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Annual Report 2021-2022

Who are we

Our History

Hepatitis B Free is an Australian registered tax-concession, not-for-profit charity. We are run by a group of passionate volunteers mostly based in Sydney, Australia who want to give back and make a difference. Our volunteers come from diverse backgrounds and professions, including doctors, nurses, allied health, lawyers, and students. Hepatitis B Free was founded in 201 3 by five Australian doctors and nurses. The team was led by Associate Professor Alice Lee, a gastroenterologist and hepatologist with expertise in viral hepatitis and Sue Huntley, a clinical researcher with a background in nursing and project management. Galvanised by their experience in remote Papua New Guinea, where they travelled on foot to vaccinate and provide basic health clinics for tribal villages, they decided to continue taking action towards addressing the huge unaddressed need of hepatitis B in resource-poor areas.

Our Vision

To work together towards a world free of hepatitis B.

Our Mission

To facilitate improved awareness, vaccination, testing, and life-saving treatment and care services for hepatitis B aimed at those most in need.

Our goals are globally aligned

Our ultimate goal is the elimination of hepatitis B. The World Health Organization has called for the elimination of hepatitis B by 2030. Sustainable Development Goal 3.3 states that "by 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases".

(United Nations, Sustainable Development Goal 3. https://sustainabledevelopment.un.org/sdg 3)

Our Board of Directors

Prof. Alice Lee	Ms. Sue Huntley	Mr. Kar Chua
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Our values

Partnership

We identify and collaborate with key stakeholders in each community, including health care workers, community members, Local Health Authorities and government departments.

Education

We raise awareness about hepatitis B among key high-risk groups, including in countries with high prevalence rates of hepatitis B, people with limited access to health services, and culturally and linguistically diverse communities. We train and upskill local healthcare workers, who we believe are instrumental in providing ongoing health care to their communities. Through consultation, we provide skills and resources in areas they identify as most important.

Sustainability

We work towards making our impact long-term and sustainable, through combined efforts of education in the general community and or healthcare workers, collaboration with local partners and government, regular evaluation of our projects, and advocacy at a policy level.

What is Hepatitis B?

The hepatitis B virus (HBV) is the most common cause of liver infection in the world. It is spread via blood and certain body fluids, including through unprotected sex, sharing needles, and from mother to child at birth. One in three people in the world have been exposed to HBV.

There are 240 million people worldwide living with chronic hepatitis B. Every year around 700,000 people die from complications of hepatitis B. The highest rates are found in sub-Saharan Africa, East Asia, the Pacific Islands, and the Amazon basin of South America. Hepatitis B infection can be acute or chronic.

When the infection lasts for longer than 6 months, it becomes chronic hepatitis B. The virus can remain in the body for many years, often without any symptoms.

Without treatment, chronic hepatitis B can increase the risk of scarring (cirrhosis) and liver cancer.

Vaccination

Vaccination is one of the most cost-effective ways to prevent disease. The hepatitis B vaccine is safe and highly effective in providing immunity against infection. Newborns are particularly vulnerable to hepatitis B – if they are exposed to the virus, they have >90% chance of developing lifelong infection, chronic hepatitis B. Therefore, the World Health Organization (WHO) recommends all infants should be vaccinated for hepatitis B at birth as soon as possible (within 24-48 hours) followed by at least two other doses in infancy. These three doses are 95% effective in preventing infection. However, birth dose vaccination is a major challenge in countries with limited access to healthcare, particularly when women give birth at home without a skilled attendant.

Other priority groups for vaccination include:

Healthcare workers

Household and sexual contacts of people with hepatitis B

New born babies

Young adolescents

Migrants from countries with high hepatitis B rates

People who inject drugs

Men who have sex with men

Persons with multiple sexual partners

What is Hepatitis B (continued)

Testing

Testing is important because many people with hepatitis B infection do not experience noticeable symptoms. A blood sample tested in a laboratory is the gold standard to determine whether a person has been infected with the hepatitis B virus. There are a range of tests that are used and these can be ordered as individual tests or a series of tests.

These include:

- Hepatitis B Surface Antigen the protein on the surface of the hepatitis B virus. A
 positive result means a person has hepatitis B virus in the blood.
- Hepatitis B Surface Antibody the body normally produces antibodies (proteins that
 are part of the immune system) in response to infection. A positive test means that
 either: a person has been successfully vaccinated against hepatitis B; or they have
 recovered from an acute infection from hepatitis B and the body has produced an
 antibody.
 - Hepatitis B DNA can be used to quantify the amount of hepatitis B virus in the blood. This can assist doctors to assess if a person is at increased risk of liver damage.

