INTERNATIONAL JOURNAL OF CURRENT RESEARCH IN CHEMISTRY AND PHARMACEUTICAL SCIENCES

(p-ISSN: 2348-5213: e-ISSN: 2348-5221)

www.ijcrcps.com

(A Peer Reviewed, Referred, Indexed and Open Access Journal)

DOI: 10.22192/ijcrcps Coden: IJCROO(USA) Volume 11, Issue 5- 2024

Review Article



DOI: http://dx.doi.org/10.22192/ijcrcps.2024.11.05.005

The Role of Social Media: A Powerful Tool in Adolescent Sickle Cell Disease Awareness

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Abstract

Sickle cell disease (SCD) presents unique challenges for adolescents, impacting their physical health, psychosocial well-being, and quality of life. In recent years, social media has emerged as a powerful tool for raising awareness and fostering support among adolescents living with chronic illnesses, including SCD. This review explores the role of social media in adolescent SCD awareness, highlighting its potential benefits, challenges, and future directions. Adolescents with SCD face unique psychosocial and health-related challenges, including pain management, medication adherence, and social stigma, which can significantly impact their quality of life. Social media platforms offer a virtual space where adolescents can connect with peers, share experiences, and access information in real-time, providing a sense of belonging and empowerment. Through online support groups, hashtags, and virtual communities, adolescents with SCD can find validation, encouragement, and practical advice from others facing similar challenges, fostering resilience and improving coping strategies. Additionally, social media serves as a platform for health education and advocacy, enabling adolescents to access reliable information about SCD, treatment options, and selfcare strategies, while also challenging misconceptions and promoting positive health behaviors. However, social media use among adolescents with SCD is not without challenges and considerations. Privacy concerns, cyberbullying, and misinformation pose risks to online interactions, necessitating the development of guidelines for safe and responsible social media use. Moreover, disparities in access to technology and digital literacy may exacerbate existing inequalities, limiting the reach and effectiveness of social media interventions. Healthcare providers must navigate ethical considerations surrounding patient-provider interactions in online spaces, ensuring confidentiality, professionalism, and the provision of accurate medical advice.

Keywords: Social Media, Adolescent Health, Sickle Cell Disease Awareness, Digital Advocacy, Online Communities

Introduction

Sickle cell disease (SCD) stands as one of the most prevalent genetic disorders worldwide, affecting millions of individuals, particularly those of African descent. Among the affected population, adolescents face unique challenges as they navigate the complexities of adolescence while managing the chronic health implications of SCD. This period of development is characterized by increasing autonomy, peer influence, and identity formation, making it crucial for adolescents with SCD to have access to comprehensive support systems. In recent years, the emergence and widespread adoption of social media platforms have transformed the landscape of adolescent health communication, offering new opportunities for raising awareness, providing support, and fostering community engagement among individuals living with chronic illnesses, including SCD. 1-5 Adolescents living with SCD encounter a multitude of challenges that extend beyond the physical manifestations of the disease. ⁶ The unpredictable nature of SCD-related symptoms, including pain crises, fatigue, and complications such as stroke or organ damage, can disrupt daily activities, school attendance, and social interactions. Moreover, adolescents with SCD may experience psychosocial stressors, including stigma, social isolation, and feelings of inadequacy, which can impact their self-esteem, mental health, and overall quality of life. As they for independence and autonomy, strive adolescents with SCD require tailored support systems that address their unique needs and empower them to effectively manage their health and well-being.

Social media platforms have become integral to the lives of adolescents, serving as primary channels for communication, information sharing, and social interaction.⁷ These platforms offer a virtual space where adolescents can connect with peers, express themselves, and access a wealth of information on various topics, including health and wellness. For adolescents living with chronic illnesses such as SCD, social media provides an opportunity to find solidarity, share experiences, and seek support from others facing similar challenges. Through online support groups, blogs, and social media campaigns, adolescents with SCD can connect with a global community, exchange tips for managing their condition, and advocate for their healthcare needs.In recent years, social media has emerged as a powerful tool for raising awareness and fostering support among adolescents living with SCD.8 Advocacy healthcare organizations. providers, individuals affected by SCD have leveraged social media platforms to amplify their voices, share their stories, and advocate for improved and resources. Hashtags such care #SickleCellAwareness and #SickleCellWarrior have gained traction on platforms like Twitter and Instagram, sparking conversations, awareness, and connecting individuals with SCDresources and support Additionally, social media influencers, celebrities, and healthcare professionals have played a significant role in promoting SCD awareness and destigmatizing the disease through their online presence and engagement with followers. Given the growing influence of social media in adolescent health communication and the increasing prevalence of SCD awareness initiatives on digital platforms, this review aims to explore the role of social media in adolescent SCD awareness.

