



# IOTOD

improving outcomes in the  
treatment of opioid dependence

## HIGHLIGHTS REPORT

---

# IMPROVING OUTCOMES IN THE TREATMENT OF OPIOID DEPENDENCE

---

20th Annual IOTOD Conference  
11 – 12 May 2022, Virtual Congress

## **Viral hepatitis: uncovering the unknown**

The Improving Outcomes in the Treatment of Opioid Dependence (IOTOD) conference is supported by various financial supporters. The session entitled "Viral hepatitis: uncovering the unknown" and this session report are supported by sponsorship from Gilead Sciences.

The educational programme is run at arm's length from the financial supporters and all content is created by the faculty. No funder has had input into the content of the materials or presentations used in the educational programme. PCM Scientific is the medical education company acting as scientific secretariat and conference organiser.

# Contents

<b>Viral hepatitis: uncovering the unknown</b>	<b>3</b>
Introduction	3
Educational Impact	3
<b>Known-Knowns. What we need to do to access the people we know about?</b>	<b>4</b>
WHO guidance on the elimination of viral hepatitis: new tools for healthcare providers	4
Monitoring incidence: a key target	4
Monitoring incidence: how to approach it?	5
Treating the reluctant: simplify for success	5
Summary	6
References	6
<b>The “unknown knowns” – Understanding the complete picture: harm reduction, stopping infection and re-infection</b>	<b>7</b>
Screening for hepatitis	7
Preventing transmission – harm-reduction measures	8
Summary	9
References	9
<b>The “unknown unknowns”. Managing hepatitis B in drug treatment services</b>	<b>10</b>
How to prevent transmission of HBV	10
Vaccination	11
Treatment of HBV	11
Prevention of onward transmission	11
Future perspectives	11
References	12
<b>Panel discussion key highlights</b>	<b>13</b>

The Improving Outcomes in the Treatment of Opioid Dependence (IOTOD) conference is supported by various financial supporters. The session entitled “Viral hepatitis: uncovering the unknown” and this session report are supported by sponsorship from Gilead Sciences.

The educational programme is run at arm’s length from the financial supporters and all content is created by the faculty. No funder has had input into the content of the materials or presentations used in the educational programme. PCM Scientific is the medical education company acting as scientific secretariat and conference organiser.

# Viral hepatitis: uncovering the unknown

## Introduction

The 20th annual Improving Outcomes in the Treatment of Opioid Dependence (IOTOD) conference took place as a virtual event on 11<sup>th</sup> and 12<sup>th</sup> May 2022. The two-day online conference delivered expert presentations and discussions on a wide range of issues including opioid analgesic dependence, advances in opioid dependence therapy and the importance of seeing the patient as a whole, incorporating psychosocial treatments and mental health considerations into treatment plans.

On the second day, the conference also dedicated an entire session to examining strategies for reducing the transmission and improving the identification and treatment of viral hepatitis among people who use drugs. This session, chaired by Professor Graham Foster, described the recent updates to the World Health Organization (WHO) guidance on viral hepatitis and how practitioners should use this guidance as a lever to improve their service. It also summarised harm reduction measures that could be used to reduce viral hepatitis risk.

A message reiterated by experts throughout the session was the importance of being proactive and not settling for second-rate care for this population, as simple to implement testing pathways and effective prevention or treatment options are widely available.

This report summarises the key educational messages and recommendations discussed during the IOTOD 2022 viral hepatitis session.

## Educational Impact

Commitments to change pledged by audience during this session were as follows:

### Following IOTOD 2022, I will ...

- Implement treatment approaches for HCV (hepatitis C virus) and formulate patient treatment plans in accordance with the new WHO guidelines
- Identify harm-reduction measures that can be implemented at my practice to reduce the risk of infection and re-infection with blood-borne viruses in patients with OUD (opioid use disorder)
- Implement strategies for effective HBV (hepatitis B virus) diagnosis which improve treatment uptake and HBV vaccination in practise.



## Professor Graham Foster

Professor of Hepatology  
Queen Mary University of London, London, UK

# Known-Knowns. What we need to do to access the people we know about?

Professor Foster shared valuable insights into the updates made in 2021 to the WHO guidelines on viral hepatitis elimination. He also covered new treatment approaches specifically for HCV in accordance with the new WHO guidelines.

## WHO guidance on the elimination of viral hepatitis: new tools for healthcare providers

Professor Foster started by summarising some of the key updates made by the WHO on its 2016 strategy for the elimination of viral hepatitis.<sup>1</sup> The shift by the WHO from a focus on reduction in incidence to absolute numbers was framed as a critical and novel development, marking a completely new strategy. The change in approach allows healthcare providers a greater ability to prove they have eliminated HCV or HBV in their area through measurement of an absolute number of infections, rather than calculating a percentage change relative to the 2015 value. For people who inject drugs (PWID), the threshold value was set at  $\leq 2/100$ . Professor Foster explained that this means that healthcare providers do not need an area record of the infection incidence during 2015 to be able to demonstrate elimination of viral hepatitis.

