

Dr. James A. Ferguson Emerging Infectious Diseases Graduate Fellowshi

Columbia University | University of Michigan | Southern Plains Tribal Health Board Morehouse College | University of Pittsburgh | Kennedy Krieger Institute | UCLA

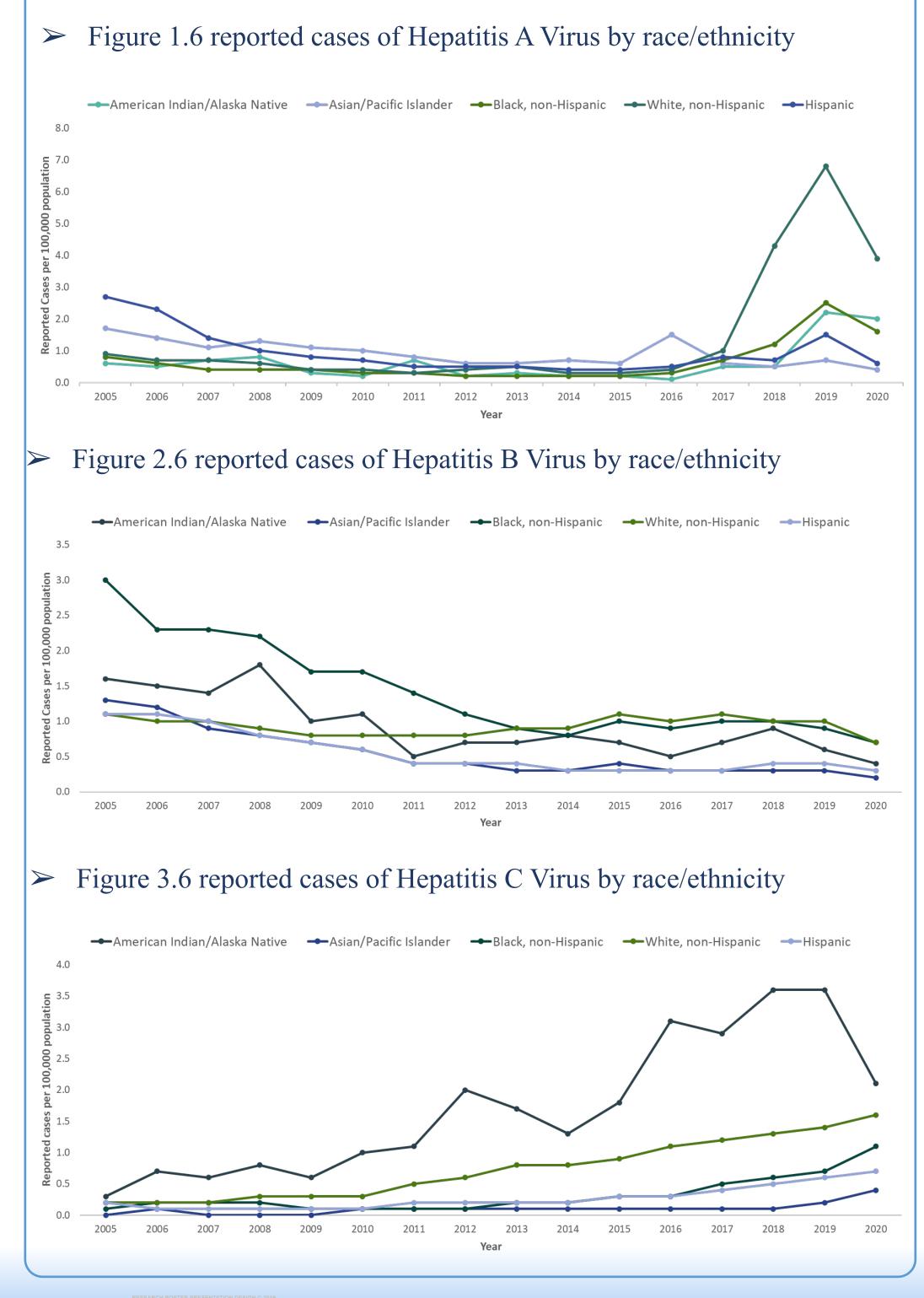
#### Introduction

HBV (Hepatitis B Virus) and HCV (Hepatitis C Virus) are major contributing factors to liver cancer. In the U.S. alone, approximately 65 percent of liver cancer cases are related to Hepatitis B or C, with nearly 50 percent being related to Hepatitis C alone. Some groups of Americans, such as American Indians, are at increased risk for chronic hepatitis infection due to the lack of proper health care not being received through Indian Health Service (IHS). About 1 in 5 people with chronic HCV end up needing a liver transplant that can be avoided with the proper screening and treatment. IHS has been consistently underfunded throughout the years, that it has forced healthcare providers to limit the services offered to the members of 574 tribes that they are responsible for.

