REPUBLIC OF NAMIBIA
MINISTRY OF HEALTH AND SOCIAL SERVICES

Viral Hepatitis National Strategic Plan 2019-22

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LIST OF ACRONYMS AND ABBREVIATIONS

AJS	Acute Jaundice Syndrome
ARI	Acute Respiratory Infection
ARVs	Anti-Retroviral Drugs
ART	Anti-Retroviral therapy
AU	African Union
CDC	Center for Diseases Control and prevention
CHWs	Community Health Workers
DHS	Demographic and Health Survey
ELISA	Enzyme-Linked Immuno-Sorbent Assay
EPI	Expanded Programme on Immunisation
HALE	Health Adjusted Life Expectancy
HAV	Hepatitis A Virus
HBs Ag	Hepatitis B surface antigen
HBV	Hepatitis B Virus
HCC	Hepatocellular carcinoma
HCV	Hepatitis C Virus
HEV	Hepatitis E Virus
HIRD	Health Information and Research Directorate
HIV	Human Immunodeficiency Virus
HPCNA	Health Professional Council of Namibia
HPP	Harambee Prosperity Plan
HRH	Human Resources for Health
HMIS	Health Management Information System
TWG	Technical Working Group
IDSR	Integrated Disease Surveillance & Response
ICT	Information and Communications Technology
IEC	Information Education Communication
MAWF	Ministry of Agriculture, Water and Forestry
MCH	Maternal and Child Health

MDGs	Millennium Development Goals
MET	Ministry of Environment and Tourism
MICT	Ministry of Information and Communication Technology
MOHSS	Ministry of Health and Social Services
MSM	Men who have Sex with Men
NAMBTS	Namibia Blood Transfusion Services
NAPHAIS	Namibia Population-based HIV AIDS Impact Survey
NAT	Nucleic Acid Testing
NCDs	Non-Communicable Diseases
NDP5	The Namibia fifth National Development Plan
NGOs	Non- Government Organizations
NIP	Namibia Institute of Pathology
NMRC	Namibia Medicine Regulatory Council
NTDs	Neglected Tropical Diseases
OST	Opioid Substitution Therapy
PFP	Private for Profit
PNFP	Private not for Profit
PLHIV	People living with HIV
PWID	People Who Inject Drugs
RDTs	Rapid Diagnostic Tests
RMNCH	Reproductive, Maternal, Newborn and Child Health
SDGs	Sustainable Development Goals
SOPs	Standard Operating Procedures
SRH	Sexual Reproductive Health
STIs	Sexually Transmitted Infections
TBD	To be Determined
TTIs	Transfusion Transmissible Infections
UHC	Universal Health Coverage
UN	United Nations (UN) Agencies

FOREWORD

Viral hepatitis is an international public health challenge, comparable to other major communicable diseases including HIV, tuberculosis and malaria. Despite the significant burden it places on communities, viral hepatitis has been largely ignored as a health and development priority until recently.

In 2010 and 2014, the World Health Assembly adopted 2 resolutions on viral hepatitis, urging Member States to recognize and address the burden of viral hepatitis through improved prevention and control efforts. In 2012, the World Health Organization (WHO) issued a framework for global action to prevent and control viral hepatitis infection, which aligned action along four strategic themes of raising awareness, promoting partnerships and mobilizing resources; evidence-based policy and data for action; prevention of transmission; and screening, care and treatment. The Ministry of Health in Namibia has taken this bold step to implement these recommendations in line with the current Health Sector Strategic Plan 2018-22.

The strategy describes the contribution of the health sector in Namibia to combating viral hepatitis, towards its elimination as a public health threat by 2030. It promotes synergies between viral hepatitis and other health issues, and aligns the hepatitis response with other global health and development strategies, plans and targets.

The Ministry of Health and Social Services anticipates that this strategic plan will serve as a guiding document to national efforts for the prevention and control of viral hepatitis and associated chronic liver disease and hepatocellular carcinoma. It is against this background that the Ministry of Health and Social Services calls for coordinated and concerted efforts from the Government and Development partners in addressing the viral hepatitis burden in Namibia.

Hon. Dr. Bernard Haufiku, MP

Minister of Health and Social Services

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The Ministry cordially acknowledges the work of the Viral Hepatitis Technical Working Group in guiding the development of this strategy and for all the consultative meetings to review the document to suit the Namibia context. We are grateful to our colleagues at WHO and in particular, Dr. Fabian Ndenzako from the WHO Regional Office, for technical assistance throughout the process. Special gratitude goes to the international consultant, Dr. Edwin Libamba for his commitment and hard work in leading this work.

Mr. Ben Nangombe

Permanent Secretary

Ministry of Health and Social Services

EXECUTIVE SUMMARY

Viral hepatitis is an inflammation of the liver caused by one of the five hepatitis viruses, referred to as types A, B, C, D and E. While all these viruses cause liver disease, they vary significantly in terms of epidemiology, natural history, prevention, diagnosis and treatment.

Hepatitis A virus (HAV) is usually transmitted by the faecal-oral route, either through person-to-person contact or ingestion of contaminated food or water. Hepatitis B virus (HBV) and hepatitis C virus (HCV) are infections that can be spread through contamination by blood and other body fluids. Hepatitis D virus (HDV) infections occur exclusively in persons infected with HBV. Like HAV, Hepatitis E virus (HEV) is transmitted through consumption of contaminated water or food.

Immunization is the most effective strategy for prevention of hepatitis B virus infection. Comprehensive prevention strategies for both hepatitis B and hepatitis C viruses include provision of safe blood products, safe injection practices, harm reduction services for people who inject drugs and promotion of safe sex. For viral hepatitis A and E, prevention is through improved sanitation, food safety and vaccination.

According to the WHO Global Hepatitis Report 2017, viral hepatitis caused 1.34 million deaths in 2015, a number comparable to deaths caused by tuberculosis and higher than those caused by HIV. However, the number of deaths due to viral hepatitis is increasing over time, while mortality caused by tuberculosis and HIV is declining. Most viral hepatitis deaths in 2015 were due to chronic liver disease (720 000 deaths due to cirrhosis) and primary liver cancer (470 000 deaths due to hepatocellular carcinoma). Globally, in 2015, an estimated 257 million people were living with chronic HBV infection, and 71 million people with chronic HCV infection. Approximately 47% of viral hepatitis deaths are attributable to HBV while 48% is attributable to HCV and the remainder attributable to hepatitis A and E viruses.

Prevention and control of hepatitis can therefore make a significant contribution to saving lives by preventing liver cirrhosis, cancer and thereby reducing the mortality attributed to hepatitis B and hepatitis C.

Namibia is one of the countries with high prevalence of HBV. However, the prevalence of HBV and HCV in the general population is not well known and the mortality related to these infections is not accurately established owing to limited data available to the Ministry of Health and Social Services through routine health information systems, surveillance and research.

Trends in transfusion transmissible infections among voluntary non-remunerated blood donors at the Namibia Institute of Pathology (NIP) based on 149,269 samples tested in 2017 indicates a seroprevalence of 9% for HBV and 0.8% for HCV. Data analysis from the same institution indicated the prevalence of HAV at 8%, HBsAg prevalence at 11.6% and that of HCV at 1.3% for the year 2013.

The health sector in Namibia has registered significant achievements in the control of infectious diseases in previous years. However, there are challenges that need to be addressed in order to improve the quality of service delivery for viral hepatitis prevention and control: There is low knowledge of viral hepatitis among HCW, policy makers and general population. There are no testing and treatment guidelines for Hepatitis and training materials are lacking.

In addition, hepatitis treatment is adhoc and limited with uncoordinated engagement of private sector. There is no viral load testing of hepatitis B or C with no identified place to refer patients. The strategic information on viral hepatitis is not well developed. There is also staff shortage with multiple M&E reporting platforms with limited tools to capture the hepatitis sequels. The partner engagement and support to viral hepatitis is lacking with no civil society involvement. There is no system to serve the mono-infected Hepatitis B positive clients, while those HIV/HBV co-infected are treated through the HIV programme.

