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Undergraduate

# Hepatitis B Virus Prevalence in the Hmong: An Observation of Education and Mistrust

By: Kimberly Fang

## Introduction

The Hmong are an immigrant minority group from Southeast Asia whose origins trace back to China. Persecuted by communists for their alliance with U.S. forces during the Vietnam War, the Hmong fled from Laos and northern Vietnam to refugee camps of Thailand (Mills, Yang, & Riordan, 2005). The U.S. government then relocated the Hmong to the United States from the refugee camps. Since then, the Hmong have populated the U.S. for the past 35 years. The population of Hmong was dispersed throughout three prominent states—California, Minnesota, and Wisconsin; California being the most inhabited. California's Central Valley had the highest population of Hmong people in comparison to other regions of California. The Hmong in the Central Valley reported a census array

of health problems since their arrival in the U.S. Of the various health problems among the Hmong was the infection of Hepatitis B Virus (HBV). There was a disproportionate burden of HBV, liver infection and an increased risk of liver cancer where 1 in 5 Hmong had HBV. HBV was transmitted through bodily fluid, however, was preventable by receiving vaccination. Although a readily available solution to HBV exists, the Hmong still have a high rate of HBV in comparison to other ethnic groups; thus, this disparity makes the Hmong a vulnerable group to HBV.

Hepatitis B was studied to be endemic to Southeast Asian minorities. The Hmong population in Fresno of the Central Valley had a prevalence rate of 16.7% for Hepatitis B (Sheikh et al., 2010). Compared to other Asian minority groups, the Hmong had the highest prevalence rate of HBV and

cancer mortality rate. In comparison to non-Asian groups, Hmong had higher rates for liver cancer. Kue and Thorburn (2013) compared the Hmong population to Hispanics, another prominent ethnic group in the central valley. The study concluded in the Hmong to be three times more at risk. HBV rates in the Hmong population had a significant correlation to hepatic, liver, and lung cancer which led to premature mortality and morbidity rates. Preventative measures (i.e. HBV vaccinations) were not practiced by the Hmong (Lee & Vang, 2010).

Vaccination and other preventative measures were available in the U.S, however, within the Hmong community there was limited HBV education to equip the Hmong for HBV prevention. The health consequences of unvaccinated HBV were linked to a person to be at risk for liver cancer and carrying HBV to future generations. HBV amongst the Hmong is an inequality because of the inability to deliver a vaccine with appropriate and effective methods. Two perspectives of health disparities in HBV prevalence amongst the Hmong were observed in (a) determinants of low socioeconomic status (SES) and (b) mistrust of physicians in westernized healthcare due to acculturation of Hmong cultural traditions to western medicine. Negative health outcomes of low SES and mistrust of physicians in the Hmong resulted in no action taken to seek vaccination which then led the illness to progress into liver cancer and death.

## Determinants of Low SES

### *Education*

A causal pathway leading to poor health was evident in education paving a way to psychological responses which led to negative outcome of untreated HBV or non-vaccinated Hmong. The Hmong reported to have the lowest social economic status (SES) and highest rate of poverty out of Asians (Lee & Vang, 2010). According to Chen (2005), Asian minorities experienced poorer quality of life, lower production of economic stability, and higher health care costs. The education among Asians was stratified in that 26.7% of Asians obtained a BA degree. However, the Hmong had a significant proportion (45.7%) of individuals without any type of schooling at all (Chen, 2005). In contrast to other Asian groups, the Hmong have a wider gap in education. Negative health outcomes were evident in the lack of education affecting the psychological responses (i.e. cognition) of an individual. Of the percentage without higher education 76% did not speak English well and were of the age group 44 and older. Because the age groups diagnosed with HBV were illiterate, they were unaware of the consequences of HBV or the benefits of a vaccine. Health relevant behaviors included inattention to seek physician provision.

Health care was not sought after by the Hmong as they did not have prior knowledge to what their illnesses were. In a study conducted by Helsel, Mochel, and Bauer (2005), Hmong participants were asked to give an explanation of

what their illnesses was. Participants responded by saying they did not know what the illnesses were. Lack of knowledge of health was exhibited as the Hmong had no prior education of illnesses within their community. Four of 10 Hmong participants did not know the consequence of an untreated disease. (Helsel, Mochel, & Bauer, 2005). Translators in the study explained that the participants had insufficient translations for names and definitions of the illnesses, which made comprehension of the illnesses difficult to grasp. Hmong informants who reported low English proficiency stated their limited English speaking ability hindered their ability to obtain secure jobs that required English (Dodge, Mills, & Yang, 2006). Low levels of education were associated with low levels of income (Barr, 2008).

