5 Hepatitis Treatment

IN THIS CHAPTER

- Overall Treatment Recommendations
- Treatment for Hepatitis A
- Treatment for Hepatitis B
- Treatment for Hepatitis C
- People Receiving Medication-Assisted Treatment for Opioid Dependence
- People Who Relapse to Substance Use
- People Who Have HCV/HIV Co-Infection
- People Who Have Co-Occurring Behavioral Health Disorders
- Chapter Summary

It was late July 2006 and I was ready to commit to getting myself better. I remember taking my first ribavirin pill and knowing that this is the start of a new life for me. I had help with my first pegylated interferon shot. I scheduled my shots for Friday nights just in case I got sick afterwards. I was nervous and scared. That first night I had a fever and just felt very tired and weak. But the end of the next day I was ok.… The first doctor's appointment after starting treatment went very well. My liver enzymes were already back to normal. I felt so happy. Twelve weeks into treatment they checked my viral count and it was undetectable. I knew I was going to make it through this.

—Kathleen (Hepatitis C Support Project, 2006)

Overall Treatment Recommendations

Clients who become infected with hepatitis and seek antiviral treatment—especially for hepatitis C—face long and in some cases difficult treatment regimens that, in the end, might not clear the virus from their bodies. Clients in treatment for chronic viral hepatitis might have to manage serious side effects of the treatment while striving to manage their behavioral health issues. People who decide to delay or forgo hepatitis treatment must learn new skills to live with their disease.

Facing these difficult decisions, some clients will feel overwhelmed, fearful, and hopeless. Counselors who understand hepatitis treatment options and their side effects can better support their clients in recovery from substance use disorders (SUDs).

Clients who have any form of viral hepatitis will benefit from:

- Resting.
- Avoiding alcohol and discontinuing drug use.

- Avoiding other substances that can harm the liver, including acetaminophen (Tylenol) in large doses.
- Eating nutritious, well-balanced meals.
- Getting vaccinated against hepatitis A and hepatitis B.

Treatment for Hepatitis A

Because hepatitis A is always acute, its treatment is generally limited to addressing symptoms, monitoring liver health, and letting the virus run its course. Clients recently exposed to hepatitis A virus (HAV) might be advised by their medical care providers to receive the HAV vaccination or immunoglobulin injection to reduce the likelihood of becoming ill (Franciscus, Highleyman, & Kukka, 2007; Victor et al., 2007).

In rare cases, hepatitis A leads to severe liver problems that require medication, hospitalization, or transplantation. If left untreated, liver problems can lead to life-threatening conditions. Therefore, a client who might have been infected with HAV should seek the care of a medical care provider.

Suggestions for counseling clients who have hepatitis A include the following:

- Assure clients that their symptoms are temporary.
- Reinforce prevention with messages such as, "You will recover from hepatitis A; let's talk about what you can do to make sure you never get the more serious types. A vaccine against hepatitis B can protect you, and there are ways to reduce the risk of getting hepatitis C."
- Encourage clients to take care of themselves. Say, for example, "Your body is working hard to fight off the hepatitis infection. It is very important that you take care of yourself now."
- Reinforce the importance of maintaining SUD recovery activities. Say, "Your liver is injured. If you drink or use drugs, you could make it worse. Let's talk about everything you're doing to stay free of alcohol and other substances."

Treatment for Hepatitis B

All cases of hepatitis B begin as an acute infection and most cases resolve without treatment. However, if the person does not recover completely within 6 months, the infection is considered chronic. Clients diagnosed with chronic hepatitis B should get regular monitoring by a medical care provider, and some might undertake treatment. Several medications are used for chronic hepatitis B. Treatment might be started with any of the U.S. Food and Drug Administration (FDA)-approved antiviral medications, but interferon, tenofovir, or entecavir are preferred (Lok & McMahon, 2009). These medications might be prescribed individually or in combination (see Exhibit 5-1).

Any treatment for hepatitis B has benefits and risks. Antiviral treatment generally lasts 6 months–1 year and can extend for years longer (possibly for life). Managing side effects can be difficult. The decision to undertake treatment should not be made in haste because ending some antiviral medications early can reactivate the HBV infection. Many people elect to delay hepatitis B treatment until they are better able to adhere to it. Exhibit 5-2 provides counseling tips for addressing clients' concerns about hepatitis B.