The strategy describes the contribution of the health sector to combating viral hepatitis, towards its elimination as a public health threat. It promotes synergies between viral hepatitis and other health issues, and aligns the hepatitis response with other health and development strategies, plans and targets. It positions the response to viral hepatitis within the context of universal health coverage - an overarching health target of the 2030 Agenda for Sustainable Development. The strategy outlines a way ahead, and provides:

- A vision where viral hepatitis transmission is halted and everyone living with viral hepatitis has access to safe, affordable and effective care and treatment;

- A goal of reducing morbidity and mortality due to viral hepatitis towards eliminating viral hepatitis as a major public health threat in Namibia by 2030.

The strategy outlines the following specific objectives:

- Creating an enabling environment for managing viral hepatitis through policy development, advocacy and inclusion and stakeholder participation
- Providing effective and affordable preventive services including provision of vaccines
- Providing simple and reliable screening and diagnostic services for viral hepatitis
- Providing care and treatment services in the context of continuum of care and in accordance with universal health coverage
- Utilizing national data generated from research as input for evidence-based decision making

Achieving these objectives will require a radical change in the hepatitis response and will mean that hepatitis is elevated to a higher priority in the public health responses in Namibia.

1 BACKGROUND AND EPIDEMIOLOGY

1.1. Introduction

Viral hepatitis is an inflammation of the liver caused by one of the five hepatitis viruses, referred to as types A, B, C, D and E. While all these viruses cause liver disease, they vary significantly in terms of epidemiology, natural history, prevention, diagnosis and treatment.

Hepatitis A virus (HAV) is usually transmitted by the faecal-oral route, either through person-to-person contact or ingestion of contaminated food or water. Hepatitis B virus (HBV) and hepatitis C virus (HCV) are infections that can be spread through contamination by blood and other body fluids. Hepatitis D virus (HDV) infections occur exclusively in persons infected with HBV. Like HAV, Hepatitis E virus (HEV) is transmitted through consumption of contaminated water or food.

The most common hepatitis diseases are due to the hepatitis B virus (HBV), the hepatitis C virus (HCV) and the hepatitis D virus (HDV)[1]. There are effective tools and strategies for the prevention and treatment of hepatitis, however low awareness of hepatitis among the general population and key populations, has limited their impact. Since knowledge about the various risks and transmission routes is central to preventing the spread of hepatitis, increasing awareness is an important component of the global public health response[2]. Due to its often long asymptomatic, preclinical phase, viral hepatitis is a silent epidemic as most people are unaware of their infection[3].

[1] World Health Organization. Prevention and Control of Viral Hepatitis Infection: Framework for Global Action. 1–28 (2012). at <http://www.who.int/csr/disease/hepatitis/GHP_framework.pdf>

[2] World Health Organization (WHO). *Global policy report on the prevention and control of viral hepatitis IN WHO MEMBER STATES*. (2013).6.

[3] Lazarus, J. V, Safreed-Harmon, K. & Sperle, I. Global policy report on the prevention and control of viral hepatitis: In WHO Member States. *Glob. Alert Response* i–208 (2013). at <http://apps.who.int/iris/bitstream/10665/85397/1/9789241564632_eng.pdf>

1.2. Global Burden of Viral Hepatitis

According to the WHO Global Hepatitis Report 2017, viral hepatitis caused 1.34 million deaths in 2015, a number comparable to deaths caused by tuberculosis and higher than those caused by HIV. However, the number of deaths due to viral hepatitis is increasing over time, while mortality caused by tuberculosis and HIV is declining. Most viral hepatitis deaths in 2015 were due to chronic liver disease (720 000 deaths due to cirrhosis) and primary liver cancer (470 000 deaths due to hepatocellular carcinoma). Globally, in 2015, an estimated 257 million people were living with chronic HBV infection, and 71 million people with chronic HCV infection[4]. Approximately 47% of viral hepatitis deaths are attributable to HBV while 48% is attributable to HCV and the remainder attributable to hepatitis A and E viruses.[5]

Prevention and control of hepatitis can therefore make a significant contribution to saving lives by preventing cancer and thereby reducing the mortality attributed to hepatitis B and hepatitis C viruses. Viral hepatitis is also a growing cause of mortality among people living with HIV. About 5-15% of all people living with HIV are co-infected with HCV and 5-20% are co-infected with HBV. Globally, about 2.9 million people living with HIV are co-infected with HCV while 2.6 million people are co-infected with HBV[6].

1.3. Viral Hepatitis Burden in Namibia

In Namibia, the prevalence of HBV and HCV in the general population is not well known and the mortality related to these infections is not accurately established owing to limited data available to the Ministry of Health and Social Services through routine health information systems, surveillance and research.

Trends in transfusion transmissible infections among voluntary non-remunerated blood donors at the Namibia Institute of Pathology (NIP) based on 149,269 samples tested in 2017 indicates a seroprevalence of 9% for HBV and 0.8% for HCV. Data analysis from the same institution indicated the prevalence of HAV at 8%, HBsAg prevalence at 11.6% and that of HCV at 1.3% for

[4] World Health Organization (WHO). *Global Hepatitis Report, 2017*
[5] World Health Organization (WHO). *Manual for the Development and Assessment of National Viral Hepatitis Plans, A Provisional Document.* September 2015
[6] World Health Organization (WHO). *Global health sector strategy on viral hepatitis 2016-2021.* June 2016

the year 2013. The regional distribution of hepatitis B ranges from 8.3% (N=5512) in Erongo to 16.3% (N=12469) in Kavango region[7].

Namibia is one of few countries with policy to screen pregnant women against, HIV, Syphilis and Hepatitis B. The policy is being implemented and most pregnant women are screened. In 2013, the Hepatitis B prevalence among pregnant women was at 7.3% with 11,390 pregnant women testing positive for Hepatitis B. There is high prevalence of Hepatitis B/HIV co- infection in the country at 13.6%. All co-infected individuals are enrolled and treated through HIV treatment programme. However, there was no follow up of individuals who were hepatitis B positive but HIV negative[8].

Namibia is one of the countries implementing the population based HIV AIDS Impact Survey (NAPHAIS) where data collection has been completed. The NIP was involved in NAPHAIS and conducted HIV testing. However, the Hepatitis B and C testing was not included in the survey protocol and thus not tested. There is an opportunity to understand the population based hepatitis prevalence by testing the blood samples for Hepatitis B and C.

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%[9].

In a separate publication by Mhata P, Rennie TW, Small LF, Nyarang'o PM et al, based on a cross-sectional descriptive study conducted using pre-existing electronic laboratory data on HBV infection with data retrieved from the Central Namibia Institute of Pathology laboratory in Windhoek during January - December 2013 found that of a total of 77 238 hepatitis B surface antigen test results retrieved countrywide, 9 087 (11.8%) were positive. Of the positive results, 246/9 087 (2.7%) were in children aged 0 - 14 years, with the sexes equally affected. HBV infections increased markedly, particularly among females, in the age group 15 - 39 years, reaching

[7] Ndezako F, Lesi O; *Baseline assessment of viral hepatitis programme in Namibia, Feb. 2018*
[8] Ndezako F, Lesi O; *Baseline assessment of viral hepatitis programme in Namibia, Feb. 2018*
[9] Mhata P, Small L, Hunter C; *Investigation into health care worker awareness and implementation of policies for the prevention and control of HBV infections in Namibia*

a peak in the age group 30 - 34 years. It was also found in this study that routine screening of pregnant women for HBV during ANC visits was found to be systematically conducted in only two regions, Ohangwena and Khomas[10].

