# Investigation into Health Care Worker's Awareness and Implementation of Policies for the Prevention and Control of Hepatitis B Infections in Namibia

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#### Abstract

Hepatitis is a viral infection that causes severe infection and death. The purpose of this study was to assess the current health care worker awareness and the implementation of national guiding documents, for the prevention and control of hepatitis B in Namibia. The study was qualitative descriptive survey conducted to establish baseline information on health care workers' awareness and practices in preventing further spread of HBV in Namibia. Although health care workers are generally aware of hepatitis B disease burden in the country, their practices, availability and use of national guiding documents for effective prevention and control are insufficient.

**Keywords**: Awareness, Health-care workers, Viral Hepatitis, Hepatitis B, National guiding documents, Prevention, Control, transmission

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## 1 Introduction

Hepatitis is a potentially life-threatening inflammation of the liver, which can be caused by viruses; toxic substances such as alcohol, certain drugs; and autoimmune diseases(1).

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Hepatitis viruses (A, B, C, D or E) are the commonest cause of hepatitis, and B virus (HBV) is the commonest major global health problem (1). Infection with HBV can result in chronic infection, putting people at increased risk of death from liver cirrhosis and liver cancer (1, 2). The disease can spread through body fluids, blood and blood products - at birth; during household contacts; sexual intercourse and through occupational hazards such as cuts and needle-prick injuries (1). Many people who are infected do not have symptoms, but constitute the main source of infection in the community for many years (1, 2). Data on the prevalence of HBV is limited, but the World Health Organization (WHO) estimates that 15-60% of the normal population in many African countries may be positive for HBV (3).

Namibia, with a population of 2.3 million is comprised of 13 political regions, 34 health districts, 35 district hospitals, 44 health centers and over 265 clinics (7). There are four main private hospitals with numerous smaller private facilities across the country, (7). A health-facility based study of 1074 first time blood donors at the Namibia Blood Transfusion Services (NAMBTS) conducted in showed 14.8% positivity rates for current HBV infections nationally and Kavango region reported the highest positivity rate of 23% (8, 10). The most recent study of all pre-existing test results from the central laboratory of hepatitis A, B and C among pregnant women, Antiretroviral clinic clients and patients in whom the clinician suspected hepatitis, showed positivity rate of 11.76% nationally, with Kavango region having the highest HBV positivity rate of above 16.3% (10). Available information on routine and surveillance data monitoring, disease prevention and control seem inadequate to effectively reduce disease transmission (10, 11, 12, 13, 14, 15). The purpose of this survey was to assess the health care worker awareness and implementation of national guiding documents for the prevention and control of hepatitis B in Namibia. This information will particularly be useful for the country to develop and implement the WHO global hepatitis strategy 2016-2021, which aims at achieving global elimination of hepatitis B and C by 2030 (9).

### 2 Methods

We conducted a qualitative descriptive survey was conducted to establish baseline information on health care workers' awareness and implementation of national policies in preventing further spread of hepatitis B in Namibia. The researcher obtained ethical clearance from the Ministry of Health and Social Services (MOHSS). Up to 30 Health Care Workers (HCWs) were selected purposively from state and private facilities and were interviewed during February-July 2014. Two separate self-administered questionnaires were completed one for the Ministry of Health staff (17 respondents) and the other for the private practitioners and development partners (13 respondents), including the World Health Organization (WHO), UNICEF and Centers for Disease Control (CDC). Categories of health care workers interviewed include six state medical officers; five private medical officers; 10 program officers/policy makers and nine nurse practitioners. The purpose for including primary health care workers (nurses and doctors), program officers and policy makers was to assess their awareness on the disease burden and to build a case for the development of evidence-based national policies/strategies for effective prevention and control of viral hepatitis in the country. Statistical analysis was conducted using Epi-info statistical software.

### 3 Findings

Health Care Workers from the MOHSS who were interviewed, cited the following as critical challenges for reducing Hepatitis B Virus (HBV) spread in Namibia:

- Inadequate public awareness on disease burden, prevention and control among health care workers and communities;
- Inadequate national guiding documents, including HBV treatment protocols in public facilities;
- Limited/No access to HBV screening, monitoring, treatment or care for people who are non-pregnant or negative for HIV;
- Limited routine, surveillance and research data for evidence-based strategic planning.