Treatment for Hepatitis C

Because most people who have hepatitis C have mild symptoms or no symptoms, clients often do not know they are infected and, therefore, do not seek hepatitis treatment until severe hepatitis C virus (HCV)-related

Exhibit 5-1 Medications for Chronic Hepatitis B

Medication	Administration	Side Effect
Short-acting interferon	Injected several times a week for 6 months–1 year, sometimes longer	Depression, suicidal behavior, aggression, homicidal behavior, flu-like symptoms, diarrhea, nausea, taste alteration, anorexia, weight gain, liver and biliary system disorders, bone pain, arthritis, leg cramps, blood disorders
Long-acting (pegylated) interferon	Injected once per week for 6 months–1 year	Dry mouth, flushing, headache, fatigue, malaise, dizziness, hypothyroidism, nausea, anorexia, diarrhea, blood disorders, liver and biliary system disorders, musculoskeletal system disorders, insomnia, depression, anxiety, emotional lability, impaired concentration, menstrual disorders, coughing, sinusitis, rash, dry skin, taste alteration, blurred vision, conjunctivitis
Lamivudine	Tablet taken once per day for 1 year or longer	Headache, fever, nausea and vomiting, malaise, fatigue, cough, diarrhea, insomnia, rash, shortness of breath; hepatitis B virus (HBV) infection might worsen if medication is stopped
Adefovir dipivoxil	Tablet taken once per day for 1 year or longer	Lactic acidosis, fluid retention, nausea and vomiting, pain in abdomen or stomach, jaundice, drowsiness, kidney problems, liver problems; hepatitis might worsen if medication is stopped
Entecavir	Tablet taken once per day for 1 year or longer	Lactic acidosis, liver problems, headache, fatigue, dizziness, nausea; hepatitis might worsen if medication is stopped
Telbivudine	Tablet taken once per day for 1 year or longer	Fatigue, cough, diarrhea, headache, abdominal pain, rash, fever, back pain, muscle pain, sore throat, joint pain, nausea, lactic acidosis, liver problems; hepatitis worsens if medication is stopped
Tenofovir	Tablet taken once per day for 1 year or longer	Lactic acidosis, liver problems, serious psychiatric symptoms, depression, diarrhea, dizziness, fatigue, headache, kidney problems, nausea, vomiting, stomach pain, rash, insomnia, weakness, bone problems (pain, softening of bones, decreased bone density); hepatitis worsens if medication is stopped

Source: *Physicians' Desk Reference 2010* (64th ed.), 2009.

Exhibit 5-2 Counseling Tips for Addressing Concerns About Chronic Hepatitis B

- Help clients understand that although their symptoms might have diminished, they remain infected. Explain, "I know you feel better now, but remember that you still have the infection and could spread it to others. Have other members of your household been tested or vaccinated?"
- Help clients understand the importance of seeing a medical care provider for regular monitoring. Ask, "Have you talked to your doctor lately about your chronic hepatitis B? What decisions have you made about hepatitis treatment?"
- If clients are treating their hepatitis B, ask, "What are you doing to help yourself adhere to treatment?"
- For clients who do not have hepatitis A, hepatitis C, or HIV co-infection, stress the importance of prevention. Say, "It's great that you are addressing your HBV infection. It is very important that you make sure you don't get other forms of hepatitis or HIV. These can make your HBV infection worse. Let's make a plan to make sure you don't contract another infection and that you get vaccinated."
- Reinforce the importance of maintaining substance abuse recovery activities.

diseases have produced other symptoms or their infections are found in a screening test. Approximately one in five people clears HCV infection without treatment. In rare cases, acute HCV infection quickly leads to liver failure (for example, following reinfection after a liver transplant). Therefore, any client diagnosed with hepatitis C is a potential candidate for antiviral treatment.

Acute Hepatitis C

Treating hepatitis C early might greatly increase a patient's chances of sustained virologic response (SVR) and prevent long-term liver damage (Kresina et al., 2008). Response rates in acute HCV infection are radically better than in chronic infection, but to maximize the likelihood of viral clearance, treatment should be initiated within the first 20 weeks. Therefore, counselors should encourage clients who have hepatitis C to seek specialized care immediately. No clear regimen exists for treating acute hepatitis C. Currently, treatment is a shortened form (approximately 12 weeks) of the antiviral treatment for chronic hepatitis C.

