

## The Application of the Biopsychosocial-Spiritual Model to the Quality of Life of People Living with Sickle Cell Disease

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**Abstract :** The management of sickle cell disease requires a multidisciplinary team for better outcomes. Thus, literature on the application of the biopsychosocial model for the management and explanation of chronic pain in sickle cell disease (SCD) and other chronic diseases abound. However, there is limited research on the use of the biopsychosocial model, together with a spiritual component (biopsychosocial-spiritual model). The study investigated the extent to which healthcare providers utilized the biopsychosocial-spiritual model in the management of chronic pain to improve the quality of life (QoL) of patients with SCD. This study employed the descriptive survey design involving a consecutive sampling of 261 patients with SCD who were between the ages of 18 to 79 years and were accessing hematological services at the Clinical Genetics Department of the Korle Bu Teaching Hospital. These patients willingly consented to participate in the study by appending their signatures. The theory of integrated quality of life, the gate control theory of pain and the biopsychosocial(spiritual) model were tested. An instrument for the biopsychosocial-spiritual model was developed, with a basis from the literature reviewed, while the World Health Organisation Quality of Life BREF (WHOQoLBref) and the spirituality rating scale were adapted and used for data collection. Data were analyzed using descriptive statistics (means, standard deviations, frequencies, and percentages) and partial least square structural equation modeling. The study revealed that healthcare providers had a great leaning toward the biological domain of the model compared to the other domains. Hence, participants' QoL was not fully improved as suggested by the biopsychosocial(spiritual) model. Again, the QoL and spirituality of patients with SCD were quite high. A significant negative impact of spirituality on QoL was also found. Finally, the biosocial domain of the biopsychosocial-spiritual model was the most significant predictor of QoL. It was recommended that policymakers train healthcare providers to integrate the psychosocial-spiritual component in health services. Also, education on SCD and its resultant impact from the domains of the model should be intensified while health practitioners consider utilizing these components fully in the management of the condition.

**Keywords :** biopsychosocial (spiritual), sickle cell disease, quality of life, healthcare, accra

**Conference Title :** ICCPP 2023 : International Conference on Clinical Psychology and Psychopathology

**Conference Location :** Los Angeles, United States

**Conference Dates :** October 30-31, 2023