In resource-limited settings, rapid point of care test kits, typically conducted via simple finger prick, can provide results within minutes and can be beneficial in the absence of laboratory infrastructure.

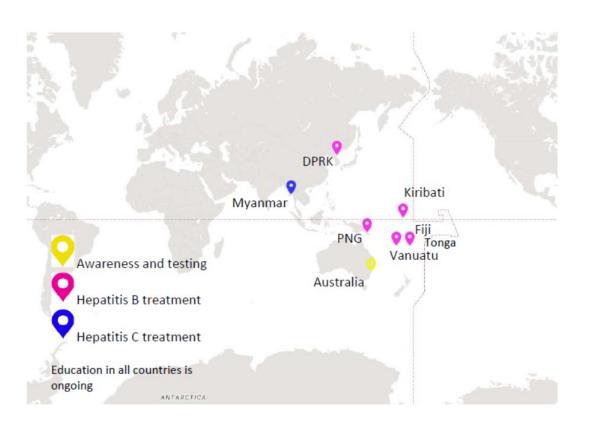
Treatment

Hepatitis B is not curable, but it can be treated. Not all people with chronic hepatitis B need treatment, however all people should be monitored by a health professional who can monitor their liver function and virus levels.

Treatment with antiviral therapy medicines such as tenofovir and entecavir reduces risk of death after five years from nearly 30% to about 5% in the sickest patients. Not only is this treatment lifesaving, it brings health and a future for patients and those around them.

Treatment can turn a death sentence into a treatable condition

Where we work









Papua New Guinea

To support the program and the wilder community in general, a laboratory upgrade at Siroga clinic was essential. NBOPL management approved the purchase of new haematology and biochemistry analysers and they were ordered prior to the end of the year. The analysers arrived in Popondetta and were set up and staff training was completed.

Training is provided on an ongoing adhoc basis by Prof Alice Lee via Zoom teleconference. Whatsapp and email are used to assist with reviewing challenging cases together with local health workers.

To date 8 patients are continuing on antiviral treatment and while the Hepatitis program continues, competing resources due to the COVID-19 pandemic has meant health resources and man power have had to shift their focus for the time being. While no additional patients were commenced on treatment, local Doctors and Healthcare works have been conducting screening throughout the year in preparation for further assessment.

We are hoping with countries starting to reopen trip planning will commence later this year for early 2023.

Work on the patient Hepatitis B information booklet continues and is currently undergoing translation from English to Pidgeon by health workers in Siroga clinic. We are planning for the booklet to be completed and the first run printed for the next country visit.

Once again Jodee has outdone herself collating unused and decommissioned medical equipment and supplies. A full container was arranged, packed and shipped to Siroga clinic to be utilised.

Kiribati

Due With the program gaining momentum our goal is to extend this work to the outer islands of Kiribati. We are also planning expanding the program to include specific cohorts such as eliminating mother to child transmission by treating mothers with high viral loads with Tenofovir while they're pregnant.

Since the program was established in 2018 a key focus has been to strengthening screening, linkage to care, treatment and technical support through training and guideline development.

Multiple publications have been submitted and published about the ongoing program in Kiribati. Sharing prevalence data and informing the wider Health and Scientific community is an important part of program sustainability and ongoing funding.

Progress to date:

Prevention of mother to child transmission (PMTCT) 174 mothers registered: 74 received antiviral treatment

South Tarawa



>30,000 RDTs performed to date



>2,000 viral load testing sent to VIDRL



2,777 HBsAg positive cases



308 (>10%) are now receiving therapy



HCW training on PMTCT program



HCW vaccination

Butaritari: Population 3,241: >2% screened: 29 registered: 29 on antiviral treatment

North Tabiteuea: Population 4,120: >15% screened: 3 registered: 3 on antiviral treatment

Aranuka: Population 1,123: >43% screened: 20 registered: 20 on antiviral treatment

Nikunau: Population 2,061: >2% screened: 23 registered: 20 on antiviral treatment

Tamana: Population 1,054: >75% screened: 60 registered: 58 on antiviral treatment

North Tarawa: Population 7,041: 7% screened: 74 registered: 74 awaiting antiviral treatment

Kiritimati: Population 7,380: >20% screened: 71 registered: 71 on antiviral treatment

DPRK

Since the program commenced in 2015, more than 2,000 patients had been commenced on hepatitis B treatment at five different treatment sites. The hepatitis C program that commenced in December 2019 was also continuing. Since early 2020 when COVID-19 took hold DPRK has remained closed to communication and resupplies. We anticipated supplies of HB medication would of ran out in mid 2020. We continue to communicate with program partners CFK in the USA about the current challenges, we hope 2022/23 will see communication and resupply reopen in DPRK.

