

The Role of Parents and Teachers: A Collaborative Approach to Sickle Cell Disease Education

*Emmanuel Ifeanyi Obeagu¹, Muhammad Tukur² and Mariita Nchaga Asuma³

¹Department of Medical Laboratory Science, Kampala International University, Uganda.

²Department of Science Education, Faculty of Education, Kampala International University, Uganda.

²Department of Public Administration, Kampala International University, Uganda.

*Corresponding authour: Emmanuel Ifeanyi Obeagu, [Department of Medical Laboratory Science, Kampala International University, Uganda, emmanuelobeagu@yahoo.com, ORCID: 0000-0002-4538-0161](#)

Abstract

Sickle Cell Disease (SCD) presents multifaceted challenges for children and adolescents, impacting their physical health, academic performance, and psychosocial well-being. Parents and teachers play pivotal roles in supporting children with SCD and fostering understanding and acceptance within educational settings. This review explores the importance of a collaborative approach between parents and teachers in SCD education, highlighting the roles and responsibilities of each stakeholder and strategies for effective collaboration. Parents serve as advocates, educators, and caregivers for children with SCD, ensuring that their medical needs are met and providing emotional support to help them navigate the challenges of living with the disease. In the context of education, parents collaborate with teachers and school administrators to develop individualized education plans (IEPs) and 504 plans that address the unique needs of their child and promote their academic success. By actively engaging in their child's education and advocating for their needs, parents play a crucial role in creating inclusive and supportive learning environments that meet the diverse needs of children with SCD. Teachers, as frontline educators, have a responsibility to create inclusive and supportive classroom environments that meet the diverse needs of all students, including those with chronic illnesses like SCD. By understanding the impact of SCD on students' health and academic performance, teachers can provide

Citation: Obeagu EI, Tukur M, Asuma MN. The Role of Parents and Teachers: A Collaborative Approach to Sickle Cell Disease Education. Elite Journal of Public Health, 2024; 2 (5): 58-65

accommodations, modifications, and support services to help students with SCD thrive in the classroom. Moreover, teachers serve as sources of knowledge, empathy, and encouragement, fostering positive and accepting classroom cultures where students with SCD feel valued, understood, and included.

Keywords: *Sickle Cell Disease, Parents, Teachers, Education, Collaboration, Psychosocial Support, Academic Success.*

Introduction

Sickle Cell Disease (SCD) is a chronic genetic blood disorder characterized by the presence of abnormal hemoglobin, leading to the formation of sickle-shaped red blood cells. This condition affects millions of people worldwide, with particularly high prevalence in regions where malaria is endemic. While medical interventions have improved the management of SCD, individuals living with this condition still face numerous challenges, including recurrent pain episodes, fatigue, and increased susceptibility to infections. Beyond the physical manifestations, SCD can also impact various aspects of a child's life, including their academic performance, social interactions, and overall quality of life. Parents serve as advocates, educators, and caregivers for their children with SCD, providing emotional support and ensuring that their medical needs are met. Meanwhile, teachers are responsible for creating inclusive and supportive classroom environments that meet the diverse needs of all students, including those with chronic illnesses like SCD. By working together in a collaborative partnership, parents and teachers can create environments that empower children with SCD to thrive academically, socially, and emotionally.¹⁻⁵

The educational journey for children with SCD is often fraught with unique challenges that require careful consideration and support from both parents and teachers. These challenges may include managing pain episodes during school hours, coping with fatigue and physical limitations, and navigating the social and emotional aspects of living with a chronic illness. Furthermore, children with SCD may require accommodations and support services to ensure equitable access to educational opportunities and to mitigate the impact of their condition on their academic performance and overall well-being. While parents play a central role in managing their child's health and advocating for their needs, teachers also have a significant impact on the educational experiences of children with SCD. Teachers are responsible for implementing accommodations and modifications outlined in individualized education plans (IEPs) and 504 plans, collaborating with healthcare providers to ensure that medical needs are addressed, and fostering a supportive classroom culture that promotes understanding and acceptance of students with SCD. By understanding the roles and responsibilities of each stakeholder and implementing strategies for effective collaboration, parents and teachers can create environments that meet the unique needs of children with SCD and optimize their educational experiences.⁶⁻¹⁰

The Role of Parents in SCD Education

Parents play a multifaceted and critical role in the education of children with Sickle Cell Disease (SCD), serving as advocates, caregivers, and educators. As primary caregivers, parents are

