



Montefiore Montefiore Einstein
Center for Transplantation

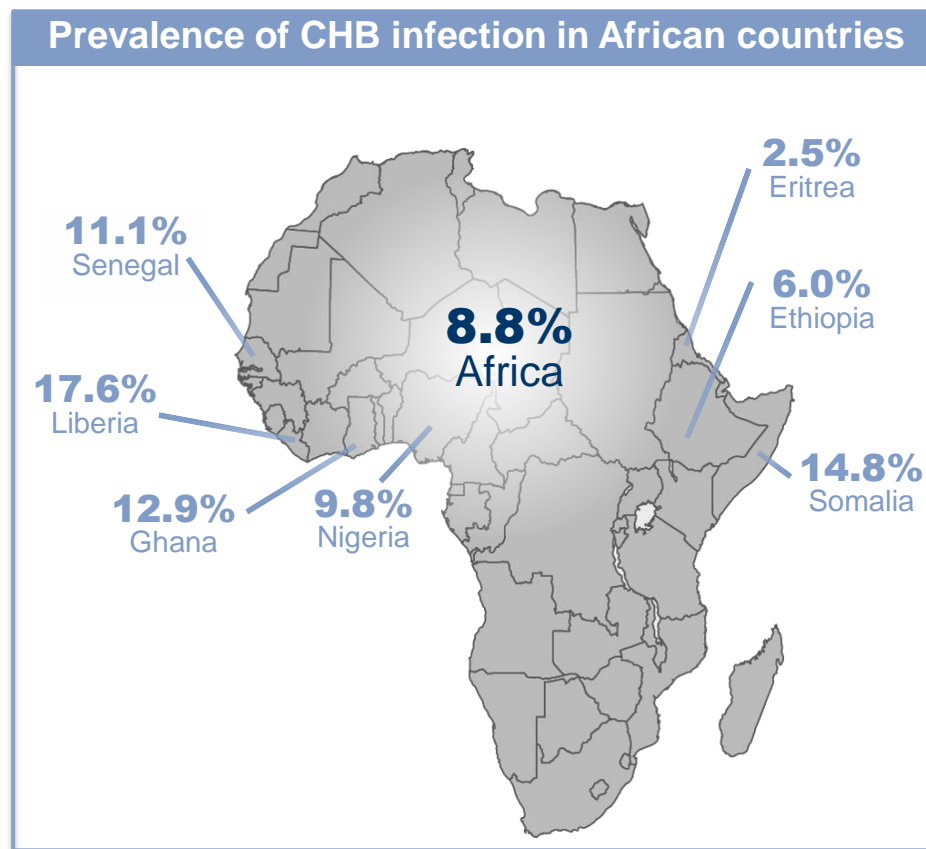
Breaking Down Barriers for Hepatitis B Screening in the Bronx West African Community

