

Antenatal Hepatitis B testing coverage at Vila Central Hospital laboratory, Efate, Vanuatu; 2018 - 2021

Presenter: Leiwia Dick¹

Co-authors: Rubby Leiwia Dick¹, Leila Bell^{2,3}, Junior George Pakoa¹, Sereana Natuman Damutalau⁴, Kaylene Kalmos⁴, Caroline van Gemert²

1. Vila Central Hospital Laboratory, Port Vila, Vanuatu, 2. Burnet Institute, Melbourne, Australia, 3. Monash University, Melbourne, Australia, 4. Ministry of Health, Vanuatu



Introduction

- ▶ The Hepatitis B virus (HBV) is transmitted through contact with blood or other body fluids, with mother-to-child transmission (MTCT) the most common route of transmission
- ▶ Diagnosis of HBV infection requires laboratory testing (HBsAg test), and before 2024 all tests were conducted in a centralised laboratory
- ▶ WHO recommends HBV screening in the first antenatal care visit (ANC-1) but this is not consistently applied across Vanuatu due to variations in guidelines
- ▶ HBV vaccination was introduced in 1990 in Vanuatu
- ▶ WHO and UNICEF estimated vaccine coverage was 68% in 2022
- ▶ This study aims to assess hepatitis B screening and percentage positive among women seeking antenatal services on Efate Island



Objectives

- ▶ **Objective 1:** To estimate the HBsAg screening rate among pregnant women presenting for ANC-1 on Efate Island, 2018 - 2021
- ▶ **Objective 2:** To calculate the HBsAg positivity rate among pregnant women presenting for ANC-1 on Efate, 2018 - 2021



