

# African Network for Hepatitis B Awareness and Education

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<https://africanhepbnetwork.org/>

The logo features the letters 'HBV' in a bold, dark red font. The 'H' and 'B' are positioned above the 'V'. Behind the letters is a golden-yellow silhouette of the African continent, which is set against a background of brown and grey stones.

# AFRICAN NETWORK FOR HEPATITIS B AWARENESS AND EDUCATION

**Welcome**

# Epidemiology of hepatitis B

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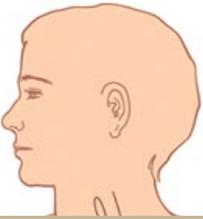
2 billion people have serologic evidence

400 million people are infected

620.000 people die every year

- Cirrhosis, HCC
- 66% in Asia
- 25% in Africa
- 3% in western world
- 3% in South America
- 3% in Middle east

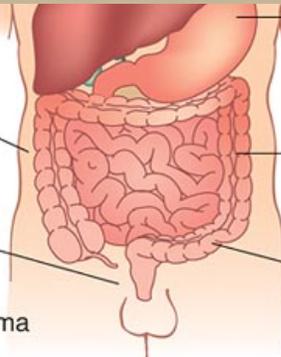
# Chronic Manifestations of HBV



Fever (60%–80%)  
"Flu"-like features (>70%)  
Nasal congestion

Jaundice (20%–30%)  
Fatigue, weakness (75%–90%)  
Pruritus (25%–45%)

No chronic symptoms



Abdominal discomfort or pain (60%–70%)  
Dark or brown urine (75%–95%)  
Other signs  
Macular erythema  
Irritability  
Decreased gustatory acuity

Anorexia and weight loss (80%–90%)  
Diarrhea/constipation (25%)  
Light- or clay-colored stools (20%–60%)

# Lack of awareness



Virus vya Hepatitis B vinaweza  
sababisha maradhi au kansa  
ya ini



Virusi vya Hepatitis B  
huambukiza x100 zaidi ya  
UKIMWI / HIV



Unaelewa afya yako?  
Pima afya  
Upate chanjo

Stop B

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USA  
Egypt  
Nigeria  
Sierra Leone  
Sudan  
Uganda  
Malawi  
Tanzania  
Kenya  
Ethiopia



# Role African Hep B Network

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- Network across researchers and providers in Africa that care for or are interested in hepatitis B
- Main goal is to increase awareness about hepatitis B in the continent
  - General public
  - Healthcare providers
  - Government officials



# African Hep B Network projects

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- Surveys related to HBV and HCC knowledge and attitudes
- Expansion of the “Waiting room project” Tanzania
- Outreach for HBV awareness and testing Tanzania
- HBV app
- COVID-19 attitudes in the continent

# African Hep B Network projects

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- **Surveys related to HBV and HCC knowledge and attitudes**

## Knowledge of Hepatitis B Transmission Risks among Health Workers in Tanzania

Jose D. Debes,\* Johnstone Kayandabila, and Hope Pogemiller

*University of Minnesota, Minneapolis, Minnesota; Arusha Lutheran Medical Centre, Arusha, Tanzania*

