Title:
The Health Status of Zimbabwe Born Immigrants to the US

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Cardiovascular Health in At-Risk Populations
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Cardiovascular risk, Healthcare utilization and Zimbabwean immigrants

References:
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Abstract Summary:
We conducted a health needs assessment survey of the Zimbabwe born immigrants in the North East US. Despite high levels of healthcare utilization, participants had high obesity and hypertension rates, depression risk and low HIV risk perception.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
The learner will be able to identify diseases common in Sub-Saharan immigrants	Emerging science on African immigrant health shows higher rates of sexually transmitted HIV infection among women, late diagnosis of HIV (Kerani et al. 2008; Johnson, Hu, & Dean, 2010), higher rates of cardiovascular risk factors (Commodore-Mensah et al. 2016), and higher rates of hypertension, diabetes and pre-diabetes (Yu et al. 2013)
The learner will be able to identify at least two areas of increased health risk for Zimbabwean immigrants	The women had BMI of 32kg/m2 compared to 28 kg/m2 among men; Overall, 55 participants had a BMI>25kg/m2. Thirty-three participants reported having been told by a health care provider that they had high blood pressure and were taking blood pressure medication. Over 50 percent of the participants had a PHQ 2 depression screen of 2, warranting further testing.
The learner will be able to identify the health utilization patterns of Zimbabwean immigrants	Eighty-five participants reported having a primary care provider, and had been seen in the previous 12 months, forty-two were seen three or more times in the previous 12 months. Twenty-five had been to the emergency room at least once in the prior 12 months.

Abstract Text:

Background: The African immigrant population in the US has increased from 130,000 in 1980 to 1.5 million in 2014, thus comprising a small but growing population of immigrants in the country (Zhong & Belatova, 2014). The US government categorizes African immigrants broadly as African American (US Bureau, 2016) despite their different cultural background, health profile, and health practices. As such, the health status and disease burden of African immigrants is not well understood. Emerging science on African immigrant health shows higher rates of sexually transmitted HIV infection among women, late diagnosis of HIV (Kerani et al. 2008; Johnson, Hu, & Dean, 2010), higher rates of cardiovascular risk factors (Commodore-Mensah et al. 2016), and higher rates of hypertension, diabetes and pre-diabetes (Yu et al. 2013). Sub-Saharan Africa has a much higher burden of both infectious and non-infectious diseases compared to other regions (Dala et al., 2011). Some regions have higher disease burdens than others. For instance, Southern Africa is the epicenter of the HIV epidemic, with nine of the 16 countries reporting an HIV prevalence of >10% (UNAIDS, 2016). In Southern Africa, Zimbabwe has a high burden of both infectious and noninfectious diseases; including an HIV prevalence of 14.7% (UNAIDS, 2016), hypertension prevalence of 30% (Mutowo et al. 2016), tobacco use of 33.4 % in males and 5% in females and central obesity of 9.5% males and 23.4% females (Hakim et al. 2005).

Over 3 million Zimbabweans have migrated to other countries since 2000 because of an ongoing political and economic crisis. The US is a popular destination, the number of Zimbabweans living in the US increased by 210% since 1980. Despite increased numbers of migrants originating from a high disease burden country, not much is known about their health status and healthcare needs. It is unknown how the Zimbabwean-born immigrant to the US utilizes healthcare. Equally unknown, is the state of their health profile and risk regarding both communicable and non-communicable diseases. The purpose of this pilot study of Zimbabwean immigrants in the US was threefold:

1. To assess the feasibility of conducting health studies in this immigrant community.
2. To examine the self-reported prevalence of cardiovascular disease risk factors, perceived risk of HIV infection; and screen for depression
3. To examine health care utilization patterns.

The overarching goal of this needs assessment is to identify modifiable risk factors and possible barriers to healthcare they may face in order to determine areas of need for possible future interventions. Our goal in the future is to leverage on the data to develop targeted interventions to address the identified modifiable risk factors, areas of need, and health access issues in this and other Sub-Saharan African immigrant populations.

Methods: We cross-sectionally conducted a pilot, needs assessment study of Zimbabwean immigrants. The participants were recruited at religious festivals held in the North East of the US (MA, IL, FL and DE). Religious festivals in which participants are immigrants from a specific country serve as socialization and networking platforms for the Sub-Saharan immigrant communities. The investigators were given podium time to explain the goals of the needs assessment. A booth was erected on the festival hotel site where participants were given a free health screening:, they had their height, weight and blood pressure measured and recorded after which they were asked to complete a 20-30-minute the needs assessment soliciting for demographic, household, housing, employment and income, smoking and alcohol use, and health care utilization, prevalent diseases, a physical activity questionnaire, a 2 item depression screen, an HIV risk perception questionnaire, when they last had an HIV test, if they had not been tested the reasons they did not. The study was approved by the Spaulding Rehabilitation Network IRB. Data was collected from Sept 2015 to September 2016.

Results: Seventy-five women and twenty-three men, (mean age 49 and 43 years, respectively [range 23-74]), completed the questionnaire. Overall, seventy participants had a fulltime job, seven were unemployed. Sixty-two participants were married, seventy-five had a at least a baccalaureate degree. Seventy participants worked fulltime. The women had BMI of 32kg/m^2compared to 28 kg/m^2 among men; Overall, 55 participants had a BMI>25kg/m^2. Eighty-five participants reported having a primary care provider, and had been seen in the previous 12 months, forty-two were seen three or more times in the previous 12 months. Twenty-five had been to the emergency room at least once in the prior 12 months.

Eighty had some type of health insurance, Thirty-three participants reported having been told by a health care provider that they had high blood pressure and were taking blood pressure medication. Fifty-nine walked each day for at least 10 minutes; 13 said their work involved vigorous physical activity, 37 said their work involved moderate physical activity. However, more than half participated in moderate sport activities. Nearly all (82) believed they were not at risk for HIV. Of those who had been tested for HIV, 15 were tested in the previous 12 months, 55 were tested more than one year ago, while 10 had never been tested. Those who were tested were tested either for immigration, to get married, or the doctor requested on the basis of their country of origin. Over 50 percent of the participants had a PHQ 2 depression screen of 2, warranting further testing.

Conclusion: In this feasibility pilot study, we were able to access a highly educated population with high utilization of healthcare and high risk for cardiovascular disease and depression. This pilot provides a glimpse into the health profile of Zimbabwean immigrants in the US. Despite originating from Zimbabwe, a country with high endemic risk for HIV, participants neither perceived themselves as at risk, nor get tested for HIV as they should. The data seems to reveal some contradictions, i.e., participants appear to be connected to health care, but do not get regular HIV testing. A few stated that the reason they have not been tested for HIV is they have never been offered the test. They are participating in physical activities, yet there is a high prevalence of obesity and high prevalence of risk factors for cardiovascular disease. Mixed methods studies with a larger sample of Sub-Saharan African immigrants are needed to clarify the discordance and to measure the cardio-metabolic biomarkers; assess for depression and HIV risk and determine the community's readiness for intervention studies. Findings from follow up studies will be used to design cardiovascular risk reduction interventions.