Table 1 summarizes the responses.

Table 1: Critical challenges for reducing further spread of HBV in Namibia, according to MOHSS staff (doctors, program officers and nurses)

Question	Positive Response
Inadequate HBV awareness among HCW and the public	14/17
Limited or no access to HBV monitoring treatment and care	10/17
Inadequate national guiding documents	9/17
Limited routine surveillance and research data on HBV	
in Namibia	7/17

The responses from other health stakeholders, including the private doctors concurred with those provided by the Ministry of Health staff (Table 2).

All respondents (17 out of 17 respondents) revealed that the ministry does not have a strategic plan for raising public awareness for viral hepatitis. They equally affirmed that the MOHSS does not have a national research agenda for viral hepatitis.

Table 2: Showing main reasons for further spread of HBV in Namibia, according to health stakeholders (n = 13)

Question	Positive Response
Inadequate HBV awareness among HCW and the public	8/13
Mother-to-child transmission from HBV infected mothers	3/13
Limited access to treatment and care of people who	
are HIV negative	1/13

Table 3: Action points required to address HBV spread in Namibia, according to the MOHSS (n = 17)

Question	Positive Response
Increased HBV awareness among HCW and the public	13/17
Improved national guiding documents	10/17
Improved access to screening, monitoring, treatment, and	
care of people who are infected with HBV	6/17
Improved surveillance, data collection, and analysis	5/17

Both the respondents from the MOHSS staff and from the private sector recommend the following actions to be considered by the MOHSS for immediate implementation:

- Increase public awareness among health care workers and communities;
- Develop updated evidence-based national strategic plan in tandem with the global hepatitis strategy 2016-2011 for HBV prevention, diagnosis, treatment and care;
- Improve access to screening and monitoring, beyond Antenatal care and HIV positive people;
- Strengthen routine and surveillance data collection, analysis, research and data use for policy guidance.

### 4 Conclusion

Although the study has shown significant gaps related to awareness, updated policy guidance and sub-optimal performance in the monitoring and documentation of viral hepatitis, the MOHSS should be commended for ensuring that the laboratory has adequate capacities for screening blood/blood products; introducing Hepatitis B vaccinations for babies and exposed health care workers; and for developing guiding documents for HBV screening selected target groups. This shows high level commitment by the Ministry to reduce hepatitis transmission in the country. However, the reported sub-optimal vaccination coverage of 73%, (compared to the national target of 95% in 2012) among the health care workers according, to the annual report of the quality assurance units in the MOHSS (15), suggests low awareness and little risk perception on the part of some health care workers. These study results confirms the finding by the World Hepatitis Alliance and WHO Global Policy report findings of 2010 and 2012, respectively, that the prevention and control of viral hepatitis has been neglected in most countries (5, 6). This is generally coupled with inadequate coordination in the prevention and control of viral hepatitis, due to lack of updated guiding documents, and limited public awareness among policy makers and health care workers (4, 5, 6).

Identified gaps need to be addressed in line with the Global Hepatitis Strategic Plan 2016-2021 if the country is to reach the elimination goal for hepatitis B and C by 2030.

Although health care workers are generally aware of hepatitis B disease in the country, their practices, availability and use of available national guiding documents for its prevention and control are not sufficient to effectively reduce further transmission of hepatitis B in Namibia.

#### 5 Recomendations

- 1. MOHSS to consider sensitizing health care workers on the disease burden, prevention and control of viral hepatitis in Namibia. The World Hepatitis Day, commemorated on the 28 July each year is a good opportunity to start with, in partnership with other health stakeholders.
- 2. MOHSS should consider updating guidelines on viral hepatitis, including treatment protocols, in collaboration with partners.
- 3. MOHSS should consider inclusion of hepatitis B on its research agenda.
- 4. Need for improved data collection, analysis, reporting and dissemination of data on viral hepatitis to ensure evidence-based policy development and planning.

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