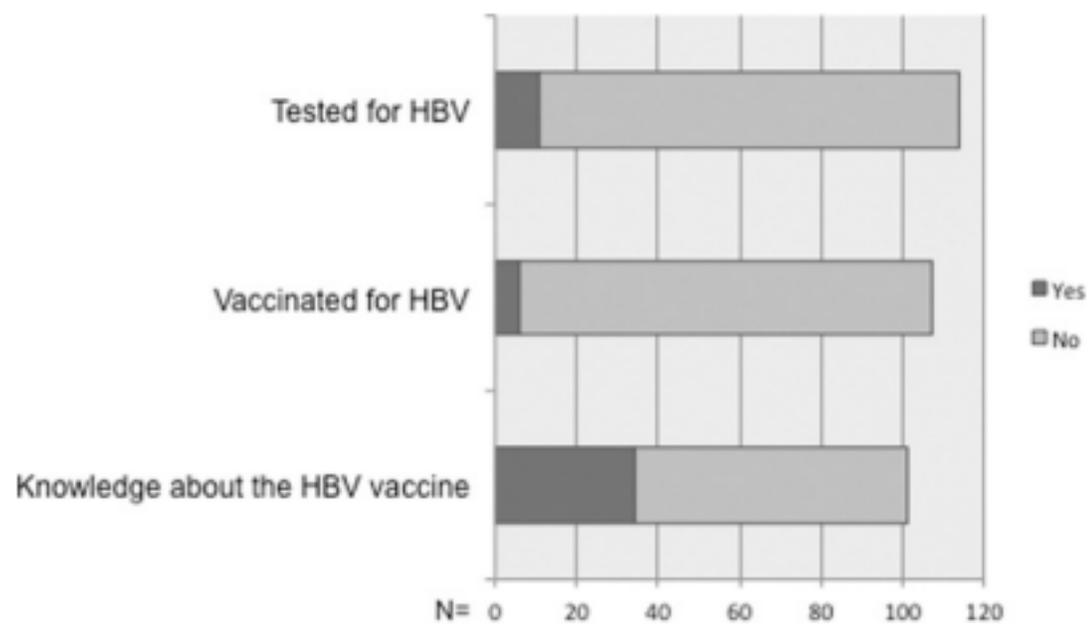


FIGURE 1. Overall responses of questions about hepatitis B.

## Hepatitis B Awareness and Vaccination Patterns among Healthcare Workers in Africa

Shemal M. Shah,<sup>1</sup> Holly Rodin,<sup>2</sup> Hope Pogemiller,<sup>1</sup> Oluwadayo Magbagbeola,<sup>3</sup> Kenneth Ssebambulidde,<sup>4</sup> Anteneh Zewde,<sup>1,5</sup> Matthew Goers,<sup>1</sup> Benjamin Katz,<sup>1</sup> Itegbemie Obaitan,<sup>1</sup> Ehab Fawzy Abdo,<sup>6</sup> Sahar Mohamed Hassany,<sup>6</sup> Mohamed Elbadry,<sup>7</sup> Abdelmajeed Mahmoud Moussa,<sup>7</sup> Jasintha Mtengezo,<sup>8</sup> Mark Dedzoe,<sup>9</sup> Benjamin Henkle,<sup>1</sup> Martha Binta Bah,<sup>10</sup> Matthew Sabongi,<sup>11</sup> Johnstone Kayandabila,<sup>12,13</sup> Robert Fell,<sup>1</sup> Ifeora Ijeoma,<sup>14</sup> Lucy Ochola,<sup>15</sup> Mirghani Yousif,<sup>16</sup> and Jose D. Debes<sup>1,11,12\*</sup>



- General awareness
- Vaccination of children of providers
- Reasons for no-vaccination
- Differences between East and West Africa



The Lancet Gastroenterology & Hepatology

Volume 8, Issue 8, August 2023, Pages 697-698



Correspondence

# Assessment of hepatocellular carcinoma surveillance practices in Africa

Manaswita Tappata<sup>a</sup>, Marina Farah<sup>b</sup>, Chimaobi Anugwom<sup>a c</sup>, Amir S Seid<sup>a d</sup>, Ijeoma Ifeora<sup>e</sup>,  
Jose D Debes<sup>a</sup> 

# African Hep B Network projects

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- Surveys to HBV and HCC knowledge and attitudes
- **Expansion of the “Waiting room project”**
- Outreach for HBV awareness and testing
- HBV app
- COVID-19 attitudes and understanding in the continent

## Letter to the Editor

### The Waiting Room Project: An Approach to Community Health Education in Hepatitis B

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*Dr. Shemal Shah during a hepatitis teaching session in the waiting room of KCMC Cancer Center in Moshi, Tanzania*

# African Hep B Network projects

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- Surveys related to HBV and HCC knowledge and attitudes
- Expansion of the “Waiting room project”
- **Outreach for HBV awareness and testing**
- HBV app
- COVID-19 attitudes and understanding in the continent

# Hepatitis B Awareness in Rural Tanzania via Community Outreach

**Manaswita Tappata, MD<sup>1</sup>, James Ford, MD<sup>2</sup>, Johnstone Kayandabila, MD<sup>3</sup>, Samwel Seth, MD<sup>3</sup>, Jose D Debes, MD PhD<sup>1,4</sup>**

1: Department of Medicine, University of Minnesota, Minneapolis, MN, USA 2: Department of Emergency Medicine, University of California, San Francisco, San Francisco, CA, USA 3: Department of Medicine, Arusha Lutheran Medical Center, Arusha, Tanzania. 4: Department of Gastroenterology and Hepatology, Erasmus Medical Center, Rotterdam, the Netherlands



# African Hep B Network projects

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- Surveys related to HBV and HCC knowledge and attitudes
- Expansion of the “Waiting room project”
- Outreach fro HBV awareness and testing
- **HBV app**
- COVID-19 attitudes and understanding in the continent



UNIVERSITY OF MINNESOTA  
Driven to Discover™

# Hepatitis B App to Increase Awareness of Disease and Linkage to Care in Africa

Manaswita Tappata<sup>1</sup>, Nasreen Quadri<sup>1</sup>, Jose D. Debes<sup>1,2</sup>

*Affiliations: 1: Department of Medicine, University of Minnesota, Minneapolis, MN, USA 2: Department of Gastroenterology and Hepatology, Erasmus Medical Center, Rotterdam, the Netherlands*

## App description



An application named “**HBV Africa**” was designed to be functional in Android and iOS devices.