Benefits of Social Media in Adolescent SCD Awareness

Social media platforms offer a plethora of benefits in raising awareness and fostering support among adolescents living with sickle cell disease (SCD). One of the primary advantages is the ability to create virtual communities where adolescents with SCD can connect with peers facing similar challenges. Through online support groups, forums, and chat rooms, adolescents can share experiences, exchange advice, and provide emotional support, creating a sense of belonging and reducing feelings of isolation. These virtual communities offer a safe space for adolescents to express themselves, ask questions, and seek guidance from others who understand their

experiences firsthand.Furthermore, social media provides a platform for disseminating accurate information about SCD and promoting health among education adolescents. Through multimedia content, infographics, and interactive posts, healthcare organizations, advocacy groups, and individuals affected by SCD can share valuable resources, tips for self-care, and updates on treatment advancements. By harnessing the power of storytelling and visual communication, social media campaigns can effectively convey complex medical information in a digestible format, empowering adolescents to make informed decisions about their health and wellbeing. 10-14

Another significant benefit of social media in adolescent SCD awareness is its potential to advocacy efforts and challenge amplify misconceptions about the disease. 15 Hashtags #SickleCellAwareness such as #SickleCellWarrior have become rallying cries for individuals living with SCD, sparking conversations, raising awareness, and mobilizing support on a global scale. Social media influencers. celebrities. healthcare and professionals play a crucial role in leveraging their platforms to destignatize SCD, share personal stories, and advocate for improved care and resources for affected individuals. By engaging with diverse audiences and fostering dialogue, social media campaigns can combat myths, stereotypes, and discrimination associated with SCD, promoting greater understanding and empathy within broader communities. Moreover, social media platforms offer opportunities for adolescents with SCD to become advocates for themselves and their peers, empowering them to share their experiences, raise awareness, and drive positive change. 16 By amplifying their voices, sharing their stories, and advocating for their healthcare needs, adolescents with SCD can challenge misconceptions, demand better support and promote inclusivity healthcare systems and society at large. Through social media, adolescents can connect with policymakers, healthcare providers, and advocacy organizations, contributing to policy changes,

research funding, and improved access to care for individuals living with SCD.

Challenges and Considerations

While social media offers significant benefits in raising awareness and fostering support among adolescents living with sickle cell disease (SCD), it also presents certain challenges and considerations that must be addressed to ensure safe and effective use.

Privacy Concerns: Privacy is a paramount concern in online spaces, particularly for adolescents sharing personal health information. There is a risk of unintended disclosure of sensitive medical details, potentially leading to privacy breaches or exploitation by malicious actors. Adolescents with SCD must be cautious when sharing personal information online and should be educated about privacy settings and the importance of safeguarding their digital footprint.¹⁷

Cyberbullying and Harassment: Social media platforms can be breeding grounds cyberbullying and harassment, which can have detrimental effects on the mental health and wellbeing of adolescents with SCD. Individuals may derogatory subjected to comments, discrimination, or ridicule based on their health condition, exacerbating feelings of isolation and low self-esteem. Healthcare providers, parents, and educators must educate adolescents about safe online behavior and provide resources for reporting and addressing cyberbullying incidents.

Misinformation and Misleading Content: The proliferation of misinformation and misleading content on social media poses a significant challenge for adolescents seeking accurate information about SCD. 18 False claims about miracle cures, unproven treatments, or misleading health advice may lead to misguided decisions about healthcare management. Healthcare providers and advocacy organizations play a crucial role in combating misinformation by providing evidence-based resources, debunking myths, and promoting critical thinking skills

among adolescents navigating online health information.

Digital Access Divide and **Disparities:** Disparities in access to technology and digital literacy may exacerbate existing inequalities among adolescents with SCD. 19 Individuals from marginalized communities or low-income households may lack access to reliable internet connections, smartphones, or computers, limiting their ability to engage in online support networks or access health information. Efforts to bridge the digital divide and improve digital literacy are essential to ensure equitable access to social media resources and support for all adolescents with SCD.