1.4. Current viral hepatitis preventive strategies in Namibia

Blood Transfusion Services

The country has a nationally co-ordinated and well-established Blood Transfusion Services. There are updated policies, guidelines and standard operating procedures related to blood safety. There is a well-trained team for donor recruitment, donation and blood screening. The BTS laboratory is well equipped with capability of conducting Nucleic Acid Testing for HIV, Hepatitis B and Hepatitis C on all donated blood samples. From 2007 to 2017, the number of collected blood units per year has been increasing from 18,074 to 37201 respectively. Screening of transfusion transmissible infections (TTI)- HIV, Syphilis, Hepatitis B and C is being done systematically. The prevalence of all TTIs has been constantly less that 1% indicating good donor recruitment practices[11].

For 11 years, a total of 1924 and 483 units tested positive for Hepatitis B and C respectively. All donors whose units were positive, were counselled and refereed to health facilities (private and public) for further management. However, on visiting the hospitals (Public and Private) and interacting with physicians and nurses, there was no data on subjects referred for evaluation of hepatitis and no records of treatment. Hepatitis evaluation and treatment was available at one specialist private hospital. The viral load evaluation was done in a private facility and Tenofovir was available in private pharmacies.

Viral hepatitis Vaccination

Namibia has good policies and implementation coverage of Hepatitis B vaccination. The coverage

[10] Mhata P, Rennie TW, Small LF, Nyarang'o PM et al, *Distribution of hepatitis B virus infection in Namibia; San J Research, October 2017, Vol 107, Number 10.*
[11] Ndezako F, Lesi O; *Baseline assessment of viral hepatitis programme in Namibia, Feb. 2018*

of childhood vaccination at 6, 10 and 14 weeks is more than 90% in 2016 (WHO/Unicef Estimates). Additionally, Namibia is one of the 11 countries in WHO AFRO region implementing and scaling up the birth dose which was introduced in 2014. In 2016, WHO and UNICEF estimated the coverage of birth dose vaccine at 87%[12].

Hepatitis B Vaccination and of Health Care Workers and other High-Risk Groups

There is policy which is being systematically implemented regarding the vaccination of health care workers and other risk group against Hepatitis B. If a health care worker opts out of the vaccination, then a special form has to be completed and signed as part of avoiding claims under worker's compensations. There is no indication that HCW were screened for Hepatitis B before being vaccinated.

Viral Hepatitis Testing, Treatment and Care

The capacity to test and treat hepatitis B and C exist in Namibia. Much of testing is happening already in public facilities. However, treatment and management of hepatitis B is mostly unavailable in the public hospitals. Though the prevalence of hepatitis C is low, 107 samples tested positive at NIP and there is no record of any Hepatitis C case being ever treated. with some public hospital clinicians indicated low knowledge related to availability. There is low knowledge among clinicians related to the availability and use of Direct Acting Antivirals (DAAs) for treatment of Hepatitis C.

Viral hepatitis awareness, surveillance and monitoring

Overall, the hepatitis awareness in the country is very low among stakeholders including health care workers. The country has never commemorated a world hepatitis day, which is used in many cases to advocate for viral hepatitis. There is an on-going hepatitis E outbreak in Namibia since end of 2017. Due the intensified prevention campaigns including IEC materials, many people know of Hepatitis E.

1.5. Strengths with implementation of viral hepatitis preventive strategies in Namibia

The baseline assessment revealed promising potentials in terms of initiating and scale up viral

[12] Ndezako F, Lesi O; *Baseline assessment of viral hepatitis programme in Namibia, Feb. 2018*

hepatitis in Namibia and hence meet the 2020 targets. The following were identified as strengths that could be built on to mount the hepatitis program:

- There is a coordinator/focal person and hepatitis is housed within the HIV/STI programme. The screening/diagnostic capacity for Hepatitis B and C in pregnant women and donated blood units is available.
- The country has high vaccination coverage of Hepatitis B third and birth dose vaccines and all babies born to hepatitis positive mothers are given Immunoglobulin.
- There is good policy and practices for hepatitis B vaccination among risk group HCWs and Hepatitis viral load and tenofovir is available in private sector All HIV/Hepatitis B co-infected individuals have access to Treatment and Care with reasonable Surveillance system. The DHIS2/HMIS is able to capture the acute infections/epidemics[13].

1.6. Challenges with implementation of viral hepatitis preventive strategies in Namibia

The baseline assessment team noted the following challenges:

- There is low knowledge of viral hepatitis among HCW, Policy makers and general population
- There was no strategic plan, no testing and treatment guidelines for Hepatitis and training materials were lacking.
- Hepatitis treatment is adhoc and limited with uncoordinated engagement of private sector
- There is no viral load testing of hepatitis B or C with no identified place to refer patients
- The strategic information on viral hepatitis is not well developed. There is staff shortage with multiple M&E reporting platforms with limited tools to capture the hepatitis sequels
- The partner engagement and support to viral hepatitis is lacking with no civil society involvement
- No system to serve the mono-infected Hepatitis B positive clients, while those HIV/HBV co-infected are treated in HIV programme[14]

[13] Ndezako F, Lesi O; *Baseline assessment of viral hepatitis programme in Namibia, Feb. 2018*
[14] Ndezako F, Lesi O; *Baseline assessment of viral hepatitis programme in Namibia, Feb. 2018*

1.7. Opportunities to enhance viral hepatitis response in Namibia

The adoption of various World Health Assembly Resolutions on Viral Hepatitis and the call for the elimination of viral hepatitis as a public health problem by 2030, has generated momentum to address this public health problem. The existing capacities for testing donated blood for transfusion transmission infections and that of NIP can be expanded and improved for reporting and linking those whose blood units test positive for further management. Existence of HIV viral load testing capabilities indicate the potential to initiate and scale up hepatitis treatment and management capitalizing on HIV platforms. The WHO global guidelines for viral hepatitis testing, treatment, M&E and Surveillance are available on WHO website. They can be adapted to suite the country context and facilitate standardized service delivery. Expertise exists and can be mobilized from sub-region to support national efforts to address viral hepatitis.

1.8. Focused response to at risk populations

In Namibia and other countries in the Region, populations most affected and at risk include people who have been exposed to viral hepatitis through close personal contact[15], unsafe blood supplies and unsafe medical injections and procedures, those exposed through mother to child transmission and those exposed through sexual transmission including young people and adolescents and commercial sex workers.

[15] McMahon BJ. *Epidemiology and natural history of hepatitis B. In Seminars in liver disease 2005 Feb (Vol. 25, No. S 1, pp. 3-8)*. Published in 2005

2 NAMIBIA HEALTH SECTOR, STRATEGIC PLANS AND POLICY GUIDELINES

2.1 The Namibia Health Care System

Namibia's health system is pluralistic, with a combination of public and private sectors. The public sector is the main provider of health services, serving up to 85% of the population. Nevertheless, the private sector, including private health facilities, faith-based facilities and non-governmental organisations play important role within the health sector, and provides health services to about 15% of the population. The private sector facilities also collaborate in operating services for the MOHSS on an outsourcing basis as well as engaging in health promotion activities[16].

The public sector has adopted the Primary Health Care (PHC) approach as the cornerstone for health service delivery, and has a three-tiered formal structure of national, regional and district levels, undergird by a decentralisation policy whereby authorities are devolved to the regional level. The formal health system structure is linked with the community systems through outreach points and the health extension workers who work mostly at the community level and are supervised by the PHC Supervisors and the Regional Managers.

The responsibility of promoting and facilitating health development at the regional level is that of the Regional Health Boards and the Regional Management Teams (RMTs). District Health Boards and District Health Management Teams have mandates for health development and service delivery at their respective districts, and have the responsibility of ensuring effective and efficient implementation of regionally directed programmes and interventions.

[16] MOHSS; *Namibia National Strategy for Women's, Children's & Adolescents' Health 'RMNCAH-Nut Strategy' (2018-2022)*

The management of public health programmes is decentralized under the responsibility of the 14 Regional Health Directorates, which cover the 35 health districts. A large majority of households are reported to be living near a clinic, while 21% live near a hospital and 7% near a health centre[17].

