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Physicians' and Nurses' Perceptions and Attitudes Toward Sickle Cell Disease

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ABSTRACT

Sickle cell disease (SCD) is a complex genetic disorder that affects millions of people worldwide. This review aims to explore physicians' and nurses' perceptions and attitudes toward sickle cell disease, including their understanding of the disease, its management, and the challenges faced by patients living with SCD. By examining healthcare providers' perspectives, this review seeks to identify areas for improvement in the care and treatment of individuals with SCD.

Introduction

Sickle cell disease (SCD) is a chronic, inherited blood disorder characterized by the presence of abnormal hemoglobin in red blood cells. Individuals with SCD experience a wide range of symptoms, including pain crises, anemia, and organ damage, which can significantly impact their quality of life. SCD is a disease that affects millions of persons globally and is the most prevalent of all genetic diseases in the United States, affecting approximately 100,000 persons(1).It occurs in 1 out of every 365 African Americans (AA) births and approximately 1 out of every 16,300 Hispanic American births(2).SCD is an autosomal recessive genetic disorder caused by a single mutation of the hemoglobin beta gene (HBB) producing molecular and structural abnormalities, resulting in rigidly sickled cells, an erosion of the cells' functional attributes, a disruption in its typical longevity from 120 days to 20 days, and significant pathophysiologic events. The sickled cells adhere to the vascular endothelial membrane, causing painful vaso-occlusive episodes, tissue ischemia, inflammation, and organ damage(3) SCD-related complications result in disproportionately high use of health care resources(4)

In addition to the physical challenges, individuals with SCD have reported psychosocial concerns, including depression and anxiety(4). Provider attitudes can positively or negatively contribute to the physical and psychosocial issues affecting patients' response to sickle cell signals, care-seeking behaviors, and health outcomes(5),(6).

NPs are well suited to offer comprehensive care, including health promotion and maintenance. NPs can help address the current shortage of specialty care providers. When properly educated, they have demonstrated to be safe and equitable health care providers compared with their physician counterparts(7). It is important to understand the competencies and attitudes of NPs in providing care for individuals with SCD. Studies have explored nurses' knowledge and attitudes about SCD patients(8),(9). In 2023, a 10-study rapid evidence assessment aiming to improve health care providers' knowledge regarding SCD found improvement in providers' knowledge and attitudes but did not find sufficient support for generalizability to make recommendations to adopt an intervention(10).

Healthcare providers, including physicians and nurses, play a crucial role in the management and treatment of SCD, yet their perceptions and attitudes toward the disease may influence patient care and outcomes.

Physicians' and Nurses' Perceptions and Attitudes Toward Sickle Cell Disease

1. **Understanding of the Disease**

Physicians and nurses may have varying levels of understanding of SCD, its pathophysiology, and its complications. Education and training in SCD management can help improve healthcare providers' knowledge and confidence in caring for patients with SCD(11)

2. **Barriers to Care**

Healthcare providers may face various barriers in providing optimal care to patients with SCD, including limited access to specialty care, inadequate resources, and stigma associated with the disease(12).

3. **Pain Management**

Physicians and nurses play a critical role in managing pain crises in patients with SCD. However, there may be differences in their approaches to pain management, including the use of opioids and non-pharmacological interventions(13).

4. **Patient Education and Counseling**

Healthcare providers are responsible for educating patients with SCD about their condition, treatment options, and self-management strategies. Effective patient education and counseling can help improve patient outcomes and quality of life (14).

Challenges

1. **Multidisciplinary Care**

Collaborative, multidisciplinary care involving physicians, nurses, social workers, and other healthcare professionals is essential for effectively managing SCD and addressing the complex needs of patients(15).

2. **Cultural Competence**

Healthcare providers must be culturally competent and sensitive to the needs of patients with SCD, particularly those from minority and underserved communities (16).

3. **Advocacy and Support**

Physicians and nurses can advocate for policies and programs that improve access to care, support research and innovation in SCD management, and reduce disparities in healthcare(17).

Conclusion

Physicians' and nurses' perceptions and attitudes toward sickle cell disease can significantly impact patient care and outcomes. By understanding the challenges faced by healthcare providers in caring for patients with SCD and identifying opportunities for improvement, we can work toward enhancing the quality of care and quality of life for individuals living with this complex genetic disorder.

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