Factors Affecting Awareness of Hepatitis B Status Among Bhutanese, Karen, Somali, and Central African Refugee Populations in Tarrant County: Building Bridges Initiative (BBI)

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Background

Hepatitis B virus (HBV) is reported to be the leading cause of liver cancer in the United States, with approximately 90% of HBV incident cases being foreign born.[1] The Centers for Disease Control and Prevention recommends hepatitis B screening for newly arrived refugees who are from or have lived in countries with a high prevalence of chronic HBV infection.[2] Nearly 14,000 refugees resettled in Texas in 2014, majority arriving from Iraq, Burma, Somalia, and Democratic Republic of Congo.[3] The UNTHSC Building Bridges program (BBI) is a cancer education, and screening program for refugee women residing in Tarrant County. The program trains and employs lay health educators from refugee communities to provide cervical, breast, and liver cancer education to refugee women and links them into appropriate health services. Refugees served by Building Bridges come from countries with high prevalence rates of hepatitis B virus (Figure 1). Currently, there is limited data on refugee groups and their awareness of hepatitis B (and liver cancer). This study aims to investigate what factors influence refugee awareness of hepatitis B status.

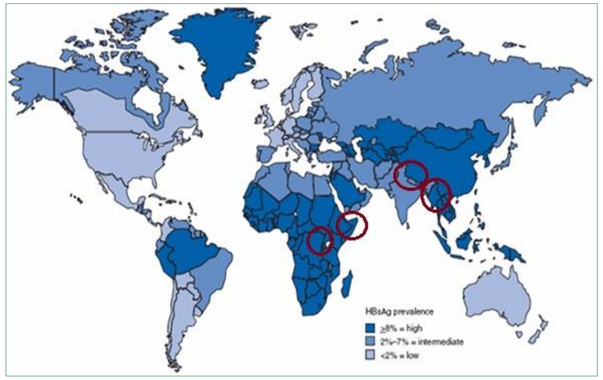

Figure 1: Geographic Distribution of chronic hepatitis B virus (HBV) Infection – worldwide, 2006

Methods

Using the Lay Health Worker model, four community based health workers conducted outreach in their respective communities (i.e. Bhutanese, Burmese, Somali and Central African) to recruit women to participate in a culturally appropriate education program. Means, t-tests, and chi-square tests evaluated the influence of time (years) in the US, attained education, and country of origin on awareness of self-reported hepatitis B status at baseline. Formal education attainment was defined as having completed the equivalent of middle school (at least 6 years of education) in their country of origin. Case status was identified through the BBI program and was defined as testing positive for exposure to the hepatitis B virus.

Results

Approximately 350 women have participated in BBI. Roughly 74% were unaware of their hepatitis B and only 26% were aware of their hepatitis B status, with 21.8% reporting a negative hepatitis B status and 4.3% reporting a positive status (Figure 2). Over half of central African women were aware of their hepatitis B status (53.1%) in comparison to their counterparts: Somali (34.6%) Karen (17.0%), Bhutan (3.4%) (Figure 4). On average, BBI participants lived in the US for approximately 5 years, with Somali participants here longer (5.9 years). Roughly 43% reported completing formal education, with Central African (33%) and Karen (31%) having the greatest proportion of formal education. However, education and region were not significantly associated with awareness of hepatitis B status (p=0.238).

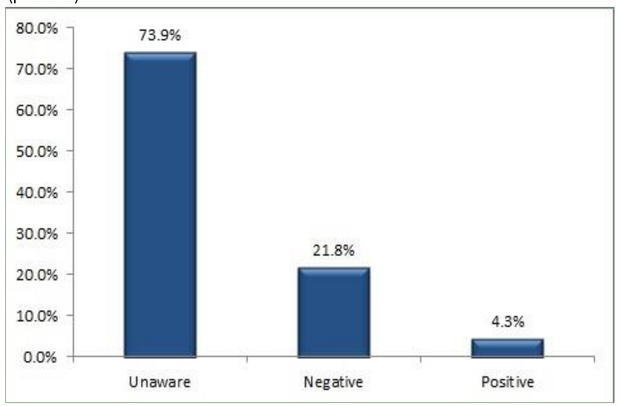

Figure 2: Refugee awareness of hepatitis B status among Karen, Somali, Central African, and Bhutanese groups