Ethical Considerations: Healthcare providers must navigate ethical considerations surrounding patient-provider interactions in online spaces. While social media offers opportunities for communication and support, it also blurs boundaries between personal and professional relationships. raising concerns about confidentiality, professionalism, and the provision of accurate medical advice. Healthcare providers should adhere to professional guidelines and codes of conduct when engaging with patients or discussing medical information maintaining respect for patient privacy and confidentiality at all times.

Online Peer **Pressure** and **Influences:** Adolescents are particularly vulnerable to peer pressure and influences in online environments, which may impact their health behaviors and treatment adherence. Social media influencers, celebrities, and peers may promote unhealthy practices, discourage medical treatment, or endorse alternative therapies without scientific evidence, leading adolescents with SCD to make uninformed decisions about their health.²⁰ Healthcare providers and caregivers must educate adolescents about discerning reliable sources of health information and encourage open communication about their healthcare decisions.

Mental Health Implications: Excessive use of social media and exposure to negative content

may have adverse effects on the mental health and well-being of adolescents with SCD.²¹ Comparison with peers, fear of missing out (FOMO), and feelings of inadequacy or insecurity may exacerbate stress and anxiety, particularly among adolescents already coping with the challenges of a chronic illness. Healthcare providers should screen for mental health concerns and provide resources for managing stress, promoting healthy online habits, and fostering positive coping strategies among adolescents with SCD.

Future Directions and Recommendations

1. **Tailored Content and Messaging:** As social media platforms evolve, there is a need for tailored content and messaging strategies to effectively engage adolescents with Sickle Cell Disease (SCD). Future initiatives should focus on understanding the preferences, interests, and information needs of this demographic to create content that resonates with them. Utilizing data analytics and audience insights can inform the development of personalized campaigns that drive meaningful engagement and behavior change. ²²⁻²⁴

2. **Interactive Education Platforms:**

Developing interactive education platforms can enhance disease awareness and self-management skills among adolescents with SCD. Gamification, quizzes, and interactive tutorials can make learning about SCD more engaging and accessible. These platforms can also serve as virtual support hubs, offering resources, coping strategies, and peer support to adolescents navigating life with SCD.²⁵

3. **Collaborative Partnerships:**

Collaborations between healthcare organizations, advocacy groups, social media platforms, and technology companies are essential for advancing adolescent SCD awareness initiatives.²⁶ By pooling resources, expertise, and networks, stakeholders can amplify their impact, reach underserved populations, and leverage innovative

technologies to address emerging challenges in SCD management and advocacy.

4. Empowering Adolescent Advocates:

Empowering adolescents affected by SCD to become advocates for their own health can catalyze grassroots movements and drive sustainable change. Providing training, mentorship, and leadership opportunities can equip young individuals with the skills and confidence to raise awareness, advocate for policy changes, and support their peers within their communities and online networks.

5. Addressing Digital Health Disparities:

Addressing digital health disparities is crucial to ensure equitable access to SCD information and support services among adolescents.³⁰ Efforts should be made to bridge the digital divide by providing access to internet connectivity, devices, and digital literacy training in underserved Additionally, communities. culturally linguistically appropriate content can enhance accessibility and inclusivity for diverse populations.

- 6. **Evidence-Based Evaluation:** Continuous monitoring and evaluation of social media-based SCD awareness initiatives are essential to assess their impact, effectiveness, and reach.³¹ Employing metrics such as engagement rates, reach, and qualitative feedback can inform iterative improvements and inform future strategies. Rigorous research studies are also needed to evaluate the long-term outcomes of social media interventions on adolescent SCD awareness, health behaviors, and health outcomes.
- 7. **Ethical Considerations:** Upholding ethical standards in social media advocacy is paramount to protect the privacy, dignity, and rights of adolescents with SCD. Stakeholders must adhere to ethical guidelines and regulations governing data privacy, informed consent, and online behavior. Promoting transparency, authenticity, and responsible communication practices can build trust and credibility within

online communities and foster a supportive environment for adolescent SCD advocacy.

