Review Article

Behind the hashtags: a review of Instagram posts on pediatric ADHD

Neha R. Mahindrakar[1]*, Srutdi K. Natarajan[2], Arundhati Negi[3], Varshil Prajapati[4], Vrunda Rajput[4], Sameena Tabassum[5], Vansh Sharma[4]

[1]S.S Institute of Medical Sciences and Research Centre, Davangere, Karnataka, India
[2]Sri Ramachandra Institute of Higher Education and Research, Chennai, Tamil Nadu, India
[3]Kasturba Medical College, Manipal, Karnataka, India
[4]GMERS Medical College, Gandhinagar, Gujarat, India
[5]Department of Paediatrics, All India Institute of Medical Sciences, Guntur, Andhra Pradesh, India

*Correspondence:
Dr. Neha R. Mahindrakar,
E-mail: mahindrakarneha89@gmail.com

ABSTRACT

Social media has become an influential source of mental health information in recent years, raising concerns about the spread of misinformation. This study aimed to evaluate the reliability of Instagram posts related to pediatric attention-deficit/hyperactivity disorder (ADHD). A total of 761 posts were analyzed across 10 popular hashtags, with data collected on content relevance, type, gender representation, content creators, and engagement metrics such as likes, comments, and follower counts. Relevance was assessed using criteria from the DSM-5 and CDC guidelines. Only 31% of posts were found to be relevant to ADHD, with a majority being educational in nature. ADHD coaches were identified as the most frequent content creators. Gender representation in the posts represented females more than males. The overall engagement rate was calculated to be 16%. These findings highlight the widespread presence of potentially unreliable ADHD-related content on Instagram. Physicians must recognize the influence of such platforms on public health literacy and take proactive steps to counter misinformation, as it may contribute to misdiagnosis, inappropriate management, and confusion among patients and caregivers.

Keywords: Attention deficit hyperactivity disorder, Child and adolescent psychiatric disorders, Digital media

INTRODUCTION

Attention-deficit/hyperactivity disorder (ADHD) is a neurodevelopmental disorder, characterized by persistent inattention, hyperactivity or impulsivity. ADHD is more prevalent in children and adolescents with approximately 1 in 9 U.S children having received an ADHD diagnosis (7.1 million children).[1]

Social-media is increasingly gaining popularity as a means of staying connected. Popular platforms like Instagram, Snapchat, and TikTok are used to share information through text, pictures, and videos. As of 2024, a study reported that Instagram has 2 billion active users monthly.[2] Research has shown that people with mental health conditions like depression, psychosis, and other serious psychiatric disorders tend to use social media at rates similar to those of the general public. Usage spans from roughly 70% among older adults to nearly 97% in the younger population.[3-5] Additional studies suggest that many individuals with mental illness engage with social media to express their experiences, access mental health information and connect with others who share similar experiences to feel supported and empowered.[6,7]

Given this statistic, social media presents a valuable opportunity to enhance health literacy and reduce the

stigma associated with ADHD.[8] However, concerns persist regarding the reliability of content, the spread of misinformation, and the potential for health-related anxiety (cyber-chondria) within these platforms.[9] Misleading content often circulates more quickly and widely and diminishes the impact of credible sources.

With social media becoming the primary source of news for many young adults, the spread of misinformation not only shapes false beliefs regarding etiology, symptoms, and treatment but also carries serious implications for public health on a larger scale. This study was done to collect data and analyze the quality of information being shared on ADHD, on the widely used social media platform, Instagram.

METHODS

We conducted a detailed review to examine the nature, accuracy and engagement rate of Instagram posts related to ADHD in children. A total of 800 posts were selected from ten ADHD related hashtags on Instagram from March to May 2025.

100 posts each were selected from the hashtags #adhdawareness, #adhdexplained, #adhdresources, #adhdstrategies, and #adhdsupport, #adhdonline and 50 posts each from #adhdisreal, #adhdchild, #adhdproblems, #adhdparenting. These hashtags were chosen based on their relevance to pediatric ADHD content and frequency of use, which was observed during preliminary analysis.

Inclusion criteria

Posts written in English. Posts focused specifically on ADHD in children. Posts that did not include comorbid conditions (e.g., autism spectrum disorder).