Chronic Hepatitis C

Treatment options for people who have chronic hepatitis C include:

- Antiviral treatment. A course of potent medications might slow disease progression or eliminate the disease.
- Deferring treatment. Not all patients want treatment, even if it is advised.
- Liver transplantation. For people who have end-stage liver disease, transplantation surgery might be the only option. However, the waiting list for such surgery can be long.

Antiviral Treatment

Antiviral treatment helps the body fight off HCV infection (i.e., weakens the virus). When the virus is not detected in the blood of a patient who is receiving antiviral treatment, and when it remains undetected for 6 months after treatment is completed, the patient is said to have an SVR. The virus does not return in 95 percent to 99 percent of patients who achieve an SVR, and it does not appear to cause further damage (McHutchison et al., 2006; Swain et al., 2007).

However, an SVR does not make a person immune to reinfection. If reexposed to HCV, a person could be reinfected. Clearing HCV does not make a person immune to other forms of hepatitis or to liver disease. For instance, drinking heavily can still cause liver damage, even after successful treatment of hepatitis C.

The standard recommended treatment for hepatitis C is a combination of pegylated interferon injections and ribavirin (Exhibit 5-3). However, in 2011, the FDA approved two new oral medications, *boceprevir* and *telaprevir*. They represent a new type of medication for HCV infection that works differently than interferon and ribavirin and works in combination with those traditional medications (FDA, 2011a; FDA, 2011b).

Hepatitis C treatment works well for most people, whereas for a minority it produces little or no improvement. Counselors can help their clients improve their chances for successful hepatitis treatment by encouraging them to:

- Take all medications as prescribed, keep all medical appointments, and reschedule missed appointments as soon as possible.
- Maintain a healthful lifestyle.
- Learn about HCV medications, including special risks and warnings even after antiviral treatment has finished.
- Always carry a list that includes the prescribing medical care provider's name and phone number and the names and dosages of the medications.
- Check with their medical care provider before starting new medicines, including vitamins, supplements, herbal remedies, prescription medications, and over-the-counter medications.
- Avoid drinking alcohol or taking drugs with no known medical use.
- Maintain as many recovery activities as possible.
- Report side effects to their medical care provider.

Side effects of antiviral medication differ from person to person. Some side effects are mild to moderate and remain so. But in some people, side effects become more severe with continued hepatitis treatment. HCV treatment is long, and having to manage side effects for the duration of treatment can strain individuals and those they turn to for support. Side effects—particularly flu-like symptoms and

Exhibit 5-3 Medications Approved for Treating Chronic Hepatitis C

Medication	Administration
Long-acting (pegylated) interferon	Injected weekly for 6 months–1 year
Ribavirin	Tablet or capsule taken orally, usually twice per day for 6 months or longer
Boceprevir	Capsule taken orally, three times per day (with food). The length of dosing time varies based on viral response and the extent of liver disease. It must be taken in combination with interferon and ribavirin.
Telaprevir	Tablet taken orally, three times per day (with food) for 12 weeks (another 12–36 weeks may be required, depending on viral response). It must be taken in combination with interferon and ribavirin.

depression, which are common side effects of interferon—are the primary reason people stop hepatitis C treatment. Because people are more likely to clear the virus if they complete their antiviral treatment, it is crucial that they get the support they need to manage side effects so the side effects do not cause them to discontinue treatment (Exhibit 5-4).

Although most side effects are manageable by the patient, others require medical intervention. Conditions requiring medical attention include the following:

- Depression or mania. Counselors need to be particularly attuned to the development of these neuropsychiatric symptoms, routinely assess for them, and refer clients for mental health treatment as appropriate.
- Anemia (reduced red blood cell count). Ribavirin often leads to anemia that can cause fatigue and increase the risk of chest pain, shortness of breath, or heart attack.
- Neutropenia (reduced white blood cell count resulting in an increased risk of infections). Neutropenia is rarely severe enough to terminate antiviral treatment.
- Pulmonary conditions. Shortness of breath or cough might develop during hepatitis treatment. People who develop these symptoms should consult their medical care provider to rule out other causes.
- Eye problems. Antiviral treatment can induce or aggravate eye problems, especially in people who have diabetes or hypertension. Clients who complain of blurry vision, any obstruction to vision, or loss of vision should receive an immediate medical examination.

