Purpose

The Royal Australian and New Zealand College of Psychiatrists (RANZCP) provides this information and guidance to psychiatrists to facilitate care for people living with mental illness who are also living with or at risk of hepatitis C. Given recent advances in the treatment of hepatitis C, the RANZCP recognises the need to improve knowledge about hepatitis C treatment among psychiatrists.

Key messages

- Advances in hepatitis C treatment present potential significant benefits for many people with mental illness. Hepatitis C is curable with over 95 per cent of people treated with direct-acting antivirals (DAAs) being cured.
- People with hepatitis C have higher rates of mental illness, including substance use disorder, and people living with mental illness are themselves at increased risk of acquiring hepatitis C.
- Psychiatrists are well placed to screen for hepatitis C and liaise with treating practitioners to ensure people with hepatitis C obtain appropriate treatment.
- There is a role for psychiatrists, particularly those working in services with high prevalence rates for hepatitis C, to upskill to provide direct treatment for uncomplicated cases with support from local hepatology and/or infectious diseases services where required.
- Shared care is particularly important in the treatment of hepatitis C. Optimal treatment requires effective communication and collaboration between health professionals including psychiatrists, physicians, general practitioners and nurse practitioners.
- Health promotion is an important aspect of working towards elimination of hepatitis C. Psychiatrists should work to improve the community’s understanding of hepatitis C and reduce the stigma associated with it.

Definitions and scope

Hepatitis C is an inflammation of the liver caused by the hepatitis C virus. [1] If left untreated, about 75% of people with hepatitis C develop chronic hepatitis C, which is associated with significant morbidity and mortality including development of cirrhosis, liver cancer, liver failure, the need for liver transplantation and/or early death.

There are national and global strategies that recommend and outline ways in which health services can institute robust processes to facilitate screening, education and counselling programs, as well as strong treatment referral pathways to work towards elimination of hepatitis C. [1-3] The RANZCP supports full implementation of these strategies.
This guideline provides guidance for psychiatrists by outlining their role in helping to eliminate hepatitis C in Australia and New Zealand. It is not a directive about clinical practice, or instructions as to what must be done for a given patient.

**Background**

It is estimated that 118,000 people in Australia were living with hepatitis C at the end of 2020 and approximately 3,500 people are newly diagnosed each year [4]. About 45,000 New Zealanders are living with hepatitis C and 40 percent of people who have acquired hepatitis C don’t know it. [3] Although acquisition rates are declining overall, ongoing high levels of newly acquired cases highlights the considerable challenge that remains to eliminate hepatitis C. [4, 5] Testing rates are lagging, newly acquired infections may be missed due to the asymptomatic nature of the disease, and there is a continued decline in the number of people treated each year. [6, 7]

To ensure elimination goals are met, considerable effort and investment is needed to raise awareness of hepatitis C and increase the availability of testing and treatment, particularly for at-risk populations. [4] People who may have a higher risk of hepatitis C are those who:

- inject drugs, or have injected drugs in the past
- have been in prison
- had a blood transfusion in Australia before February 1990, or more recently in another country
- have a mother with hepatitis C
- have a sexual partner with hepatitis C
- are HIV positive
- have had haemodialysis
- were born in, or have had medical procedures in a country with a high prevalence of hepatitis C
- have had a tattoo or body piercing done by someone with poor infection control practices
- have had other blood to blood contact with another person [8].

Psychiatric comorbidities are common in people with chronic hepatitis C, and hepatitis C is common in people living with mental illness with an established link to past or current substance use, in particular intravenous and intranasal drug use. [9-11] Studies suggest prevalence rates of up to 28% for depressive and anxiety disorders among people with hepatitis C and some Australian studies have suggested even higher rates. [9] Studies on the incidence of hepatitis C in Australia estimate 90% to be through injecting drug use. [12] Almost all new diagnoses of hepatitis C in New Zealand are in people who inject drugs.[3] Incarcerated populations are disproportionately burdened by hepatitis C with a large proportion of this population affected by concurrent psychiatric illnesses and substance use disorders. [2] Psychiatrists have a crucial role in linking individuals into health care, which is particularly important in relation to hepatitis C.

Direct-acting antiviral (DAA) therapy for chronic hepatitis C virus, one of the great advances in clinical medicine in recent decades, presents potential significant benefits for many people living with mental illness. [7] Unfortunately, uptake of DAAs has been slowing among people with hepatitis C in both New Zealand and Australia. [2, 13] There may be various reasons for this including lack of knowledge among health professionals and the community, as well as the stigma associated with hepatitis C, mental illness and injecting drug use.

Psychiatrists have a vital role to play in increasing uptake of DAAs and advocating on behalf of patients to increase access to treatment. In order to fulfil this role, it is essential that psychiatrists have suitable knowledge about the context of hepatitis C acquisition, disease progression and treatment options, as well as an understanding to help facilitate hepatitis C screening and treatment. [10]
Treatment of hepatitis C

It is important that all psychiatrists understand the advances in available treatments to people living with hepatitis C in order to provide best care.

