

## Chronic Hepatitis C and people with a history of injecting drugs in Spain: population assessment, challenges for effective treatment

### *Hepatitis C Crónica y usuarios con un historial de inyección de drogas en España: evaluación de la población, retos para un tratamiento efectivo*

RONCERO, CARLOS\*; VEGA, PABLO\*\*; MARTINEZ-RAGA, JOSE\*\*\*; TORRENS, MARTA\*\*\*\*.

\* Addiction and Dual Diagnosis Unit, Department of Psychiatry, Vall d'Hebron University Hospital - Public Health Agency, Barcelona (ASPB), CIBERSAM. Barcelona, Spain. Department of Psychiatry and Legal Medicine, Universidad Autonoma de Barcelona, Barcelona, Spain; \*\* Spanish Society of Dual Pathology, Spain. Institute of Addiction, Madrid, Spain  
\*\*\* Teaching Unit of Psychiatry and Psychological Medicine, University Hospital Doctor Peset & University of Valencia, Valencia, Spain. University Cardenal Herrera CEU, Valencia, Spain; \*\*\*\* Institute of Neuropsychiatry and Addictions, Hospital del Mar, Barcelona, Spain. IMIM- Hospital del Mar Medical Research Institute, Barcelona, Spain. Department of Psychiatry and Legal Medicine, Universidad Autonoma de Barcelona, Barcelona, Spain.

**C**hronic hepatitis C (CHC) is a discriminatory disease that disproportionately affects people neglected by public health services. People with a history of opioid use or parenteral drug use (PDU) face inequality and stigma. A history of drug injecting is a behavior which increases the risk of contracting the hepatitis C virus (HCV). There is a high incidence of HCV among people injecting drugs. There are over 300,000 people in Spain with a current or former history of injecting drug use (Ministry of Health, Social Services and Equality, 2014). There are approximately 100,000 people in Spain with a history of opioid use disorder and the majority are PDU or ex-PDU (EMCDDA, 2016). Approximately 80,000 people make use of the services available to treat opioid use disorder each year (Torrens, Fonseca, Castillo, & Domingo-Salvany, 2013).

HCV affects 50-80% of this population (Muga et al., 2015), while 32% continue injecting drugs during their treatment in Spain (Roncero et al., 2011). However, substance users undergoing treatment have a lower risk of HCV infection because they are less likely to share needles than those not receiving treatment (Donmall, Jones, Davies, & Barnard, 2009).

Only a very limited number of PDUs with HCV have been treated in Spain (Muga et al., 2015). The tolerability and effectiveness of HCV treatment in the past has restric-

ted successful interventions. However, there are currently new, efficient and accessible treatments (Grebely et al., 2015). In general, PDU are less likely to receive hepatitis C treatment than other patients (Mravčík et al., 2013). Many PDUs assume that they cannot access hepatitis C treatment because of their health problems and inequalities in the system; requesting screening and undergoing treatment is probably perceived as futile. In addition, the absence of new treatments and the fear of the side effects of the old medications used for the treatment of HCV, such as interferon, has limited access in the past (McGowan & Fried, 2012). Moreover, inadequate knowledge regarding HCV infection and its implications are limitations that must be taken into account. These problems must be solved with new and different forms of health education. For example, the use of peer support groups is likely to be of major importance. Facilitating peer- or self-diagnosis in certain contexts, including informal and non-clinical locations such as pharmacies, syringe exchange programs, and social service centers may also be a potential solution (Rose, Lutnick, & Kral, 2014).

The most important barrier to accessing HCV treatment for this population is the link between drug treatment centers and centers dealing with HCV (infectious disease and/or hepatology units or services). The separation of these services under the organization and infrastructure of the

---

*Received: November 2016; Accepted: December 2016.*

**Send correspondence to:**

Roncero, C. Addiction and Dual Diagnosis Unit. Department of Psychiatry, Vall d'Hebron University Hospital, Passeig Vall d'Hebron, 119-129, 08035 Barcelona, Spain. E-mail: [roncero@vhebron.net](mailto:roncero@vhebron.net).