After speaking about hepatitis generally, Professor Foster proceeded to focus on the topic of HCV, and how the new guidelines specifically relate to it (**Table 1**). He emphasised that in providing the updated guidance, the WHO has given healthcare providers important tools to improve care for people who use drugs. Professor Foster specified the opportunity to improve the quality of needle exchange programmes and stressed the importance of the WHO stating that there should be no unsafe injections. By setting

out that there needs to be a minimum of 300 needles and syringes per drug user per year to ensure that there are no unsafe injections, Professor Foster notes that the WHO is providing a significant lever for healthcare providers to secure greater access to resources. **He reiterated that the WHO is saying that unless you provide this level of support you will not get rid of HCV in your community.** Professor Foster urged all practitioners to seize the opportunity to get more money for their programmes and emphasised what a significant step forward the guidance is for improving the quality of needle exchange programmes.

## Monitoring incidence: a key target

Following the discussion around reporting incidence, Professor Foster asked the audience how do healthcare providers keep an eye on the incidence in their community? The need for, the importance of, and the types of testing, i.e., antibody and RNA testing, were raised.

Acknowledging that service users can be chaotic, drifting in and out of services for a variety of reasons (sustained abstinence, relapse, prison, moving home), he emphasised that while healthcare providers will not have contact with all drug users within the locality, they should focus on looking at the people using their service. Although healthcare providers are unaware of what is happening outside their service, logic dictates that if people within the service are getting new infections despite strong testing and treating of the service user population, the infection must be coming from the community. Professor Foster went on to say that if HCV from the community is affecting the service users, no matter how good the service is, not everyone who needs help is being reached. He highlighted that contact tracing might be required. Professor Foster further emphasised that monitoring

Table 1. Summary of impact and programmatic targets for HCV of WHO updated guidance on viral hepatitis

Elimination targets	Elimination of chronic HCV infection as a public health problem	
2030 GHSS relative reduction reference targets (compared to 2015)	<b>Incidence</b> 80% reduction	<b>Mortality</b> 65% reduction
HCV-specific absolute prevalence, incidence and mortality targets	<b>Annual incidence</b> ≤5/100,000 ≤2/100 (PWID)	<b>Annual mortality</b> ≤2/100,000
Programmatic targets	<b>Testing and treatment</b> ≥90% of people with HCV diagnosed ≥80% of people diagnosed with HCV are treated  <b>Prevention</b> 0% unsafe injections 100% blood safety 300 needles & syringes/PWID/year	

GHSS = global health sector strategy; PWID = people who inject drugs.

Adapted from WHO, Interim guidance for country validation of viral hepatitis elimination. 2021.<sup>1</sup>

incidence is a powerful tool for understanding what is going on in the local area and reiterated the importance of the WHO decision to bring this to the fore in the recent strategy update.

incidence in their area. Professor Foster returned to the WHO guidance and encouraged all healthcare providers to take the time to review the updated guidance and employ it to eradicate HCV in their drug-using population.

## Monitoring incidence: how to approach it?

Professor Foster started by re-stating that while measuring incidence of HCV infection is complicated by the drift of users in and out of service, it remains a powerful tool. He went on to explain some of the nuance of testing for HCV.

RNA testing allows the identification of individuals who have recently been infected with HCV. Those who have caught HCV in the previous 50 days will test positive for HCV RNA but will test negative for antibodies. Professor Foster highlighted that if you can identify the RNA positive, antibody negative individuals, there is an opportunity to narrow down when they caught it. However, he noted that this is very uncommon and will require the testing of a large number of patients, citing the number to be tested in England as 10,000! Professor Foster then described the approach of re-testing, now and again at a fixed point in the future, giving the examples of a year or 5 years, and how healthcare providers needed to balance how often they test and what type of testing and re-testing they employ, based on the estimated

## Treating the reluctant: simplify for success

Having discussed screening, Professor Foster emphasised that testing is just the beginning. Identification of HCV is important, but even more important is getting the patients into treatment. Professor Foster acknowledged that for many patients, treating their HCV, which they perhaps were unaware of prior to screening, may be perceived by the patient as a lower priority for treatment. He went on to discuss how simplifying the treatment process needs to be prioritised, and asked how can healthcare providers make HCV treatment simpler for patients, and would a simplified regimen be effective? Professor Foster asked the audience if providers should “just hand over the drugs” and countered his own suggestion with some potential reasons why that might not seem like an appropriate strategy, for example, treatment is expensive, there are side effects, patients are usually checked at regular intervals.

Having allowed a moment for the audience to consider these arguments, Professor Foster continued by discussing a minimum monitoring approach that was taken in a recent

clinical study,<sup>2</sup> the MINMON trial. Professor Foster outlined the details of the trial, in which patients at 38 sites across 5 countries were treated for HCV using a minimal monitoring approach. There was no genotyping, no sequential dispensing of medication, with all tablets given to participants at once, and no scheduled monitoring visits. There were two remote contact points for the trial participants, with phone calls at weeks 4 and 22. Of the 399 patients who participated, there was a sustained virological response (SVR) in 379 patients (95%). Professor Foster highlighted that the minimal monitoring approach works and was an effective way of treating people in this case.