Citation: Obeagu EI, Tukur M, Asuma MN. *The Role of Parents and Teachers: A Collaborative Approach to Sickle Cell Disease Education.* Elite Journal of Public Health, 2024; 2 (5): 58-65

intimately involved in managing their child's health and well-being, including scheduling medical appointments, administering medications, and monitoring symptoms. In the context of education, parents act as liaisons between healthcare providers, educators, and school administrators, ensuring that their child's medical needs are understood and accommodated within the school setting. By communicating openly and proactively with teachers and school staff, parents can help create a supportive and inclusive environment that promotes their child's academic success and overall well-being. Beyond their logistical and administrative roles, parents provide emotional support and encouragement to help their child navigate the challenges of living with SCD. Children with SCD may experience pain episodes, fatigue, and other symptoms that can impact their ability to participate fully in school activities. In these moments, parents offer comfort, reassurance, and understanding, helping their child cope with physical discomfort and emotional distress. By fostering a supportive home environment where their child feels valued, loved, and understood, parents contribute to their child's resilience and emotional well-being, empowering them to face the challenges of SCD with confidence and courage.¹¹⁻¹⁵

Moreover, parents play an active role in advocating for their child's educational needs and ensuring that appropriate accommodations and support services are in place. This may involve collaborating with teachers, school administrators, and healthcare providers to develop individualized education plans (IEPs) or 504 plans that outline specific accommodations, modifications, and support services tailored to their child's needs. These plans may include provisions for extended time on assignments or tests, frequent breaks, access to a quiet space for resting, and flexibility with attendance requirements. By advocating for their child's educational rights and collaborating with school personnel, parents help create an environment where their child can thrive academically and reach their full potential despite the challenges posed by SCD. In addition to their direct involvement in their child's education, parents also play a crucial role in educating their child about their condition and empowering them to become active participants in their own care. Parents teach their child about the importance of self-care, including staying hydrated, getting adequate rest, and recognizing signs of pain or illness. They also encourage their child to communicate openly with teachers and peers about their condition, fostering self-advocacy skills and promoting a sense of autonomy and independence. By instilling knowledge, confidence, and resilience in their child, parents equip them with the tools they need to navigate the educational system and succeed in school despite the challenges posed by SCD.¹⁶⁻²⁰

The Role of Teachers in SCD Education

Teachers play a crucial role in supporting the education and well-being of students with Sickle Cell Disease (SCD), contributing to their academic success and overall development. As frontline educators, teachers have the responsibility to create inclusive and supportive classroom environments that meet the diverse needs of all students, including those with chronic illnesses like SCD. By understanding the impact of SCD on students' health, academic performance, and social interactions, teachers can provide accommodations, modifications, and support services to help students with SCD thrive in the classroom. One of the key responsibilities of teachers in SCD education is to implement accommodations and modifications outlined in individualized education plans (IEPs) or 504 plans. These plans are developed in collaboration with parents, healthcare

Citation: Obeagu EI, Tukur M, Asuma MN. The Role of Parents and Teachers: A Collaborative Approach to Sickle Cell Disease Education. *Elite Journal of Public Health*, 2024; 2 (5): 58-65

providers, and school administrators and outline specific accommodations and support services tailored to the student's needs. Accommodations may include provisions for extended time on assignments or tests, frequent breaks, access to a quiet space for resting, and flexibility with attendance requirements. By implementing these accommodations, teachers ensure that students with SCD have equitable access to educational opportunities and can participate fully in classroom activities.²¹⁻²³

Moreover, teachers serve as sources of knowledge, empathy, and encouragement for students with SCD, fostering a positive and accepting classroom culture where all students feel valued, understood, and included. Teachers can create opportunities for students to learn about SCD and its impact on individuals' lives, promoting understanding and empathy among their peers. By fostering a supportive and inclusive classroom environment, teachers help reduce stigma surrounding chronic illnesses like SCD and promote a culture of acceptance and inclusion. In addition to their role in the classroom, teachers also collaborate with parents, healthcare providers, and other school personnel to ensure that students with SCD receive the support they need to succeed academically and thrive socially and emotionally. By communicating openly and proactively with parents about their child's progress, needs, and concerns, teachers can establish a collaborative partnership that promotes the best interests of the student. Teachers also work closely with school nurses and other healthcare providers to coordinate care and support services for students with SCD, ensuring that their medical needs are addressed effectively while they are at school.²⁴⁻²⁶

Strategies for Collaboration between Parents and Teachers

Effective collaboration between parents and teachers is essential for supporting children with Sickle Cell Disease (SCD) and optimizing their educational experiences. Several strategies can facilitate collaboration and communication between parents and teachers, ensuring that the needs of children with SCD are understood and addressed effectively:

1. **Open Communication Channels:** Establish open and proactive communication channels between parents and teachers, including regular meetings, emails, phone calls, and written communication. Encourage parents and teachers to share information about the child's health, academic progress, and any concerns or challenges that arise. By maintaining open lines of communication, parents and teachers can stay informed and involved in the child's educational journey.²⁷
2. **Collaborative Goal Setting:** Collaboratively set goals and expectations for the child's academic and social development, taking into account their individual needs, strengths, and challenges. Develop individualized education plans (IEPs) or 504 plans that outline specific accommodations, modifications, and support services tailored to the child's needs. By working together to establish clear goals and expectations, parents and teachers can ensure that the child receives the support they need to succeed academically and thrive socially and emotionally.²⁸
3. **Shared Decision-Making:** Involve parents as active partners in decision-making processes related to their child's education and well-being. Seek input from parents on

Citation: Obeagu EI, Tukur M, Asuma MN. The Role of Parents and Teachers: A Collaborative Approach to Sickle Cell Disease Education. *Elite Journal of Public Health*, 2024; 2 (5): 58-65

important decisions, such as changes to accommodations or support services, and collaborate to develop solutions that meet the child's needs. By involving parents in decision-making processes, teachers demonstrate respect for their expertise and perspective and ensure that decisions are made in the best interests of the child.²⁹

4. **Regular Progress Monitoring:** Implement regular progress monitoring procedures to assess the child's academic, social, and emotional progress and identify areas for improvement. Share progress reports and assessment results with parents, highlighting the child's strengths and accomplishments as well as areas needing additional support or intervention. By keeping parents informed about their child's progress, teachers promote transparency and accountability and facilitate ongoing collaboration and support.³⁰
5. **Parent Education and Empowerment:** Provide parents with information, resources, and strategies to support their child's education and well-being at home. Offer workshops, seminars, or support groups focused on topics relevant to SCD education, such as managing pain episodes, advocating for accommodations, and promoting self-care. By empowering parents with knowledge and skills, teachers enable them to play an active and informed role in their child's education and development.³¹
6. **Cultural Competence and Sensitivity:** Recognize and respect the cultural beliefs, values, and practices of families from diverse backgrounds, including those affected by SCD. Be mindful of cultural differences in communication styles, attitudes toward healthcare, and approaches to education, and adapt strategies accordingly. By demonstrating cultural competence and sensitivity, teachers foster trust, respect, and collaboration with parents and create inclusive and supportive learning environments for all students.³⁰
7. **Conflict Resolution:** Develop strategies for resolving conflicts or disagreements that may arise between parents and teachers in a constructive and respectful manner. Encourage open dialogue, active listening, and empathy, and seek to understand each other's perspectives and concerns. By addressing conflicts proactively and collaboratively, parents and teachers can maintain positive relationships and focus on the best interests of the child.

Conclusion

Effective collaboration between parents and teachers is essential for supporting children with Sickle Cell Disease (SCD) and optimizing their educational experiences. By working together as partners, parents and teachers can create inclusive and supportive learning environments that meet the diverse needs of children with SCD and promote their academic success, social development, and overall well-being. Through open communication channels, collaborative goal setting, shared decision-making, and regular progress monitoring, parents and teachers can ensure that the educational needs of children with SCD are understood and addressed effectively. By involving parents as active partners in their child's education and empowering them with knowledge and resources, teachers foster a sense of ownership and investment in the educational process and facilitate meaningful collaboration and support.

Citation: Obeagu EI, Tukur M, Asuma MN. The Role of Parents and Teachers: A Collaborative Approach to Sickle Cell Disease Education. *Elite Journal of Public Health*, 2024; 2 (5): 58-65

References

1. Ata F, Rahhal A, Malkawi L, Iqbal P, Khamees I, Alhiyari M, Yousaf Z, Qasim H, Alshurafa A, Sardar S, Javed S. Genotypic and phenotypic composition of sickle cell disease in the Arab population-a systematic review. *Pharmacogenomics and Personalized Medicine*. 2023;133-144.
2. Aneke JC, Okocha CE. Sickle cell disease genetic counseling and testing: A review. *Archives of Medicine and Health Sciences*. 2016;4(1):50-57.
3. Piel FB, Williams TN. Sickle cell anemia: history and epidemiology. *Sickle Cell Anemia: From Basic Science to Clinical Practice*. 2016:23-47.
4. Obeagu EI, Ochei KC, Nwachukwu BN, Nchuma BO. Sickle cell anaemia: a review. *Scholars Journal of Applied Medical Sciences*. 2015;3(6B):2244-2252.
5. Mansour AK, Yahia S, El-Ashry R, Alwakeel A, Darwish A, Alrjjal K. Sickle cell disease (SCD). *Inherited Hemoglobin Disorders*. 2015;35.
6. Yusuf HR, Lloyd-Puryear MA, Grant AM, Parker CS, Creary MS, Atrash HK. Sickle cell disease: the need for a public health agenda. *American journal of preventive medicine*. 2011;41(6):S376-383.
7. Williams-Gray B, Senreich E. Challenges and resilience in the lives of adults with sickle cell disease. *Social Work in Public Health*. 2015;30(1):88-105.
8. Pandarakutty S, Murali K, Arulappan J, Al Sabei SD. Health-related quality of life of children and adolescents with sickle cell disease in the Middle East and North Africa region: A systematic review. *Sultan Qaboos University Medical Journal*. 2020;20(4):e280.
9. Thomas VJ, Taylor LM. The psychosocial experience of people with sickle cell disease and its impact on quality of life: Qualitative findings from focus groups. *British journal of health psychology*. 2002;7(3):3453-63.
10. Obeagu EI. Erythropoietin in Sickle Cell Anaemia: A Review. *International Journal of Research Studies in Medical and Health Sciences*. 2020;5(2):22-28.
11. Obeagu EI. Sickle Cell Anaemia: Haemolysis and Anemia. *Int. J. Curr. Res. Chem. Pharm. Sci*. 2018;5(10):20-21.
12. 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.
13. 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.
14. 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
15. Obeagu EI. An update on micro RNA in sickle cell disease. *Int J Adv Res Biol Sci*. 2018; 5:157-8.
16. Obeagu EI, Obeagu GU. Incorporating Sickle Cell Disease Curriculum in Schools: An Effective Approach. *Elite Journal of Health Science*. 2023;1(1):30-6.
17. STTI B, Ohene-Frempong K. Healthcare provision for sickle cell disease in Ghana: challenges for the African context. *Diversity in Health and Social Care*. 2008; 5:241-254.