Despite the challenges that working in DPRK brings, this life-saving humanitarian project will continue.

Myanmar

Communication with local teams Medical Action Myanmar (MAM) and Myanmar Liver Foundation (MLF) are frequent. Dr Alice Lee corresponds via Zoom teleconference, Whatsapp and email for program updates to assist with reviewing challenging cases together with local health workers.

Group format online training is well received with various topics covered. Normally 20-30 doctors are in attendance. There continues to be an ongoing shortage of medical staff in Myanmar.

The wonderful work done in Myanmar has been written up for publication in medical journals, one article is pending acceptance and publication the other will be submitted for consideration in the coming few weeks.

Pacific Islands

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As the program grows and more and more patients are being treated, additional clinics in other locations are needed to accommodate both patient access and capacity. Two other clinics currently being reviewed for potential program roll out.

At present blood samples of HBV patients are being shipped to the Australian lab VIDRL for HBV viral load testing. This testing is ran on a specific machine that is not yet available in country but is an aditional test that assists local doctors with making treatment decisions for their patient and assists with monitoring for complex patients. Plans are underway to introduce HBV viral load testing using the GeneXpert machine in country which will greatly increase result turn around time.

It is proposed to introduce a more widespread HBV testing and vaccination program, with HBF providing testing kits and Fiji providing the vaccines. The program is still in the development stage and we look forward to its progress and implementation.

Vanuatu-

The HBV program in Vanuatu. Continues to move forward. Logistics remain an issue with all shipments routing though Fiji incurring delays and higher freight charges. HBF provided a grant of \$5000AUD to assist with funding a coordinator for the program.

Tonga-

The country is becoming more self sufficient and the program is doing well under the leadership of program champion Dr Loutoa Poese. The country is due to take over the medication supply in the coming months

Solomon Islands

While the local team are keen for assistance with a Hepatitis program, competing priorities are proving difficult to engage with the local team at the current time.

Samoa

At present Samoa are completely focused on COVID-19 related activities and program start up will be revisited at a late date suitable for the local team.

General Pacific Island information-

World Health Organisation (WHO) are due to release the updated HBV guidelines for the Pacific in early 2023.

While regular in country visits, email correspondence, meetings and training occurred pre COVID-19, a more formalised monthly meeting is now ran by Dr Alice Lee via Zoom teleconference for the PI countries. Policy, guidelines, structured education along with reviewing challenging cases together with local health workers has been a focus of the monthly meetings.





Training: online and on the ground

Local health workers are the front-line of healthcare, and it is vital to support their work through resources and education.

All Hepatitis B Free (HBF) programs rely on good communication, collaboration and ongoing training with the local health workers who are primarily responsible for the care of their patients. Achieving this involves a combination of regular trips to counties to provide face to face training and maintain personal relationships; as well as online training (in countries where internet connection is available). Due to the remoteness of some locations, online training is a core part of the program. This is an opportunity to talk about how to manage hepatitis B and troubleshoot complex cases.

However, there are still difficulties, including limited internet bandwidth, making things such as video conferencing and even occasionally email difficult.

Until March 2020 when the COVID-19 pandemic forced all international travel to cease, HBF had been visiting most countries up to four times per year to support each country's program. During the global pandemic all programs have been replying 100% on online training and communication (via various forms). As the pandemic slows down and countries are reopening their boarders we are looking forward to visiting again with our first international trip planned for later this year in November to Kiribati.

Training for the Pacific Island counties is provided on a monthly basis by Prof. Alice Lee via Zoom teleconference. The hour long sessions consist of slide presentations and case reviews. Topics are at times chosen by the local teams to assist with their specific education needs. Time is allocated during each session to assist with reviewing challenging cases together with local health workers to provide support with their patient management.

Kiribati program leads Director Sue Huntley and Dr Aiden Foy run the online education for the local health workers, as well as to troubleshoot complex patient cases seen by the local doctors.

Presentations for local clubs of organisations such as Lions and Rotary continue to occur adhoc, these presentations on Hepatitis B in general and our work in various countries are always well received and generates much discussion . Some clubs have also provided donations to help support programs.

General business

- David continues to provide quarterly updates to international donation platform Global Giving. We have been very lucky to receive thousands of dollars in donations via this platform that have supported many of our programs.
- Our Founders have attended multiple International conferences and symposiums
 - Slowly returning to face to face meeting with our members and volunteers
 - World Hepatitis Day celebrated on 28th July each year
 - 2021-2022FY Finance report pending finalisation with our accountants.