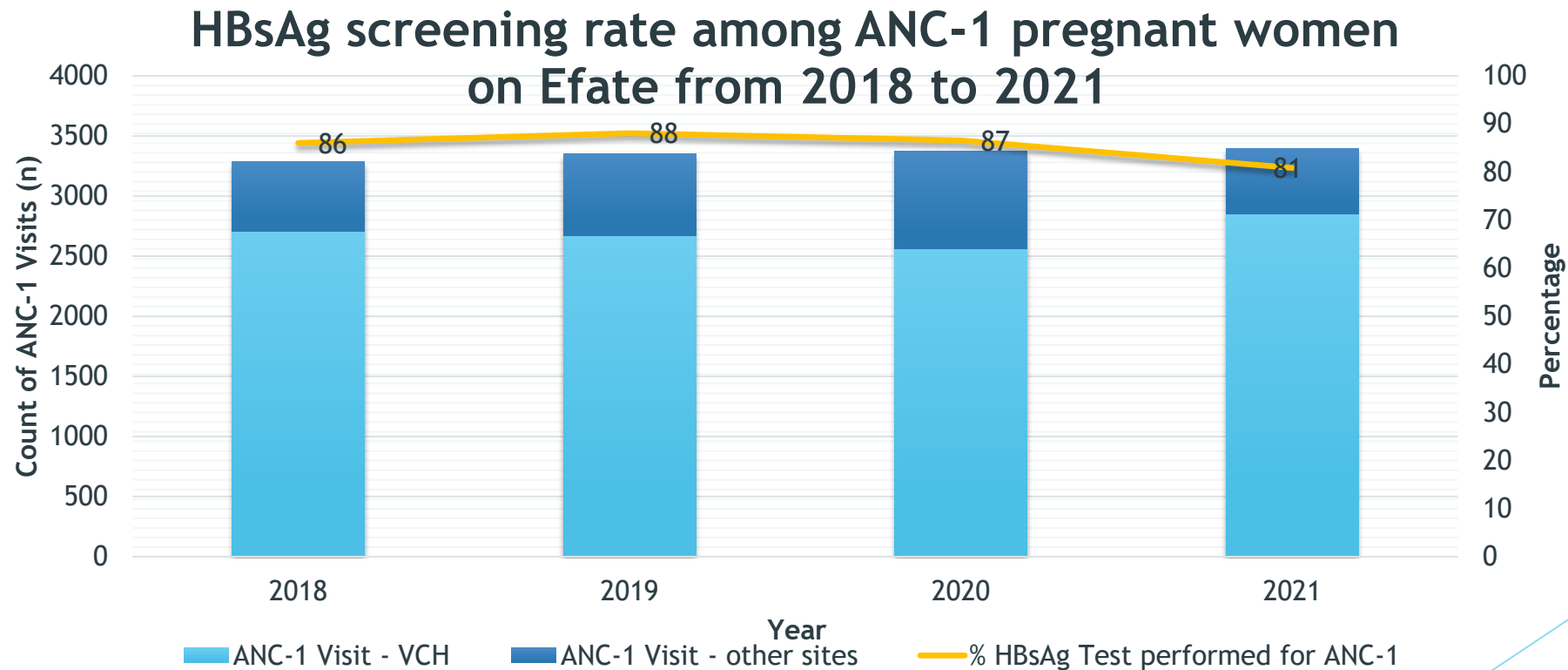
Methods

- ▶ Study Design
 - ▶ Cross Sectional study
- ▶ Study population
 - ▶ Pregnant women attending ANC services for their first ANC visit (ANC-1)
- ▶ Setting
 - ▶ Efate Island, population ~ 66,000. Efate is the third largest island but location of the capital Port Vila.
- ▶ Time period of interest
 - ▶ Data for 2018 to 2021 were included
 - ▶ Data for 2022 were obtained but not included due to validity issues
- ▶ Data sources
 - ▶ Manual review of ANC clinic registries
 - ▶ VCH laboratory electronic database
- ▶ Outcome measures:
 - ▶ Pregnant women who had a HBsAg screening test at ANC-1
 - ▶
$$\frac{\text{number of pregnant women with a HBsAg test result (+,-or/indet)}}{\text{number of pregnant women attending ANC-1 at all ANC clinics}}$$
 - ▶ Positivity among pregnant women who a reactive HBsAg screening test at ANC-1
 - ▶
$$\frac{\text{number of pregnant women with reactive HBsAg test result}}{\text{number of pregnant women with a HBsAg test result (+,-or/indet)}}$$



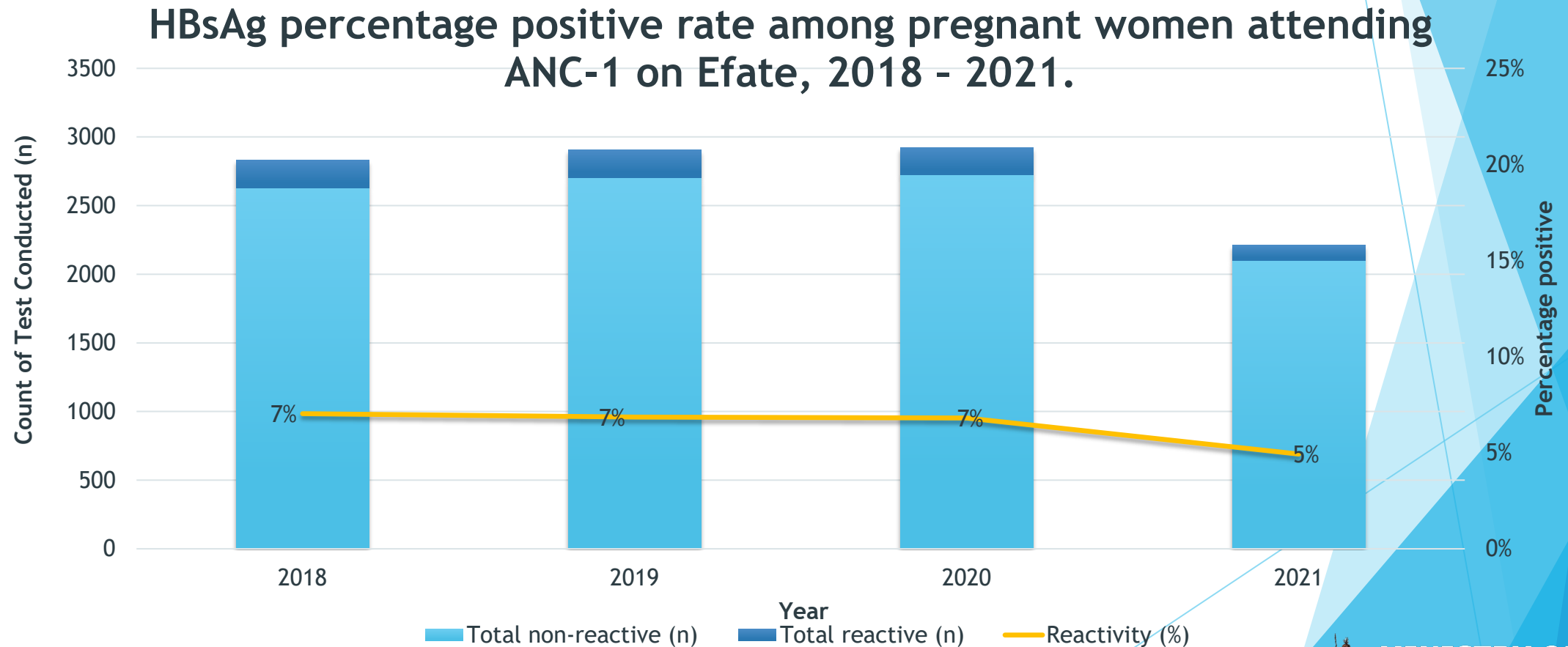
Results: Outcome measure 1

(Pregnant women who had a HBsAg screening test at ANC-1)



Results: Outcome measure 1

(Reactivity among pregnant women who a reactive HBsAg screening test at ANC-1)



Discussion

▶ Screening rate:

- ▶ Overall, 81% of pregnant women who were seen at ANC-1 on Efate had a HBsAg test between 2018 and 2021
- ▶ Screening rate decreased from 2019 (88%) to 2021 (81%)

▶ Positivity rate:

- ▶ Positivity rate decreased from 2018-2020 (7%) to 2021 (5%)
- ▶ Positivity reduction may be due to vaccination, which was introduced in 1990 but additional data is required to demonstrate this

▶ Recommendations:

- ▶ Perform HBsAg testing at community - based health facilities (point-of-care rapid diagnostic testing)
- ▶ Have a laboratory information & management system (LIMS) in place
- ▶ Ensure consistency in national guidelines to recommend HBsAg testing at ANC-1



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- ▶ VCH ANC Team
- ▶ VFHA team

