# HEPATITIS B THE VANUATU STORY EVIDENCE TO IMPACT

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# VANUATU 2ND HEALTH RESEARCH SYMPOSIUM

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#### **OVERVIEW**

- Introduction
- Background
- What Medical Dept has done to date
- Aim and objectives
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- Discussion
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#### INTRODUCTION

Hepatitis B- a double stranded DNA virus<sup>1</sup>

- Means of transmission Parenterally, sexual contact, infected mother to child, horizontal transmission<sup>1</sup>
- Complications Cirrhosis and hepatocellular carcinoma
- Global statistics 350M worldwide infected carrier, 1 million deaths<sup>1</sup>

Time of exposure	Risk of chronic infection	Risk of CLD or HCC
At birth	90%	50% of male carriers and 14% of female carriers
Childhood	30%	5-10%
Adulthood	<5%	1-2%



# SUMMARY OF RESULTS FROM "ANTENATAL SERIOLOGY-THE NEED FOR HEPATITIS B SCREENING"

Women delivering at VCH in 2013	3036 screened
HBsAg screening	259 (only 9%) screened, None were referred to the medical team for follow up 12% prevalence
Prevalence of HBsAg donor blood over 20 month period	14.2% prevalence this is from a total of 1685 individuals screened

#### WHAT HAS HAPPENED SINCE THE 2013 STUDY

- Proper registration of all Hepatitis B positive cases that are seen by the medical team
- Developed HBsAg treatment guideline
- Addition of the anti-viral therapy into the NEDL-Tenofovir
- Rolling out Tenofovir treatment to Lenekel Hospital, NPH, Lolowai Hospital and Norsup Hospital
- Addition of HBV DNA into the test panel available at VCH
- Addition of Alpha feto Protein into the test panel available at VCH
- Starting treatment on Antenatal positive mothers
- Addition of Hepatitis B treatment guideline into the "Vanuatu treatment guideline" phone app



# AIM AND OBJECTIVE

# AIM:

To determine the prevalence of hepatitis B among women visiting the antenatal clinic at VCH in 2020

To determine if the testing rate has improved

# **OBJECTIVES:**

To estimate the burden of disease due to hepatitis B in Vanuatu



#### **METHODOLOGY**

Study Type- Retrospective study

#### **Inclusion**:

- All expectant mothers whom received Antenatal care at VCH from Jan 2020 to August 2021 and whom had screening blood done
- Blood donor Jan 2020 To August 2021

#### **Exclusion**:

- Expectant mothers who had no ANC
- Expectant mothers who had ANC but no screening blood done.



#### **RESULTS**

#### **ANC**

Total ANC Patient= 4,449

Total No. patients tested- 2,933

Testing rate- 66%

Prevalence of Heaptitis B positive in pregnant women= 7%

#### **BLOOD DONORS**

Total tested- 1204

Total Positive= 115

Prevalence of Hepatitis B positive blood donors= 10%



#### DISCUSSION

- 1. Antenatal screening for Hepatitis B has improved from 9% (2013) to 66% (2020)
- 2. The rate of Hepatitis B prevalence is lesser then in 2020, however still high
- 3. Additional research is needed to determine the true Hepatitis B rate in Vanuatu, Prevalence of CLD and HCC and also to determine outcome from Tenofovir and treating

Antenatal positive mums

### CAUSES OF LACK OF SCREENING

- 1. Busy clinic
- 2. Lack of staff



#### NEXT STEPS/SOLUTIONS/CONCLUSION

- Improve Hepatitis B vaccination rate especially 1<sup>st</sup> dose and also completion of all 3 doses
- Refer ALL Hepatitis B positive patients to medical clinic to initiate Hepatitis B treatment and follow up if need be
- Possibility of vaccinating All ANC women who have not had a hepatitis b vaccination
- More research in Hepatitis B, its complications and treatment in order to improvie services

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