The Starfish Program

Education in Collaboration with
Faith-based Organizations

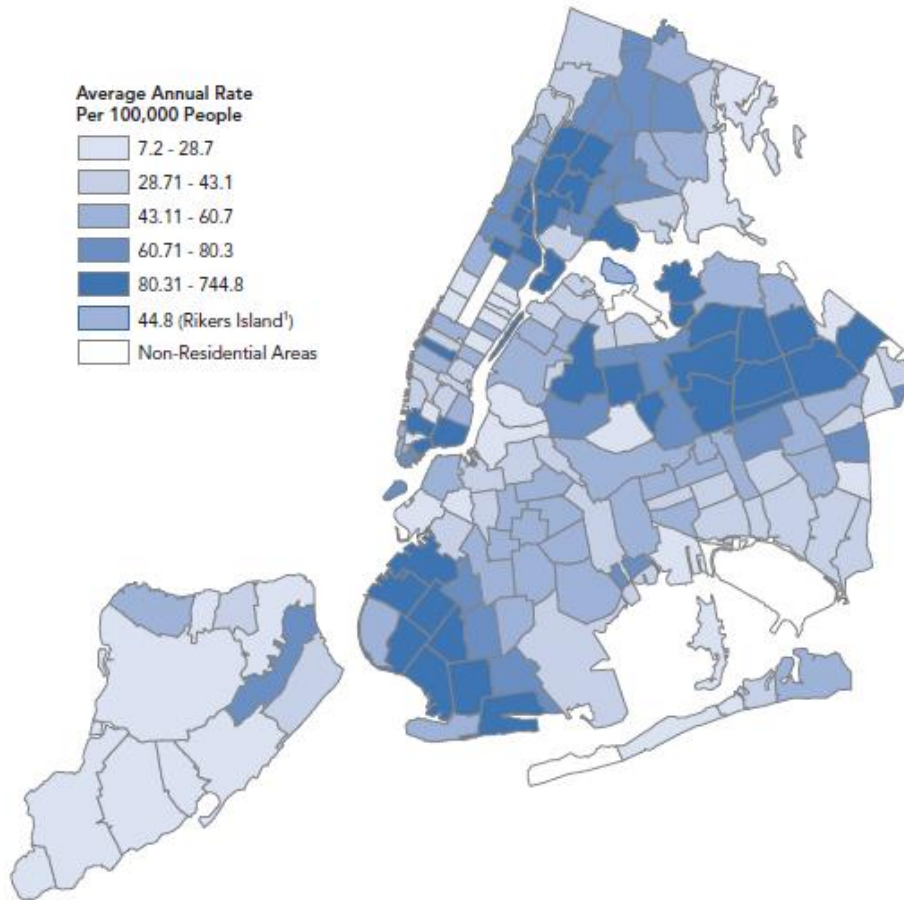
Fatima Omarufilo, MPH, PN

Chronic hepatitis B in West Africa



- Highly prevalent
- Incidence ranging from 10-15%

Hepatitis B in the Bronx New York



- Great increase in the number of immigrants from West Africa to the Bronx
- West African population increased by 39% between 2000 and 2011
- 10 percent of the immigrants in the Bronx are from West Africa



Screening for hepatitis B among West Africans in the Bronx

- Transmission and its complications can be prevented
- Screening for the infection among Bronx West African immigrants is an important public health goal
- Public screening programs have traditionally been challenging in immigrant populations
- Hepatitis B virus (HBV) screening remains low among foreign-born communities in the US, including African immigrant communities



Studies that have assessed Barriers to Screening

- Speculation
- No study directly assessed the various barrier

Studies assessing barriers to screening: based on expert opinion

- Blanas DA, et al. Adapting the Anderson Model to a Francophone West African Immigrant Population: Hepatitis B Screening and Linkage to Care in New York City. J Community Health; 2015;40:175-184
 - 4 focus groups were conducted with 39 purposefully selected participants in French, audio-recorded, translated into English
- Mohamed EA, et al. Knowledge, attitudes, and behaviors of viral hepatitis among recent African Immigrants in the United States: A community based participatory research qualitative study. Front Public Health 2020;8:1–8.
 - 7 focus groups of participants from various African countries – Ethiopian, Kenyan and Liberians
- Freeland C, et al. Barriers to hepatitis B screening and prevention for African immigrant populations in the United States: A qualitative study. Viruses 2020;12:305–14.
 - 17 in-depth interviews with community health experts working in African immigrant communities
- Mukhtar NA, et al. Patient knowledge, beliefs and barriers to hepatitis B care: Results of multicenter, multiethnic patient survey. Dig Dis Sci 2021;66:434–41.
 - Questionnaires of community members demonstrating low level of knowledge of HBV transmission (44.39%) and history of screening and vaccination (49.23%)
 - Speculation about reasons for low levels



Potential Barriers for Hepatitis B Screening

- Limited medical knowledge about Hepatitis B
- Health care cost
- Limited understanding and complexity of Western health care systems
- Stigma
- Cultural attitudes and practices – increase trust, understanding of shared community values.
- Development of culturally appropriate strategies to address disparities in viral hepatitis in these communities.
- Language barriers
- Immigration concerns



Proposals to increase screening

- Education to create awareness
- Collaboration with faith-based organizations
 - West Africans place great importance on community and religious centers
 - Religious centers play an important role in their experiences of health and illness