The following are some of the challenges of the health care system:

- Inadequate information system provisions on equity
- Limited human resources in capacity and number
- Existing parallel health information systems
- Health systems research shortfalls compounding limited evidence-based health services management
- Inadequate purchasing of supplies and poor maintenance of existing infrastructures.
- Unavailability of policy guideline on viral hepatitis

The human resources for health emergencies also remain a hurdle in provision of health services. There are vacancy rates for doctors of 30%, registered nurses 20%, pharmacists 25% and Environmental Health officers 43%[18].

The morbidity patterns in Namibia are predominantly due to communicable diseases including acute respiratory infections (ARI), malaria, intestinal infections, and perinatal conditions leading to infant mortality. The 2017 vital statistics for Namibia are shown in Table 1 below[19].

Table 1: Vital Statistics 2017

Statistic	Indicator
Population	2.308990
Annual Growth Rate	1.4%
Crude Birth Rate	29.4
Crude Death Rate	4.2
Total Fertility Rate	3.9
Infant Mortality Rate	39/1000

[17] Ministry of Health and Social Services, *Namibia Strategic Plan for EPI 2018-22, July 2017*
[18] Ministry of Health and Social Services, *Namibia national measles elimination strategic plan, 2015.*
[19] Ministry of Health and Social Services, *Namibia Strategic Plan for EPI 2018-22, July 2017*

Under-five Mortality Rate	54/1000
Maternal Mortality Rate	385/100000
Male Life Expectancy at birth	53
Female Life Expectancy at birth	61

2.2 Health sector strategic plan 2017-22

The MoHSS Strategic Plan for 2017/2018 – 2021/2022 is aligned to the broader national development plans such as Vision 2030, Harambee Prosperity Plan (HPP); SWAPO Election Manifesto of 2014; Fifth National Development Plan (NDP5), Agenda 2030/Sustainable Development Goals (SDG), the African Union (AU) Agenda 2063, while taking into consideration the evolving context of public health care and social welfare services delivery[20].

The Ministry's Strategic Plan is aimed to improve efficiency and effectiveness in the delivery of public health services through Universal Health Coverage. It provides guidance and serves as reference tool for government, as well as technical and financial partners in health in their effort to address major issues and challenges in order to improve health outcomes.

Despite some progress over the past decade, the burden of HIV/AIDS, Malaria and Tuberculosis, including multi-drug-resistant and extensively resistant tuberculosis cases, is still gloomy and requires special attention. The morbidity and mortality burden attributable to non-communicable diseases such as cardiovascular diseases, cancer and diabetes are on the increase. Some of these diseases are associated with the following risk factors: tobacco use, abuse of alcohol, physical inactivity and unhealthy diets. Thus, innovative interventions for the prevention and control of both communicable and non-communicable diseases are central to curb the scourge of these diseases.

The competent and skilled health workforce, adequate health financing, sound policy framework, adequate community engagement, appropriate and relevant medical products and medicines

[20] Ministry of Health and Social Services, *MoHSS Strategic Plan 2017 – 22*

including technologies and knowledge management, are pivotal to health system strengthening in Namibia.

2.3 Development of viral hepatitis strategy and treatment guidelines

The development of the national viral hepatitis strategy is in line with the current health sector strategic plan 2017-22 described above. The viral hepatitis strategy provides a platform to reduce morbidity and mortality due to viral hepatitis towards elimination of viral hepatitis as a major public health threat in Namibia by 2030. It is envisioned that hepatitis management guidelines will be developed to complement the strategy and to provide the necessary tools to health care workers to effectively manage acute and chronic forms of hepatitis.

2.4 The viral hepatitis program in Ministry of Health and Social Services

Viral hepatitis program has been established in the Ministry of Health and Social Services, under Directorates of Special Programmes and Primary Health Care. The Ministry has appointed a viral hepatitis focal directorate. The viral hepatitis program in the Ministry of Health and Social Services has a Technical Working Group (TWG) consisting of members from departments within the Ministry of Health and Social Services and other stakeholders involved in the Viral Hepatitis response.

2.5 Contribution to the 2030 Agenda for Sustainable Development

The Viral Hepatitis Strategy will contribute to the attainment of the 2030 Agenda for Sustainable Development and specifically to the health-related Goal 3, target 3.3. The strategy describes priority actions required to achieve the global hepatitis targets and how the hepatitis response can contribute to the achievement of universal health coverage, other health targets and the broader 2030 Agenda. It is aligned with other relevant health strategies and plans, including those for sexually transmitted infections, safe injections, blood safety, vaccines, tuberculosis and non-communicable diseases, and responds to the requirements of World Health Assembly resolutions on viral hepatitis that were adopted in 2010 and 2014.

3 VISION, GOAL AND OBJECTIVES

VISION

A country where viral hepatitis is no longer a major public health burden

GOAL

Achieve a 90% reduction in new cases of chronic viral hepatitis and a 75% reduction in deaths by 2030

OBJECTIVES

- Create an enabling environment for managing viral hepatitis through policy development, advocacy and stakeholder participation
- Provide effective and affordable preventive services including provision of vaccines
- Provide simple and reliable screening and diagnostic services for viral hepatitis
- Provide care and treatment services in the context of continuum of care and in accordance with universal health coverage
- Strengthen the capacity of the health sector to monitor the viral hepatitis prevention and treatment program
- Utilize viral hepatitis data as evidence for decision making

4 PREVENTING TRANSMISION OF VIRAL HEPATITIS

Implementing scientifically proven, culturally acceptable and affordable preventive methods are essential in eliminating new viral hepatitis infections and containing viral hepatitis as a public health problem. Priority interventions for preventing viral hepatitis in Namibia include advocacy and awareness, use of safe and effective vaccines, improving blood safety, enhancing infection prevention and control in health care settings and communities, preventing mother-to-child transmission of viral hepatitis, promoting safer sex and promoting proper use of sanitation, safe water and food.

4.1 Partnerships, Advocacy, Awareness and community action

The objectives for advocacy include:

- To improve public knowledge of hepatitis virus infection and strengthen community participation
- To improve access to hepatitis testing and treatment services
- To increase engagement of higher-level at government, partners and relevant stakeholders
- To improve knowledge of hepatitis epidemics based on improved surveillance efforts resulting in stronger national plans
- To scale up viral hepatitis testing, prevention, treatment and care services, and move towards achieving the targets to eliminate hepatitis by 2030.

The proposed advocacy is achieved through community engagement by holding high profile national events such as: commemoration of world viral hepatitis day; social mobilization; engagement of national stakeholders and health professionals including civil society, private sector, professional associations, pharmaceutical industries, the media and through development and dissemination of viral hepatitis information products.

4.2 Providing safe and effective vaccines

Effective vaccines exist for preventing viral hepatitis A and B. Hepatitis B virus immunization is a critical intervention for the elimination of hepatitis B virus.

Key Activities:

- Continue provision of hepatitis B virus vaccine in national childhood immunization schedules
- Vaccinate all newborn babies with hepatitis B vaccine within 24 hours of birth and missed opportunities up to 14 days
- Strengthen identification of missed opportunities and provide required hepatitis B virus vaccination for children
- Offer hepatitis B virus vaccination to people who are at risk of acquiring and transmitting the virus such as health care workers, military, commercial sex workers, prisoners and sea going personnel.
- Increase coverage of viral Hepatitis B vaccinations to >90%
- Preposition stocks of viral Hepatitis B Vaccinations at all times.

4.3 Improving blood safety

The risk of transmission of viral hepatitis B and C through the transfusion of contaminated blood and blood products may occur as a result of the absence or poor quality of screening in blood transfusion services. The target for Namibia is to have all of blood donations screened in a quality assured manner by 2020.

