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## Introduction

*Hepatitis B virus (HBV)* triggers the host's immune system to attack liver cells that are infected, resulting in inflammation and tissue necrosis. Chronic HBV infection (CHBI) involves recurrent immunologic activities, potentially leading to liver fibrosis, cirrhosis, and cancer (Figure 1).

The prevalence of CHBI is notably highest among Vietnamese Americans, reaching 12.48% nationally and 11.2% in the Mississippi Gulf Coast. Contributing factors include the endemic nature of HBV in many Asian countries, the mode of transmission, lack of awareness, and limited access to healthcare and vaccination.

To address these health disparities, a screening initiative, named *Test to Protect Family and Self*, was instituted within Vietnamese communities across three counties in South Mississippi (Harrison, Hancock, Jackson) (Figure 2).

Out of 505 participants screened for HBV, those requiring vaccination or diagnosed with chronic HBV were connected to available care programs. Surprisingly, over half of CHBI patients did not engage with the offered programs. This prompted an investigation into the barriers preventing these individuals from accessing medical resources and a search for potential approaches to overcome these obstacles.

## Methods

As part of a larger five-year HRSA-funded project, 505 Vietnamese community members were screened for HBV (Figure 3). Those who were found to be chronically infected with HBV were asked to participate in a face-to-face survey administered by a Vietnamese-speaking Community Health Worker to identify barriers hindering participation in the linkage to care service.

Responses were meticulously analyzed to derive frequency and percentage data for each category. Subsequently, a multivariate logistic regression was performed to ascertain factors linked to the lack of engagement in the linkage care program.

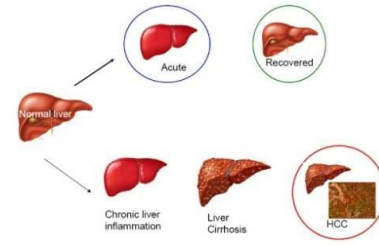


Figure 1. Acute and chronic impacts of HBV infection on liver function



Figure 2. *Test to Protect Family and Self* Screening Initiative within Vietnamese communities in Harrison, Hancock, and Jackson counties



Figure 4. Obstacles preventing CHBI patients from accessing offered care programs

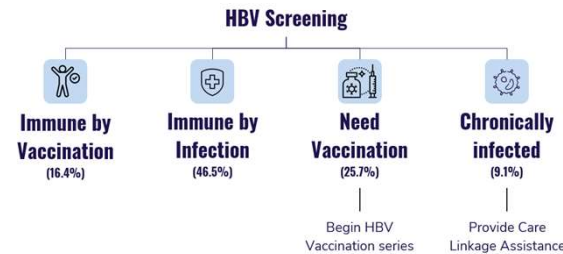


Figure 3. Categorization of participants based on their HBV immune statuses

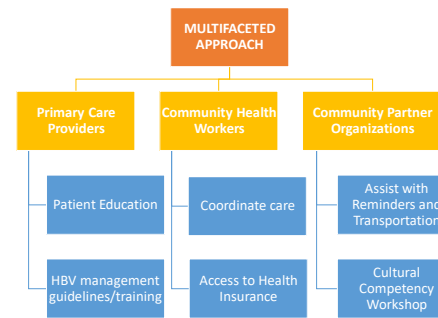


Figure 5. A proposed multifaceted approach to surmount obstacles in effectively utilizing medical resources

## Results

Out of the 46 individuals with CHBI, 30 actively participated in the survey. The majority of respondents were aged over 50 (63.4%) and had attained less than a high school education (65.4%).

A significant portion reported an annual income of less than \$25,000 (83.4%). Impressively, 90.0% were well-informed about their HBV status; however, a fifth of them hadn't sought medical attention since their diagnosis.

Additionally, a lack of insurance, limited transportation options, and a preference for over-the-counter (OTC) remedies and natural alternatives over prescription medications were associated with lower participation rates.

## Discussion

To effectively address these barriers, a multifaceted approach is essential.

Firstly, primary care providers should focus on patient education, emphasizing the importance of continuous care in managing chronic conditions such as CHBI. Additionally, specialized training in HBV management should be offered for professionals working in areas with a high prevalence of HBV.

Secondly, community health workers can play a pivotal role by enabling coordinated care with physicians and assisting uninsured patients in navigating available health insurance programs.

Finally, community partner organizations can offer valuable support through appointment reminders and transportation assistance, along with organizing Cultural Competency Workshops for healthcare providers.

Future research is imperative to develop a comprehensive strategy and implement these approaches effectively.

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