## Summary

Professor Foster finished by reiterating that there is new guidance, and therefore new opportunities to improve how people who use drugs and also have HCV can be treated. He encouraged healthcare providers to shout about the WHO guidance, using it as a lever to make things better for their clients, and to make partners in healthcare provision understand what is needed to achieve the elimination of viral hepatitis.

Professor Foster reminded the audience to prepare to do plenty of regular testing, mentioning the proposed 10,000 tests per year in England, and acknowledged that it will require a lot of effort. He also emphasised that testing alone is not enough, and to be ready to follow up with appropriate treatment, and to consider minimal monitoring as a tool in that regard.

**97% of delegates found the relevance of this content to their clinical practice to be good or excellent**

## References

1. World Health Organization (WHO). Interim guidance for country validation of viral hepatitis elimination. 2021. Available at: <https://bit.ly/37qabdz> (accessed June 2022).
2. Solomon et al. A minimal monitoring approach for the treatment of hepatitis C virus infection (ACTG A5360 [MINMON]): a phase 4, open-label, single-arm trial. *Lancet Gastroenterol Hepatol*. 2022;7(4):307–317.





## Professor Dr Heino Stöver

Professor of Social Scientific Addiction Research, Faculty of Health and Social Work  
Frankfurt University of Applied Sciences, Germany

# The “unknown knowns”. Understanding the complete picture: harm reduction, stopping infection and re-infection

Following on from Professor Foster, Professor Stöver stepped in to expand on screening, including the “known” and “unknown” populations to target, and to discuss harm-reduction measures, including where the 300 needles per user per year that Professor Foster mentioned may be put to best use.

### Screening for hepatitis

Professor Stöver started by providing an overview of the global burden of hepatitis, reminding the audience that globally, it is estimated that only 21% of people with chronic HCV are aware of their diagnosis,<sup>1</sup> and briefly mentioned some of the consequences of chronic infection, including development of chronic liver disease, cirrhosis and hepatocellular carcinoma.<sup>2</sup> He recounted the developments in the epidemiology of hepatitis in the last 10 to 15 years, in terms of better tools for detection of HCV and HBV, and new, effective treatments with excellent SVR rates leading to better outcomes for patients.<sup>3</sup> Professor Stöver highlighted how these developments were putting healthcare providers in a good position to eradicate hepatitis, per the WHO goals.<sup>4</sup>

Professor Stöver echoed Professor Foster’s comments on the importance of screening the drug using population, where blood-borne virus circulation is a known issue, but also emphasising the importance of looking outside this population, especially to those with intermittent contact with key at-risk populations (e.g., men who have sex with men [MSM], migrants, prisoners). He reinforced the importance of the new WHO guidance,<sup>4</sup> as discussed by Professor Foster, and mentioned self testing as an important strategy to reach people who may not otherwise test for viral hepatitis.

On the topic of screening, Professor Stöver gave some examples of proposed or in-practice universal screening, rather than screening limited to services for key at-risk populations. He provided the example of China, where a proposal for universal screening for HBV has been evaluated and found to be cost effective, with the expectation of preventing 3.46 million liver-related deaths over the lifetime of the screening cohort.<sup>5</sup> He also highlighted the recent implementation of universal screening for HCV in the US,<sup>6,7</sup> and HCV and HBV screening in Germany for the entire population over the age of 35 years.<sup>8</sup> Professor Stöver emphasised the hard work over a long period of time that had gone into securing the hepatitis screening programme in Germany and called the implementation a great achievement.

Professor Stöver reminded the audience of the current key screening populations for blood-borne viruses, per the WHO guidelines,<sup>1</sup> but went on to discuss the “unknown knowns”, i.e., other populations that could be targeted for screening in places where universal screening is not practiced. He highlighted the population engaged in chemsex (chemically enhanced sex) as a particularly at-risk group owing to the documented lack of protective measures being used. He also reminded the audience that in the population with alcohol use disorder, risky behaviour can occur, and this population should also be considered for additional screening, along with those with painkiller dependence.

Professor Stöver elaborated further on the chemsex population, highlighting that this emerging group, while not generally injecting drug users, are a key but

underserved population who are at an increased risk of blood-borne viruses. He summarised the types of drugs that have been reported to be used by those engaging in chemsex, including crystal methamphetamine, cathenones (mephedrone, 3MMC) and gamma-butyrolactone/gamma-hydroxybutyrate. He emphasised that this population are at risk of stigmatisation and face barriers to accessing services,<sup>9</sup> placing them at risk of blood-borne viruses and reiterating the importance of universal screening to capture populations who may not present at specialised services.