- New direct-acting antivirals (DAAs) have been shown to be highly tolerable and effective in treating hepatitis C with cure rates of over 95%. [7, 14] There are several regimens which allow well tolerated, simple, once-daily oral dosing for 8–16 weeks depending on clinical needs. [7]

- In Australia the first of the new pangenotypic DAAs, Sofosbuvir/Velpatasvir was added unrestricted to the PBS list in 2017 and Glecaprevir/Pibrentasvir was added in 2018. In February 2019, Glecaprevir/Pibrentasvir was funded by Pharmac without restriction in New Zealand.

- DAA treatment regimens can be used for treatment-naïve people, people who have failed previous hepatitis C therapy, and people with liver cirrhosis although they require more extensive follow-up. DAA therapy can be used for both adults and children.

- Mental health conditions and substance use, including alcohol, do not disqualify patients from DAA therapy. Patients with substance use disorder before DAA therapy initiation may benefit from targeted on-treatment support. [15]

- DAAs confer minimal risk of additional neuropsychiatric side effects and neuropsychiatric symptoms often improve during and after hepatitis C treatment. [16]

- A number of patients who have been treated previously with interferon may avoid further treatment with DAAs owing to experience of previous side-effects. There is a critical role for psychiatrists in understanding the difference between DAAs and interferon in terms of side-effects and efficacy of treatment, and communicating this information to patients (see Box 1).

Box 1. Interferon: impact of past practice

Previously hepatitis C treatment centred on interferon, the use of which could produce a range of serious side effects, including neuropsychiatric adverse events in up to 40% of treated individuals, with 20–30% developing depressive symptoms and other potential reactions including mania, psychosis and suicidality. [17-19] Interferon may also exacerbate pre-existing psychiatric conditions and is therefore contraindicated for people with uncontrolled psychiatric symptoms. [17, 20] As a result of the side effect profile of interferon, it is estimated that around 20% of people did not complete treatment; even of those who did, only 50–60% were cleared of the virus. [14] Previous experience with interferon may contribute to misunderstanding, fear and stigma of DAA treatments.

The role of the psychiatrist

Screening and prescribing

- Psychiatrists are well positioned to assist in screening and identifying people with hepatitis C, and facilitating treatment. [11] This is important for people living with mental illness and for whom a psychiatrist may act as an early point of contact into the medical system. Initial screening for hepatitis C by psychiatrists is encouraged on entry to the service, and regular screening for patients who have ongoing risk, such as ongoing substance use. It is acknowledged that in many circumstances psychiatrists may not be the first point of contact, but should have awareness of hepatitis C to facilitate support as required.

- Psychiatrists should familiarise themselves with hepatitis C testing resources to help ensure access to the correct tests. Testing for hepatitis C includes two types of blood tests:
Hepatitis C RNA: tells if patient has chronic hepatitis C infection
Hepatitis C antibody: tells if patient has ever had hepatitis C infection so it could mean acute, current or past infection

This may mean that people who test positively using only the antibody test may be subject to needless stress when they do not currently have the virus. Further information can be found at: Testing for hepatitis C | Hepatitis Australia.

- In order to prescribe DAA for hepatitis C, the following criteria should be considered in line with the PBS and Pharmac general statements: [21-23]
  - Chronic hepatitis C must be treated by a medical practitioner or an authorised nurse practitioner experienced in the treatment of chronic hepatitis C; or in consultation with a Gastroenterologist, Hepatologist or Infectious Diseases Physician experienced in the treatment of chronic hepatitis C
  - The cirrhotic status (non-cirrhotic or cirrhotic) of the person being treated
  - Details of the previous treatment regimen (only for requests for treatment in people who have previously failed a treatment)
  - Hepatitis C genotype testing is no longer required with the current pangenotypic regimens

- Any General Practitioner or Nurse Practitioner can prescribe DAAs. Psychiatrists should be aware of this as this greatly increases accessibility by having the patient's own GPs able to treat them in primary care.

- Psychiatrists and in particular addiction psychiatrists may be eligible to prescribe DAAs to people living with uncomplicated cases chronic hepatitis C. Psychiatrists who wish to become prescribers of DAAs will require experience in the treatment of chronic hepatitis C, or they will need to work in consultation with a Gastroenterologist, Hepatologist or Infectious Diseases Physician experienced in the treatment of chronic hepatitis C.

- Some people with hepatitis C will still need referral to a specialist experienced in hepatitis C treatment, usually a Gastroenterologist, Hepatologist or Infectious Diseases Physician. The Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM) has developed a Decision Making in Hepatitis C tool to assist healthcare providers make decisions for their patient, including to determine whether a patient should be referred to a specialist. Free training is also available for those interested in learning more about hepatitis C prescribing, and resources are available to assist those who do not have experience prescribing.

Risks and considerations for practice

- DAAs do not present the same neuropsychiatric risks as Interferon-based therapies. There are very few drug interactions (e.g. metabolism, clearance) between DDAs and commonly used psychiatric medications. Comprehensive information can be found on the Liverpool® HEP Drug Interaction Checker developed by the University of Liverpool.