Key Activities:

- Promote the rational use of blood and blood products.
- Implement quality control measures for laboratory testing of viral hepatitis B and C to ensure supplies of quality assured assays
- Sustain systems of surveillance, haemovigilance and monitoring of the incidence and prevalence of viral hepatitis infection in blood donors and on post-transfusion hepatitis risk.

4.4 Enhancing infection prevention and control in health care settings and communities

The Ministry of health and Social Services in Namibia has developed IPC guidelines for infection prevention and control that address hand hygiene, handling and disposal of used sharps, management of clinical waste and safe cleaning of equipment. The occupational guidelines also have management of occupational exposure for HBV and HCV among health workers and safe disposal of clinical waste. Consistent implementation of infection control practices including safe injection measures in health care and community settings will reduce transmission of viral hepatitis to both users of health care services as well as health care workers.

Key Activities:

- Strengthen and sustain routine infection prevention and control practices in health care settings, both public and private including laboratories.
- Implement the safe injection policy with the aim of reducing unnecessary injections and promote use of safety-engineered injection devices
- Provide health workers with free immunization against hepatitis B
- Provide post exposure prophylaxis to health workers and other high risk individuals
- Promote safe practices in those conducting traditional scarification, traditional circumcisions, hair shaving and other local rituals involving contact with blood.
- Promote safe waste management practices at all levels
- Promote regular occupational health and safety assessments at health facilities

4.5 Preventing mother-to-child transmission of viral hepatitis

Transmission of hepatitis B virus in highly endemic areas often occurs from infected mothers to their infants during the perinatal period. Elimination of mother to child transmission of hepatitis B virus will require a comprehensive approach that includes prevention of hepatitis B virus infection in young women, hepatitis B virus testing, care of pregnant women with chronic hepatitis B virus infection, delivery of hepatitis B virus vaccine to the infant within 24 hours of birth and safety delivery practices.

Key Activities:

- Provide timely administration of hepatitis B virus birth-dose vaccine with specific attention given to births occurring outside health care settings
- Continued provision of Immunoglobulin to all babies born to hepatitis positive mothers.
- Update national polices and guidelines on MNH based on evolving WHO guidance on elimination of mother-to-child transmission of viral hepatitis

4.6 Providing harm reduction services

A package of harm reduction services for people who inject drugs can be highly effective in preventing the transmission and acquisition of viral hepatitis B and C, as well as HIV and other blood-borne infections. Such a package should be integrated into a comprehensive set of services for the prevention and management of substance use disorders. WHO, UNODC and UNAIDS have defined a set of interventions and services that should be included in a comprehensive package for people who inject drugs[21]. Ensuring sufficient coverage of harm reduction interventions depends on overcoming legal and societal barriers.

Key Activities for harm reduction (injection drug use)

- Develop national guidelines for prevention of transmission of viral hepatitis and other blood-borne viruses among PWID
- Vaccination of PWID against HBV (rapid schedule)
- Provision of HBV, HCV and HIV testing and counselling
- Provision of PWID with sterile needles, low-dead space syringes and other injecting equipment
- Provision of peer-to-peer interventions for harm reduction
- Provision of opioid substitution therapy (OST) to treat opioid dependence and integration

[21] WHO, UNODC, UNAIDS technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users – 2012 revision, see http://www.who.int/hiv/pub/idu/ targets_universal_access/en/ (accessed 1 October 2018).

of OST services with those providing hepatitis care and treatment.

Key Activities for harm reduction (Sexual risk)

- Develop a national policy for the promotion of safer sex practices, and access to condoms and appropriate lubricant for high-risk groups
- Recommend and provide HBV vaccination to MSM, sex workers and other at-risk groups
- Provide targeted information campaigns for at-risk and other vulnerable groups such as adolescents, sex workers, MSM and PWID
- Develop a national policy and action to eliminate discrimination and gender violence, and to increase access to medical and social services for vulnerable persons

4.7 Promoting safer sex

Safer sex practices including minimizing the number of sexual partners and consistent and correct use of male and female condoms offer powerful protection against viral hepatitis B and C and a range of other sexually transmitted infections.

Key Activities:

- Promote behavior change to avoid unprotected and multiple sexual activity
- Create the demand and increase supply of male and female condoms especially to populations most at risk of viral hepatitis B and/ or C virus infection through social marketing programes.
- Ensure that the national hepatitis B virus vaccination policy includes persons at increased risk of acquiring hepatitis B virus infection.

4.8 Promoting proper access to safe food, water and sanitation

Assuring access to safe food, drinking water and sanitation systems can dramatically reduce the transmission of viral hepatitis A and E.

Key Activities:

- Advocate for universal and equitable access to safe and affordable drinking water to all

- Achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of those in vulnerable populations
- Support and strengthen the participation of local communities in improving water and sanitation management
- Promote safe food hygiene practices

5 DIAGNOSING HEPATITIS INFECTION

Early diagnosis of hepatitis infection is critical for effective treatment and care. Yet in Namibia, the number of persons with viral hepatitis aware of their status remains unknown. Awareness is lacking among healthcare workers and the general population. In addition to this, reliable diagnostics that are appropriate for the setting of intended use and testing services are not sufficiently available in all regions and laboratory capacity is minimal.

Increasing early diagnosis requires overcoming those shortcomings, using effective testing approaches, quality-assured diagnostics and linking the results of testing to treatment and care services. This strategy calls for a major increase in diagnosis of viral hepatitis infections with 30% of people infected knowing their status by 2020.

As seen in Chapter 1 of this strategy, seroprevalence of HBV has been estimated at 9% and that of HCV at 0.8% based on 2017 data from voluntary non-remunerated blood donors at the Namibia Institute of Pathology (NIP). However, an opportunity exists in Namibia to understand the population based hepatitis prevalence through testing of blood samples for Hepatitis B and C using blood samples that were collected for HIV testing during the HIV AIDS Impact Survey (NAPHAIS).

As a way of complementing this strategy, it is envisioned that The Ministry of Health and Social Services in Namibia will develop comprehensive guidelines for the screening and confirmation of persons with viral hepatitis infection.

5.1 Increase number of people diagnosed with viral hepatitis

Key Activities:

- Develop national algorithm for testing viral hepatitis infection.

- Strengthen the national laboratory system for quality diagnosis of viral hepatitis which include training of laboratory staff, supervision as well as application of quality control in testing procedures and proficiency testing

- Strengthen the capacity of NIP to act as a confirmatory centre and also locally validate WHO prequalified reagents

- Ensure a sustainable provision of validated reagents and supplies.

- Establish key linkages between testing and other services to improve referral and access to quality assured treatment and other supportive services

A detailed account of screening and diagnosing hepatitis including testing algorithms will be presented in the guidelines described above.

6 TREATING HEPATITIS AND PROVIDING SUPPORTIVE CARE

6.1 Expanding treatment for viral hepatitis

Effective clinical management of viral hepatitis reduces the individual, social and health burden related to the infection. As indicated above, it is proposed that the Ministry of Health and Services in Namibia will develop comprehensive guidelines for the care and treatment of persons with viral hepatitis infection. For HBV and HCV infections, these national guidelines will address the following key activities:

Key Activities:

- Initial clinical assessment including:
    - Assessment of liver disease stage based on clinical criteria or non-invasive tests and laboratory confirmatory tests.
    - Assessment to reduce individual risk of disease progression including screening and counseling for alcohol use as well as screening for hepatotoxic drugs.
    - Develop treatment guidelines for HBV and HCV and train health workers.
    - Disseminate and orient health care workers on the HEV guidelines.
- Assessment for starting antiviral treatment including:
    - Screening and testing for co-morbidities and other risk factors in order to inform treatment plans
    - Prioritization for treatment of individuals according to clinical criteria
    - Monitoring of patients for whom treatment has been deferred

- Provision of antiviral treatment including:
    - Optimal first line therapeutic regimen
    - Monitoring response to treatment and appoint a focal person
    - Monitoring for and managing adverse effects
    - Availability of antiviral delivery points in all health facilities.