Using the chemsex population as an example, Professor Stöver discussed the potential benefits of systematic assessment for blood-borne viruses like HCV and HBV. He provided an additional example of a successful Georgian initiative, targeted in regions with high burden of HCV and other communicable diseases, where primary care facilities offered free testing in the community or workplace. Centring testing around patient convenience proved successful and detection and treatment increased.<sup>10</sup> Professor Stöver returned to the German example of the recently expanded 35-plus check, which now includes screening for viral hepatitis, as an ideal example of how this could be implemented in practice.

## Preventing transmission: harm-reduction measures

Professor Stöver moved on to cover harm-reduction measures that can be used as a means to prevent viral transmission. The importance of safe drug-consumption rooms was emphasised as a resource, not just for overdose prevention, but for the reduction in the spread of disease. The strong support these facilities have from the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) was also mentioned, in addition to opioid dependence treatment (ODT) and take-home naloxone initiatives.

Summarising other measures that can be employed, Professor Stöver highlighted the value of promoting safer sex, and the important roles of providing clear information, education, and counselling. He reminded the audience about the importance of ODT treatment, specifically highlighting the issues around providing ODT in closed settings, such as prisons, where ODT provision is often not in line with the community setting. After stressing the importance of regular screening for blood-borne viruses, Professor Stöver finished his summary of harm-reduction measures by highlighting the opportunity to work with marginalised communities more effectively by, for example, providing practical training materials for sex workers on how to manage their sex work in a safer way.<sup>11</sup>

Circling back to safe drug-consumption rooms, Professor Stöver gave further detail on the value of these facilities, citing their impact on overdose reduction, transmission of blood-borne viruses and reduction in infection-related wounds. He discussed his own experience of monitoring four safe drug-consumption rooms in Frankfurt, Germany, reporting that there are an average of 200,000 consumption events per year across 5,000 to 6,000 drug users. He noted the reduced transmission and re-infection rate for blood-borne viruses seen with the availability of the safe facilities. He also emphasised the broader reach obtained through the facilities, noting **that by reaching out to those accessing the safe drug-consumption rooms, it was possible to provide screening and support to users who were not engaged with services elsewhere, e.g., those who are not partaking in ODT at present.** Professor Stöver also noted the benefit to the wider community of reduced drug littering, preventing incidental exposure. He went on to emphasise the need for safe drug-consumption facilities in larger cities.

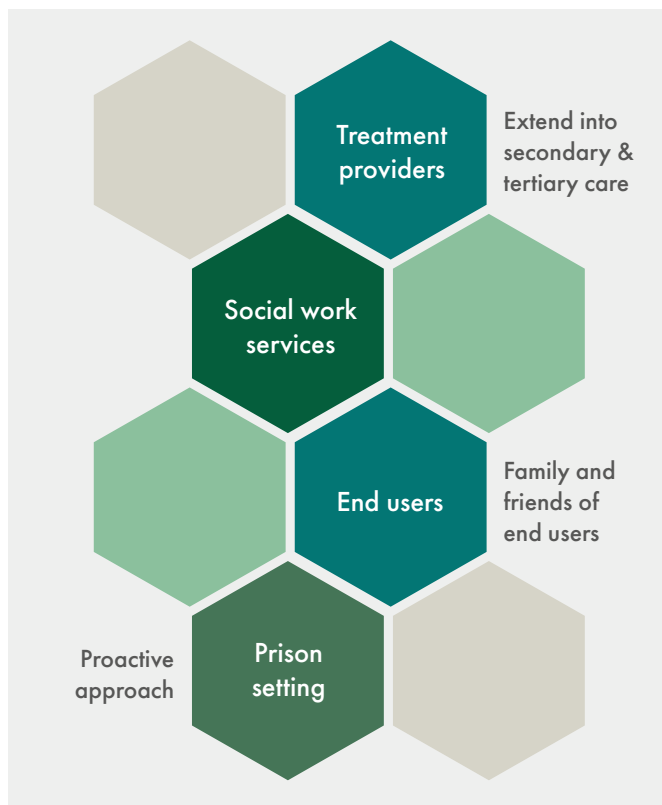
Professor Stöver advocated for continuing to promote safer sex to cut down on horizontal transmission of viral hepatitis, noting the particular susceptibility of the chemsex community. He highlighted that the main means of achieving this continue to be provision of free condoms, recommending vaccination for HBV for those most at risk and regular screening for sexually transmitted infections, including HBV, HCV and HIV (human immunodeficiency virus).

Reiterating the importance of the key targets for awareness raising activities, Professor Stöver stressed the importance of providing more information, education and counselling, not only to service users, but also to the wider community who interact with them (**Figure 1**).<sup>1, 12, 13</sup> He highlighted treatment providers, social work services, family and friends as all being key targets for awareness-raising activities, extending knowledge to the wider community, and called for a pro active approach to all situations and targeting of marginalised groups. He also emphasised the importance of using different methods and channels for communication to provide and broadcast the message to reach as many people as possible.