Citation: Obeagu EI, Tukur M, Asuma MN. The Role of Parents and Teachers: A Collaborative Approach to Sickle Cell Disease Education. *Elite Journal of Public Health*, 2024; 2 (5): 58-65

18. Hinton D, Kirk S. Teachers' perspectives of supporting pupils with long-term health conditions in mainstream schools: a narrative review of the literature. *Health & social care in the community*. 2015;23(2):107-120.
19. Obeagu EI, Obeagu GU. From Awareness to Action: Encouraging Adolescent Engagement in Sickle Cell Disease Prevention. *Elite Journal of Public Health*. 2023;1(1):42-50.
20. Jones PC, Schmitt AJ, Nayyar A, Brandon Conaway R, Eyler K, Franklin K, Hodge C. Confronting racial inequity in health and education: Supporting students with sickle cell disease. *Psychology in the Schools*. 2024;61(3):1181-1194.
21. Ritsher JE, Coursey RD, Farrell EW, Rudolph B, Larson GL, Sweeny S, Hough EE, Arorian K, Oyserman, D., Mowbray, CT, & Zemencuk, JK (1994). Resources and supports for mothers with severe mental-illness. *Health & Social Work*, 19 (2), 132-142. Rieder, RO (1973). Offspring of schizophrenic parents-review. *Journal of Nervous and Mental Disease*, 157 (3), 179–190. *Encyclopedia of Primary Prevention and Health Promotion*. 2003;19(2):292.
22. Wakefield EO. Perceived racism and stigma among youths with sickle cell disease: An exploratory study. University of Hartford; 2014.
23. Almquist J, Valovich McLeod TC, Cavanna A, Jenkinson D, Lincoln AE, Loud K, Peterson BC, Portwood C, Reynolds J, Woods TS. Summary statement: appropriate medical care for the secondary school-aged athlete. *Journal of athletic training*. 2008;43(4):416-427.
24. Dyson SM, Atkin K, Culley LA, Dyson SE, Evans H. Sickle cell, habitual dys-positions and fragile dispositions: young people with sickle cell at school. *Sociology of Health & Illness*. 2011;33(3):465-483.
25. Choudhry MI. Complex students: Understanding how to best supports students with a comorbid developmental or physical health need. 2021.
26. Frynas JG. The false developmental promise of corporate social responsibility: Evidence from multinational oil companies. *International affairs*. 2005;81(3):581-598.
27. Obeagu EI, Obeagu GU. Addressing Myths and Stigmas: Breaking Barriers in Adolescent Sickle Cell Disease Education. *Elite Journal of Health Science*. 2024;2(2):7-15.
28. 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.
29. Reich J, Cantrell MA, Smeltzer SC. An integrative review: The evolution of provider knowledge, attitudes, perceptions and perceived barriers to caring for patients with sickle cell disease 1970–Now. *Journal of Pediatric Hematology/Oncology Nursing*. 2023;40(1):43-64.
30. Lucena J, Schneider J. Engineers, development, and engineering education: From national to sustainable community development. *European Journal of Engineering Education*. 2008;33(3):247-257.
31. Sandel M, Faugno E, Mingo A, Cannon J, Byrd K, Garcia DA, Collier S, McClure E, Jarrett RB. Neighborhood-level interventions to improve childhood opportunity and lift children out of poverty. *Academic pediatrics*. 2016;16(3): S128-135.

