

**Title:**

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## Hepatitis C virus micro-elimination in vulnerable populations before and during a global pandemic

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### ABSTRACT

**Objective:** to analyze a hepatitis C virus (HCV) microelimination strategy targeting vulnerable populations and the influence of the pandemic on its maintenance and outcomes.

**Methods:** In 2018, the Hepatology Unit implemented an HCV microelimination strategy for patients attending drug addiction care centers and Psychiatry Units such as the Alcoholism Treatment Unit. These centers reported suspected or confirmed cases of HCV infection directly to the hepatologists, who, after reviewing the clinical records, cite those patients if necessary.

**Results:** From June 2018 to February 2020, hepatologists were consulted on 37 anti-HCV positive patients, 31 of them were from Drug Addiction Care Centers, 5 from the Alcoholism Disorders Unit and 1 from the Department of Psychiatry. Fibrosis stage: F0-F1, 18 (50%); F2, 9 (25%); F3, 2 (4.2%); F4, 8 (20.8%). Female sex, 6 (16.7%). Required attending: Yes, 27 (73%). 25 (92.6%) went. Outpatient consultation: 10 (27%). Required treatment: 19 (51.3%). Sustained virological response: 19 (100%). Fibrosis stage of treated patients: F0-F1, 13 (68%); F2, 2 (11%); F3, 1 (5%); F4, 3 (16%). Patients from the Psychiatry Department during 2021: 11. 9 (82%) do not need to attend; 2 (18%): their situation is unknown.

**Conclusions:** sustained communication with centers that care for populations at risk of active HCV infection is needed to detect cases, increase adherence to treatment, and rescue patients who require screening for hepatocarcinoma.

**Key words:** Hepatitis C virus. Micro-elimination. Vulnerable populations. Drug addiction.

Dear Editor:

Our purpose is to analyze the micro-elimination strategy targeting vulnerable populations (people addicted to drugs, alcohol dependence and psychiatric disorders) implemented since 2018 as well as the influence of the pandemic on its maintenance and the results obtained.

This was an observational, retrospective study. In 2018, the Hepatology Unit of the Department of Gastroenterology of our hospital (University Health Care Complex

of Salamanca), implemented a strategy of HCV micro-elimination to facilitate access to specialized consultation for patients with HCV infection treated in drug addiction care centers (DACC) and in Psychiatry Units such as the Alcoholism Disorders Unit (ADU).

This strategy consists of direct communication to the hepatology doctors of the cases of HCV infection detected by doctors in the addiction centers. The hepatologists, after reviewing the medical records on paper and the hospital's computer system, make appointments for those patients who need to be studied and/or treated in a "high-resolution C virus consultation" and inform the doctors at the addiction centers of the situation of those who do not need to attend (outpatient consultation).

From June 2018 to February 2020, hepatologists were consulted on 37 anti-HCV positive patients, 31 of them were from DACC, 5 from the ADU and 1 from the Department of Psychiatry. Fibrosis stage: F0-F1, 18 (50%); F2, 9 (25%); F3, 2 (4.2%); F4, 8 (20.8%). Female sex, 6 (16.7%). Required attending: Yes, 27 (73%). 25 (92.6%) went. Outpatient consultation: 10 (27%). Required treatment: 19 (51.3%). Sustained virological response: 19 (100%). Fibrosis stage of treated patients: F0-F1, 13 (68%); F2, 2 (11%); F3, 1 (5%); F4, 3 (16%). Patients from the Psychiatry Department during 2021: 11. 9 (82%) do not need to attend; 2 (18%): their situation is unknown. Subject status across the micro-elimination program is shown in Figure 1.

In the context of a micro-elimination strategy, our study shows the need to establish direct lines of communication with centers that care for populations at risk of active HCV infection, as well as direct patient access to the health system, simplifying diagnosis and hospital visits to access treatment as much as possible. When this is achieved, adherence to treatment increases, and patients requiring follow-up for advanced fibrosis or cirrhosis are rescued, even in such situations as the COVID-19 pandemic.

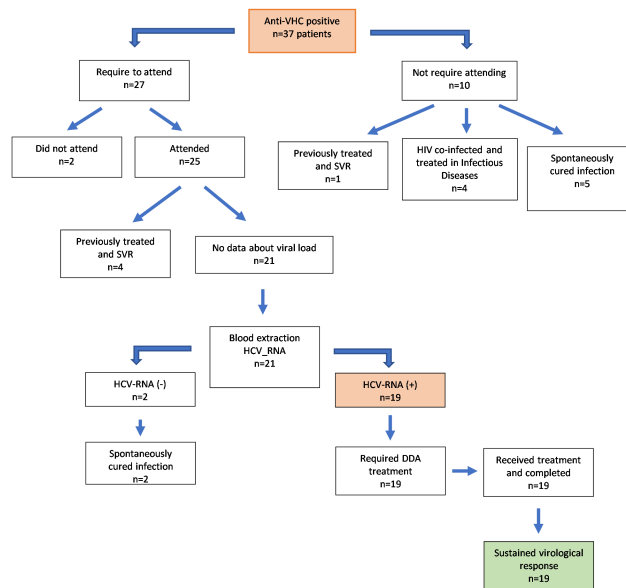
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**Figure 1. Subject status across the micro-elimination program.**



Abbreviations: DAA, Direct Acting Antivirals. HIV, Human Immunodeficiency Virus. SVR, sustained virological response. HCV RNA, hepatitis C virus Ribonucleic Acid.

Fig. 1. Subject status across the micro-elimination program (DAA, Direct Acting Antivirals. HIV, Human Immunodeficiency Virus. SVR, sustained virological response. HCV RNA, hepatitis C virus Ribonucleic Acid).

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