On the subject of ODT, Professor Stöver asked the audience to consider what differences may exist between service users who are receiving short-acting ODT formulations, such as sub-lingual buprenorphine or methadone, and those on longer-acting formulations, such as depot buprenorphine. Highlighting the reduced contact time people on longer-acting formulations have with supportive services, he suggested that the audience consider what kinds of strategies could be employed to support their patients.



Figure 1. Key targets for awareness-raising activities



Finally, Professor Stöver emphasised the risk of re-infection, particularly in settings such as prisons, where there is a 20% re-infection rate.<sup>14</sup> While acknowledging this as a serious issue, he also underscored that the toolkit for preventing re-infection is the same as for preventing infection. Healthcare providers do not need to re-invent the wheel when the increased use of existing resources and ideas can be harnessed to prevent re-infection.

## Summary

Professor Stöver finished by summarising that the keys to preventing transmission of blood-borne viruses are counselling, testing and treatment. He reminded the audience that the importance of education and the psychosocial aspects of treatment cannot be overstated. He underscored the importance of all populations having access to screening, with greater availability being required universally, and a one-stop-shop approach to screening and monitoring being the optimum situation.

Professor Stöver reminded the audience of harm-reduction measures that have been shown to reduce viral transmission of hepatitis, including safe drug-consumption rooms, promoting safe sex and provision of ODT, clarifying that in

some situations, treatment may need to include provision of original substances, e.g., heroin, when appropriate.

**Finally Professor Stöver called on the audience to stop re-infection by applying rigorous testing, treatment and harm-reduction measures in all settings.**

**97% of delegates found the relevance of this content to their clinical practice to be good or excellent**

## References

1. World Health Organization. Hepatitis C fact sheet. Available at: <https://bit.ly/3xoclijz> (accessed June 2022).
2. Centers for Disease Control and Prevention. Hepatitis C Questions and Answers for Health Professionals 2020. Available at: <https://bit.ly/3xn1efW> (accessed June 2022).
3. Jhaveri. Screening for Hepatitis C Virus: How Universal Is Universal? *Clin Ther* 2020;42(8):1434–1441.
4. World Health Organization (WHO). Interim guidance for country validation of viral hepatitis elimination. 2021. Available at: <https://bit.ly/37qabdz> (accessed June 2022).
5. Su et al. Cost-effectiveness of universal screening for chronic hepatitis B virus infection in China: an economic evaluation *Lancet Glob Health* 2022;10(2):e278–e287.
6. US preventive services task force recommendation statement. *JAMA*. 2020;323(10):970.
7. Schillie. CDC Recommendations for Hepatitis C Screening Among Adults – United States, 2020. *MMWR Recomm Rep*. 2020;69:1–17.
8. National Association of Statutory Health Insurance Physicians (Germany). Available at: <https://bit.ly/376vGk1> (accessed June 2022).
9. Day. A message from the guest editor of this special “Chemsex” edition of *Drugs and Alcohol Today* 2019;19(1):1–2.
10. WHO. European Programme of Work. Available at: <https://bit.ly/3uxnAtI> (accessed June 2022).
11. Stöver et al. Final Report on Prevention, Treatment, and Harm Reduction Services in Prison, on Reintegration Services on Release from Prison and Methods to Monitor/Analyse Drug use among Prisoners. Available at: <https://bit.ly/3O4F7RH> (accessed June 2022).
12. Shah & Abu-Amara. Education provides significant benefits to patients with hepatitis B virus or hepatitis C virus infection: a systematic review *Clin Gastroenterol Hepatol* 2013;11(8):922–933.
13. SAMHSA. Treatment improvement protocol series. 53. 2011. Available online: <https://store.samhsa.gov/sites/default/files/d7/priv/sma11-4656.pdf> (accessed June 2022).
14. Bhandari et al. High rate of hepatitis C reinfection following antiviral treatment in the North East England Prisons. *J Viral Hepat*. 2020;27(4):449–452.



## Professor Ashley Brown

Consultant Hepatologist,  
Imperial College Healthcare NHS Trust, London, UK

# The “unknown unknowns”. Managing hepatitis B in drug treatment services

Professor Brown started by reminding the audience that while HBV tends to be the lesser discussed blood-borne virus compared with HCV and HIV, it is still an important cause of morbidity. Recalling Professor Foster’s talk, he emphasised that the global elimination of HBV is also a WHO target,<sup>1</sup> and that the purpose of his talk is to outline how the audience can help achieve this goal through diagnosis of existing HBV and prevention of onward transmission.

### How to prevent transmission of HBV

Starting with the basics, Professor Brown briefly explained the difference between vertical (mother to child) and horizontal (exposure to infected bodily fluids) transmission of HBV. He emphasised that globally, vertical transmission is a much bigger issue in terms of overall case numbers, mortality and morbidity. However, Professor Brown also noted that vertical transmission is not commonly reported in EU/EEA countries and the UK.<sup>2</sup>

Professor Brown reminded the audience if a baby becomes infected with HBV during birth, there is no immune system reaction to it and as such no symptoms to indicate that they are infected. The majority of new-borns who become infected with HBV perinatally become chronically infected. He contrasted that with horizontal transmission of HBV, which can result in a very dramatic immunological response.

