Hepatitis C: A hidden epidemic

A major challenge to public health

Over the past few years hepatitis C has emerged as a major threat to public health worldwide. Within the European Union the total number of people infected is unknown but it is likely to exceed one million and could be considerably higher.

Since the introduction of screening of blood and blood products for hepatitis C, transmission of the virus has been dramatically reduced. Injecting drug users are now the group at greatest risk of infection, accounting for up to 60–90 % of new infections. Health promotion activities are needed to discourage people from injecting drugs or to change their behaviour to reduce the risk of contracting the virus if they are unable to stop.

Hepatitis C is a highly infectious and potentially fatal disease that attacks the liver. Yet people who have contracted the virus often remain symptom free for many years and most cases are undiagnosed. Public and professional awareness of the disease needs to be raised to encourage people at risk to come forward for testing and referral for treatment where it is appropriate.

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Across Europe a very high proportion of people who have ever injected drugs are infected with the hepatitis C virus. Infection with hepatitis C can result in health problems ranging from chronic fatigue to severe liver disease and cancer of the liver. The hepatitis C virus is highly infectious and is transmitted through direct contact with infected blood. The disease spreads rapidly among drug users who share needles and other injecting equipment. Young and new injectors are at high risk of contracting hepatitis C shortly after they begin injecting.

Key issues at a glance

1. Across Europe a very high proportion of people who have ever injected drugs are infected with the hepatitis C virus.
2. Infection with hepatitis C can result in health problems ranging from chronic fatigue to severe liver disease and cancer of the liver.
3. The hepatitis C virus is highly infectious and is transmitted through direct contact with infected blood. The disease spreads rapidly among drug users who share needles and other injecting equipment.
4. Young and new injectors are at high risk of contracting hepatitis C shortly after they begin injecting.
5. Treatment for hepatitis C infection has improved dramatically in recent years. However, the treatment of injecting drug users for HCV is controversial and so many do not receive treatment.
6. Wherever injecting drug use is likely to increase, such as in the new EU member states, new epidemics of hepatitis C are likely to emerge.

‘Policy makers cannot afford to ignore the implications of hepatitis C infection. The implications of inaction for EU public health budgets are likely to be considerable. It is better to provide screening, prevention education and treatment now than to let the disease spread and to wait until sufferers become chronically ill. In this field too the principle of precaution is a must’

Georges Estievenart
EMCDDA Executive Director

Definitions

Hepatitis C is blood-borne liver disease, caused by the hepatitis C virus (HCV), first identified in 1989. HCV has become a major public health consequence of drug injecting and represents a major challenge for drug policy. This is recognised in the EU Action Plan on Drugs 2000–2004, which calls on Member States to find strategies to increase access to and availability of services for drug users who are at risk of severe health damage, drug-related infectious diseases and death, in order to reduce individual and public health risks.
Hepatitis C infection among injecting drug users - Overview

1. An epidemic among drug users

Infection with the hepatitis C virus (HCV) is widespread amongst people who have ever injected drugs. In all European Union countries the incidence of HCV among people injecting drugs is extremely high, ranging from about 30% to over 90% according to the population surveyed. For example, data from Dublin in Ireland indicate that 53% of addicts who have been injecting for up to two years are positive for HCV, with similarly high levels amongst new injectors in Coimbra, Portugal (62%) and Glasgow in the UK (36%).

Injecting drug users are now the largest risk group for HCV transmission in Western Europe. Other routes of transmission of HCV have been effectively prevented, for example infection from contaminated blood products has been eradicated through blood screening. Across the EU most new notified infections are related to injecting drug use. In some countries this may be as high as 90%.

Because new infections often go unnoticed for many years, it is difficult to assess accurately the extent of HCV infection. However, it is estimated that there are some 500,000 drug injectors in the EU infected with HCV. Overall, including ex-injectors and people infected through other routes, there are probably over one million people in the EU, and possibly up to several million, infected with HCV.

2. A major challenge for public health

The onset of an infection with the hepatitis C virus produces often unspecific symptoms and remains unnoticed. Two to four out of ten people who contract HCV recover spontaneously, clearing the virus within six months after infection. Among those who remain chronically infected, a significant proportion advance over time to end-stage, potentially lethal, liver disease. Knowledge about the pace of progression into manifest liver disease is still incomplete and rates are variable with studies among adults reporting over 20% who develop cirrhosis within twenty years. Studies among young infected individuals and recent reviews however suggest lower rates of 3–10%. The risk of progressing into severe liver damage depends of different factors such as age at infection, gender, heavy alcohol use and co-infection with HIV or HBV.

Although most chronically infected people show no obvious signs of liver disease, many may suffer from fatigue, loss of appetite, sickness, stomach pain and joint pain which reduces their day-to-day functioning and quality of life.

The social and economic costs of hepatitis C are considerable and all EU states potentially face escalating health care costs. Effective prevention is likely to be key in reducing the future burden to the health care system and further human suffering. It has been estimated that each year of delay in preventing new HCV infections in the EU will lead to an increase in treatment costs of an additional 1.4 billion euros.

HCV awareness is still at an early stage and prevention of HCV transmission is difficult. There is no vaccine. However, new antiviral combination treatments have dramatically improved treatment options for the control of the disease and for improving quality of life.

3. Hepatitis C spreads rapidly among people injecting drugs

HCV is highly infectious — around ten times more infectious than HIV. Although HCV may be spread through sexual intercourse or from mother to child, these forms of transmission are relatively unusual. By far the greatest risk of infection is through direct contact with contaminated blood, where even minimal exposure is likely to result in infection.

