

Developing an Innovative Community Based Collaboration in Kakamega, Kenya to Provide Education and Awareness on Sickle Cell Anemia (SCA)

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Introduction & Purpose

Sickle Cell Anemia (SCA) is a blood disorder that affects major organs of the body, manifesting in a wide range of health problems, including chronic pain and infection. In Kenya, especially Western Kenya, where the prevalence is higher than in other parts of the country, SCA is associated with high morbidity and mortality among children and adolescents due to limited medical resources and inadequate education and awareness about SCA. The purpose of this study was to increase education and awareness of SCA in diverse population groups in Kakamega, Kenya, and surrounding regions. This study was conducted in collaboration with Ball State University (BSU) and Masinde Muliro University of Science and Technology (MMUST).

Methods

Study Design: Descriptive

Sample Size: (n = 270)

Description of study participants: All study participants were over the age of 18 years, including administrators, university faculty, physicians, nurses, respiratory therapists, social workers, paramedics, interprofessional students, parents, and caregivers, and SCA patients.

Setting: Two high school boarding schools, two hospitals, and two community centers and MMUST.

Data Collection: The researchers created a questionnaire to determine pre and post-test knowledge of SCA. The questionnaire assessed knowledge of etiology, prevalence, signs, symptoms, screening methods, and treatment options of SCA among study participants. Participants completed the pre-test before delivery of the educational presentation and post-test at conclusion of the program. The program was delivered by BSU and MMUST faculty.

Results

1. There were differences between participants' pre-test and post-test responses.
2. Improved participants' global awareness and knowledge regarding health care and treatment.
3. Increased awareness and knowledge prompted questions from participants dispelling myths and false information. Examples of myths and false information:
 - "SCA is a family curse"
 - "HIV/AIDS is the same as SCA"
 - "SCA individuals will die at age 18"
 - "Individuals develop SCA through casual contact"
 - "Individuals who are slender and thin have SCA"
 - "Can SCA be protected by using condoms?"
 - "A child born with SCA and lives to age 18 automatically heals or becomes a carriers (SCT)"
 - "How can you stop SCA from... generation or lineage?"

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Participants felt empowered to become advocates and warriors for others with SCA. Moreover, participants requested to become involved with train the trainer to continue the outreach of education and awareness throughout Kakamega and surrounding regions.

Conclusions & Implications

BSU and MMUST presenters agreed that there was an increase in awareness and knowledge of SCA following the educational presentations. In addition, a need for more SCA education exists among patients, families, educators, health care providers, and community at large.

BSU and MMUST presenters acknowledged the scarcity or lack of resources and prevalence of health disparities are barriers for appropriate screening and treatment of SCA.

Continued research and collaboration between BSU and MMUST faculty to establish a center of SCA care in Kakamega is warranted.

References

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