At a global level, the WHO is promoting vaccination against HBV, with the hope to eradicate the virus over several generations. The HBV vaccine was developed over 40 years ago, and while that means it has a well-established safety profile, it also means that anyone over the age of 40 years of age was not vaccinated at birth. Professor Brown reminded the audience that although HBV

vaccination was not previously thought to be important on a global scale, vaccination of children is becoming more common. Despite the increased use of HBV vaccines in children, Professor Brown cautioned that their current use is not ideal, as, in many countries, babies are vaccinated at 8 weeks rather than at birth, which leaves them at risk of HBV in the first 2 months.

Professor Brown went on to acknowledge that while acute HBV is rare among PWIDs, there is still great value in targeting this small, but preventable, group for HBV transmission. He also highlighted the overlap of transmission risk in PWIDs with other types of HBV transmission risk, for example, those engaged in sex work and the MSM community, particularly those engaged in chemsex, as discussed by Professor Stöver.

**Professor Brown stressed that horizontal transmission of HBV among PWIDs is a preventable route that healthcare professionals can, and should, tackle.**

Highlighting harm-reduction services as a first step in preventing HBV transmission, Professor Brown recalled Professor Foster’s talk, underscoring the role for the 300 needles per client per year suggested by the WHO in preventing clients with HBV from passing it on to those who test negative.

Professor Brown moved on to the topic of screening, emphasising that drug treatment services are an ideal place

to facilitate HBV screening as it requires a small amount of sample and does not require specialist skills to undertake. He reiterated the value of screening clients in a setting with which they are already familiar and by staff who have an existing rapport with them.

Professor Brown also took a moment to remind providers about the niche but important issue of hepatitis D, or delta virus (HDV). This parasitic virus cannot exist in isolation and is a parasitic virus of HBV, without which it is unable to exist. Although the true incidence of HDV in PWIDs is unknown,<sup>3</sup> it is thought to be uncommon overall as the prevalence of active HBV in the PWID population is low.<sup>4</sup> However, Professor Brown stressed to the audience that while the population affected is small, it is crucial that they be identified as new treatments emerge (e.g., bulevirtide), allowing better management of concomitant infection and decreased morbidity for their patients.

While underscoring the importance of HBV testing in the ODT setting, Professor Brown also emphasised the need for increased testing in vulnerable communities outside this setting. He noted that these at-risk communities may not be on ODT, and indeed may not need to be on ODT, but may be engaged with similar services, providing an opportunity for access to screening and treatment.

## Vaccination

Echoing his earlier comments, Professor Brown reminded the audience that a highly effective vaccine for HBV is available and it should be offered to all those who are considered at risk. He outlined that the vaccine approved in the EU requires 3 doses at baseline, 1 month and 6 months post-dose, and that a two-dose vaccination also exists and is available outside the EU. He further urged healthcare providers to consider how to achieve compliance with the dosing schedule with service users who, as Professor Foster outlined previously, can be chaotic. Professor Brown mentioned financial incentives as a possible tool for ensuring compliance with the dosing regimen.

## Treatment of HBV

**Professor Brown reminded the audience that HBV cannot be cured, which is why there is so much emphasis on the importance of screening – it is better to prevent infection altogether.** He went on to outline that, much like with HIV, treatment of HBV involves viral suppression, which requires daily and indefinite use of medication to reduce the viral load.

The current treatment guidelines for HBV are aimed at preventing damage to the liver,<sup>5</sup> with a goal of improving survival and quality of life by preventing the development of cirrhosis, liver failure hepatocellular carcinoma<sup>6,7</sup> and chronic infection.<sup>8</sup> However, as noted by Professor Brown, not all patients are thought to require treatment. He went on to outline that many patients will have immune control of the infection and will only require antiviral medication if the virus mutates and escapes from immune control. Professor Brown emphasised that the only way to know this mutation is happening, is careful monitoring of the viral load to evaluate if the infection is under the control of the immune system. He reminded the audience that this is why identification of infected individuals is important – they need to know who to follow up, even if no treatment is required immediately.

## Prevention of onward transmission

To achieve the goal of eliminating HBV, Professor Brown reminded the audience of the need to scale up prevention and control programmes, namely screening and vaccination for those who do not have HBV and specialist services for those who test positive.