Rationale for the Starfish Program

- Starfish Program was created to break down the barriers towards screening through education in a culturally sensitive manner
- Important aspects of the program
 - Education and awareness
 - Staffing by West African health care providers
 - Collaboration with local faith-based centers

Development of the Starfish Program

- Recruitment of West African personnel
 - Emmanuel Emeasoba, MD
 - Fatima Omarufilo, MPH
 - John Nnaemeka Bosah, MD
- Hepatitis B Patient Navigator
 - Monitor established Montefiore patients with chronic hepatitis B for compliance with testing, HBV therapy if indicated, and screening for liver cancer
 - Liaison for patients with chronic hepatitis B with treating physician
 - Participation in outreach to the Bronx West African Community for education and screening



Development of HBV screening program

- Preparation of educational Power Point Presentation
- Networking with Bronx West African community and religious leaders
- Collaboration with religious leaders

Culturally sensitive Power Point presentation

- Culturally appropriate clinical vignettes
 - vertical transmission
 - rapid death from hepatocellular carcinoma
- Epidemiology with an emphasis on West Africa (3 slides)
- Modes of transmission (3 slides)
- Chronic hepatitis (1 slide)
- Cirrhosis (4 slides demonstrating cirrhosis, ascites, esophageal variceal bleeding)
- Hepatocellular carcinoma including importance on West Africa (2 slides)
- Clinical evaluation (significance of various tests, 3 slides)
- Vaccination (1 slides)
- Steps for screening at Montefiore

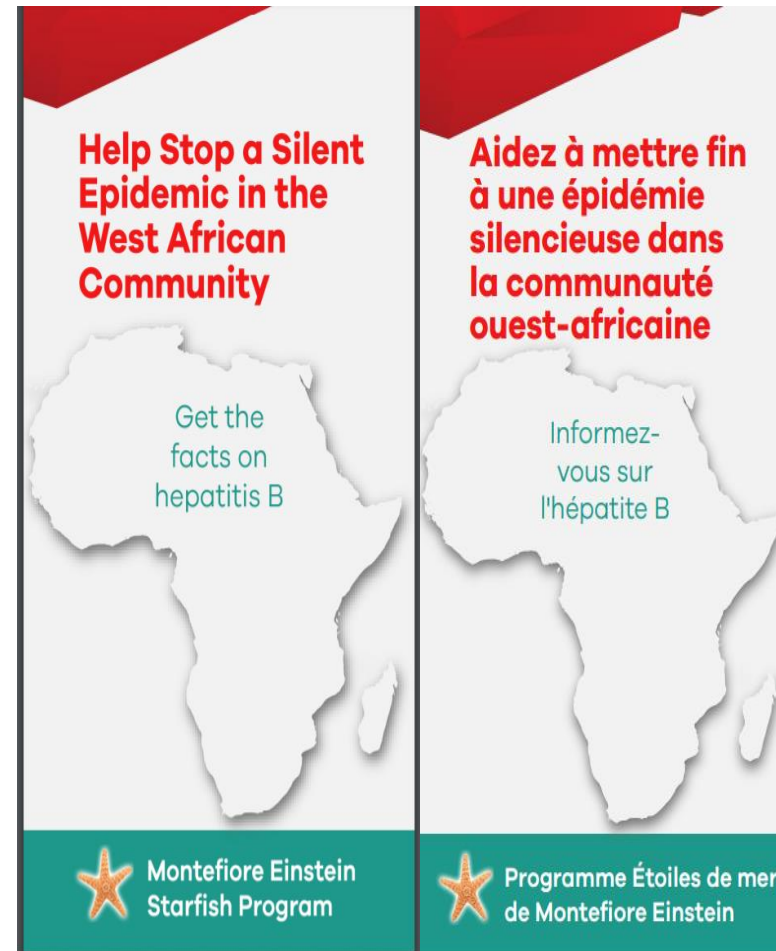


Networking with the West African community

- Attendance at the monthly Bronx African Community Council at the Bronx County Court House where important issues concerning the community are discussed
- Appointment of member to the Community Board of the Montefiore Medical Center
- Attended religious services to assess functioning of the organizations
- Religious leaders directly contacted or by email and/or telephone to request meetings
 - Discussion of the impact of hepatitis B on West African community
 - Dates for educational events for the members of the church or mosque scheduled

