Hepatitis B in Timor-Leste: Current status and challenges

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I would like to acknowledge the Larrakia people as the traditional custodian of the land on which we meet today, and pay my respect to their elders, past and present.

Introduction

- Timor-Leste is an archipelago located in the in the Indian Ocean, in close vicinity to to Australia and Indonesia
- Total population of nearly 1.4 million (Census (Census 2022)
- Approximately 36,000 babies are born born annually

Hepatitis B burden in Timor-Leste

- Blood Bank data suggests 6% HBsAg seroprevalence among blood donors
- The HBV seroprevalence among health-care workers (HCWs) is 4.9% (2021)
- Pregnant women, 6.4% were found to be HBsAg positive
- A population-representative serological survey in 2021
 2023 showed 3.8% participants with HBsAg positive
- In 2021, 84 cases of Chronic Liver Disease secondary to CHB were admitted, mostly at the age of 31-45 years (48%)
- Hepatocellular carcinoma cases in 2022-2023 at National Hospital, 82% was positive for HBsAg (youngest was 29 years old)

Vaccination and Prevention Efforts

To prevent and control hepatitis B, three doses of hepatitis B vaccine was introduced in 2008

It consists of pentavalent vaccine administration at 6 weeks, 10 weeks and 14 weeks

Birth dose of hepatitis B vaccine was introduced in 2017

No vaccination for high risk population

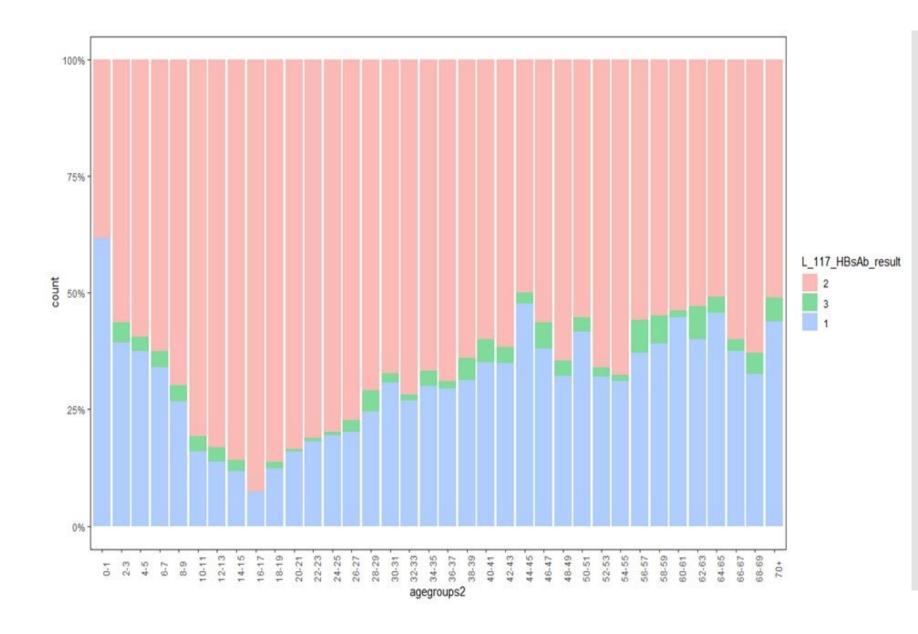
Current Situation on Immunity to Hepatitis B

- Vaccination coverage survey in 2018 shows variable uptake of uptake of hepatitis B vaccine
- Coverage of Hepatitis B infant vaccine (3 doses) in 2023 is 83%
- Birth dose hepatitis B vaccine coverage in 2023 is 77.2%
- HCWs survey shows immunity gap
- 16.4% had been vaccinated
- 41.4% seronegative
- 37.3% had evidence of previous (cleared) infection