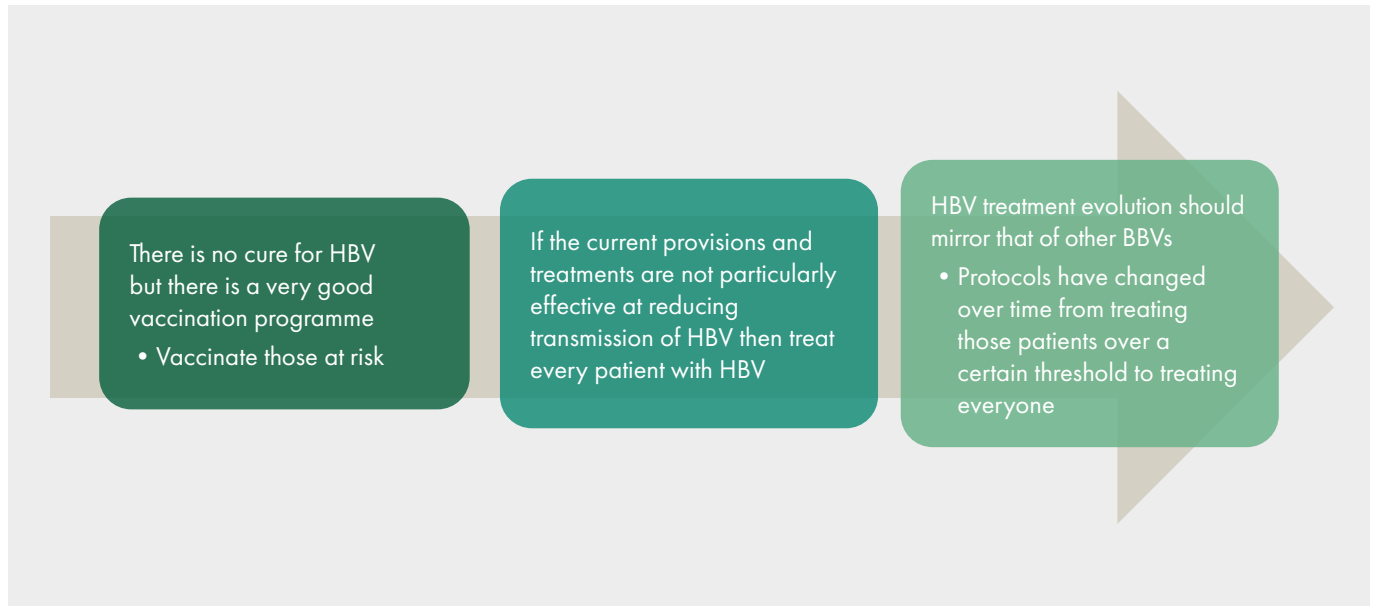
Professor Brown went on to highlight barriers to the prevention of onward transmission, namely countries where harm-reduction strategies are inadequate in general, using the example of Asia as a region in which, despite progress, reaching PWIDs remains challenging and legal barriers to services exist.<sup>9</sup> He underscored the need for integrated and wholistic services as a means for preventing transmission of blood-borne viruses.

Another area in which harm-reduction services are lacking, Professor Brown noted, was in prisons across the world. He underlined the often inferior quality of harm-reduction services found in prisons compared with in the community.<sup>10</sup> He highlighted needle and syringe programmes in particular as a service that is greatly restricted in prisons, a significant contrast to the 300 needles per user per year figure from the WHO guidance,<sup>1</sup> as discussed by Professor Foster in the first talk. Professor Brown also mentioned the variability of ODT and overdose prevention programmes, reiterating the importance of such resources in prisons, as well as in the community.

## Future perspectives

Professor Brown rounded out his talk by summarising the future perspectives for this disease (Figure 2). The healthcare field has important lessons to take from the COVID-19 global pandemic. The strategies taken to treat the whole

Figure 2. Consideration for the future management of HBV infection



community, the approaches to mass vaccination and the importance of sharing data are all key takeaways that, if actioned appropriately, could improve management of communicable disease. He also suggested that healthcare practitioners begin thinking about the way in which treatment for HBV is offered. Perhaps it is time to stop waiting until the disease has advanced and to begin treating all patients with chronic HBV as a means of preventing transmission through reduction of viral titres, as has been done for HIV.

Professor Brown finished by reminding the audience of the crucial importance of keeping abreast of treatments in development for HBV and HDV, underscoring the value in awareness of upcoming treatment options as well as ongoing clinical trials that may help their patients.

**100% of delegates found the relevance of this content to their clinical practice to be good or excellent**

## References

1. World Health Organization (WHO). Interim guidance for country validation of viral hepatitis elimination. 2021. Available at: <https://bit.ly/37qabdz> (accessed June 2022).
2. ECDC. Prevention of hepatitis B and C in the EU/EEA and the UK. 2020. Available at: <https://bit.ly/3QZal7E> (accessed June 2022).
3. Botelho-Souza et al. Hepatitis delta: virological and clinical aspects *Viral J.* 2017;14(1):177.
4. Mahale et al. Hepatitis D Viremia Among Injection Drug Users in San Francisco *J Infect Dis.* 2018;217(12):1902–1906.
5. EASL, Hepatitis B EASL Guidelines. 2017. Available at: <https://bit.ly/3OVQ4Fo> (accessed June 2022).
6. Lok. Hepatitis B Treatment: What We Know Now and What Remains to Be Researched *Hepatol Commun.* 2018;3(1):8–15.
7. Wang et al. Acute liver failure caused by severe acute hepatitis B: a case series from a multi-center investigation *Ann Clin Microbiol Antimicrob.* 2014;13:23.
8. Wilkins et al. Hepatitis B: Screening, Prevention, Diagnosis, and Treatment *Am Fam Physician.* 2019;99(5):314–323.
9. Stone. Reviewing harm reduction for people who inject drugs in Asia: the necessity for growth. *Harm Reduct J.* 2015;12(1):32.
10. Sander et al. The Global State of Harm Reduction in Prisons. *J Correct Health Care.* 2019;25(2):105–120.

