407.

6. Digital childhood: electronic media use in preschoolers / E.A. Vandewater, S.J. Lee [et al.] // Pediatrics. – 2007. – Vol. 119, № 5. – P. 1006–1015.