6.2 Providing supportive care

In addition to antiviral treatment, supportive care is required for many, including the management of decompensated liver disease and hepatocellular carcinoma. Treatment of advanced liver cirrhosis and hepatocellular carcinoma, including liver transplantation and chemotherapy, is very limited in Namibia, highlighting the need to provide access to good quality palliative and end-of-life care including access to adequate analgesia.

A detailed account of treating hepatitis and providing chronic care will be available in the treatment guidelines described above.

7 MONITORING HEALTH SECTOR RESPONSE TO HEPATITIS

A robust strategic information system is essential for advocating, decision making, funding, planning and implementing more effective viral hepatitis interventions. Relevant data may be derived from a wide variety of sources including national HMIS, program reviews, surveys, surveillance and case studies. These data should be analyzed holistically and strategically to improve the overall functioning of the program.

7.1. Strengthen the capacity of the health sector to monitor the viral hepatitis

Building the capacity of the national monitoring and evaluation system is crucial in monitoring the viral hepatitis prevention and treatment program. Setting national targets and indicators for the national program will enable the country to monitor and report the status of the response. The viral hepatitis indicators need to be built into the routine HMIS operations that generate data and information on a periodic and on-going basis to provide evidence for program decisions.

Key Activities:

- Develop comprehensive viral hepatitis M&E framework
- Adapt from WHO and develop standard national indicators to monitor the viral hepatitis program in the country
- Develop viral hepatitis monitoring and evaluation tools/instruments for data collection, recording and reporting (paper based and electronic formats)
- Include relevant viral hepatitis programme indicators into the national Health Management Information System
- Conduct health care providers training on viral hepatitis monitoring and evaluation system (public and private)
- Conduct training on quality assurance (internal and external) in all aspects (health service

delivery, screening, care and treatment, data collection and analysis)

- Conduct data review meetings
- Conduct regular supportive supervision visits

7.2 Conduct epidemiological and operations research on viral hepatitis

Prioritization and conducting of hepatitis research agenda is important to inform policy decisions and implementation. Investment in information systems involving research and routine data collection and reporting is key to opening opportunity for funding hepatitis interventions in Namibia.

Key Activities:

- Develop viral hepatitis research agenda
- Conduct epidemiological and operations research in line with the research agenda
- Disseminate results timely to inform policy and share best practice

7.3 Estimate the national burden due to chronic hepatitis

Key Activities:

- Conduct sero-surveys for hepatitis B and C every 5-10 years
- Conduct sentinel surveillance for liver cirrhosis
- Conduct surveillance for hepatocellular carcinoma due to chronic hepatitis
- Conduct sero-surveys in high risk groups e.g. commercial sex workers

7.4 Monitor trends in chronic hepatitis over time

Key activity:

- Analyse routine clinical and laboratory data
- Conduct risk factors studies for viral hepatitis

ANNEX 1: IMPLEMENTATION PLAN OF THE VIRAL HEPATITIS NATIONAL STRATEGY 2019-22

Strategy 1: Preventing transmission of viral hepatitis									
Goal	**Objectives**	**Activities**	**Indicator**	**Baseline (2017)**	**Implementation Period and Targets**				**Leading Agent**
					2019	**2020**	**2021**	**2022**	
1. Raise awareness of viral hepatitis	1.1 Increase the knowledge of the general population (community engagement) and key populations on risks and protection from viral hepatitis	Commemorate world hepatitis day on 28 July	World Hepatitis Day commemorated	0	1	1	1	1	MoHSS
		Conduct social mobilization activities (health promotions, develop and disseminate IEC materials for community)	% Social mobilization activities conducted	0	70%	80%	90%	100%	MoHSS
		Promote safe practices in those conducting traditional scarification, traditional circumcisions, hair shaving and other local rituals involving contact with blood	Proportion of traditional rituals promoting safe practices	0	100%	100%	100%	100%	MoHSS
		Engage private sector	Number of Meetings Held	0	2	2	2	2	MoHSS
		Engage professional associations	Number of Meetings Held	0	2	2	2	2	MoHSS, HPCNA
		Engage pharmaceutical industries	Number of Meetings Held	0	4	4	4	4	MoHSS, NMRC
		Engage media	Number of Meetings Held	0	4	4	4	4	MoHSS, MICT

		Prepare IEC materials for primary level health care workers	Number of IEC Materials prepared	0	1	1	1	1	MoHSS
	1.2 Increase awareness of health care providers in screening high risk populations	Prepare IEC materials on hepatitis serology for primary level HCW	% of HCW orientated to IEC Materials	0	80%	85%	90%	95%	MoHSS
	1.3 Reduce stigma and discrimination associated with hepatitis in the community	Create Awareness to improve public knowledge	Number of awareness creation activities carried out	0	4	4	4	4	MoHSS, MICT
2. Reduce new viral hepatitis infections	2.1 Provide safe and effective vaccines	Continue provision of hepatitis B virus vaccine in national childhood immunization schedules	Pentavalent 3 coverage	88%	90%	92%	93%	95%	MOHSS
		Vaccinate all newborn babies with HBV vaccine within 24 hours of birth and missed opportunities up to 14 days	% Newborns vaccinated with HBV vaccine	94%	95%	96%	97%	98%	MOHSS
		Offer hepatitis B virus vaccination to people who are at increased risk of acquiring and transmitting the virus such as HCWs, military, commercial sex workers, prisoners and sea going personnel	% High risk vaccinated						MOHSS
		Preposition stocks of HBV vaccinations at all times	% of HBV vaccines available	100%	100%	100%	100%	100%	MOHSS, Pharmaceuticals
	2.2 Improve blood safety	Promote the rational use of blood and blood products	% Blood screened for	100%	100%	100%	100%	100%	MOHSS

			HBV and HCV						
		Implement quality control measures for laboratory testing of viral hepatitis B and C to ensure supplies of quality assured assays	Stock out of validated reagents for HCV and HBV	0	0	0	0	0	MOHSS
		Sustain systems of surveillance, haemovigilance and monitoring of the incidence and prevalence of HBV infection in blood donors and on post-transfusion hepatitis risk.	HBV Prevalence detected in blood donors	0.75%	0.70%	0.65%	0.60%	0.55%	MOHSS
		Sustain systems of surveillance, haemovigilance and monitoring of the incidence and prevalence of HCV infection in blood donors and on post-transfusion hepatitis risk.	HCV Prevalence detected in blood donors	0.25%	0.20%	0.15%	0.10%	0.05%	
	2.3 Enhance infection prevention and control in health care settings.	Strengthen and sustain routine infection prevention and control practices in health care settings, both public and private including laboratories.	% Facilities adhering to IPC standards	TBD	100%	100%	100%	100%	MOHSS
		Implement the safe injection policy with the aim of reducing unnecessary injections and promote use of safety-engineered injection devices	% Facilities with safety injection devices	100%	100%	100%	100%	100%	MOHSS