Appendix D provides practical approaches to managing common side effects of hepatitis C antiviral treatment. The U.S. Department of Veterans Affairs, National Hepatitis C Program, offers information on managing side effects on its Web site (http://www.hepatitis.va.gov/pdf/treatment-side-effects.pdf).

Deferring Treatment

Some clients might choose to postpone antiviral treatment. They might have more urgent health problems to tend to, or they might feel they are not strong enough in their SUD recovery to undergo hepatitis treatment.

Exhibit 5-4 Adhering to Antiviral Treatment

Substance abuse treatment counselors can help clients adhere to antiviral treatment by:

- Explaining intended effects and side effects of medication.
- Paying attention to side effects and advising clients to report them to their medical care providers.
- Being respectful and nurturing.
- Providing reminder services (e.g., cell phone reminders, pill organizer boxes).
- Addressing depression, when appropriate.
- Striving for multidisciplinary collaboration among all professionals caring for the client.

Where possible, observed dosing might also encourage treatment adherence.

Source: Robaeys & Buntinx, 2005

Medical care for clients who choose to defer treatment generally involves:

- Getting regular medical evaluations.
- Having liver enzyme and cancer screening tests once or twice every year.
- Getting a liver biopsy every 3–5 years.
- Adopting a lifestyle that promotes liver health.

It is critical for clients with compromised liver functions to take precautions against contracting HIV and to get vaccinated against HAV and HBV. Clients who are co-infected with HCV and HIV should be encouraged to get treated for their HIV. Clients who are HIV negative should be retested for HIV at the advice of their medical care provider. Counseling tips for working with clients who have chronic hepatitis include:

- Help clients understand that they should see a medical care provider regularly. "When was the last time you saw your doctor about your hepatitis?"
- Encourage patients to adopt habits that support liver health, such as avoiding alcohol and eating a healthful diet.
- Help clients think about how to create or improve their support networks so that no matter what hepatitis treatment choices they eventually face, they have help from others. "Would you like to create a list of people you know and list the help they could provide you as you cope with hepatitis?"

Liver Transplantation

Although many people who have hepatitis C respond to antiviral treatment or can live indefinitely with their illness, in some people, liver damage will be extensive and a liver transplantation is needed. Counselors should be prepared to support clients who have been told that liver transplantation surgery is necessary. They might also need to educate the transplantation team about the value of medication-assisted treatment (MAT) for opioid dependence. The following factors influence a patient's acceptance to a transplant waiting list:

- Urgency of need
- Willingness and ability to endure the extensive preoperative and postoperative tests and procedures
- Willingness and ability to follow physician's instructions
- Willingness to adjust to the postoperative lifestyle
- Access to caregivers who can provide support during the lengthy transplantation process
- Ability to stop all alcohol use

Patients obtaining a liver transplant generally go through the following phases:

1. Contacting a transplant center. People who have been told that a liver transplant is their only hope should obtain a physician's referral to a transplant center as soon as possible. Each transplant center has its own criteria for placing patients on its waiting list. Clients who are not accepted for a waiting list might be deferred until the conditions that prevented the client from being accepted are resolved.
2. Waiting for the transplant. The time between being put on a waiting list and receiving the transplant can be as short as a few days or as long as several years. While waiting, patients must keep their records updated at the transplant center and stay as healthy as possible to be ready for surgery when a liver becomes available. They must avoid consuming alcohol or drugs and continue to take medications as prescribed.

Complementary or Alternative Medicine

Clients might turn to complementary or alternative medicine (CAM), believing it will bolster nutrition, attack the hepatitis, protect or strengthen the liver, or mitigate side effects of viral hepatitis treatment. As many as 20 percent of people who have liver disease use herbal remedies. No conclusive scientific evidence supports the use of CAM for hepatitis C; herbal treatments, dietary supplements, alternative medicines, and acupuncture have not been proven to cure or relieve symptoms of hepatitis C (Dieticians of Canada, 2003; National Center for Complementary and Alternative Medicine, 2008). In addition, some herbal treatments might harm the liver, further damaging an already compromised organ. Plants and alternative treatments that can harm the liver are provided in Appendix E.

