Liver disease and cirrhosis

Information for frontline workers supporting people experiencing homelessness

Supporting document with links to published evidence and guidance

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Introduction

Liver disease is more common in people experiencing poverty and amongst marginalised groups, including people experiencing homelessness (1, 2). The rates of liver disease have been increasing in the UK (3, 4). Unfortunately, the death rate from liver disease has also been increasing nationally, at a time when the death rate from other chronic diseases has been reducing (3, 5). With the right care and support, the risk of complications from liver disease can be reduced (6, 7).

People experiencing homelessness face additional barriers, and need extra support, to access good healthcare (8). Barriers include lack of a fixed address or telephone number, and lack of access to transport. Front line workers can make a big difference to people's care and do an incredible and challenging job. The responsibility for clinical decisions remains with healthcare professionals. This document aims to equip you with information about liver disease and how it is cared for, to help you to feel more confident supporting people with this condition.

Tips for talking to people about their liver health

- **Be non-judgemental.** People with liver disease or risk factors for liver disease can feel stigmatised by professionals, which can be a barrier to accessing care (9, 10). Liver disease should be perceived in a similar way to other conditions, which healthcare professionals help people to manage.
- **Meet people where they are.** Behavioural change can be complicated by poor mental health, learning needs, cognitive impairment, life adversity, and trauma (11, 12). People vary in their readiness and may be in circumstances which make change difficult (11, 12). Realistic aims are important, and for some, the focus is on harm reduction (12).
- **Challenge fatalism.** People can be frightened that liver disease only gets worse, and this can lead to avoidance of care and escalating risk (13, 14). With good care, the risk of deterioration can be altered, and people can be helped (6, 7).
- **Celebrate successes.** Attending appointments, taking medication, and reducing risk factors can make a real difference to people's health, and should be celebrated (12). Front-line workers can be a key supportive relationship in people's lives. They can encourage people to value themselves and their health.

Roles of the liver

The liver is a large organ at the top right-side of the abdomen. The liver has many vital roles in the body, which include:

1. Processing and eliminating toxins.
2. Storing energy and nutrients.
3. Producing proteins including those to help the blood to clot.
4. Digesting food.
5. Fighting infections (15).

A lot of blood passes through the liver, and the liver has an important role in keeping a person's blood healthy (15).

Stages of liver disease

Liver disease can develop through stages, which include:

⇒ Inflammation (hepatitis),

⇒ Fat build-up (steatosis),

⇒ Scarring (fibrosis).

Over time, severe scarring can develop, which is called cirrhosis (16). More advanced stages of cirrhosis limit the ability of the liver to perform its vital functions (17). Liver cirrhosis can be compensated, meaning that the liver is damaged but just about coping with the body's needs, or decompensated, meaning that the liver is no longer coping, and complications have developed (17). People with decompensated liver cirrhosis can be very unwell (17). People with liver cirrhosis are at increased risk of a type of liver cancer[1] (6).

Common risk factors for liver disease

The most common causes of liver disease nationally are:

- Alcohol
- Hepatitis C (a virus which can damage the liver).
- Obesity (17).

The rates of alcohol use disorders and hepatitis C are higher among people experiencing homelessness (2, 18-21). Malnutrition is more common among people experiencing homelessness, which is a risk factor for progression of liver disease (22, 23).

In the UK, the major risk factor for hepatitis C is injecting drug use (24). Hepatitis C testing is now widely available within substance misuse services, primary care and hospitals (25).

[1] Hepatocellular carcinoma (HCC).

Hepatitis C treatments have become highly effective at curing the virus; the treatments are all taken as tablets and are much better tolerated (26). Treatments are widely available through proactive outreach and peer support (26, 27). Most people with hepatitis C can be cured with the right medications (24, 26).

Alcohol is easily accessible, it's use is often normalised, and many people drink at harmful levels (14, 28). There is no completely safe level of drinking, but it is recommended no more than 14 units a week, spread over 3 days or more, with 2 or 3 alcohol free days in the week (28, 29). People can struggle to remember how much they are drinking and underestimate the risks (30). Knowing the percentage strength of drinks and unit contents can help, by helping people to moderate their intake with weaker drinks or smaller measures and identifying harmful use (28). For example:

- 568 ml 'pint' of 5% ABV lager, beer or cider: 2.8 units.
- 750 ml bottle of 13.5% ABV wine: 10.1 units.
- 700 ml bottle of 40% ABV spirits e.g. whisky, vodka: 28.0 units (31, 32).

