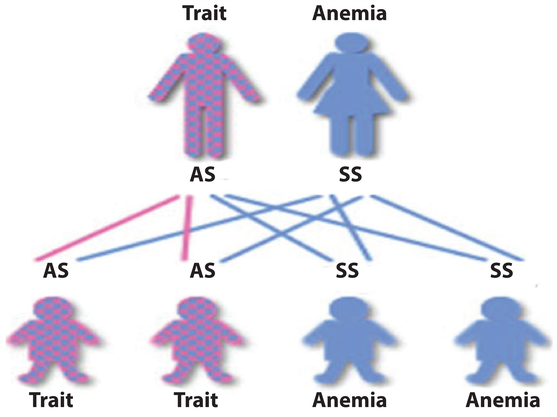
Developing an Innovative Community Based Collaboration in Kakamega, Kenya to Provide Education and Awareness on Sickle Cell Anemia (SCA)

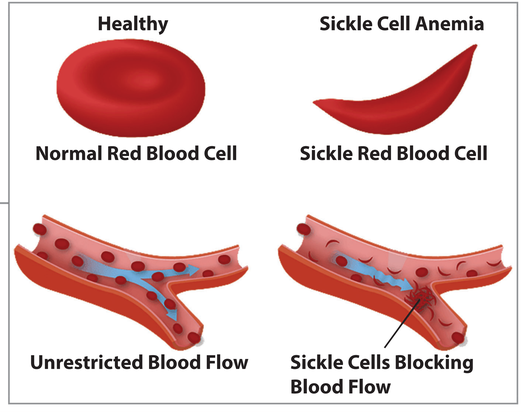
Dr. Sheila Abebe, Dr. Wilfridah Mucherah, Dr. Linda Siktberg, Dr. Rebecca Brey, Dr. Jay Kandiah

INTRODUCTION

According to the World Health Organization, the prevalence of sickle cell anemia (SCA) is 20-30% higher in Western Kenya compared to the rest of the country. SCA affects major organs of the body manifesting a wide range of health problems, including chronic pain and infection. In Kenya, SCA is associated with high morbidity and mortality among children and adolescents due to limited medical resources, and inadequate education and awareness about SCA.

In collaboration with Ball State University (BSU) and Masinde Muliro University of Science and Technology (MMUST), the purpose of this study was to provide an educational intervention to increase the awareness of SCA in diverse population groups in Kakamega, Kenya, and surrounding regions.





METHODS

Design: Descriptive
Sample (n=270)

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

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

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

RESULTS

1. There were differences between participant's pre-test and post-test responses.

2. Improved participants' global awareness and knowledge regarding health care and treatment.

3. Acknowledgement of affordable health care and community support is paramount for continuity of care and quality outcomes for patients with SCA.

4. 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"
- "You will die at age 18"
- "Individuals develop SCA through casual contact"
- "Individuals who are slender and thin have SCA"
- "Can SCA be prevented by using condoms"
- "A child born with SCA and lives to age 18 automatically heals or becomes a carrier (SCT)"
- "How can you stop SCA from a generation or lineage"

5. Participants felt empowered to become advocates and warriors for others with SCA.

6. Participants requested to become involved with train the trainer to continue the outreach of education and awareness throughout Kakemega and surrounding regions.

CONCLUSIONS AND 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 the community at-large.

BSU and MMUST presenters acknowledged the scarcity 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.

Presented at ASHA October 4-6, 2018. Contact for correspondence syabebe@bsu.edu, wmucherah@bsu.edu, and lsiktber@bsu.edu