#### *Income*

Poor health was determined by income— a measure of low SES. Dodge, Mills, and Yang (2006) found that low SES was associated with low vaccination, screening services, and increased risk of disease and illnesses. Income was disaggregated as the Hmong were below the average mean by \$22,000 in comparison to other Asian minority counterparts (e.g., Chinese counterparts were above the mean by \$1,700). Thus, put the Hmong below the average household income of White Americans. Hmong women were surveyed and were found to have a correlation between low income, English proficiency, and health prevention behaviors. Research

concluded Hmong women who were “economically poor and less educated” did not seek vaccination (Dodge, Mills, & Yang, 2006) and had a higher chance of being unaware they had HBV or that they could pass HBV onto their children (Chen, 2005). Infection of HBV was through transmission of the virus through a virus-carrier-mother and being an immigrant from overseas. Delays in seeking preventative or intervention care led to poor outcomes and risk of HBV transmission to household members (Tran, 2009). The income of an individual predicted the occupational environment they were exposed to. Those with lower income were linked with living in low SES neighborhoods where individuals were subject to living conditions susceptible to contracting the virus. Lower income predicted an individual’s occupation.

#### *Occupation*

The occupation of an individual determined the health intervention resources available to them. The Hmong came to the U.S. from a country of overall low SES lacking in resources. The U.S. is a high SES nation, capable of providing basic resources and opportunities fundamental to human existence (Barr, 2008). In the Central Valley, common occupations for the Hmong were in agriculture and manufacturing (28.7%) and transportation and material moving (31%) as unemployment rates were at 49.6% for the Hmong (Dodge, Mills, & Yang, 2006). However, such employment positions put an individual at risk for higher levels of stress added

onto their allosteric load which then developed health illnesses (Barr, 2008). Because individuals were preoccupied with obtaining financial sufficiency for basic needs, they could not obtain time for vaccinations for themselves or their family. Occupation of the Hmong were high stress and high demand jobs. Thereof, HBV in conjunction to an increased allostatic load was a risk factor for liver cancer and death if the individual was not vaccinated. Prevention of premature mortality and morbidity could be provided through early intervention through means of a vaccine. Occupation also determined the type of health insurance and care an individual received. Even with health care, the Hmong would deny western health care as a means of prevention due to a history of mistrust through acculturation.

## Acculturation and Mistrust

The acculturation of the Hmong culture into westernized culture triggers mistrust. Acculturation occurs when an individual of one culture assimilates to a second culture. Rates of hepatic cancers within the Hmong increased, since 1970's, when the Hmong initially settled in the U.S (Mills, Yang, & Riordan, 2005). Geographical relocation of the Hmong from the 1970's forced acculturation where the Hmong were forced to adapt to a new environment. Acculturation was a stressor that added to the biological response. Health relevant behaviors affected biological responses of an individual, which increased their allosteric load putting them at risk of

health illnesses due to the wear and tear of stress. Exposure to a new environment increased stress levels as the Hmong synthesized two cultures together to form an identity (Helsel, Mochel, & Bauer, 2005). Acculturation caused change to culture, customs, and social institutions within the Hmong community, thus, minimized their control over synthesizing two cultures and the dominance of one culture over the other. Integration of two cultures led to distress as the first culture was erased through assimilation, thus, the Hmong had begun to lose cultural identity.

In effect, belief system of the Hmong influenced their perspective on health and their response to seek effective health care. Helsel, Mochel, and Bauer (2005) discussed majority of the Hmong to be practicing Shamans who believed an individual's soul was the root of health; if they felt their soul was healthy then they believed they were healthy. The Hmong believed disease was caused by supernatural events. Western medicine techniques defied the Hmong's belief of the soul and spiritual healing (Helsel, Mochel, & Bauer, 2005). Thus, this cultural belief discouraged the Hmong to seek healthcare where the Hmong perceived physicians to harm the soul. In example, the Hmong declined surgical methods as they believed mutilation of the human body led to the soul to be released, hence, resulted in the individual to be in danger (Kue & Thornburn, 2013). The Hmong perceived western medicine practice professionals as a threat to what they believed to be the source

of life. The soul was how the Hmong identified an individual's life, thereof, western medical care was perceived to endanger a Hmong individual's identity (Dodge, Mills, & Yang, 2005). Thereof, was linked to hindering the Hmong from seeking vaccine for HBV. Thus, the social environment of cultural tradition and belief prevented vaccine of HBV (Kue & Thornburn, 2013) causing the prevalence rate to increase.