Exclusion criteria

Posts in languages other than English. Posts exclusively focused on ADHD in adults. Posts with incomplete information regarding likes or comments. Duplicate posts.

Data analysis

761 posts which met the inclusion criteria were analyzed (Figure 1).[10] To assess the reliability of the information in a post, content was compared against established guidelines for ADHD from the centers for disease control and prevention (CDC) and the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5).

Posts were thematically categorized into one of three content types 'educational' if they aimed to provide factual information about ADHD symptoms, diagnosis or management; 'motivational' if they included content from parents of children with ADHD or from support groups dedicated to building a sense of community for

families of kids with ADHD; and meme-based if humor or satire was the central element. Gender representation was assessed by whether the posts featured males, females, neither or both. The nature of content creators (healthcare workers, ADHD support groups, parents of children with ADHD among others) was also documented. Engagement rate for the overall content was calculated using the formula: (Number of Likes+Number of Comments) / Number of Followers.[11]
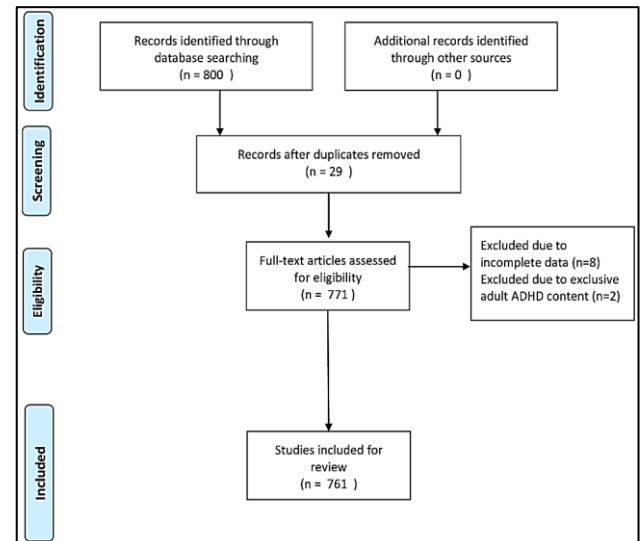

Figure 1: PRISMA flowchart.

RESULTS

A total of 761 Instagram posts pertaining to ADHD were analyzed in the study. 236 posts were found to be relevant to ADHD, which accounted for 31% of the total and has been portrayed in Table 1. The analysis showed that ADHD coaches and educators (251) contributed to most of the ADHD content online (Figure 2). 509 posts featured content classified as educational followed by meme-based (195) and motivational (57) (Figure 3). The gender represented in the posts was also analyzed and showed a distribution of 4.34% male, 20.50% female and 13.80% both sexes (Figure 4). The engagement rate of the analyzed posts was calculated to be 16%.
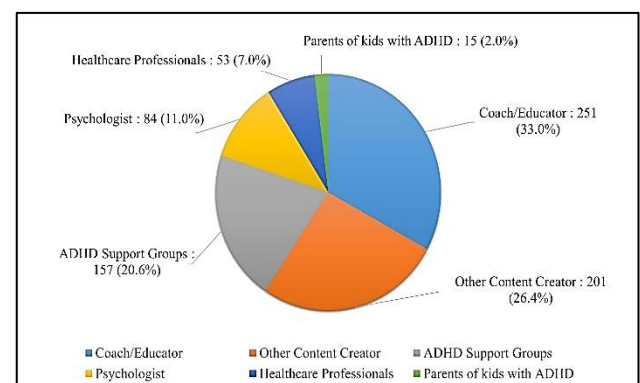

Figure 2: Content creator type distribution of posts.

Table 1: Relevance of posts.

S. No.	Hashtag	Total number of posts evaluated	No. of posts relevant to ADHD (compared to DSM-5 and cdc.gov)	Contribution to total relevant posts (%)[a]	Relevant posts within the hashtag (%)[b]
1.	#adhdawareness	92	22	2.89	23.9
2.	#adhdexplained	96	21	2.75	21.8
3.	#adhdresources	89	32	4.20	35.9
4.	#adhdstrategies	98	23	3.02	23.4
5.	#adhdsupport	98	28	3.67	28.5
6.	#adhdonline	100	44	5.78	44.0
7.	#adhdisreal	42	8	1.05	19.0
8.	#adhdchild	49	9	1.18	18.3
9.	#adhdproblems	49	35	4.59	71.4
10.	#adhdparenting	48	14	1.83	29.1
	Total	761	236	31.0	

