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Misunderstanding of Pain in Sickle Cell Disease by Outpatient Infusion Nurses

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Purpose: Over the past year, our infusion center, which is in a large urban hospital, has seen an increase in the number of adult sickle cell patients treated with intravenous opioids for exacerbation of their chronic pain. As the phenomena of chronic pain differs from acute pain, we recognized that the infusion center nurses were not comfortable treating these patients. Hence, we wanted to better understand and identify any knowledge gaps regarding the management of chronic pain in patients with sickle cell disease (SCD).

Methods: To assess if a knowledge gap existed the infusion nurses participated in an in-service on SCD and chronic pain management. This was given at their regularly scheduled in-service time, which is on a Tuesday morning before their shift begins. The infusion nurses completed the previously validated “Knowledge of Sickle Cell Disease questionnaire” before and immediately after the in-service. This was done to assess changes in their knowledge of SCD. Fourteen of the twenty questions on the questionnaire were used, nine of which were items assessing knowledge of pain assessment and treatment or definitions of terms commonly misunderstood (addiction and tolerance) and the remaining five pertained to SCD complications in adults

Results: Sixteen outpatient infusion nurses participated. Pre-test scores ranged from - ranged from 79%-93%. Post –test scores remained in the same range (79%-93%) with different questions answered incorrectly. The scores for the questions pertaining to adult complications of SCD did not change. There was good understanding recognizing the difference between acute and chronic pain and the need for individualized treatment plans on the pre and post test scores. However, the responses related to the definition of addiction and understanding that opioid addiction is not common among SCD patients did not change.

Conclusion: Although sickle cell disease is a rare congenital disease, it is more prevalent in large urban areas. There is an assumption that nurses working in urban settings have an understanding of the pathophysiology of Sickle Cell disease and management of chronic pain related to the disease. What was surprising was the knowledge gap regarding the common sequela of the disease as well as understanding the nuances of chronic pain, acute pain, addiction and tolerance. These results validated our observation. What was an unexpected finding was that post test scores were lower. This could possibility be attributed to the time the in-services are offered and not necessarily to the content or staff’s perceptions of SCD patients, which was not assessed; but rather to divided attention of the staff as they prepare for their clinical

day. It is evident that a practice change needs to be considered regarding re-evaluating in-service scheduling times and providing more disease specific in-services.

Title:
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Keywords:
Sickle cell disease, chronic pain and outpatient pain management

Abstract Summary:
The paradigm for understanding pain in patients with sickle Cell disease (SCD) has changed. It is now understood that these patients experience acute and often chronic pain. We observed the phenomena of chronic pain and its' management in SCD patients was often uncomfortable for the outpatient infusion nurses.

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