The app provides **simple information** related to HBV including:

Basics on Hepatitis B

Clinical Manifestations

Approach to HBV patient

How to teach community

## App description

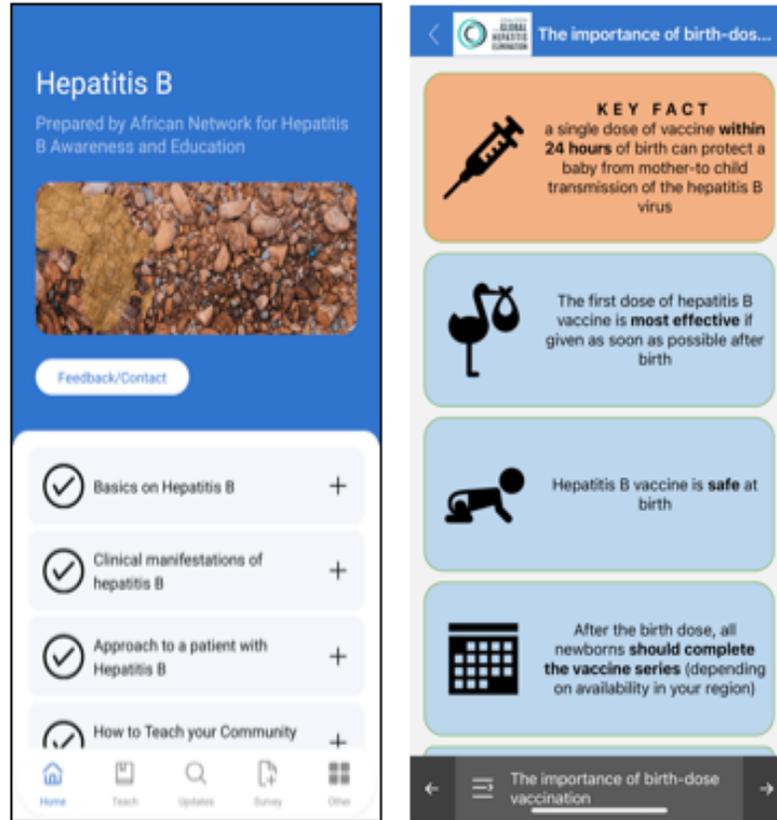


Figure 1. Example of HBV Africa App home screen (left) and information on HBV birth-dose vaccination (right).

## Conclusions

### Check out the app!

Android



SCAN ME

iOS



SCAN ME

<https://africanhepbnetwork.org/>

We expect the use of the app to **aid providers in rural and isolated areas of Africa** to better understand this lethal disease, help them in the initial management of patients and **increase awareness** by educating communities about HBV.

 Basics on Hepatitis B +

 Clinical manifestations of hepatitis B +

 Approach to a patient with Hepatitis B -

Initial Approach →

Liver Cancer Screening →

Prevention of complications →

Approach to Pregnant Women with Hepatitis B →

The importance of birth-dose vaccination →

 How to Teach your Community about Hepatitis B +

 African Hepatitis B Network +



Home



Teach



Updates



Survey



Other



**KEY FACT**

a single dose of vaccine **within 24 hours** of birth can protect a baby from mother-to child transmission of the hepatitis B virus



The first dose of hepatitis B vaccine is **most effective** if given as soon as possible after birth



Hepatitis B vaccine is **safe** at birth



After the birth dose, all newborns **should complete the vaccine series** (depending on availability in your region)



- ✓ Basics on Hepatitis B +
- ✓ Clinical manifestations of hepatitis B +
- ✓ Approach to a patient with Hepatitis B +
- ✓ How to Teach your Community about Hepatitis B -
- Key Messages →
- What is HBV? →
- HBV is common →
- HBV is silent →
- **HBV is Preventable** →
- Hepatitis B is Manageable! →
- Example Video on How to Teach →

Home
Teach
Updates
Survey
Other

← Back
HBV is common



- **Prevalence in Africa is 8% (depending on the region)**
- **8 in every 100 Africans has Hepatitis B**