[a]Contribution to total relevant posts (%) = (Total number of relevant posts for the specific hashtag/Total number of relevant posts across all hashtags) ×100. [b]Relevant posts within the hashtag (%) = (Total number of relevant posts for a specific hashtag/Total number of posts evaluated for that hashtag) ×100.
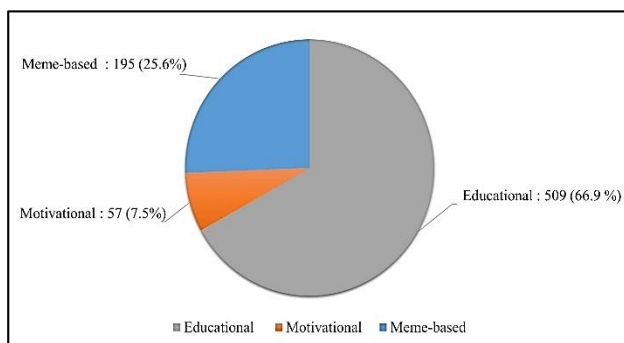
Figure 3: Nature of content distribution of posts.
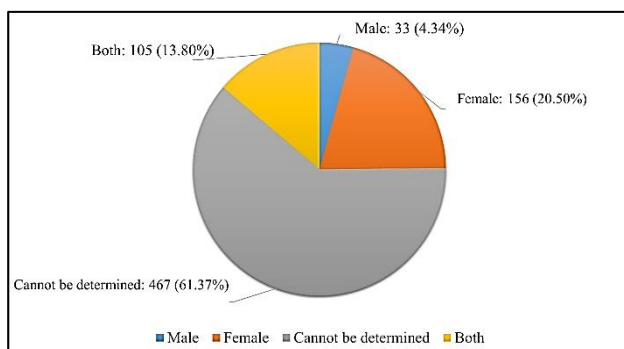
Figure 4: Gender distribution of Instagram posts.

DISCUSSION

This review aimed to analyze the characteristics of ADHD content shared on Instagram. 800 posts were sampled from March to May 2025 from ten ADHD related hashtags. Out of the 761 posts that met the inclusion criteria that were analyzed, only 236 (31%) were found to be relevant according to our predetermined guidelines. These guidelines helped determine the credibility of posted information. Given that Instagram is widely utilized by young and middle-aged audiences, the prevalence of misleading or irrelevant information highlights the need for improved content creation and monitoring mechanisms on Instagram. Similar results have been found by other studies aiming to look at the quality of ADHD content on social media.

A study by Karasavva et al showed that around 93.9% of the 98 videos analyzed on TikTok did not provide any source for their claims online.[12] Yeung et al found that approximately half of the 100 videos they analyzed on TikTok with ADHD hashtags were misleading.[9] Likewise, a study analyzing 50 TikTok videos under a single hashtag (#adhdtest) revealed that around 92% of the videos were misrepresentative and unreliable. In addition, the posts that did contain useful and relevant information had minimal engagement from users.[13] According to the best of our knowledge, this is the first study analyzing the quality of Instagram posts on pediatric ADHD. The predominant number of posts in our study were created by ADHD coaches and educators, who contributed to 251 of the 761 posts that were analyzed. The title of ADHD 'expert' was earlier reserved for researchers and clinicians. With the advent of social media, the role of ADHD coaches and influencers has increasingly become prominent on these platforms.[14] These individuals draw from personal experiences and provide relatable content that resonates with audiences.

The study also categorized the types of content being shared. Educational posts made up the majority of the content (509 posts), followed by meme-based content (195 posts) and motivational posts (57 posts). Gender representation showed a notable variation with 20.5% of the posts representing females, 4.34% representing males and 13.8% representing both sexes. This domain of analysis was done to assess how accurately Instagram content reflects the real-world prevalence of ADHD in children. Research suggests that ADHD is diagnosed

more often in males while girls are consistently underdiagnosed and undertreated due to the differences in expression of symptoms.[15] The engagement rate was calculated to be 16%, depicting a significantly high value.

