Hepatitis C and COVID-19 Global Concerns:
Sustained Financing and Expanded Access to Testing and Pangenotypic Treatments Needed to Recover the Path to Elimination

By Bryn Gay, Sural Madoori, Annette Gaulino, and Elizabeth Lovinger
Edited by Candida Hadley

INTRODUCTION

Enormous amounts of public funding and health resources have been reallocated from addressing the blood-borne hepatitis C virus (HCV) to respond to the novel SARS-CoV-2 virus/COVID-19 pandemic. This has complicated the delivery of essential services and made scale-up of HCV testing and treatment even less likely. As governments and donors send emergency COVID-19 relief aid to countries and jurisdictions, sustained financing and expanded access to prevention, testing, and pangenotypic treatments for HCV (that treat all genetic variations of the virus) need to be included to recover the path to elimination.

Investments in research and development of HCV treatments, diagnostic tools, and lab infrastructure have directly led to the creation of goods that are being put to use for COVID-19.

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Lessons from HCV on how to address a largely undiagnosed and untreated infection that includes numerous barriers between patients and effective cures can inform policies on accessing COVID-19 technologies, such as vaccines. Community engagement and advocacy networks can be leveraged to inform COVID-19 R&D, clinical trials, and equitable and affordable access strategies. Investments in COVID-19 can also aid with rolling out the HCV response and strengthening the capacity and infrastructure needed for both epidemics.

COVID-19 is Threatening the Incremental HCV Progress Nearly Everywhere

Global HCV Diagnosis and Treatment Gaps

We can expect COVID-19 to worsen HCV and overdose-related death tolls because people who are disproportionately affected by HCV, particularly people who use drugs, are more likely to be isolated, miss medical appointments, and lack access to essential support systems. The pandemic has also interrupted outreach and prevention programs, including harm reduction services, screening campaigns, and routine health visits that confirm HCV diagnoses and identify new cases. Interruptions to essential health programs are part of efforts to reduce people's risk of exposure to the SARS-CoV-2 virus.

Before COVID-19, global treatment uptake among the general population was already dismal, with a few exceptions, namely Australia, France, Georgia, and Italy (see Figure 1). Since the groundbreaking, highly effective direct-acting antiviral (DAA) sofosbuvir (Sovaldi) for HCV became available in 2013, more than 90% (or 67 million people) of the world's estimated 71 million people living with chronic HCV remain untreated.
Figure 1. Treatment Uptake in 20 Select Countries in 2018

Source: map Crowd data, 2018
Table 3. Cross-Disease Benefits for COVID-19 From HCV\textsuperscript{44}

| Treatment | • COVID-19 R&D has benefited from HCV R&D: remdesivir, originally developed by Gilead to treat HCV, shows some potential\textsuperscript{45} to reduce the SARS-CoV-2 viral load,\textsuperscript{46} decreasing the severity of the illness and the duration of hospital stays for patients with COVID-19.

  • Preliminary studies\textsuperscript{47} show the hepatitis C medications sofosbuvir and daclatasvir can potentially reduce mortality and improve recovery time. DISCOVER, a larger placebo-controlled, double-blind trial with 600 participants is underway with results anticipated in fall 2020\textsuperscript{48} (see Box 1). |

| Diagnostic tools | • COVID-19 tests have been developed for many HCV diagnostics platforms, such as COBAS TaqMan (Roche), GeneXpert (Cepheid), Genedrive, RealTime (Abbott), and ARCHITECT (Abbott).

  • Cepheid’s GeneXpert multi-disease PCR testing platform is used for rapid diagnosis of HCV, as well as HBV, TB, HIV, and HPV. GeneXpert was developed with substantial investment from public tax revenue, U.S. government grants,\textsuperscript{49} and philanthropic donors. With support from BARDA,\textsuperscript{50} Cepheid has now developed a COVID-19 test that can be used on the 23,000 GeneXpert diagnostics machines already used worldwide. |

| Diagnostic tools (continued) | • Diagnostics manufacturer Molbio in India has submitted\textsuperscript{51} for prequalification status at the World Health Organization for HCV diagnostic tests used on its TrueNAT multi-disease PCR testing platforms. Molbio has now received approval from India’s regulatory authority for a TrueNAT COVID-19 test, expanding the number of existing diagnostics platforms that can be repurposed for the current pandemic.\textsuperscript{52} |

| Lab infrastructure and capacity | • Lab infrastructure and capacity used for HCV, including laboratory facilities, research, clinical expertise, and members of community advisory boards, are being activated for COVID-19 research and responses.

  • HCV medical providers and community health workers have supported COVID-19 responses through a range of activities, including training medical workers on the use of personal protective equipment, guiding and assisting contact tracing efforts, providing epidemiologic and modeling support, and even researching COVID-19 interventions.\textsuperscript{53} |

  • HCV community advisory boards established to enable community engagement on implementation of national hepatitis plans and treatment access are being consulted regarding proposed research for COVID-19. |
Key Recommendations:

- Allocate new funding for remaining HCV research
- Invest in global HCV programs $5 billion per year
- Strengthen lab infrastructure and health systems
- Fix administrative & legal barriers to treatment
- Decentralize, simplify & integrate HCV/COVID testing
- Enhance international cooperation in science *(Open COVID Pledge; non-exclusive/non-abusive patenting & licensing)*
- Reclaim public health & pharmaceutical R&D systems for the public good & across diseases