- Achieving adherence to treatment with DAAs can be challenging in the presence of psychiatric comorbidities. [24] However recent studies have suggested that substance use and mental illness in itself is not a major barrier to adherence. [15, 24] Inequitable access to health services is an issue. People with limited access to social support and/or secure housing, as well as Aboriginal and Torres Strait Islander peoples, Māori and Pasifika, may benefit from support from culturally appropriate community health services to encourage ongoing adherence to treatment.

- It is important to consider individualised approaches for different population groups. For instance, successful treatment for people who inject drugs will require collaboration with addiction specialists and/or coordination with pharmacists who may be dispensing opiate
agonist therapy to assist with adherence [25]. Prison eradication programs are effective in reaching large populations and it is helpful for all prisoners to have management plan, including when they are leaving prison and returning to the community.

- Psychiatric comorbidities, including substance use disorder, can present significant complications to clinical management of hepatitis C. People with both hepatitis C and HIV may present with complex psychiatric complications due to the psychiatric comorbidities associated with both viruses. [26, 27] Substance use may also result in physical complications including exposure to other blood-borne viruses and have an adverse effect on the liver. [28] As a result, various hepatological–psychiatric models of care have been developed in order to manage psychiatric comorbidity during hepatitis C therapy. [17] The Hepatitis Australia website includes information on hepatitis C and developments in treatment.

- When treatment is completed successfully, counselling or other psychiatric treatments may be useful to mitigate future risk associated with substance use and risk behaviours. [19] As such, psychiatrists play a vital role in supporting people living with mental illness and hepatitis C to maintain treatment and obtain further care as required.

**Patient-centred care, shared care, community support and education**

- Shared care is particularly important in the treatment of hepatitis C. Optimal treatment requires effective communication and collaboration between health professionals including psychiatrists, physicians, general practitioners and nurse practitioners. Multidisciplinary care of patients is encouraged and appropriate specialist referral should be considered if there is co-infection with hepatitis B or HIV, cirrhosis, or prior DAA treatment failure. [20, 29]

- Psychiatrists should advocate for local health services to institute robust processes to facilitate hepatitis C screening, education and counselling programs, as well as strong treatment referral pathways. Education and counselling programs have been found to improve screening rates among people with mental illness while treatment compliance may be encouraged through the use of community nursing programs and mobile health care model. [19, 30-32]

- Prison populations have high incidence and prevalence of hepatitis C. Incorporating hepatitis C screening and treatment programs in correctional settings, ideally using a universal screening approach and improved coverage of harm reduction interventions, is critical for national hepatitis C elimination strategies. [33] Wherever possible, psychiatrists should advocate for improved treatment programs in prison.

- Proactive health promotion is an important aspect of working towards elimination of hepatitis C. People at risk of, or who have acquired, hepatitis C will often be supported in primary or community services. Psychiatrists can assist by providing support or advice.

- Psychiatrists should work to improve the community’s understanding of hepatitis C and reduce the stigma associated with it. This includes asking people about past and current intravenous drug use or other risk factors. Prioritising people who inject drugs for DAA therapy will rapidly reduce new transmissions. [34]

- Psychiatrists should advocate for harm reduction approaches such as promotion of needle and syringe exchange programs, opioid agonist treatment programs, and rehabilitation programs at community and alcohol other drug services to contribute to mitigating risks associated with unsafe injecting practices which contributes substantially to hepatitis C transmissions. Robust research also demonstrates the effectiveness of supervised injecting centres. [34-36] Addressing factors such as alcohol use, risk factors for metabolic syndrome, poor diet and lack of exercise, will help prevent and improve the outcome for liver disease.
Summary

To optimise health outcomes associated with hepatitis C, the RANZCP recommends that psychiatrists:

- encourage initial screening for hepatitis C on entry to the service, and regular screening for patients who have ongoing risk [37]
- advocate and promote treatment for hepatitis C, and liaise with treating practitioners to ensure people obtain adequate treatment
- support people undergoing treatment, giving due consideration to individual risk factors and potential interactions of direct-acting antivirals (DAAs) with psychotropic medicines
- provide advice and referrals to individuals with hepatitis C
- work closely with other health professionals, including gastroenterologists and liver specialists, in multidisciplinary and shared care teams
- work to improve the community’s understanding of hepatitis C and reduce the stigma associated with it.

Further clinical resources


Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM). Hepatitis C Training, Information and Resources.

National Institute for Health and Care Excellence (NICE). Hepatitis C guidelines. April 2022. UK


Further reading


References


This information is intended to provide general guidance to practitioners, and should not be relied on as a substitute for proper assessment with respect to the merits of each case and the needs of the patient. The RANZCP endeavours to ensure that information is accurate and current at the time of preparation, but takes no responsibility for matters arising from changed circumstances, information or material that may have become subsequently available.

REVISION RECORD

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