#### What Is Hepatitis?

- $\rightarrow$  Hepatitis is an inflammation of the liver most often caused by a virus. More specifically, it is swelling of the tissue that damages and affects how well the liver functions. In the US, the most common types of viral hepatitis are Hepatitis A (HAV), Hepatitis B (HBV), and Hepatitis C (HCV). While each can produce similar symptoms, each hepatitis virus affects the liver differently, has different routes of transmission and infection, and typically affects different populations.
- Hepatitis is known as the silent virus killer due to its ability to remain undiagnosed for some time as it does not present visible symptoms. As a result, it can become a chronic infection and lead to cirrhosis, liver failure, and liver cancer.

#### American Indians (AI) Are Disproportionately Impacted By Hepatitis C Virus (HCV).



# Seeking Better Outcomes Among Americans Indians for Hepatitis and Liver Cancer/Disease From Indian Health Service Malia Hardy, Cameron University

# **Southern Plains Tribal Health Board/ T.H.E.S.I.S**

### How Does Hepatitis Correlate With Liver **Disease/Cancer?**

- $\rightarrow$  There are a couple of risk factors that increase someone's chance of getting Hepatocellular Carcinoma (HCC, liver cancer) or having a form of liver disease; one of the main ones being Hepatitis (Chronic Hepatitis). Having HBV or HCV leads to cirrhosis of the liver; which in turn causes HCC making it one of the most common cancers in the world.
- Cirrhosis is a type of disease where the liver cells overtime become damaged and replaced by scar tissue. Most people who developed HCC show evidence of having cirrhosis that can be traced back sometimes to having HBV or HCV.
- → Studies have shown high rates of HCV among Al's and Aboriginal populations when compared to other races/ethnicities.
- → In the United States, American Indians have a higher prevalence of liver disease due to their enhanced susceptibility to HCV.
- Liver disease is the 5th leading cause of death among American Indians in the United States.

#### Treatments:

**Antiviral medications, Liver transplant, Vaccines for** HAV & HBV

## Hepatitis A, Hepatitis B & Hepatitis C

#### Background:

→ Hepatitis A Virus (HAV), Hepatitis B Virus (HBV), and Hepatitis C Virus (HCV) can spread from person to person through sharing contaminated needles (such as in drug use), unprotected sex, or childbirth. They can also be passed on through blood transfusions.

#### Symptoms:

- → HAV sometimes presents similar symptoms to HBV such as jaundice and stomach pain. Other times the symptoms include loss of appetite, throwing up, joint pain, and feeling tired.
- $\rightarrow$  HBV is more likely to mimic a flu-like illness and jaundice for symptoms. But most people recover completely from HBV infection within a few months. Infants and small children who become infected have a higher risk of becoming chronic carriers. Only a very small percentage of adults become chronic carriers and develop a higher risk for liver cancer.
- → HCV, on the other hand, is less likely to cause symptoms nor present any feelings of sickness. However, most people with HCV develop chronic infections and are more likely to lead to liver damage and cancer.



#### **Services Expected to be Offered at Indian Health Services Hospitals:**

(1) Primary Care Physicians (2) Emergency Department (3) Radiology Department (4) Pharmacy (5) Operating Room (6) Laboratory services (7) Gastroenterology services (8) Intensive Care Unit