Conclusion

Social media has emerged as a powerful catalyst in raising awareness about adolescent Sickle Cell Disease (SCD) and fostering a supportive community for those affected by the condition. Through digital advocacy, online communities, and targeted campaigns, stakeholders have been able to engage adolescents, promote disease education, and advocate for better SCD management and quality of life. Healthcare communication continues to evolve, presenting new opportunities and challenges for adolescent SCD awareness initiatives. Moving forward, it is essential to capitalize on the strengths of social media platforms while addressing emerging trends and needs in adolescent healthcare. Collaborative partnerships, tailored content, interactive education platforms, and empowered adolescent advocates are key pillars for advancing adolescent SCD awareness efforts. By embracing evidence-based practices, ethical considerations, inclusive strategies, stakeholders maximize the impact of social media in improving the lives of adolescents living with SCD.

References

- 1. Obeagu EI, Ochei KC, Nwachukwu BN, Nchuma BO. Sickle cell anaemia: a review. Scholars Journal of Applied Medical Sciences. 2015;3(6B):224422-52.
- 2. Obeagu EI. Erythropoeitin in Sickle Cell Anaemia: A Review. International Journal of Research Studies in Medical and Health Sciences. 2020;5(2):22-28.
- 3. Obeagu EI. Sickle Cell Anaemia: Haemolysis and Anemia. Int. J. Curr. Res. Chem. Pharm. Sci. 2018;5(10):20-21.
- 4. Obeagu EI, Muhimbura E, Kagenderezo BP, Uwakwe OS, Nakyeyune S, Obeagu GU. An Update on Interferon Gamma and C Reactive Proteins in Sickle Cell Anaemia Crisis. J Biomed Sci. 2022;11(10):84.
- 5. Obeagu EI, Bunu UO, Obeagu GU, Habimana JB. Antioxidants in the management of sickle

- cell anaemia: an area to be exploited for the wellbeing of the patients. International Research in Medical and Health Sciences. 2023;6(4):12-17.
- 6. Poku B. Understanding fatigue experiences of adolescents with sickle cell anaemia in Ghana: A constructivist grounded theory study. The University of Manchester (United Kingdom); 2019.
- 7. Spies Shapiro LA, Margolin G. Growing up wired: Social networking sites and adolescent psychosocial development. Clinical child and family psychology review. 2014; 17:1-8.
- 8. Kulandaivelu Y, Lalloo C, Ward R, Zempsky WT, Kirby-Allen M, Breakey VR, Odame I, Campbell F, Amaria K, Simpson EA, Nguyen C. Exploring the needs of adolescents with sickle cell disease to inform a digital self-management and transitional care program: qualitative study. JMIR pediatrics and parenting. 2018;1(2):e11058.
- 9. Obeagu EI, Asuma MN, Tukur M. Counseling Services for Adolescents: Nurturing Mental Health in Sickle Cell Disease Education. Elite Journal of Public Health. 2024;2(5):51-7.
- 10. Obeagu EI, EzeanyaCU O. Harnessing Technology for Effective Sickle Cell Disease Awareness Among Ugandan Adolescents: A Review. Elite Journal of Public Health. 2023;1(1):1-1.
- 11. Obeagu EI, GU. Adolescent Peer Education Programs: A Catalyst for Sickle Cell Disease Reduction. Elite Journal of Haematology, 2024; 2 (4)::1-9.
- 12. ObeaguEI OG. From Awareness to Action: Encouraging Adolescent Engagement in Sickle Cell Disease Prevention. Elite Journal of Public Health. 2023;1(1):42-50.
- 13. Wesley KM, Zhao M, Carroll Y, Porter JS. Caregiver perspectives of stigma associated with sickle cell disease in adolescents. Journal of Pediatric Nursing. 2016;31(1):55-63.
- 14. Obeagu EI, Obeagu GU. Culturally Tailored Education: A Key to Adolescent Sickle Cell Disease Prevention. Elite Journal of Public Health. 2024;2(3):52-62.
- 15. Wesley KM, Zhao M, Carroll Y, Porter JS. Caregiver perspectives of stigma associated

