

Open Access

Published 10/17/2022

Copyright

© Copyright 2022

Fleming et al. This is an open access poster distributed under the terms of the Creative Commons Attribution License CC-BY 4.0., which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Distributed under

Creative Commons CC-BY 4.0

## Dismantling Barriers: Innovative Use of Simulation to Reduce Barriers Experienced By Individuals with Sickle Cell Disease Presenting to the Emergency Department

Karen Fleming <sup>1</sup>, Richenda Haye Miller <sup>2</sup>, Jennifer Page <sup>2</sup>, Andrea Ennis <sup>2</sup>, Marian Luctkar-Flude <sup>3</sup>, Jane Tyerman <sup>4</sup>

1. Hemoglobinopathies, University Health Network, Toronto, CAN 2. Emergency Department, North York General Hospital, Toronto, CAN 3. School of Nursing, Queen's University, Kingston, CAN 4. School of Nursing, University of Ottawa, Ottawa, CAN

**Corresponding author:** Karen Fleming, karen@seamlesshealthcareconsulting.ca

**Categories:** Medical Education, Medical Simulation, Hematology

**Keywords:** racism, health inequities, emergency department, healthcare simulation, virtual simulation game, advocacy, health equity, healthcare providers, implicit bias, sickle cell

**How to cite this poster**

Fleming K, Haye Miller R, Page J, et al. (2022) Dismantling Barriers: Innovative Use of Simulation to Reduce Barriers Experienced By Individuals with Sickle Cell Disease Presenting to the Emergency Department. *Cureus* 14(10): e.

### Abstract

**Background:** Individuals with Sickle Cell Disease (SCD) experience barriers in accessing equitable care when they arrive at Emergency departments in Toronto, Ontario, nationwide, and more surprisingly worldwide. Individuals with SCD are stigmatized as drug seekers, drug addicts, extra work for healthcare staff, and noncompliant with following their pain regimens appropriately.

Implicit biases negatively impact care and when coupled with racism, which is a social determinant of health, many individuals with SCD have been shown to suffer the consequences of prolonged wait times, provider mistrust, and overall inequitable health care experiences and outcomes.

**Aim Statement:** To improve provider knowledge, reduce provider bias and thereby improve access to equitable care for those diagnosed with Sickle Cell Disease presenting to the Emergency Department of a community teaching hospital with vaso-occlusive crisis

**Methods:** A convenience sample of 20 Emergency Department nursing staff participated in a 10–15 minute virtual simulation game (VSG) designed to improve the knowledge and comfort level of participants focused on the care of individuals with SCD presenting to the emergency department.

Before playing the game, each participant completed pre work that introduced implicit bias and the RNAO What every Nurse Needs to Know About Sickle Cell Disease webinar.

Lastly, each participant completed a pre and post assessment utilizing a modified Clinician Experiences with Sickle Cell Disease Questionnaire, along with an overall evaluation of the game experience.

**Results:** For both comfort level and knowledge 31% of participants rated their comfort/knowledge as > 8 out of 10 pre game, while post game that value increased to 75% for both indicators.

87% of participants rated their experience with the game as > 8 out of 10.

**Conclusion:** Care of patients with SCD is complex and not well understood by many. This VSG can help to inform emergency room staff about the barriers individuals with SCD experience to help improve their overall care and outcomes.