# Panel discussion key highlights

The panel discussion sought to answer and further discuss some audience questions. The subject of chemsex and the magnitude of risk of viral hepatitis was raised. Professor Stöver highlighted that there was no clear answer on this and risk could vary widely between members of the community depending on the frequency of their contact and degree of activities undertaken while participating in chemsex activities. Professor Foster pressed Professor Stöver on if healthcare practitioners should consider increasing the level of screening for viral hepatitis in service users engaged in chemsex and was advised that while risk is based on a number of individual factors, he suggested that screening more than annually would be wise. Professor Foster agreed that increased testing is never a bad thing, but acknowledged that sufficient funding may be a limiting factor to some services. Professor Brown also highlighted that the horizontal transmission of HBV during chemsex was a rarer event than transmission of HIV or HCV. He reiterated his call for greater awareness of HBV vaccination in at-risk populations, reminding the audience of free HBV vaccination programme in the UK as an example. Professor Brown emphasised that HBV vaccination in this population should be standard practice, but also cautioned healthcare providers to ensure they screen for HBV before vaccination. While stressing that there would be no medical harm in vaccination of a person who already has HBV, Professor Brown highlighted the false sense of security they may take from the vaccination, which Professor Foster echoed was a serious risk.

Professor Foster moved on to discuss the increasing trend of patients presenting with more advanced stages of liver disease following a lack of services during the pandemic and commented that alcohol abuse seems to be rising. He asked his fellow panellists their thoughts on how can this troubling trend be managed, asking if practitioners should treat the hepatitis first then deal with the alcohol issue later? Professor Brown started by reminding the audience that it is never too late to start treating a patient. He also reminded healthcare providers of the importance of building a relationship with the patient and working together to treat

them, cautioning against being the “angry doctor”. Stressing the importance of a considered approach, Professor Brown suggested beginning with treating things that can be treated immediately, like hepatitis, and working up to more complex issues, such as alcohol use disorder; starting a patient’s treatment with a blanket ban on all alcohol, he cautioned, would likely result in a patient disengaging from the service. He suggested starting with strategies to reduce alcohol intake gradually, building understanding of the risks to the patient’s health and getting their alcohol use under control, rather than trying to cut it out entirely. Professor Brown emphasised that if patients trust their doctor and feel like they are working together, they will come to be more likely to engage long-term. Professor Stöver echoed Professor Brown, and agreed that for many people, the abstinence only approach is a deterrent to engaging in services and the healthcare community was slowly moving away from it. He highlighted that the goals of individual patients look different and will require different strategies to achieve, stressing that controlled drinking is a strategy that is becoming more prevalent. Professor Foster agreed and commented on the interesting changes in attitudes and approaches to treatment, underlining that decisions should be made on a case-by-case basis to avoid driving people out of services.

Although running short on time, the panel took a moment to consider the value of testing followed by immediate treatment, and asked if safe drug-consumption rooms might be an appropriate setting to undertake this. Professor Stöver discussed this as an option for the chemsex community, as many within this community have poor awareness of the transmission risk, unlike people who inject drugs, who have a greater understanding of this risk. It was noted that with the onward transmission risk higher than in the injecting drug user community, it may be helpful to bring viral load down quickly to prevent onward transmission by treating everyone who is infected.

Professor Foster finished by imploring the audience to utilise the new WHO guidance as **“we have more work to do”**.



# IOTOD

improving outcomes in the  
treatment of opioid dependence

PCM Scientific  
1 Giltspur Street  
London EC1A 9DD  
UK

T: +44 (0)20 7214 0500  
E: [contact@iotodmeeting.com](mailto:contact@iotodmeeting.com)  
W: [www.iotodeducation.com](http://www.iotodeducation.com)

The Improving Outcomes in the Treatment of Opioid Dependence (IOTOD) conference is supported by various financial supporters. The session entitled "Viral hepatitis: uncovering the unknown" and this session report are supported by sponsorship from Gilead Sciences.

The educational programme is run at arm's length from the financial supporters and all content is created by the faculty. No funder has had input into the content of the materials or presentations used in the educational programme. PCM Scientific is the medical education company acting as scientific secretariat and conference organiser.

 pcm  
scientific  
MAKING CHANGE HAPPEN