3. Getting the transplant. The surgery itself takes up to 12 hours. Recovery can take months.
4. Living with the transplant. Following a transplantation procedure, patients must take medication for the rest of their lives to reduce the chance of their bodies rejecting the donated liver. This medication weakens the immune system. Patients might experience an array of intense emotions following the surgery. Counselors can help clients explore their emotions while developing realistic expectations for their futures. Liver transplants buy some time, but not necessarily a lot of it. Within 5–10 years, many patients contract hepatitis C again and, because medications suppress their immune response, the disease progresses much more rapidly (Berenguer et al., 2006; National Institutes of Health [NIH], 2002). In fact, the recurrence of HCV after a transplant is universal unless viral eradication occurs before the transplant. In such cases, progression of the disease might be rapid, sometimes resulting in cirrhosis within 1 year of transplant.

Counselors can play a critical role with clients who have end-stage liver disease or liver cancer and are not likely to obtain a liver transplant in time, who have been rejected from waiting lists, or who cannot go through the procedure. Specifically, counselors can help clients with end-of-life decisions, help ensure that those decisions are respected, and obtain palliative care. This work might be enhanced by collaboration with medical care providers, social workers, ethicists, family, hospice care, spiritual advisors, and therapists. Resources for liver transplantation are provided in Appendix C.

People Receiving Medication-Assisted Treatment for Opioid Dependence

Some medical care providers and clients believe that people on methadone or buprenorphine are ineligible for, or will not benefit from, antiviral treatment. However, research suggests that treatment for hepatitis C can be effective for people receiving MAT for opioid dependence (Kresina, Bruce, Cargill, & Cheever, 2005; Mauss, Berger, Goelz, Jacob, & Schmutz, 2004; Sylvestre, Litwin, Clements, & Gourevitch, 2005). NIH (2002) hepatitis C treatment guidelines state that MAT has been shown to reduce risky behaviors that can spread HCV infection, and it is not a contraindication to HCV treatment.

Many clients receiving methadone, buprenorphine, or naltrexone might want antiviral treatment, but it is not offered to them by their medical care providers. Counselors can provide a crucial service by informing clients

that their receipt of MAT for opioid dependence does not exclude them from hepatitis treatment. Counselors can help clients search for medical care providers who are open to assessing them for hepatitis treatment, and counselors can advocate treatment if they perceive that clients are being discriminated against because of their past or current substance use status.

Adherence to antiviral treatment is an important factor in treatment success, and studies show that individuals receiving methadone treatment can adhere to treatment for hepatitis C (Schaefer et al., 2007; Sylvestre & Clements, 2007). Modifying treatment for clients receiving MAT for opioid dependence might help them adhere to antiviral treatment (Exhibit 5-5). Chapter 7 provides more information on program-level modifications.

People Who Relapse to Substance Use

People who relapse, continue to use, or have only recently quit using drugs or alcohol are often denied treatment for viral hepatitis. One study found that more than one-third of substance abuse treatment programs listed recent drug use as a reason their clients had not been treated for HCV infection (Astone-Twerell, Strauss, Hagan, & Des Jarlais, 2006). Several factors determine whether a person is a good candidate for antiviral treatment, and recovery status is just one factor. Clients should not be denied hepatitis treatment for this reason alone. Other misperceptions abound. NIH (2002) indicates that treatment of chronic hepatitis C can be successful even when patients have not abstained from active drug use.

