# **NHMS 2020**



This research highlight is based on NHMS 2020: Communicable Diseases. Volume I

### Who is this publication for?

- · Ministry of Health Malaysia
  - Disease Control
     Division: Sector of Vaccine

     Preventable Disease
  - Medical Practice Division
  - Traditional and Complementary Medicine Division
- · Local City Councils
- Ministry of Education

### Purpose of this summary

To share the main finding of NHMS 2020 focusing on Hepatitis B risk factors to further strengthen existing programmes and activities to increase awareness among Malaysian population.

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### **RESEARCH HIGHLIGHT**

NATIONAL HEALTH AND MORBIDITY SURVEY 2020 — PERSONAL RISK FACTORS OF HEPATITIS B INFECTION

## **ARE YOU AT RISK OF HEPATITIS B?**

ISSUE

## Main risk factors of Hepatitis B infection

A risk factor is a particular element or behavior that increases the chance of getting a disease [1]. Hepatitis B virus (HBV) can be spread through blood and bodily fluids (semen or vaginal secretion), and also from mother to baby [2]. The main HBV transmission is from sexual contact or intravenous drug use.

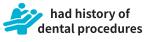
There are many other risk factors of HBV transmission. For example, transmission can occur during medical or dental procedures. Unvaccinated dental health care workers have a 10 times greater risk of becoming infected with HBV compared to the average citizen [3]. Transmission from surgical procedures may also still occur, with a study reporting a prevalence of 6.25% [4].

Other exposures can occur through percutaneous transmission such as body art. A study by Sahlan, showed that 46% of HBV positive people in an indigenous community had history of body piercing and tattooing [5]. Occupational exposure is also one of the risk factors for HBV infection. Healthcare workers reported the highest incidence of needlestick injuries [6], but other high risk occupations such as correctional officers are also exposed to used needles and blood splashes [7].

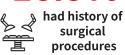
HBV infection is also strongly related to having a positive family member where vertical transmission and close contacts between family members can transmit HBV [8]. Sahlan also showed that all HBV positive patients in the Negrito tribe had history of home delivery [5].

### KEY MESSAGES

53.7%



20.0%



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23.3% had history of body piercing

Self-reported risk factors among Hep B+ respondents

21.3%

had family members who

had history of occupational exposure



had history of **one** risk factor



#### KEY CONSIDERATIONS

### Ministry of Health

- Disease Control Division: Sector of Vaccine Preventable Disease.
- To include highly recommended Hepatitis B vaccination for:-
  - Correctional officers, police officers, municipal waste workers and scavengers.
  - Family members of HBV positive patients.
  - Population with high-risk behaviors for HBV infection.
- Medical Practice Division
  - Implementation of more stringent and frequent audits to ensure compliance to Guidelines of Infection Control in hospitals as well as primary healthcare and dental healthcare.
  - Provide counselling guidelines in a primary healthcare setting on risk factors and transmission of HBV from patients and information on vaccination of HBV positive family members.
- Traditional and Complementary Division
  - To enforce strict universal safety regulations and regular monitoring for complementary body therapy outlets such as body piercing, acupuncture and blood cupping
  - To develop mandatory awareness programs for body therapies providers and users.

## Local City Council

• To create a strict guideline and regulations for body piercing outlets and providers.

### Ministry of Education

• To incorporate knowledge and awareness regarding Hepatitis B and other blood-borne diseases in the school curriculum.

### METHODS

We used data from the National Health & Morbidity Survey (NHMS) 2020 to focus on communicable diseases. The NHMS 2020 was a nationwide community-based cross-sectional study design using a multistage stratified random sampling method. The survey included respondents living in non-institutionalized living quarters from 113 enumeration blocks in Malaysia. Data were analysed in account for complex survey analysis to obtain population estimates. Data were collected using a validated Self-Administered Questionnaire (SAQ) which comprised of 14 questions that cover risk behaviours involving percutaneous exposure (ie: piercing, tattoo, blood cupping and acupuncture), occupational exposure (history of sharp injury at a workplace), medical procedures (ie: haemodialysis, surgical procedure, dental procedures and blood transfusion), high-risk sexual behaviours and history of HBV positive family members. All of these questions were in a dichotomous response option (only Yes or No answer was required). Each respondent may answer Yes to more than 1 risk factors asked in the questionnaire above.

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#### Disclaimer

The views, interpretation, implications, conclusions and recommendations are those of the author alone and do not necessarily represent the opinions of the investigators participating in the project nor the views or policy of the Ministry of Health, Malaysia.

This research highlight is part of a collection from the NHMS 2020:

- 1) Are you at risk of Hepatitis B?
- 2) Hepatitis B: A healthy carrier among us!
- 3) Stigma towards people living with HIV
- 4) Poor HIV knowledge among youth
- 5) Ignoring TB-like symptoms in Malaysia
- 6) Antibiotic resistance: How doctors and pharmacist could help?
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