"I Can See!": A Health Promotion Project to Improve Quality of Life in Jamaican Communities

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Purpose
The purpose of this poster is to describe a health promotion project about Sacred Heart University’s one-week clinical experience to Kingston, Jamaica. The project focuses on testing the Jamaican population for hyperopia, dispensing reading glasses, and observing the conditions that may be leading to various visual impairments in the Caribbean.

Background
Each year, Sacred Heart University’s undergraduate and graduate nursing students along with faculty and community healthcare providers, travel to Jamaica to provide medical care to impoverished populations. Students are able to test the population for hyperopia, and observe the conditions that may be leading to various visual conditions, such as a high UV index and poor nutrition. Through donations, the team dispenses eye glasses to the clinic patients throughout the week.

Review of Literature
- Approximately 253 million people worldwide are visually impaired. However, lower socioeconomic populations are more affected by visual impairment issues, including blindness (World Health Organization [WHO], 2017).
- On a global level, chronic eye conditions such as uncorrected refractive errors and cataracts are the leading cause of blindness in low and middle-income regions (WHO, 2017).

Risk Factors
- Ultraviolet Radiation
  - In 2010, about 30.2% of the Caribbean population of 34,300,000 people were reported to be blind (Khairallah et al., 2015).
- Nutrition and Agriculture Deficiencies
  - Vitamins A, C, E, Lutein and zeaxanthin, Omega 3 fatty acids, Zinc
- Agricultural Issues
  - In the past twenty years, farming and agriculture have decreased as a result of limited land, high costs, and environmental factors such as hurricanes and flooding, leading to increased poverty (Palacios, 2015; Tandon, 2014).
  - The poor agriculture in Jamaica, in conjunction with high poverty rates, leads to micronutrient deficiencies amongst the population (Lopez de Romana, Olivares, & Brito, 2015).

Student Observations from Health Clinics in Jamaica
- At the clinics, many cases of farsightedness, pterygium, and undiagnosed diagnoses of cataracts are noted. In 2017, 196 cases out of over 500 patients seen for the 5 days.
- The Jamaican population was eager to take vitamin supplements, without having a full understanding of the health benefits. Specifically, how these nutrients can have a positive impact on their vision.
- Unlike the U.S., grocery stores placed produce items in the back of the Jamaican grocery stores and put unhealthy items in the front. There was a lack of well-rounded dietary options, but many sugary snacks.

Global Nursing Initiatives
- “A world in which nobody is needlessly visually impaired, where those with unavoidable vision loss can achieve their full potential, and where there is universal access to comprehensive eye care services,” (WHO, 2014, p. 9).
- The World Health Organization created a global action plan with the goal of decreasing avoidable visual impairment by 25% by 2019 (WHO, 2014).
- The importance of this goal is that visual impairment increases a patient’s risk for unemployment, motor vehicle collisions, depression, anxiety, and falls (WHO, 2014).
- Sunglasses should block out about 99-100% of both UV-A and UV-B radiation, and block about 75-90% of visible light (American Optometric Association [AOA], 2018).
- Therefore, it should be ensured that the Jamaican population is receiving appropriate sunglasses to protect them against the UV radiation.
- Students should continue to teach patients the importance of protecting their eyes with hats, wearing SPF lotion, staying sheltered from the sun, and eating a healthy, well-rounded diet with vitamin supplements.

Health Promotion Project Implementation
- In 2016, Sacred Heart University students dispensed 228 reading glasses during a one-week clinical trip to Kingston, Jamaica. In 2017, 196 reading glasses were given to the population during the same clinical experience.
- Eye glasses strengths ranged from 1.00 – 3.75, with the primary need for strength ≥ 2.0.
- Donations were collected by students and the community.
- BSN students conducted a health screening using the Rosenbaum chart.
- Over 1,000 eye glasses were donated by Catholic charities.
- Glasses were dispensed based on the identified needed strength.
- Students had diagnoses of hyperopia.
- Donations were collected by students and the community.
- Over 1,000 eye glasses were donated by Catholic charities.
- A health promotion station was organized at the daily clinics.
- Students should continue to teach patients the importance of protecting their eyes with hats, wearing SPF lotion, staying sheltered from the sun, and eating a healthy, well-rounded diet with vitamin supplements.

Future Implications
- There is a need for sunglasses due to the undiagnosed diagnosis of cataracts, macular degeneration, and other visual impairments related to UV exposure. Sacred Heart University’s nursing program has the goal of collecting at least 600 sunglasses for the clinical trip in October 2018.
- Sunglasses should block out about 99-100% of both UV-A and UV-B radiation, and block about 75-90% of visible light (American Optometric Association [AOA], 2018).
- Therefore, it should be ensured that the Jamaican population is receiving appropriate sunglasses to protect them against the UV radiation.
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References available upon request