HCV: The Global Battle Against Viral Disease

In 2020 the year that witnessed the most significant medical and scientific collaboration on a scale unprecedented in history, three scientists who made a pivotal contribution to the global fight against bloodborne hepatitis, Harvey J. Alter, Michael Houghton, and Charles M. Rice were jointly awarded the Nobel Prize in Physiology or Medicine 2020. Their efforts along with countless others have saved millions of lives as we continue the battle against viral diseases.



Written by Kristy Hayes, Head of Advocacy, The Hepatitis C Partnership

This battle permeated all of our lives in 2020, in an imposing, devastating, and unpredictable manner, the fallout of which, in terms of screening and treatment across many health domains, has yet to be determined. Early indicators suggest data concerning communicable diseases, such as HIV and Syphilis, show increased prevalence. Screening for blood-borne viruses has been greatly reduced and access to drop-in facilities remains a challenge as a result of infection control procedures.

In Ireland, an estimated 20-30,000 people are infected with HCV and 60% of those may be undiagnosed. That's roughly the size of the population of Mullingar, many of whom are unaware they have the disease, which is a major cause of cirrhosis and liver cancer. Hepatitis C is one of the leading sources of end-stage liver disease, HCC, and liver-related deaths in the western world. It is also one of the main indications for liver transplantation worldwide.

Drop-In HCV Treatments

The Number of people completing treatment for Hep C in Ireland fell to 110 in the first quarter of 2021, a sizable decline from the 354 in the same period in 2019 and the 193 in 2020 (*). Just 532 people commenced treatment in 2020 compared to 1,196 in 2019. According to Professor Jack Lambert, Consultant

in Infectious Diseases and Genitourinary Medicine at Dublin's Mater Hospital and UCD, "At the moment, we have probably had as many, if not more, new infections in the past five years as we have successfully treated," The untreated spread of HCV poses a significant challenge, particularly given the impact this virus has on socio-economically disadvantaged persons including PWIDs, prisoners, migrants, and the homeless. Taking into account that the model of care in Ireland is still centralised towards hospital clinics or specialist addiction services, linkages to care for those on the periphery including some of these marginalised groups is greatly reduced.

Scale Up Screening

Wider screening for at-risk groups particularly amongst certain age cohorts namely the baby boomer generation (those born between 1946 to 1964) as recommended by the CDC recommendation report in 2012, may provide an opportunity to identify hidden infections. According to the WHO, countries that are delivering successful elimination strategies are screening widely amongst at-risk groups.

"Everyone should have a Hep C test once in their lifetime, probably during their forties, as is the case in the US, we must target other cohorts for screening," said Professor Jack Lambert.

In 2019 The National Hepatitis C Treatment Programme (NHCTP) led by Professor Aiden McCormick, published Community Treatment Guidelines which outlined details of the programme for trained level 1 and level 2 GP's and community pharmacists. All participating GPs must be registered to prescribe methadone, and training is coordinated by the ICGP, PCRS, and hospital pharmacists. In 2020 11 patients started treatment in a pharmacy dispensing site (National Hepatitis C Treatment Registry Monthly Report). However, burgeoning evidence about micro elimination in at-risk groups has led to discussions between the NHCTP and various pharmacists in Ireland about initiating a pilot pharmacy-led programme. Growing evidence from Scotland, Australia, and the US suggest that pharmacists are in a unique position to increase access to care and improve health outcomes for patients with an HCV diagnosis.

Capacity building through

We see this working successfully for many disease areas where this sharing of strengths, skills, and resources increases equality of access to care and reduces the heavy burden on primary care services. Pharmacists have a multitude of touchpoints to support national public health agendas in an age of growing demand for healthcare. The

fallout of COVID-19 will demand greater collaboration amongst healthcare professionals and with an estimated 85M visits a vear, who are better placed than Irish Pharmacists to meet these demands. The hugely successful COVID-19 vaccine programme is a testament to the potential success of this approach.

Decentralised Models of Care

Initiation of this multidisciplinary approach must embrace a decentralized model of care as outlined by the WHO and The American Association for the Study of Liver Diseases (AASLAD), in terms of tackling the burden of HCV in our communities. Creating the necessary infrastructure for elimination requires crossdisciplinary approaches to increase screening, testing, and diagnosis. Recent evidence seems to suggest a more central role of pharmacists who benefit from existing relationships with patients.