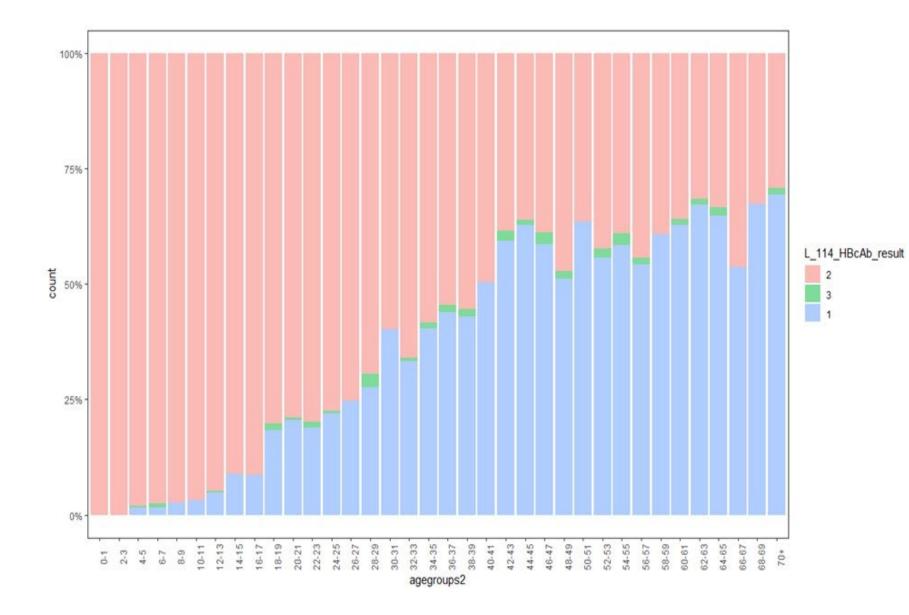
Current Situation on Immunity to Hepatitis B

- In 2022 survey:
- HBsAb seroprevalence was highest in younger children aged 1-4 years, reflecting recent improvements in vaccine-induced immunity, but lowest among adolescents in the 15-19 year age
- Seroprevalence of HBcAb was low among children (and very low in those aged 1-4 years). This might be indication that most children are being protected against vertical transmission by their birth dose

HBsAb Seroprevalence



HBcAb Seroprevalence



Current Situation on Diagnosis and Screening

- Mostly for people with liver disease or elevated liver enzymes
- Blood Bank: Hepatitis B is screened through rapid tests to detect the presence of hepatitis B surface antigen (HBsAg), together with HIV and Syphilis tests
- Pregnant Mother: Integrated in ANC guideline, however it is not routinely done
- High risk population:
- HIV patients
- ESKD patients undergoing dialysis

Current situation on treatment of Hepatitis B

- At National Hospital from 2018
- Criteria and SOP developed by local physician and Australian Gastroenterologist
- Request of Tenofovir 300mg through specialist drug list
- Started with 50 patients (mostly cirrhotic patients)
- Currently 126 patients are under treatment
- More then 50% drop out mostly patients from rural area

Challenges for Hepatitis B Control in Timor Leste

- Policy Gaps
- Lack of comprehensive national hepatitis strategy
- Funding constrains
- 2. Healthcare Access
- Sub optimal vaccine coverage
- Limited availability of testing and treatment services
- Lack of knowledge and capacity of human resources at health system
- 3. Public Awareness
- Health literacy
- Lack of awareness in the community regarding hepatitis B prevention and treatment

Current plan for Hepatitis B Control in Timor-Leste

1. Advocacy

- Comprehensive guideline for hepatitis B testing and treatment in the treatment – in the process of approval
- Vaccination for health care workers through NITAG
- Basic laboratory support in referral hospitals and health centers centers
- Treatment TDF to be included in the essential drug list
- Government to secure adequate funding for hepatitis B program program

Current plan for Hepatitis B Control in Timor-Leste

- 2. Integrating hepatitis B testing and treatment to the primary health primary health care
- Strengthening the capacity of the HCWs in primary health care health care facilities to screen, diagnose and manage hepatitis B hepatitis B cases
- Improve early detection and linkage to care
- Prevention of mother to child transmission by Treat all pregnant pregnant mothers with HBsAg positive in 3rd TM
- Improving Vaccination Coverage

Conclusion

Hepatitis B remains a significant public health challenge in Timor-Leste, requiring continued efforts to improve detection, treatment, and preventive measures.

Addressing the barriers, strengthening the healthcare system, and scaling up vaccination programs are crucial steps towards controlling this disease in the country.