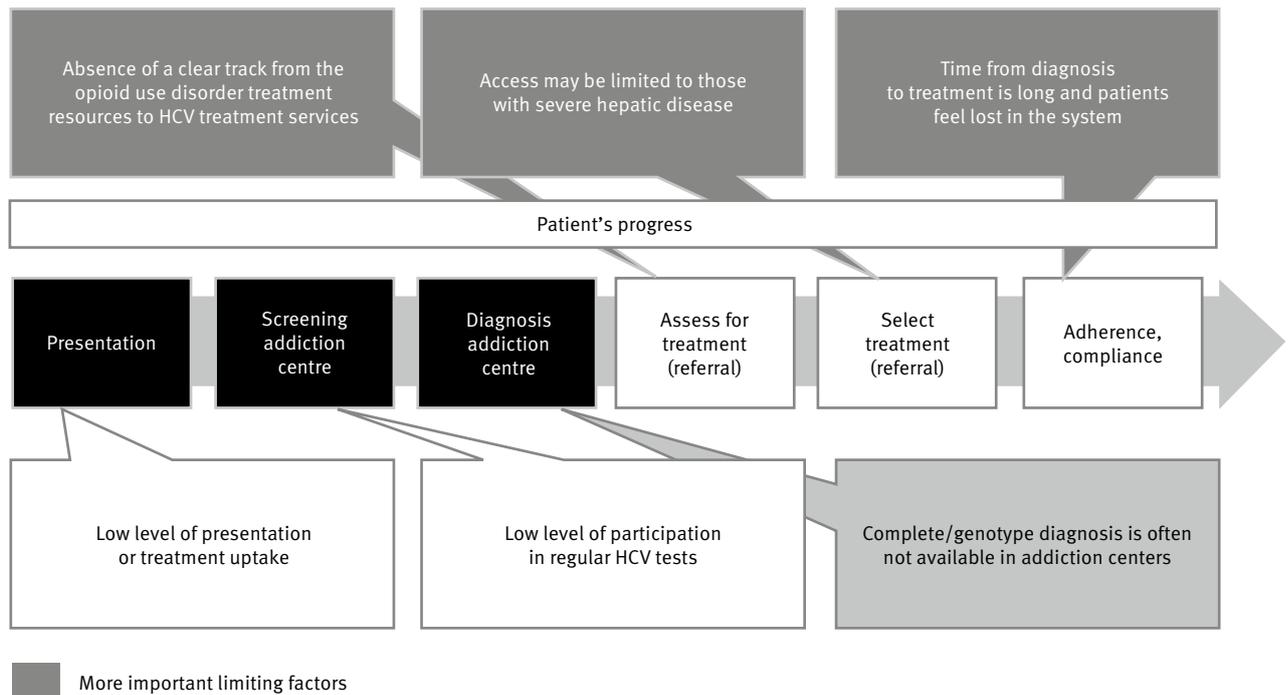


Fig. 1. Patient's progress

Spanish health system is the major limitation for the successful administration of treatment for patients with HCV. These limitations can be addressed by facilitating collaboration between units treating patients with addiction and services for infectious diseases and/or hepatology, including the development of a joint protocol for health professionals and patients.

It is very difficult to figure out how these groups can be effectively treated since many of them have no contact whatsoever with social and health services, or only with services for the treatment of opioid dependence. The following causes of limited access to treatment have been described: (1) low level of presentation of symptoms and treatment participation, (2) low participation in regular HCV tests, (3) conspicuous absence of a clear protocol from the resources for the treatment of opioid use disorder to HCV treatment services for many patients (Figure 1).

### Conclusions

There are approximately 150,000 people in Spain with opiate use disorder and many of them also have a history of injecting drugs. Of this population, there are 80,000 people who are accessing services for the treatment of substance dependence, receiving opioid substitution treatment and other types of interventions. However, to date, few PDUs with HCV have been treated in Spain. The reasons behind the low number of PDUs treated suggest a series of strategies that can improve access to health services for the

se groups. This is an opportunity for policymakers, doctors and patients to make a significant change in the way HCV is treated in PDU.

### Acknowledgements

We are grateful to the 21 experts from across Spain that contributed to this work. Editorial assistance with the manuscript was provided by Tara Lumley at *applied strategic*, London.