←
→
HBV is common

← Back
HBV is Preventable



- **You must know how it is transmitted to prevent it!**
  - Sex
  - Blood
  - Mother to Child
  - Sharing household with people who have Hepatitis B
- **There is a vaccine that effectively prevents infection**
- **Pregnant women should be checked for hepatitis B**

←
→
HBV is Preventable

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# African Hep B Network projects

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- Surveys related to HBV and HCC knowledge and attitudes
- Expansion of the “Waiting room project”
- Outreach fro HBV awareness and testing
- HBV app
- **COVID-19 attitudes and understanding in the continent**

## COVID-19 in Africa: Survey Analysis of Impact on Health-Care Workers

Nasreen S. Quadri,<sup>1</sup> Amir Sultan,<sup>2</sup> Sophia Ibrahim Ali,<sup>1</sup> Mirghani Yousif,<sup>3</sup> Abdelmajeed Moussa,<sup>4</sup> Ehab Fawzy Abdo,<sup>5</sup> Sahar Hassany,<sup>5</sup> Johnstone Kayandabila,<sup>6</sup> Allison Benjamin,<sup>1</sup> Mark Jacobson,<sup>1</sup> Kenneth Ssebambulidde,<sup>7</sup> Lucy Ochola,<sup>8</sup> Ifeora Ijeoma,<sup>9</sup> and Jose D. Debes<sup>1,10\*</sup>

<sup>1</sup>University of Minnesota, Department of Medicine and School of Public Health, Minneapolis, Minnesota; <sup>2</sup>Addis Ababa University, Department of Gastroenterology, Addis Ababa, Ethiopia; <sup>3</sup>University of Gezira, School of Pharmacy, Gezira, Sudan; <sup>4</sup>Aswan University Hospital, Department of Gastroenterology, Aswan, Egypt; <sup>5</sup>Al-Rajhi University Liver Hospital–Assiut University, Department of Tropical Medicine and Gastroenterology, Assiut, Egypt; <sup>6</sup>Arusha Lutheran Medical Centre, Department of Medicine, Arusha, Tanzania; <sup>7</sup>Makerere University, Department of Medicine, Kampala, Uganda; <sup>8</sup>Institute for Primate Research, Nairobi, Kenya; <sup>9</sup>University of Nigeria, Department of Virology, Nsukka, Nigeria; <sup>10</sup>Hennepin Healthcare, Minneapolis, Minnesota

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Cross-sectional Study

Qualitative healthcare worker survey: Retrospective cross-sectional case study on COVID-19 in the African context

Allison Benjamin<sup>a</sup>, Amir Sultan<sup>b</sup>, Mirghani Yousif<sup>c</sup>, Abdelmajeed Moussa<sup>d</sup>, Ehab Fawzy Abdo<sup>e</sup>, Johnstone Kayandabila<sup>f</sup>, Kenneth Ssebambulidde<sup>g</sup>, Lucy Ochola<sup>h</sup>, Ifeora Ijeoma<sup>i</sup>, Nasreen Syeda Quadri<sup>a,j,\*\*</sup>, Jose Daniel Debes<sup>a,k,l,\*</sup>

A. Benjamin et al.

Annals of Medicine and Surgery 79 (2022) 103918

Question: Do you have concerns about your personal safety due to COVID-19 lockdown in your country? If yes, why?

### Responses

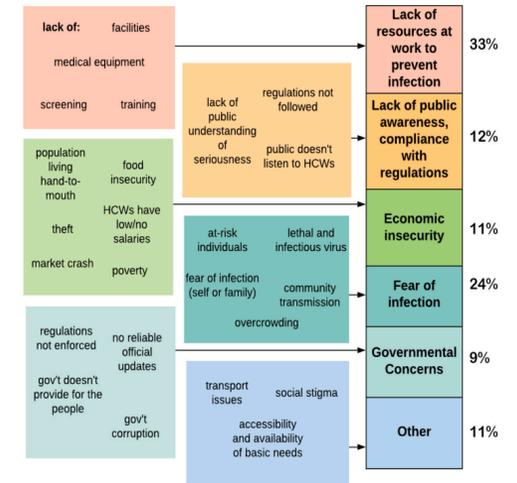
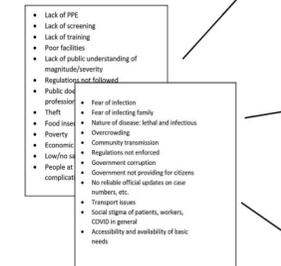


Fig. 1. Personal safety responses.