		Promote regular occupational health and safety assessments at health facilities	Number of incidences of exposure reported and investigated	TBD					
		Provide post exposure prophylaxis to health workers and other high risk individuals	% Facilities providing PEP	TBD	100%	100%	100%	100%	MOHSS
		Promote safe waste management practices at all levels	% of compliance to standards	TBD	80%	85%	90%	95%	MoHSS, MET
	2.4 Prevent mother-to-child transmission of viral hepatitis	Provide timely administration of hepatitis B virus birth-dose vaccine with specific attention given to births occurring outside health care settings	% Newborns vaccinated with HBV vaccine	94%	95%	96%	97%	98%	MOHSS
		Continued provision of immunoglobulin to all babies born to hepatitis positive mothers	% babies given	0	100%	100%	100%	100%	MoHSS
		Review national polices and guidelines on MNH based on evolving WHO guidance on elimination of mother-to-child transmission of viral hepatitis	# Policy guidelines reviewed	1	1	1	1	1	MOHSS
	2.5 Promote safer sex	Promote behavior change to avoid unprotected and multiple sexual activity.	Reduced prevalence of STIs	1.8%	TBD	TBD	TBD	TBD	MOHSS
		Create the demand and increase the supply of male and female condoms	# Male and female	27 642 404	30000000	31 000 000	32 000 000	34 000 000	MOHSS

		especially to populations most at risk of hepatitis B and/ or C virus infection through social marketing programs	condoms distributed						
		Ensure that the national hepatitis B virus vaccination policy includes persons at increased risk of acquiring hepatitis B virus infection	Vaccination policy updated	0	1	1	1	1	MOHSS
	2.6 Promote proper access to safe food, water and sanitation	Advocate for universal and equitable access to safe and affordable drinking water to all	% Households with safe drinking water	TBD					DHS, MAWF
		Achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of those in vulnerable populations	% Households with toilets	TBD					DHS, MAWF
		Support and strengthen the participation of local communities in improving water and sanitation management	Number Health promotion activities conducted	TBD	4	4	4	4	MoHSS
		Promote safe food hygiene practices	Number of Food hygiene activities carried out	TBD					MoHSS, MAWF

Strategy 2: Diagnosis viral hepatitis infection									
Goals	**Objectives**	**Activities**	**Indicator**	**Baseline (2017)**	**Implementation period and Targets**				**Leading Agent**
					2019	**2020**	**2021**	**2022**	
Reduce morbidity and mortality due to viral hepatitis	Increase number of people diagnosed with viral hepatitis	Develop national algorithm for testing viral hepatitis infection.	National algorithm for testing viral hepatitis developed	0%	50% draft	100%	100%	100%	MOHSS/NIP
		Disseminate/ training of staffs on the algorithm	% of staff trained on the national algorithm	0%	50%	100%			MOHSS
		Strengthen the national laboratory system for quality diagnosis of viral hepatitis which include training of laboratory staff, supervision as well as application of quality control in testing procedures and proficiency testing	% of laboratory staff trained on quality control testing.	50%	100%	100%	100%	100%	MOHSS/NIP
		Strengthen the capacity of NIP to act as a confirmatory centre and also locally validate WHO prequalified reagents	To decentralize confirmatory centres and validate WHO prequalified reagents.	Total 9 <u>Accredited: 56%</u> Keetman shop, Swakopmund, WCRL, Onandjokwe, Rundu. <u>Not accredited</u> :44% Walvis	66%	78%	89%	100%	MOHSS/NIP

				Bay, Katima Mulilo, Oshakati, Otjiwarongo					
		Ensure a sustainable provision of validated reagents and supplies.	% Stock out of validated reagents and supplies						NIP
		Referral key linkages between testing and other services to improve referral and access to quality assured treatment and other supportive services	Lab TAT, Follow up of the patient. Medicine available Key linkages between testing and other services established						

Strategy 3: Treating hepatitis and providing chronic care									
Goals	**Objectives**	**Activities**	**Indicator**	**Baseline (2017)**	**Implementation period and Targets**				**Leading Agent**
					2019	**2020**	**2021**	**2022**	
Reduce morbidity and mortality due to viral hepatitis	Expanding treatment for viral hepatitis	Assess liver disease stage based on clinical criteria or non-invasive tests and laboratory confirmatory tests	Percentage of liver failure, liver cirrhosis and hepato cellular carcinoma identified.						MOHSS
		Reduce individual risk of disease progression including screening and counselling for alcohol use	% of people screened and counseled on use of alcohol and drugs						

		as well as screening for hepatotoxic drugs							
		Develop national treatment guidelines for HBV and HCV and train HCW	National treatment guidelines for HBV and HCV developed and train HCW (Stages in developing the guidelines).						
		Disseminate and orient HCW on HEV guidelines	HEV guidelines disseminated and HCW oriented on HEV guideline						MOHSS
		Provide antiviral hepatitis treatment	% Of eligible people started on treatment						MOHSS
		Provide supportive care to patients with advanced disease	% Of patients receiving supportive care						MOHSS

Strategy 4: Monitoring health sector response to hepatitis									
Goals	**Objectives**	**Activities**	**Indicator**	**Baseline (2017)**	**Implementation Period and Targets**				**Leading Agent**
					2019	**2020**	**2021**	**2022**	
4. Monitor health sector response to hepatitis	4.1 Strengthen the capacity of the health sector to monitor viral hepatitis	Develop comprehensive viral hepatitis M&E framework	M&E framework developed	0					MOHSS
		Adapt from WHO and develop standard national indicators to monitor the viral hepatitis program in the country	National indicators developed	0					MOHSS
		Develop viral hepatitis monitoring and evaluation tools/instruments for data collection, recording and reporting (paper based and electronic formats)	Tools/instruments developed	0					MOHSS
		Include relevant viral hepatitis programme indicators into the national Health Management Information System	Programme indicators integrated in national HMIS						MOHSS
		Conduct health care providers training on viral hepatitis monitoring and evaluation system (public and private)	% of Health Care Providers trained on M&E system						MOHSS
		Conduct training on quality assurance (internal and external) in all aspects (health service delivery, screening, care and treatment, data collection and analysis)	# Of trainings conducted						MOHSS
		Conduct data review meetings	No of data review meetings conducted						MOHSS
		Conduct regular supportive supervision visit	Number of Support Supervisory Visits conducted						MOHSS
	4.2 Conduct epidemiological and operational research on viral hepatitis	Develop viral hepatitis research agenda	Research agenda developed						MOHSS/Partners / Universities
		Conduct epidemiological and operational research in line with research agenda	Operations research conducted						MOHSS/Partners / Universities
		Disseminate research results timely to inform policy and share best practice	dissemination reports						MOHSS/Partners / Universities

Strategy 4: Monitoring health sector response to hepatitis									
Goals	**Objectives**	**Activities**	**Indicator**	**Baseline (2017)**	**Implementation Period and Targets**				**Leading Agent**
					2019	**2020**	**2021**	**2022**	
	4.3. Estimate the national burden due to chronic hepatitis	Conduct sero-surveys for hepatitis B and C every 5-10 years	hepatitis B and C sero-surveys conducted						MOHSS/Partners / Universities
		Conduct sentinel surveillance for liver cirrhosis	sentinel surveillance liver cirrhosis conducted						MOHSS/Partners / Universities
		Conduct surveillance for hepatocellular carcinoma due to chronic hepatitis	Surveillance of hepatocellular carcinoma conducted						MOHSS/Partners / Universities
		Conduct sero-surveys in high risk groups	sero-surveys conducted						MOHSS/Partners / Universities
	4.4 Monitor trends in chronic hepatitis over time	Analyse routine clinical and laboratory data	routine data analysed						MOHSS/Partners / Universities
		Conduct risk factors studies for viral hepatitis	Risk factors studies conducted						MOHSS/Partners / Universities

ANNEX 2: WORKPLAN FOR VIRAL HEPATITIS STRATEGY DEVELOPMENT PROCESS IN NAMIBIA

Activity Component	Action Point	Responsible Person	Date
Briefing meeting with stakeholders/ TWG Members	MOHSS to invite TWG members	MOHSS / WHO to provide refreshment	06 Sept 2018
Conduct Stakeholder Consultations with relevant Ministries, Departments and Agencies (Gather evidence)	MOHSS Departments: • Primary Health Care (EPI, MCH, HEU, Surveillance, HAV, HEV) • Special Programs (HIV, TB, Malaria, STI, HBV, HCV) • HIRD • Policy &Planning • Tertially Care (Clinical, Laboratory) • QA • Namibia Institute of Pathology • Windhoek Central Hospital	MOHSS/Consultant	04 – 13 Sept
	Blood Transfusion Service		
	City of Windhoek		
	Regional Council		
	University of Namibia		
	Private Sector		
	Ministry of Agriculture, Water and sanitation		
	Civil Society		
Develop Chapter Drafts (Lay out)	Background and epidemiology	Consultant	07 -13 Sept
	Vision, Goal, Objective and targets	Consultant	07 -13 Sept
	Policy guidelines and strategic plans	Consultant	07 -13 Sept
	Prevention of transmission of viral hepatitis	Consultant	07 -13 Sept
	Providing treatment and chronic care	Consultant	07 -13 Sept
	Monitoring health sector response	Consultant	07 -13 Sept