This work was funded by Gilead. Gilead had no influence on the development, research or writing of the manuscript.

### Conflict of interests

Dr Carlos Roncero has received fees to give talks for Janssen-Cilag, Ferrer-Brainfarma, Pfizer, Reckitt-Benckiser/Indivior, Lundbeck, Otsuka, Servier, Shire, Lilly, Shire, GSK, and Astra. He has received financial compensation for his participation as a member of the Janssen-Cilag, Indivior and Gilead board. He has carried out the PROTEUS project, which was funded by a grant from Reckitt-Benckiser/INDIVIOR. The author has no other relevant affiliations or financial involvement with any organization or entity with a financial interest in or financial conflict with the subject matter or materials discussed in the manuscript apart from those disclosed. Dr. Pablo Vega has received fees to give talks for Janssen-Cilag, Servier, Lundbeck, Indivior, Lilly

and Gilead. The author has no other relevant affiliations or financial involvement with any organization or entity with a financial interest in or financial conflict with the subject matter or materials discussed in the manuscript apart from those disclosed. Dr. Jose Martinez-Raga has received fees to give talks for Janssen- Cilag, Servier, Lundbeck, and Lilly. The author has no other relevant affiliations or financial involvement with any organization or entity with a financial interest in or financial conflict with the subject matter or materials discussed in the manuscript apart from those disclosed. Marta Torrens has received fees for consultancies with Lundbeck, Mundipharma, Indivior and Gilead. The author has no other relevant affiliations or financial involvement with any organization or entity with a financial interest in or financial conflict with the subject matter or materials discussed in the manuscript.

Rose, V. J., Lutnick, A. & Kral, A. H. (2014). Feasibility of providing interventions for injection drug users in pharmacy settings: a case study among San Francisco pharmacists. *Journal of Psychoactive Drugs*, 46, 226–232. doi: 10.1080/02791072.2014.921745.

Torrens, M., Fonseca, F., Castillo, C. & Domingo-Salvany, A. (2013). Methadone maintenance treatment in Spain: the success of a harm reduction approach. *Bulletin of the World Health Organization*, 91, 136–141.

## References

- Donmall, M., Jones, A., Davies, L. & Barnard, M. (2009). *Summary of key findings from the Drug Treatment Outcomes Research Study (DTORS)*.
- EMCDDA. (2016). *European Drug Report: Trends and Developments 2016*. Luxembourg.
- Grebel, J., Robaey, G., Bruggmann, P., Aghemo, A., Backmund, M., Bruneau, J., ... Dore, G. J. (2015). Recommendations for the management of hepatitis C virus infection among people who inject drugs. *The International Journal on Drug Policy*, 26, 1028–1038. doi:10.1016/j.drugpo.2015.07.005.
- McGowan, C. E. & Fried, M. W. (2012). Barriers to hepatitis C treatment. *Liver International : Official Journal of the International Association for the Study of the Liver*, 32 Suppl 1, 151–156. doi:10.1111/j.1478-3231.2011.02706.x.
- Ministerio de Sanidad Servicios Sociales e igualdad. (2014). *2014 National Report (2013 data) to the EMCDDA. Spain New Development, Trends*.
- Mravčík, V., Strada, L., Štolfa, J., Bencko, V., Groshkova, T., Reimer, J. & Schulte, B. (2013). Factors associated with uptake, adherence, and efficacy of hepatitis C treatment in people who inject drugs: A literature review. *Patient Preference and Adherence*, 7, 1067–1075. doi:10.2147/PPA.S49113.
- Muga, R., Zuluaga, P., Sanvisens, A., Rivas, I., Fuster, D., Bolao, F. & Tor, J. (2015). Hepatitis C associated to substance abuse: ever closer to a treatment without Interferon. *Adicciones*, 27, 141–149.
- Roncero, C., Fuste, G., Barral, C., Rodríguez-cintas, L., Martínez-Luna, N., José, E.-O. F. & Casas, M. (2011). Therapeutic management and comorbidities in opiate-dependent patients undergoing a replacement therapy programme in Spain: the PROTEUS study. *Heroin Addiction and Related Clinical Problems*, 13, 5–16.