U.S healthcare policy promotes individuals to report their illnesses. Assimilation of Hmong culture into U.S healthcare policy created a cultural clash (Tran, 2009). The Hmong rely on social support as tradition holds for familial clans as a main social environment for an individual. Hmong who have chronic illnesses may have feelings of isolation and separation which were reported as intolerable. Thereof, in many cases the Hmong do not report their illnesses as they would feel separated from one's clan to be intolerable (Helsel, Mochel, & Bauer, 2005). Similar to the 'save face' concept, the cultural issue of separation from familial clan indicated hesitation to report chronic diseases (i.e. HBV) as the Hmong are a collective community (Tran, 2009). Any form of stigma could separate an individual from their community. Thus, the stigma of disease was a stressor triggering an individual's allostatic load. To avoid the stress of stigma, individuals did not seek medical help. Their avoidance of stigma increased their risk of health illnesses.

Without seeking proper care of their illness, the Hmong increased their risk to

poor health. The Hmong would resort to traditional herbal medicine and cultural means which would put them at risk of transmitted disease as cultural means did not prevent HBV. An additional problem arises where the Hmong did not perceive their illness or disease as severe; affecting their understanding and thoughts towards their health problem (Helsel, Mochel, & Bauer, 2005). Health relevant behaviors stem from an individual's mental action (i.e. cognition) which included knowledge and discernment of obtaining a vaccine for HBV. Chen (2005) discussed six antiviral drugs available for HBV, however, infected individuals were passed the point of treatment. The last preventative measure against premature death would be medical professionals monitoring the individual to avoid liver cancer. Mistrust, however, discouraged the Hmong from seeking help from medical professionals as the Hmong refused western medicine as a means of healing.

## Conclusion

The Hmong in central California carry an unnecessary burden of HBV. Negative outcomes of health were evident in the Hmong who took little to no action in preventing HBV. Prevention of prevalence rate of HBV involves future research observing health awareness curriculum and advocacy within the Hmong community led by community representatives. Perhaps a positive benefit of social environment the Hmong have is the social support from their community. Thereof, a possible prevention strategy

is educating the community as a whole. Investing social capital which would encourage utilization of material resources available in the community and encouraging the strength of social networks (Barr, 2009). Community education through healthcare providers who themselves are Hmong creates a stronger patient-physician relationship where trust is at the base. Hmong healthcare providers may advocate for HBV vaccines, dietary habits, and other changes in lifestyles. However, very few medical professionals are Hmong; thus, training medical professionals on cultural competence would inform professionals of the background of the Hmong and how to better serve them. Community involvement programs have the potential to intervene HBV through available vaccines and prevent potential contraction of liver cancer and other hepatic cancers. This in turn, prevents premature morbidity and mortality rates. Physicians have a difficult time communicating with minorities who are of low SES which causes a social distance; thus, minimizing the cultural gap through community involvement to ensure a health profession that acknowledges the specific needs of ethnic diversity of the community.

## References

- Barr, D. A. (2008). *Health disparities in the United States: Social class, race, ethnicity, and health*. JHU Press.
- Chen, M. S. (2005). Cancer health disparities among Asian Americans. *Cancer*, 104(S12), 2895-2902. doi: 10.1002/cncr.21501
- Dodge, J. L., Mills, P. K., & Yang, R. C. (2006). Cancer screening, reproductive history, socioeconomic status, and anticipated cancer-related behavior among Hmong adults. *Asian pacific journal of cancer prevention*, 7(1), 79. Retrieved from [http://www.apjcpcontrol.org/paper\\_file/issue\\_abs/Volume7\\_No1/Yang.pdf](http://www.apjcpcontrol.org/paper_file/issue_abs/Volume7_No1/Yang.pdf)
- Helsel, D., Mochel, M., & Bauer, R. (2005). Chronic illness and Hmong shamans. *Journal of Transcultural Nursing*, 16(2), 150-154. doi: 10.1177/1043659604273553
- Kue, J., & Thorburn, S. (2013). Hepatitis B Knowledge, Screening, and Vaccination among Hmong Americans. *Journal of health care for the poor and underserved*, 24(2).

- Lee, H. Y., & Vang, S. (2010). Barriers to cancer screening in Hmong Americans: the influence of health care accessibility, culture, and cancer literacy. *Journal of community health, 35*(3), 302-314. doi: 10.1007/s10900-010-9228-7
- Mills, P. K., Yang, R. C., & Riordan, D. (2005). Cancer incidence in the Hmong in California, 1988–2000. *Cancer, 104*(12), 2969-2974. doi: 10.1002/cncr.21525
- Sheikh, M. Y., et al. (2011). Prevalence of hepatitis B virus (HBV) infection among Hmong immigrants in the San Joaquin Valley. *Journal of community health, 36*(1), 42-46. doi: 10.1007/s10900-010-9283-0
- Tran, T. T. (2009). Understanding cultural barriers in hepatitis B virus infection. *Cleveland Clinic journal of medicine, 76*(3), 10-13. doi:10.3949/ccjm.76.53.03

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