Sharing needles, syringes and other paraphernalia and poor injecting hygiene puts injecting drug users at very high risk of becoming infected with HCV. People injecting drugs may be at risk even where they believe they are following safe practices because the HIV prevention messages they have learnt may not be sufficient to prevent HCV transmission.

Clearly, reducing levels of injecting drug use will help reduce the risk of HCV transmission. For those who carry on injecting, good hygiene and other harm reduction measures can also reduce the risk of HCV transmission. For example, there is some evidence that the provision of sterile equipment and safe disposal of contaminated needles and syringes through needle exchange programmes may reduce the risk of becoming infected with HCV.

‘The key to effective prevention is to reduce the number of people who start to inject drugs and to influence behaviour of young and new injectors. To achieve this we need to raise awareness of hepatitis C amongst professionals, drug users and the wider public.’

Marcel Reimen, Chairman
EMCDDA Management Board

4. New and young injecting drug users at greatest risk

Because HCV is very infectious and already highly prevalent amongst people who inject drugs, young drug injectors and others newly initiated into injecting are at considerable risk of contracting the virus. There is also an alarming potential for HCV to spread rapidly in countries with emerging epidemics of drug injecting.

Health prevention messages need to be targeted at new and young injectors who may not yet be infected and at young people at risk of injecting drugs.
Generally, drugs education and health prevention messages do not focus on HCV prevention. Health education initiatives need to target not only drug users but also those who work with them, to increase their awareness of the risks. To be most effective, intervention is needed early on, aimed at influencing behaviour as soon as or even before someone begins injecting. Health education initiatives need to provide objective information about HCV to non-injecting drug users and marginalised young people through outreach work and peer education. Initiatives also need to target injectors, for example training them not to initiate other people into injecting and to refuse requests to share their equipment.

It is also vital that awareness of HCV prevention is increased in the new EU member states where rates of drug injection are predicted to rise and where service provision in this area is likely to be poorly developed.

5. Lack of early warning signs means hepatitis C infections are often not identified until it is too late

Since only a minority of people infected with HCV show any symptoms in the early stages of the disease, HCV is often not diagnosed until a long time after it has become chronic. Many current and former drug injectors are therefore unaware that they are infected with HCV. As well as making it difficult to provide early treatment before long-term liver damage has occurred, the slow onset of the disease makes tracking trends in HCV infection and monitoring the impact of preventative interventions difficult.

Better screening and monitoring systems are needed to ensure people infected with HCV are identified early and can receive treatment, where it is appropriate. Screening programmes need to cover groups who are known to be at high risk of HCV infection, including known (injecting) drug users and their partners, partners of people infected with HCV, prisoners and inmates of young offenders institutions.

6. Treatment of hepatitis C infection in injecting drug users is controversial and access to treatment is often poor

In recent years treatment outcomes for people infected with HCV have improved dramatically, improving both life quality and life expectancy and eliminating the risk of infecting others. The introduction of new antiviral combination therapy using the drugs ribavirin and pegylated interferon can eradicate the virus in around 40 to 80% of patients, and reduce progression of the disease in others. However, despite the fact that injecting drug users are the group most affected by HCV, many infected drug users do not receive treatment and are often explicitly excluded.

Treatment for HCV infection is expensive, for example a 48 week treatment course costs around 23 500 euros in Germany. The side-effects of treatment which include severe depression are very unpleasant and can affect rates of both uptake of treatment and compliance and may lead to people discontinuing treatment, although recent studies show that these side effects may also successfully be treated.

Treatment guidelines such as the 1999 guidelines of the European Association for the Study of the Liver (which are currently under review) recommend that active drug users should not be treated. Injecting drug users diagnosed with HCV may be denied treatment because it is assumed that compliance is poor, risk of re-infection high and drug dependence should be addressed first. However, studies have shown that injecting drug users can be successfully treated, with similar rates of compliance as non-drug users, and that the risk of reinfection may not be higher than in non-injecting individuals. Furthermore, treatment of a substantial proportion of drug users infected with HCV has the potential to reduce significantly future transmission of the disease.

Recent guidelines and consensus declarations developed in Austria, France and the United States recommend that decisions about treatment should be taken on a case by case basis and that injecting drug users should not be automatically excluded. For drug users to benefit fully from the new drug treatments, an interdisciplinary approach is needed, bringing together expertise in treating hepatitis and caring for drug users.
Conclusions

Treatment and prevention of hepatitis C infection amongst injecting drug users

Policy considerations

1. It is important that policy makers acknowledge the future impact of hepatitis C infection and place prevention and treatment of the disease high on the policy agenda.

2. All EU states face escalating costs due to the hidden HCV epidemic. Each year of delay in preventing new HCV infections in the EU may lead to an increase in treatment costs of an additional 1.4 billion euros.

3. The risk of transmission of HCV can be reduced through measures to alter high risk behaviour such as sharing needles and other injecting equipment, as well as through action to reduce injecting drug use.

4. There is a short window of opportunity for prevention with young and new injectors. It is vital that interventions are targeted at this group, and at new populations where drug injecting may be spreading, including in the new member states.

5. Improved screening and monitoring systems for hepatitis C infection would help ensure that people needing treatment for HCV are identified early. It would also enable both trends in HCV infection and the effectiveness of preventative strategies to be monitored.

6. There is a need to review treatment guidelines for hepatitis C and to develop strategies for interdisciplinary cooperation between hepatologists and addiction specialists for including drug users in treatment.

Key sources