> x = service is offered Blank = service is not offered

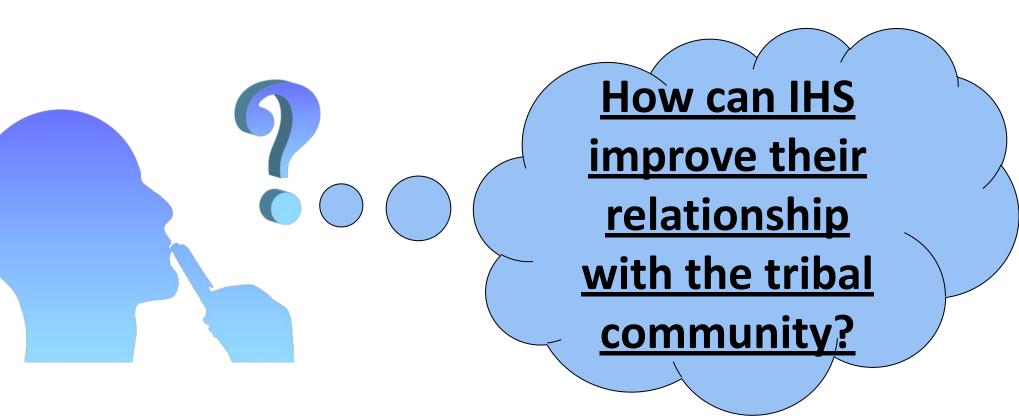
Name of Hospitals	1	2	3	4	5	6	7	8
Claremore Indian Hospital	x	x	X	X	X	x	÷	
Lawton Indian Hospital	X	х	X	X	X	х		
Wah-Zha- Zhi Health Center	x		X	X		х		
Cherokee Nation Health System	х	x	X	X	X	х	x	

 $\rightarrow$  American Indians being born in this generation already have a life expectancy around 4 years less than every other race within the United States population and continue to have higher mortality rates than everyone else in various categories of preventable diseases such as liver disease due to the lack of proper services.

→ Not only do the services available through the IHS vary across each tribe, the IHS hospitals are not always easily accessible in all service areas. Many tribal communities only have access to a small clinic that will contract them out for all specialty care, x-ray services, and other diagnostic tests and routine preventive

→ There are also some American Indians who live in urban areas away from their home reservations and cannot access IHS services, forcing them to rely on other sources of coverage or becoming uninsured.

→ There is not an equitable healthcare that is being delivered to the Tribal communities within Oklahoma and across the nation.



→ Having an investment in public health and illness prevention is essential to flipping the script on severe and chronic diseases that are impacting these communities.

Repairing American Indian community relationships with IHS by having cultural humility, being open minded, and creating a solid, trustful, and genuine relationship with the community they serve.

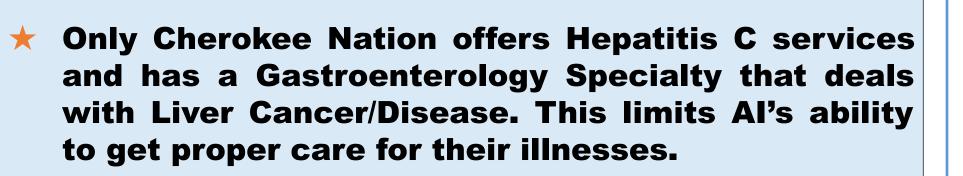
→ In many tribal communities, overall health and well-being (mind, body, and spirit) is a priority in someone's health. There is a lack of understanding in the American Indians way of traditional healing and practices. Having more of an integration of Native healing culture into the western healing way, will facilitate a better understanding of their customs. What works for one Nation here in Oklahoma may not work in a Nation on the west coast.

→ Providing proper access to speciality care, such as Gastroenterology, Intensive Care Medicine, Surgery, etc.

→ Introducing a Native liaison or quarterly meetings with the Tribal Leaders to help adjust the health issues within the community and give updates on what is being done to combat the issues or have a community advisory board that will give their input on what they feel the community needs are.

→ From a Comanche Native, "The Indian Health Service needs to be more open to learning about the community they are serving, as well as, providing the necessary services such as offering transportation if they are referring patients to other hospitals".





### **Does Racial Misclassification Play A Role In Their** Lack of Care?

→ Expanding health care services in IHS clinics and hospitals is vital to addressing the overwhelming need of specialized care to the American Indian population.  $\rightarrow$  American Indian (AI) populations tend to have one of the greatest health disparities within the United States in comparison to other racial groups. This is due to the health and mortality assessments being hindered by incomplete and inaccurate data in the surveillance and vital statistics systems.

→ Al populations are also more likely to be misclassified as another race than other racial groups in cancer registries, resulting in underestimates of cancer incidences. Similarly, misclassification of the AI race is another common problem on death certificates. As a result, mortality estimates for the American Indian population in the United States continue to be severely underestimated impacting the awareness of Al's dying from liver cancer.

→ Having an accurate estimate of disease and mortality rates is pertinent to addressing the misrepresentation of health disparities and disease burdens among American Indians.

> From a Comanche Native, **"IHS is a postcolonial** colonization, undermining the tribes sovereign nations to have proper healthcare" .....

#### **References Used:**

If you would like to learn more on Hepatitis, how Hepatitis relates to Liver Disease, or on the Indian Health Service feel free to scan this QR Code to access some of the sources I used.