# Other indirect activities

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*Am. J. Trop. Med. Hyg.*, 110(2), 2024, pp. 399–403

doi:10.4269/ajtmh.23-0365

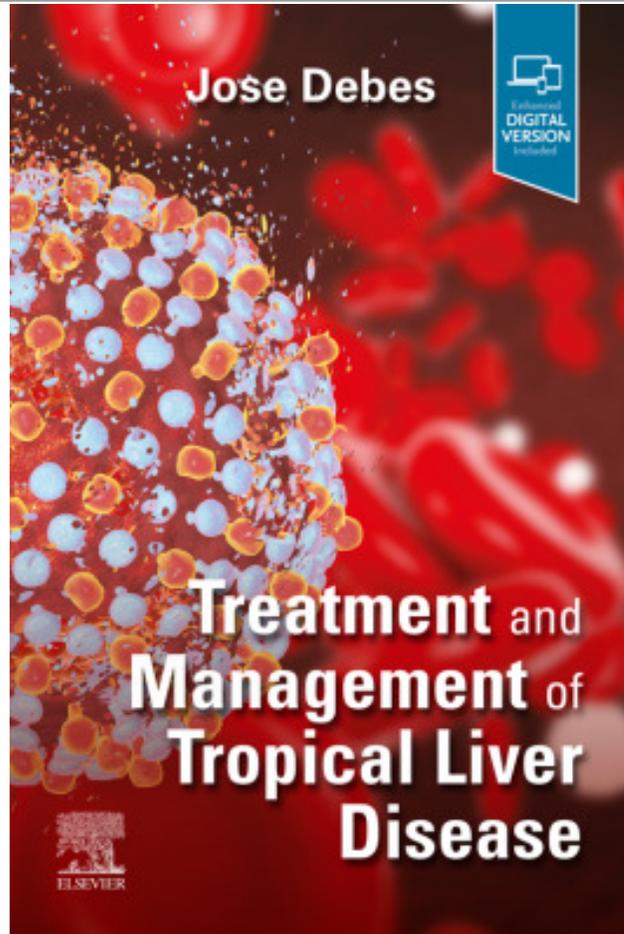
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## Combined Hepatitis B Virus and Hepatocellular Carcinoma Screening Using Point-of-Care Testing and Ultrasound in a Tanzanian Emergency Department

James S. Ford,<sup>1\*</sup> Johnstone Kayandabila,<sup>2</sup> Joseph C. Morrison,<sup>3</sup> Samwel Seth,<sup>2</sup> Benson Lyimo,<sup>4</sup> Aliasghar Mukhtar,<sup>5</sup> Michael Schick,<sup>6</sup> Larissa May,<sup>6</sup> and Jose D. Debes<sup>7</sup>

<sup>1</sup>Department of Emergency Medicine, University of California, San Francisco, California; <sup>2</sup>Department of Medicine, Arusha Lutheran Medical Center, Arusha, Tanzania; <sup>3</sup>University of California Davis School of Medicine, Davis, California; <sup>4</sup>Department of Surgery, Arusha Lutheran Medical Center, Arusha, Tanzania; <sup>5</sup>Department of Emergency Medicine, Arusha Lutheran Medical Center, Arusha, Tanzania; <sup>6</sup>Department of Emergency Medicine, University of California Davis Health, Sacramento, California; <sup>7</sup>Department of Medicine, University of Minnesota, Minneapolis, Minnesota

# Other indirect activities



## **Chapters from the network:**

Aflatoxins: Sudan

Congestive Hepatopathy: Ethiopia

Hepatitis D: Nigeria

Hepatitis C: Ethiopia

# African Hepatitis B Network

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- Johnstone Kayandabila-Tanzania
- Ifeorah Ijeoma-Nigeria
- Anteneh Zewde-USA-Ethiopia
- Oluwadayo Magbagbeola-Nigeria
- Kenneth Ssebambulidde-Uganda
- Itegbemie Obaitan-Nigeria
- Ehab Fawzy Abdo-Egypt
- Sahar Mohamed Hassany-Egypt
- Jasintha Mtengezo-Malawi
- Mirghani Yousif-Sudan
- Mohamed Elbadry-Egypt
- Abdelmajeed Moussa-Egypt
- Benjamin Henkle-Cameroon
- Martha Binta Bah-Sierra Leone
- Matthew Sabongi-USA-Madagascar
- Lucy Ochola-Kenya
- Mark Dedzoe-Ghana
- Jose Debes-USA-Tanzania



Questions?

[\\_https://africanhepbnetwork.org](https://africanhepbnetwork.org)