If women regularly drink more than 35 units a week, or men regularly drink more than 50 units a week, they should be checked for liver disease (33). This reflects the higher risk of liver disease in women compared to men, when they are drinking harmfully (34). Mutual aid groups and alcohol services offer support to people struggling with their alcohol use (28).

People who are physically dependent on alcohol should not stop abruptly, because alcohol withdrawal can cause life threatening seizures (28). Instead, they should be supported to gradually reduce or have a medication-assisted 'detox' arranged (28). 'Librium' or chlordiazepoxide is an example of a medication used in alcohol detoxification (28). Where possible, people with liver cirrhosis should be supported to stop alcohol completely, as alcohol can cause them to deteriorate (6). Cessation or reduction in alcohol use can make a significant difference to prognosis in liver disease (6).

Signs and symptoms of liver disease

Many people with liver disease do not know they have the condition (17). This is because symptoms can be absent or vague (like fatigue) until the condition is advanced (17). Signs and symptoms of decompensated liver disease include:

- Yellow eyes / skin (jaundice)
- Recent onset confusion (hepatic encephalopathy)
- Distended tummy due to fluid accumulation (ascites)

- Vomiting blood or passing blood in poo (including black poo) (17).

Too many people with liver disease are diagnosed at a late stage (35). Identifying people with risk factors for liver disease, and encouraging them to get tested, can help to change this (36).

Common tests in liver disease

Blood tests: show if the liver is working harder or struggling to function. Sometimes a combination of blood test results is used to predict the risk of scarring, and the need for a Fibroscan (see below) (37). Blood tests can also diagnose some causes of liver disease e.g. hepatitis C. People with liver cirrhosis should have regular monitoring blood tests[2], which may also include a screening test for liver cancer[3] (33). Blood tests can be performed in primary care or hospital teams, and some by substance misuse services.

Fibroscan (transient elastography): measures the amount of fat and scarring in the liver. Quick and painless, and performed using a portable machine (12). Fibroscans are commonly performed by specialist liver nurses, who can encourage people to take actions to protect their liver health. The scan takes 10 to 20 minutes, and the whole appointment might be slightly longer e.g. 30 minutes. The scan may be performed in a hospital outpatient clinic or in outreach clinics e.g. at substance misuse services. Depending on the results, people may be given advice, monitored in the community, or referred to specialist liver doctors (Hepatologists) (37).

Imaging: shows the structure of the liver and its surroundings. Generally performed in hospital imaging departments, and include ultrasound, CT[4] and MRI[5]. People with fluid accumulation in their tummy (ascites) may need the fluid to be drained in hospital, by inserting a drain through the tummy using an ultrasound (7, 38). People with liver cirrhosis are also invited for ultrasounds every 6 months, to screen for liver cancer (33).

Camera tests: some people with liver cirrhosis are offered a camera test which includes their food pipe and stomach, called an OGD[6] (6, 17). These tests are done in part of the hospital called the endoscopy department. OGDs check for abnormal blood vessels around

[2] Examples of monitoring blood tests include full blood count (FBC), urea and electrolytes (U&Es), liver function tests (LFTs), clotting.
[3] Alpha feto-protein (AFP).
[4] Computerised tomography (CT).
[5] Magnetic resonance imaging (MRI).
[6] Oesophago-gastro-duodenoscopy (OGD).

where the food pipe connects to the stomach, which can bleed. These abnormal blood vessels are called varices (6). The risk of bleeding can be frightening, and this test is a key to reducing the risk. If varices are found, the risk of bleeding can be reduced with medication and / or a procedure called banding (6, 17).

Common medications

Common medications used in liver disease:

- Beta blockers: e.g. carvedilol, propranolol. Reduce pressure in the blood vessels around the liver, and therefore the risk of decompensation or bleeding from varices (7, 17).
- Water tablets (diuretics): e.g. spironolactone, furosemide. Reduce abnormal fluid build-up particularly in the tummy (ascites) (7, 38).
- Laxatives: e.g. lactulose to achieve regular soft poos and reduce the risk of confusion (hepatic encephalopathy) (7).
- Antibiotics: e.g. rifaximin to reduce the risk of confusion (hepatic encephalopathy) (7).

Common medications for alcohol use disorders:

- Thiamine: vitamin B1 used given to people with chronic alcohol excess. Can reduce the risk of nerve damage and memory problems. This may be given as tablets or as an injection (12, 28).
- Acamprosate: reduces cravings for alcohol and helps to maintain abstinence in people with previous alcohol dependence (28).