Exhibit 5-5 SUD Treatment Modifications for Clients Receiving MAT for Opioid Dependence

Type of Interaction	Recommendation
Support meetings, peer support, and counseling sessions	These activities might help clients cope with side effects and urges to relapse that result from injecting medication (Litwin et al., 2005). If an opioid treatment program (OTP) is the only source of counseling, additional referrals for more intensive individual or family counseling might help clients with the multiple psychosocial issues that might arise.
Flexible counseling schedules while maintaining medication schedules	If licensure standards allow, 15-minute sessions four times monthly instead of monthly 1-hour sessions might be more realistic for clients with fatigue from chronic hepatitis or antiviral treatment. Programs could allow one outside support group meeting to substitute for a monthly group session.
Flexible individual dosing regimens	Clients in OTPs who undergo treatment for HCV infection often report increased opioid cravings and request increased methadone doses. It is unclear why hepatitis treatment is associated with increased cravings, but for some clients the side effects of antiviral medications might mimic withdrawal. Increasing methadone doses might help relieve the flu-like side effects caused by hepatitis treatment. Research has not confirmed that interferon lessens the effects of methadone.
Observed dosing by staff	Some people might better adhere to antiviral treatment if they take their oral medication or interferon in the presence of SUD treatment staff. Residential programs and OTPs might be better able to offer medication observation than non-OTP outpatient programs.

Misperception 1. Antiviral Treatment Is Ineffective in People Who Continue to Abuse Substances

People who have recently used injection drugs or who relapsed to drug use during hepatitis treatment have SVRs comparable with SVRs in other groups (Robaeys & Buntinx, 2005; Van Thiel et al., 2003). However, SVR is more likely in people who have at least 6 months of abstinence than in people who continue to abuse substances regularly (Robaeys & Buntinx, 2005).

Misperception 2. People Who Abuse Substances Do Not Adhere to Antiviral Treatment

Research suggests that, with support, people who use substances can adhere to antiviral treatment. Clients who are not in OTPs are more likely to discontinue treatment early, particularly in the first 8 weeks of therapy (Schaefer, Heinz, & Backmund, 2004). Sylvestre et al. (2005) found that individuals with occasional drug use had adherence rates that were comparable with rates of those who were abstinent. However, people who relapsed to regular heavy drug use showed a significantly lower level of adherence.

Misperception 3. People Who Continue to Abuse Substances Will Be Reinfected With HCV Even if SVR Is Achieved

Although data are limited, evidence suggests that the risk of reinfection with HCV is low, even among people who relapse to injection drug use (Backmund et al., 2004; Dalgard et al., 2002; Robaeys & Buntinx, 2005; Schaefer et al., 2004).

Strategies for helping clients who relapse to substance use include:

- Developing an SUD treatment plan that includes a range of effective treatment options; additional testing to evaluate HAV, HBV, and HCV status; and a hepatitis treatment referral.
- Using motivational interviewing to engage clients in treatment to improve their quality of life.
- Providing education on HCV transmission and treatment and helping with psychosocial difficulties.
- Recognizing clients' ambivalence, efforts in SUD treatment, and attempts to reduce substance use.
- Referral to mental health treatment, if warranted.

People Who Have HCV/HIV Co-Infection

People who are co-infected with HCV and HIV must adjust to two major diagnoses that can have difficult treatment regimens. In clients with HIV, hepatitis C treatment is generally advised when the likely benefits outweigh the risks of serious side effects (Ghany et al., 2009). Approximately 35 percent of people who have HCV/HIV co-infection achieve an SVR (Sherman, 2007), and this success rate might be improved with new medications.

Counselors can help clients understand the implications of HCV/HIV co-infection and provide support. Strategies to address the issues include the following:

- Educate clients about HCV/HIV co-infection. Many people who have HIV might be aware of the health consequences of HIV but be unaware that HIV infection greatly increases the progression of HCV, increasing the likelihood of

cirrhosis, end-stage liver disease, and liver cancer. In fact, liver disease—from underlying hepatitis B, C, or alcohol abuse—is the major non-AIDS cause of death in HIV-infected persons.