Andrew Radley, consultant in public health pharmacy at NHS Tayside in Scotland, and his team, have examined the efficacy of this pathway across 55 pharmacies involving 2718 patients who attended for OST. Staff from all sites received training on Good Clinical Practice, testing for BBVs as well as Information on Hepatitis C and its treatment. Pharmacists completed a pretreatment checklist of medical comorbidities, medical history, and concomitant medication to look for drug-drug interactions (DDIs), phlebotomy in the pharmacy determining suitability for treatment.

Simplifying and expanding access enhanced HCV testing and increased treatment uptake in this pathway and treatment success mirrored that of the conventional pathway. Treatment success more than doubled across the board and significant capacity was added to secondary care settings which were also estimated to be more cost-effective.

In discussions with Andrew Radley earlier in the year, he stressed the importance of linking pharmacists with the care network and ensuring the buy-in of all pharmacy staff as key factors in achieving micro elimination. Approaches such as these provide a great



The Team of The Hepatitis C Partnership

opportunity to deliver clinical services in line with public health, with Remuneration increasingly being based on clinic services as opposed to dispensing alone. Web-based applications will see prescriptions dispensed online and a paradigm shift for pharmacists as key providers in the primary care network look set to prevail in the landscape. In Tayside, community pharmacists are set to join OST teams later in the year to help integrate this model of care.

The key take-home message here is related to the significance of relationships. The acknowledgment of the trusted relationship between pharmacists and their patients but also within their wider peer group. Pharmacists taking this leap of faith were supported, mentored and teams worked with them to establish this pathway. This relational empathy was applied to health promotion and harm reduction discussions during screening and treatment.

Relationships make a difference

It's widely said that the quality of a patient's experience dictates concordance with healthcare advice. Peers, many of whom have lived experience of HCV are a key component of any successful community programme. Many of those with an HCV diagnosis are screened by peers and the trust ensuing from positive and often trauma-informed engagement leads to greater treatment success. "I only found it I had Hep C in

2020 when I attend a Hep C session, I had a swab and I went to the hospital to give blood and they said yeah you have Hepatitis C, I reckon I had it for 30 years without knowing", said Michelle, HCV Peer with the Hepatitis C Partnership. Michelle, like many others, was engaged in a recovery programme and had never been tested for HCV until a peer worker from the Mater Hospital delivered an HCV awareness session. Linking peers into any future HCV pharmacyled initiative across various engagement points would seem essential for success.

Making HCV a rare disease

Models of care and indeed the success of our neighbours in Scotland should be considered in light of their elimination achievements. In 2020, the Tayside region encompassing about 416,090 people, became one of the first regions in the world to eliminate HCV. With a comparable population and great enthusiasm for knowledge sharing this model could see many of our barriers to engagement reduced if not eliminated.

Ireland is not among the 11 countries worldwide on track meet to meet Hepatitis C elimination targets by 2030, warns Kristy Maclean Hayes, Head of Advocacy with the Hepatitis C Partnership. Picture: Marc O'Sullivan

The recently published WHO Interim Guidance for Country Validation of Viral Hepatitis Elimination, provides a global framework for the validation of elimination and overall proposes the use of absolute impact targets to validate elimination at the national level for each country.

The NHCTP is set to publish a revised and updated National Hepatitis C strategy, which is currently being reviewed by the department of health. The Hep C partnership, a national collaborative network of stakeholders working towards ensuring the elimination of Hepatitis C in Ireland, hopes to support these efforts through an

initiative set to launch in November this year, called Roadmap to Zero.

The purpose of the project is to identify the current operational Cascade of Care for Hepatitis C and to identify and progress following lines of inquiry towards the development of a Roadmap to Cure. We aim to align our objectives with those of the National Treatment Program to focus on filling gaps and ensuring the implementation of the national treatment guidelines. In doing so we will deliver a document that communicates this process as well as highlighting best practice initiatives for elimination. It is our responsibility to ensure that people who experience being marginalised are not excluded from the process and have access to information, support, and services that meet their needs. Our vision is to see a world free from liver-related diseases associated with Hepatitis C infection.

We have received some fantastic feedback already from this initiative and we look forward to continued support from the pharmaceutical community. For more information please contact kristy@hepcpartnership.ie or visit www.hepcpartnership.ie.