Vaccinations

People with liver cirrhosis are at increased risk of infection, and infection can cause decompensation (6). They should be vaccinated against hepatitis A and B, and pneumococcus. They should also have an annual influenza (flu) vaccination (39). Vaccinations can be accessed in primary care.

Nutrition

People with liver cirrhosis are less able to store energy and need to eat more regularly (7, 23). Ideally, they should eat every 2-3 hours (7). This may be difficult to achieve; for example, people who drink alcohol regularly have a reduced appetite (12). A useful way to improve nutrition in people is to encourage a bedtime snack which includes carbohydrate, like a couple of slices of toast with a topping (23). This provides energy before the fasting

which takes place while people are asleep, compensating for the lower energy stores in liver cirrhosis (7).

People with cirrhosis can also lose muscle mass, which can make them frail (7). Frailty is a risk factor for falls, and people with liver cirrhosis can have weakened bones meaning that they fracture more easily (6). Eating lean protein helps to reduce muscle loss (23). High salt food and added salt should be avoided, as it can worsen fluid build-up (ascites). People with ascites are advised to have a low salt diet (23). People with cirrhosis should not eat undercooked pork or shellfish because of the risk of food poisoning (40). People with cirrhosis can benefit from input by a dietician (6). Sometimes, healthcare professionals prescribe 'build up shakes' as a supplement (not replacement) for food.

Memory / cognition

Cognitive impairment and acquired brain injury are over-represented in people experiencing homelessness (18, 41). There are many reasons for this, including previous head injuries and undiagnosed learning needs (18). People who have drunk alcohol to excess for a long time are also at risk of alcohol related brain damage, particularly if their nutrition is poor and they have had unplanned withdrawals in the past (12, 42).

It is important to recognise cognitive impairment for three reasons:

1. People may disengage not due to poor motivation, but due to their underlying cognitive problems.
2. They may need additional support to coordinate their health and care needs.
3. Additional care is likely to be needed with mental capacity assessments (11, 12).

The resources section below includes guidance on supporting someone with alcohol related brain damage, and safeguarding.

When to get emergency medical help

Front line staff are not expected to make clinical decisions but knowing when to call an ambulance and get emergency medical help is important. For example:

- Sudden worsening in confusion or struggling to stay awake.
- Vomiting blood / black tarry poo.
- Yellow skin / eyes if not had before.
- Struggling to breathe (43).

Palliative care

For some patients, the focus shifts from curative treatment, to helping them live as well as possible for as long as possible (44). Many patients are not eligible for liver transplant, for example (7, 45). Palliative care aims to help people to manage their symptoms and make plans for what they want if they become more unwell (45). We should choose the words we use with care and consider a person's understanding of the terms we use. Palliative care can be a difficult term for people to hear, and some people worry that palliative care means that they are at the end of their life or healthcare professionals are 'giving up' (46, 47).

Palliative care is broad, and includes supporting people with physical, psychosocial and spiritual aspects of their life (44, 45). Palliative care can involve hoping for the best but planning for the worst; for example, cessation of harmful or dependent drinking may still make a difference (6, 44). People can receive palliative care, for example pain management, while also receiving treatment for reversible illnesses, for example infection (7, 45). Recognising people's care needs can also help with securing them more support in the community and more appropriate accommodation, to help to improve their quality of life (12).

Looking after yourself

Caring for people experiencing homelessness and poor physical health is demanding and can be emotionally challenging (48). Supporting someone who is unwell can be worrying, and the people we serve can feel stigmatised (9). Small changes can make a difference, you can only do so much, remember your colleagues, and debrief where you can (12).

Thank you for all that you do, and please see the resources below for further advice.

Feedback

Your feedback would be a great help and inform the development of this resource. To feedback please use the link or QR code below:

https://forms.office.com/e/NJLp2nhCzr

Further resources

- Homeless Link. Holding conversations about health. Available from: Holding conversations about health | Homeless Link
- British Liver Trust. Cirrhosis. Available from: Cirrhosis - British Liver Trust
- British Liver Trust. Cirrhosis and diet. Available from: Cirrhosis and diet - British Liver Trust
- Groundswell. Alcohol related brain damage: information for patients and carers. Available from: Alcohol related brain damage: information for patients and carers - Groundswell
- Alcohol Change. How to use legal powers to safeguard highly vulnerable dependent drinkers. Available from: How to use legal powers to safeguard highly vulnerable dependent drinkers | Alcohol Change UK
- British Liver Trust. Thinking ahead. Available from: Thinking ahead - British Liver Trust
- Homeless Link. Staff wellbeing in homeless services. Available from: Staff wellbeing in homelessness services | Homeless Link

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