Educational Events

- Date and time advertised with flyers, social media, and announcements at weekly worship times
- Held after weekly worship to attain maximal attendance
- Refreshments provided
- Question-and-answer session after the presentation (30 to 60 minutes)
- Free ballpoint pen with Program logo and contact information provided
- Voluntary 6-question survey assessing impact of the presentation on a change towards the infection and motivation for testing
- Information brochure for West Africans on the importance of screening distributed (English, French, Hausa, Twi, Igbo)





Serologic testing

- Initial program only included education
- Philanthropic funds obtained for on-site testing beginning June 2019
- Testing performed at the Moses Hospital of the Montefiore Medical Center



Screening for hepatitis B at Montefiore

- Interested participants provided name and telephone numbers
- Participants contacted after the event to create MRNs
- Appointments for screening visit provided
- Two additional attempts made if a participant did not show for the scheduled appointment



HBV screening at Montefiore

- Participant greeted by Starfish Program member at hospital entrance upon arrival
- Blood pressure measurement obtained for hypertension screening
- Voluntary questionnaire assessing demographics, previous testing for hepatitis B, medical history, and family history obtained
- Blood drawn for testing for HBs Ag and HBs Ab
- Date for return visit provided



Results: Education Events

- All religious leaders approached readily agreed to host an educational event
- 43 educational events have been held to date
 - 6 churches, 16 mosques and 21 other organizations
 - 2717 participants

Reference: Emmanuel U. Emeasoba Fatima Omarufilo John Nnaemeka Bosah and Samuel H. Sigal,*



Results of the first 9 presentations

- 224 participants have tested already (63.7+6.4 %) (2/3)
- 325 participants (95.1%)completed questionnaires
- 332 participants requested testing

Post-presentation Questionnaire

Table 1. Percentage of participants who answered in the affirmative on post-presentation questionnaire (mean, 95% confidence interval).

Did this presentation improve your understanding of Hepatitis B?	95.1 (94.8 to 95.4)
Did this presentation increase your willingness to get tested for hepatitis B?	82.7 (81.7 to 83.7)
Do you intend to see your doctor to get tested for hepatitis B?	82.7 (81.9 to 83.6)
Are you more comfortable in talking and sharing a meal with someone who has hepatitis B?	67.0 (65.8 to 68.3)
Are you more willing to talk with your family and friends about hepatitis B?	93.1 (92.2 to 94.0)
Do you plan on encouraging your family members and friends to get tested for hepatitis B?	97.8 (97.3 to 98.3)

HBV screening

- Three hundred thirty two of the 550 participants (65.2+5.6%) participants requested serologic testing.
- Among those requesting testing, 224 (63.7+6.4%) individuals have returned to Montefiore for testing
 - Approximately 2/3's return for testing in the beginning
 - Currently approximately 90%

Return visit for test results

- Great difficulty in complying with return visit for results
 - HBs Ag negative patients
 - contacted by telephone with results
 - Sent letter with results
 - HBs Ag positive
 - Re-scheduled until in-person discussion with supervising hepatologist
 - Topic reviewed
 - Requirements for a complete evaluation
 - Indications for treatment
 - Importance of screening for liver cancer
 - Importance of screening of all close contacts
 - Non-immune individuals
 - Referred to PCP, DOH
 - List maintained
 - Philanthropic funds for Free vaccination obtained
 - All contacted to ensure vaccination and arrange for free vaccination if not performed after screening

Linkage to Care

- HBs Ag positive participants - primary care provider or referral for hepatology consultation depending on patient preference and situation
- For participants with an elevated blood pressure
 - Importance of treatment
 - Instructed to contact PCP or referral based on situation
- Participants without insurance
 - Enrolled in a Medicaid program if eligible
 - Referred to a hospital of the New York City municipal health care system



Conclusions

- HBV is a major health disparity that disproportionately affects vulnerable populations, especially the West African immigrant community
- Multiple potential barriers to screening have been proposed
- Our findings indicate that an educational program staffed by West African personnel working in collaboration with religious leaders is all that is required to motivate people to undergo testing