Activity Component	Action Point	Responsible Person	Date
	Develop VH Implementation Plan	Consultant	07 -13 Sept
Stakeholders' workshop to review chapter drafts	Meeting with Stakeholders and Regional Representatives	MOHSS/WHO	15-17 Oct 2018
Finalise First draft of strategy	Circulate first draft to TWG	Consultant	20 Oct 2018
	Get Input from TWG	Consultant	27 Oct 2018
	Incorporate comments from TWG	Consultant	28 Oct 2018
Finalise Second draft of strategy	Present second draft to MOHSS/WHO	Consultant	30 Oct 2018
Finalise and submit final draft	Submit final draft to MOHSS and WHO	Consultant	5 Nov 2018

ANNEX 3: LIST OF TWG MEMBERS PRESENT DURING MEETING ON 6TH SEPTEMBER 2018 AT THE DIRECTORATE OF SPECIAL PROGRAMMES (DSP) BOARD ROOM

NAME	DEPARTMENT	ORGANISATION	E-MAIL
Ms Anne-Marie Nitschke	Director (DSP)	MOHSS	nitschkea@nacop.net
Emma Lyambo	DSP (STI Programme Officer)	MOHSS	lyamboe@nacop.net
Dorothy Maloboka	DSP	MOHSS	malobokad@nacop.net
Assegid Mengistu	DSP	MOHSS	mengistua@nacop.net
Nicholas Shapumba	EPI/PHC	MOHSS	nshapumba@mhss.gov.na
Hendrina Shikalepo	PHC/IEC	MOHSS	Hendrinashikalepo90@gmail.com
Martha Spiegel	PHC/IEC	MOHSS	Martha.spiegel62@gmail.com
Mary Brantuo	Medical Officer (Child and Adolescent Health)	WHO	brantuom@who.int
Edwin Libamba	Consultant	WHO	libambae@gmail.com

ANNEX 4: LIST OF PERSONS CONSULTED (10-14 SEPTEMBER 2018)

NAME	DEPARTMENT	ORGANISATION	E-MAIL
Mary Brantuo	Medical Officer (Child and Adolescent Health)	WHO	brantuom@who.int
Petrus Mhata	Surveillance Officer	WHO	mhatap@who.int
Roselina DE WEE	EPI Officer	WHO	deweer@who.int
Emma Lyambo	DSP (STI Programme Officer)	MOHSS	lyamboe@nacop.net
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Martha Spiegel	PHC/IEC	MOHSS	Martha.spiegel62@gmail.com
Dorothy Kambinda	PHC/IEC	MOHSS	dkambinda@gmail.com
Josephine Mbanga	PHC/IEC	MOHSS	Mbangaj2005@yahoo.com
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Francina Tjiluka	Head, QA and Nursing Services	MOHSS	Kaindjee@yahoo.com
Ms. W.M. Kafita	Quality mother and Child Care	MOHSS	Wilhelmina.kafitha@mhss.gov.na
Benson Ntomwa	Deputy Director (Public and Environ Health)	MOHSS	bntomwa@yahoo.com
Ms Dorothea Dieycardt	Focal Person Intergration	MOHSS	Blessingouma2014@gmail.com
Rose Marie DeWaldt	Ag CHPO (Reproductive Child Health)	MOHSS	rdewaldt@gmail.com

ANNEX 5: AGENDA FOR NATIONAL WORKSHOP (16-18 OCTOBER 2018)

REPUBLIC OF NAMIBIA
Ministry of Health and Social Services

VIRAL HEPATITIS NATIONAL STRATEGIC PLAN DEVELOPMENT WORKSHOP

PROTEA FURSTENHOF, WINDHOEK, NAMIBIA: 16 - 18 OCTOBER 2018

DAY 1: TUESDAY OCTOBER 16, 2018

SESSION 1: OFFICIAL OPENING		
08:00 – 09:00	Registrations	Secretariat: Ms. Karin Mvula (WHO)
09:00 – 09:30	• Introduction of participants • Workshop Objectives	Ms. Emma Iyambo (MOHSS)
09:30 – 10:00	Workshop Official Opening	MoHSS: Director (DSP/PHC) or Representative
10:00 – 10:15	Group Photo	All
10:15 – 10:30	Coffee Break	All
SESSION 2: OVERVIEW OF VIRAL HEPATITIS, GLOBAL AND REGIONAL TARGETS		
10:30 – 11:15	Overview of viral hepatitis	Dr Edwin Libamba/Consultant
11: 15 – 12:00	Overview of Global and Regional Viral Hepatitis Health Sector Strategy	Dr Mary Brantuo/WHO
12:00 – 12:30	Prevention of viral hepatitis	Dr Mary Brantuo/WHO
12:30 – 13:00	Hepatitis B Vaccination and PMTCT	Mr. Nicholus Shapumba: MOHSS/PHC
13:00 – 14:00	Lunch	All
SESSION 3: WHO POLICIES, GUIDELINES & LOCAL CONTEXT		
14:00 – 14:30	Viral Hepatitis Testing	Lab Specialist: MoHSS

14:30 – 15:15	Key Results from Baseline Assessment, Namibia	Ms Emma Iyambo: MOHSS
15:15 – 16:00	Management of Viral Hepatitis in Private Practice	Dr Barbara Scholtz - Gastroenterologist
16:00 – 16:15	Coffee Break	All
16:15 – 16:45	Overview of draft National Strategic Plan and Development Process	Dr Edwin Libamba/Consultant
16:45 – 17:00	Discussions (& End of Day 1)	All

DAY 2: WEDNESDAY OCTOBER 17, 2018

SESSION 4: DEVELOPING STRATEGIES TO ADDRESS VIRAL HEPATITIS		
08:30 – 09:00	Overview of Day 1	Rapporteur
09:00 – 09:30	Introduction to the group discussion - Review of Draft National Strategic Plan (NSP)	Dr Edwin Libamba/Consultant
09:30 - 10:30	Group Work to Review Draft NSP	All
10:30 – 11:00	Coffee Break	All
11:00 – 13:00	Group Work: Review of Draft NSP- continued	All
13:00 – 14:00	Lunch	All
14:00 - 15:30	Group Presentations	All
15:30 – 16:00	Coffee Break	All
16:00 – 17:00	Group Presentations (& End of Day 2)	All

DAY 3: THURSDAY OCTOBER 18, 2018

SESSION 5: DEVELOPING IMPLEMENTATION PLANS		
08:00 – 08:30	Overview of Day 2	Rapporteur
08:30 – 09:00	Introduction to Group Work	Edwin Libamba/Consultant
09:00 – 10:00	Group Work	All
10:00-10:15	Coffee Break	All
10:15 – 12:00	Group Work (Continues)	All
12:00-13:00	Group Presentations	All

13:00 – 14:00	Lunch	All
SESSION 6: CLOSING CEREMONY		
14:00 – 14:30	Way Forward	Consultant
14:30 – 15:30	Closing Remarks	Director (DSP/PHC) or Representative
15:30 – 16:00	Coffee Break / End of Workshop	

ANNEX 6: ATTENDANCE LIST: WORKSHOP ON VIRAL HEPATITIS STRATEGY PLAN DEVELOPMENT
16 – 18 OCTOBER 2018, PROTEA HOTEL FURSTENHOF

Republic of Namibia
Ministry of Health and Social Services

No.	Name & Surname	Position	Organisation/Institution	Region	Telephone/Mobile	E-mail
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