- with sickle cell disease in adolescents. Journal of Pediatric Nursing. 2016 Jan 1;31(1):55-63.
- 16. Obeagu EI. From Awareness to Action: Encouraging Adolescent Engagement in Sickle Cell Disease Prevention. Elite Journal of Public Health. 2023;1(1):42-50.
- 17. DeJong SM. Blogs and tweets, texting and friending: Social media and online professionalism in health care. Academic Press; 2013.
- 18. Slick N, Bodas P, Badawy SM, Wildman B. Accuracy of online medical information: The case of social media in sickle cell disease. Pediatric Hematology and Oncology. 2023;40(2):99-107.
- 19. White A, Liburd LC, Coronado F. Peer Reviewed: Addressing Racial and Ethnic Disparities in COVID-19 Among School-Aged Children: Are We Doing Enough?. Preventing chronic disease. 2021;18.
- 20. Costello N, Sutton R, Jones M, Almassian M, Raffoul A, Ojumu O, Salvia M, Santoso M, Kavanaugh JR, Austin SB. ALGORITHMS, ADDICTION, AND ADOLESCENT MENTAL HEALTH: An Interdisciplinary Study to Inform State-level Policy Action to Protect Youth from the Dangers of Social Media. American Journal of Law & Medicine. 2023;49(2-3):135-172.
- 21. Bekalu MA, McCloud RF, Viswanath K. Association of social media use with social well-being, positive mental health, and self-rated health: disentangling routine use from emotional connection to use. Health Education & Behavior. 2019;46(2_suppl):69S-80S.
- 22. Utrankar A, Mayo-Gamble TL, Allen W, Novak L, Kassim AA, Bonnet K, Schlundt D, Murry VM, Jackson GP, DeBaun M, Cronin RM. Technology use and preferences to support clinical practice guideline awareness and adherence in individuals with sickle cell disease. Journal of the American Medical Informatics Association. 2018;25(8):976-88.
- 23. Erhabor O, Adias TC, Erhabor T, Mgbere O, Usman S, Egenti BN. Role of Sociodemographic and Economic Variables in Predisposition to Vaso-Occlusive Crisis and Mortality in Patients with SCD: Case Study of

- Sub-Saharan Africa. InSickle Cell Disease 2022. IntechOpen.
- 24. Isah IZ, Udomah FP, Erhabor O, Aghedo F, Uko EK, Okwesili AN, Buhari HA, Onuigwe FU, Abdulrahaman Y, Adamu M, Ezimah AC. Foetalhaemoglobin levels in sickle cell disease (SCD) patients in Sokoto, Nigeria. Br J Med Health Sci. 2013;1(6):36-47.
- 25. Kulandaivelu Y, Lalloo C, Ward R, Zempsky WT, Kirby-Allen M, Breakey VR, Odame I, Campbell F, Amaria K, Simpson EA, Nguyen C. Exploring the needs of adolescents with sickle cell disease to inform a digital self-management and transitional care program: qualitative study. JMIR pediatrics and parenting. 2018;1(2):e11058.
- 26. Martinez RM, Osei-Anto HA, McCormick M, National Academies of Sciences, Engineering, and Medicine. Community Engagement and Patient Advocacy. InAddressing Sickle Cell Disease: A Strategic Plan and Blueprint for Action 2020. National Academies Press (US).
- 27. Obeagu EI, Ogunnaya FU, Obeagu GU, Ndidi AC. Sickle cell anaemia: a gestational enigma.

- European Journal of Biomedical and Pharmaceutical Sciences. 2023;10((9): 72-75
- 28. Obeagu EI. An update on micro RNA in sickle cell disease. Int J Adv Res Biol Sci. 2018; 5:157-8.
- 29. Obeagu EI, Babar Q. Covid-19 and Sickle Cell Anemia: Susceptibility and Severity. J. Clinical and Laboratory Research. 2021;3(5):2768-2487.
- 30. Abrams MA, Zajo KN, Beeman CM, O'Brien SH, Chan PK, Shen Y, McCorkle B, Johnson L, Chisolm D, Barnard-Kirk T, Mahan JD. A health literate approach to address health disparities: a virtual program for parents of children with sickle cell trait. Journal of communication in healthcare. 2022;15(2):112-120.
- 31. Miah SJ, Vu H, Gammack J. A big-data analytics method for capturing visitor activities and flows: The case of an island country. Information Technology and Management. 2019;20(4):203-221.



How to cite this article:

Emmanuel Ifeanyi Obeagu and Teddy Charles Adias. (2024). The Role of Social Media: A Powerful Tool in Adolescent Sickle Cell Disease Awareness. Int. J. Curr. Res. Chem. Pharm. Sci. 11(5): 38-44. DOI: http://dx.doi.org/10.22192/ijcrcps.2024.11.05.005