Hepatitis B is highly contagious: it is 50-100 times more infectious than HIV.

It is a silent killer; most people are only diagnosed after they develop liver damage.

On average, only 5% of people with chronic hepatitis know they are infected; and less than 1% have access to treatment.

5.6% of the Zambian population aged 15-59 years old have Hepatitis B.

In Zambia, 7% of 15-59-year olds will develop new infections annually.

Hepatitis B is fully preventable with effective vaccines.

Problem Statement

According to the World Health Organization (WHO, 2017), Hepatitis B is a highly contagious viral infection affecting more than 10 times the number of people infected with HIV. The virus is transmitted through contact with the blood or other body fluids of an infected person. The infection attacks the liver and can cause both acute and chronic disease. Although most people are able to clear the virus, 8 to 10% of adults go on to develop chronic infection.

In some individuals, especially among those with weak immune systems, the infection may develop into a severe life-threatening form of acute hepatitis. Chronic Hepatitis B infection, lasting longer than 6 months, may lead to liver cirrhosis, liver failure, and liver cancer (WHO, 2017).

In 2017, the global prevalence of Hepatitis B virus (HBV) infection was estimated at 3.5%, with about 325 million persons living with chronic HBV infection and about 1.4 million people dying each year from the disease (WHO, 2017). An estimated 337,454 die due to liver cancer, 462,690 due to cirrhosis, and 87,076 due to acute hepatitis. It is estimated that only 5% of people with chronic HBV infection are aware of their infection status, and less than 1% have access to treatment. In most individuals, both acute and chronic infection develops in adulthood, as shown in Figure 1 below.

In Zambia, the estimated overall prevalence of Hepatitis B virus is 5.6% among ages 15-59; prevalence among HIV positive individuals is 7.1% whereas in the HIV negatives it stands at 5.4%, (ZAMPHIA 2016). Hepatitis B virus is fully preventable with effective vaccines (WHO, 2017). However, in Zambia, the control strategies have focused on blood bank screening and childhood vaccination. Existing Hepatitis immunization program in Zambia focuses primarily on children six weeks of age, leaving the adult population at risk. the EPI Manual of 2017. Zambia has adopted the WHO goal of eliminating Hepatitis B Virus infection by the year 2030. NHSP 2017. Recent efforts to address the Hepatitis B burden have seen the inclusion of Hepatitis treatment in the HIV treatment guidelines, but no deliberate efforts have been made to address mono-infection and prevention of new infections. occurred in Limulunga, Shangombo, and Senanga districts in Western province in 2018. Furthermore, a recent outbreak in Sesheke district in Western province in January 2019 amassed eight suspected anthrax cases (Table 1, Figure 1). Laboratory samples were not tested from any suspected case in 2018 and 2019 (Table 1).
Policy Rationale

In order to achieve HBV infection elimination by the year 2030, Zambia has outlined a number of strategies in the National Health Strategic Plan 2017-2021, to reduce the incidence and mortality due to Hepatitis:

1. Reducing the number of people susceptible to Hepatitis Virus
2. Increasing the proportion of people diagnosed with Hepatitis Virus

Policy Options

In order to reduce the number of people susceptible to Hepatitis B Virus and increase the proportion of people diagnosed as stipulated in the NHSP, the following are possible options:

Option 1: Maintain the Status Quo
- Doing nothing leaves the population at risk, with as many as 7% of 15-59 year olds developing new infections each year (Zamphia 2016).
- If the situation remains unchecked, the prevalence of Hepatitis B could possibly increase to 11.1% by 2030 (incidence calculated).
- Most people remain undiagnosed until they develop serious liver complications which may require either liver transplant, surgical resection or ablation.
- These options on average cost $35,000 [inclusive of airfares for two (patient and companion) and inpatient care] (WHO 2016)

Option 2: Introduce screening and vaccination
- A 3-dose vaccination has been shown to have up to 95% efficacy
- This option recommends vaccination of all persons that test negative for Hepatitis B Virus during screening
- A proportion of people are able to clear the infection and thus have immunity. However, to distinguish those with immunity from those without would require screening for both antigens and antibodies. However, this is not economically feasible.
- An estimated 720,032 cases can be prevented through vaccinations (blood bank 2017)
- This option ultimately results in a reduction of new infections per year
- The operational and political feasibility for this option is medium to high
- Introduce awareness campaigns

Option 3: Introduce Screen and treat programme for infected population
- The introduction of a screen and treat program will allow the detection of an estimated 44962 (infected people in the population)
- This option ultimately results in a reduction of new infections per year
- The operational and political feasibility for this option is medium to high
- Introduce awareness campaigns through

Recommendations and next steps
- Implement both interventions options 2 and 3 to achieve maximum impact
- Put in place a media/Short Message Services campaign in order to increase screening uptake/awareness
LIST OF REFERENCES


4. www.cdcpinkbook.com

5. NHSP 2017: National Health Strategic Plan 2017-2021