Figure 3: Hepatitis B awareness among Karen, Somali, Bhutanese, and Central African refugees among those who reported no formal education attainment

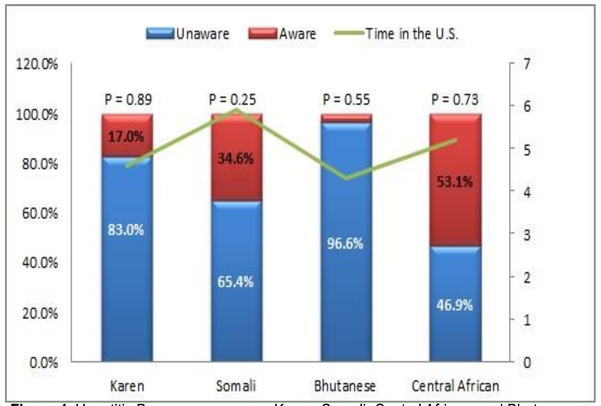

Figure 4: Hepatitis B awareness among Karen, Somali, Central African, and Bhutanese by average number of years in U.S.

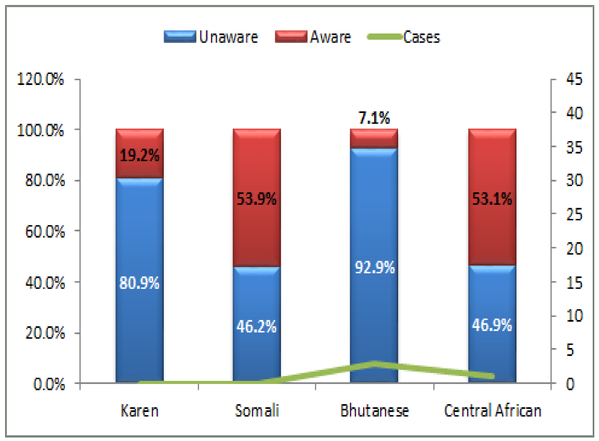

Figure 5: Hepatitis B awareness among Karen, Somali, Bhutanese, and Central African refugees among those who reported formal education attainment

Conclusion/Discussion

The majority (74%) of refugees are unaware of their hepatitis B status. Time in the U.S. nor formal education influenced hepatitis B status awareness. However, the variability in awareness between regions suggests that traditions and health care beliefs need to be considered to better understand barriers to screening and comprehending results. Partnerships between health care services and refugee resettlement groups can provide the tailored culturally and linguistically appropriate cancer prevention and intervention programs needed in this underserved population. As more participants enter the ongoing BBI, more examination will be given to monitoring changes in hepatitis B awareness and entry into healthcare for refugee women hepatitis B+.

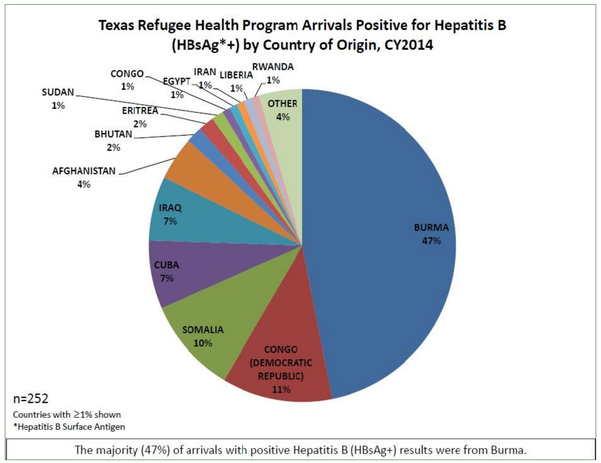

Figure 6: Hepatitis B rates among refugee groups arriving in Texas, 2014

References

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