A key limitation of this study lies in the fact that Instagram, while widely used, is not representative of all age groups. It is most commonly used by the younger generation and middle-aged individuals. Additionally, since our study required qualitative analysis of the content in the Instagram posts, subjective bias between the researchers could have occurred. Another concern is the reliance on the hashtags, which may not reflect a globally accurate dataset and reduces the generalizability of our analysis.

CONCLUSION

This study reveals that only 31% of Instagram posts related to ADHD meet clinical relevance criteria, with most content created by ADHD coaches and educators. While educational posts dominated content type, lot of them lacked clinical accuracy. Gender representation was also skewed, with more emphasis on females despite higher ADHD diagnosis rates in males. These findings underscore a disconnect between established clinical knowledge and the online narrative. As the first review article on Instagram posts on pediatric ADHD, this study highlights how mental health information is circulated on social media and the urgent need for involvement of healthcare professionals in guiding digital narratives.

REFERENCES

1. Danielson ML, Claussen AH, Bitsko RH. ADHD prevalence among U.S. children and adolescents in 2022: diagnosis, severity, co-occurring disorders, and treatment. J Clin Child Adolesc Psychol. 2024;53(3):343–60.
2. Sultanbayeva G, Kulsariyeva A, Lozhnikova O, Kalibekuly D, Tolegen B. Negative Influence of Incorrect Information on Facebook User Behaviour: Kazakhstan Case. Rotura–Revista de Comunicação, Cultura e Artes. 2025;5(1):37-54.
3. Aschbrenner KA, Naslund JA, Grinley T, Bienvenida JCM, Bartels SJ, Brunette M. A survey of online and mobile technology use at peer support agencies. Psychiatr Q. 2018;89(3):539–48.
4. Birnbaum ML, Ernala SK, Rizvi AF, De Choudhury M, Kane JM. A collaborative approach to identifying social media markers of schizophrenia by employing machine learning and clinical appraisals. J Med Internet Res. 2017;19(8):289.
5. Brunette MF, Achtyes E, Pratt S. Use of smartphones, computers and social media among people with SMI: opportunity for intervention. Community Ment Health J. 2019;55(6):973–8.
6. Bucci S, Schwannauer M, Berry N. The digital revolution and its impact on mental health care. Psychol Psychother. 2019;92(2):277–97.
7. Naslund JA, Aschbrenner KA, Marsch LA, Bartels SJ. Feasibility and acceptability of Facebook for health promotion among people with serious mental illness. Digit Health. 2016;2:1–7.
8. Naslund JA, Bondre A, Torous J, Aschbrenner KA. Social media and mental health: benefits, risks, and opportunities for research and practice. J Technol Behav Sci. 2020;5(3):245–57.
9. Yeung A, Ng E, Abi-Jaoude E. TikTok and attention-deficit/hyperactivity disorder: a cross-sectional study of social media content quality. Can J Psychiatry. 2022;67(12):899–906.
10. Moher D, Liberati A, Tetzlaff J, Altman DG; PRISMA Group. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. PLoS Med. 2009;6(7):1000097.
11. Harshitha A, Bheemavarapu B, Kaur R, Madhu KI, Mahajan A. A cross-sectional study on Instagram posts on autism. Int J Med Rev Case Rep. 2024;1:43.
12. Karasavva V, Miller C, Groves N, Montiel A, Canu W, Mikami A. A double-edged hashtag: evaluation of #ADHD-related TikTok content and its associations with perceptions of ADHD. PLoS One. 2025;20(3):319335.
13. Verma S, Sinha SK. How evidence-based is the "hashtag ADHD test" (#adhdtest): a cross-sectional content analysis of TikTok videos on attention-deficit/hyperactivity disorder (ADHD) screening. Australas Psychiatry. 2024;2:87.
14. Brown AI. ADHD, academics, and communities: who are the "ADHD experts"? In: Bertilsdotter Rosqvist H, Jackson-Perry D, eds. The Palgrave Handbook of Research Methods and Ethics in Neurodiversity Studies. Cham: Palgrave Macmillan; 2024: 329–344.
15. Skogli EW, Teicher MH, Andersen PN, Hovik KT, Øie M. ADHD in girls and boys–gender differences in co-existing symptoms and executive function measures. BMC Psychiatry. 2013;13:298.