- Stress the importance of being tested for hepatitis and receiving antiviral treatment as soon as possible. All individuals who are infected with HIV should be screened annually for HCV.
- Screen for and address cognitive deficits. People who are co-infected are more likely to suffer cognitive deficits in multiple areas, including learning, abstraction, motor abilities, memory, and information processing (Cherner et al., 2005). Counselors should be attentive to signs of these problems, conduct assessments, help clients cope with these issues, and advocate on behalf of their clients with HCV treatment providers.
- Help clients manage side effects. Individuals who have HIV often receive medications that can have significant side effects. People who are co-infected with HCV and HIV might experience many side effects with antiviral treatment (Gish, Afdhal, Dieterich, & Reddy, 2005).
- Encourage clients to seek and receive compassionate medical care. Medical care providers who have not received training in managing HCV/HIV co-infection can present barriers to effective hepatitis treatment. Clients might also be negatively influenced by judgmental approaches, frustration, and unrealistic expectations for treatment (Kresina et al., 2005). These attitudes can result in distrust and poor communication between client and provider, as well as in frustration and lack of adherence by the client. Counselors can help clients find medical care providers who are familiar with and able to treat this population.
- Help coordinate care. People who have HCV/HIV have multiple needs requiring an array of medication and treatment. Counselors can coordinate with medical care providers to address these needs. A multidisciplinary approach can help clients access the treatment that they need and increase treatment retention.
- Emphasize adherence to treatment. Effective results depend on close adherence to all treatment regimens. Counselors should explain the importance of taking medications exactly as directed.

People Who Have Co-Occurring Behavioral Health Disorders

Studies have demonstrated that completion and outcome of antiviral treatment can be similar for clients who have co-occurring substance use and mental disorders compared with clients who do not have these co-occurring conditions (Chainuvati et al., 2006; Guadagnino, Trotta, Carioti, Caroleo, & Antinori, 2006; Sylvestre & Clements, 2007). People who have and do not have psychiatric histories had similar rates of HCV treatment adherence. In people who have depressive symptoms, medications to treat depression should be given early in HCV treatment to improve treatment adherence. Freedman and Nathanson (2009) suggest that optimal results are obtained when coordinated substance abuse and psychiatric treatment occurs before and during treatment for hepatitis C.

Counselors can help their clients with co-occurring substance use and mental disorders cope with hepatitis. Suggestions for initiating conversations follow:

- "Your doctor expressed some concern about your candidacy for treatment because of your depression. How do you see things?"

- "What would be helpful for your depression?"
- "Your doctor says you can go ahead with hepatitis treatment. What do you think you need to do for this to be successful?"

Information specific to supporting clients who have co-occurring substance use and mental disorders and hepatitis is provided in Appendix F.

Chapter Summary

- Hepatitis A rarely requires treatment.
- Chronic HBV can be treated with several oral antivirals; currently, tenofovir or entecavir are the recommended first-line options for initial oral treatment options.
- Hepatitis C can be treated effectively if discovered early (i.e., in its acute phase), but it is rarely discovered early.
- Treatment for chronic hepatitis C is lengthy, can cause side effects that are difficult to manage in some people, and requires good adherence. It is not appropriate for everyone.
- Some clients might elect (or be advised) to defer antiviral treatment.
- For some people, a liver transplant is the only option. Counselors can help clients through the process.
- Clients in OTPs are eligible for antiviral treatment.
- Clients who use substances or relapse can achieve SVR comparable with that of other groups if they adhere to hepatitis treatment.
- HCV/HIV co-infection can be very serious.
- Clients with co-occurring behavioral health disorders can adhere to—and respond to—antiviral treatment.

Appendix E—Medicinal Plants/Alternative Treatments Potentially Harmful to People Who Have Hepatitis

Clients who have hepatitis should check with their medical care providers before taking nutritional supplements or alternative treatments. The substances listed below might harm the liver.

Artemisia (mugwort, sagebrush, wormwood)

Aspalathus linearis (bush tea)

Atractylis gummifera (pine thistle)

Callilepis laureola

Crotalaria

Ephedra sinica (ma huang)

Gnaphalium (Gordolobo herbal tea)

Hedeoma (pennyroyal, squaw mint oil)

Heliotropium

Iron supplements

Kombucha mushroom tea

Larrea tridentata (chaparral leaf, creosote bush, greasewood)

Margosa oil

Mate (Paraguay) tea

Myristica (nutmeg)

Piper methysticum (kava)

Sassafras

Scutellaria lateriflora (skullcap)

Senecio aureus

Senecio jacobaea (tansy ragwort, variation of ragwort)

Senna

Symphytum officinale (comfrey)

Valeriana officinalis (valerian root)

Viscum album (mistletoe)

Vitamin A supplements

Yerba tea

Source: *Alternative and Complementary Therapies,* U.S. Department of Veterans Affairs, http://www.hepatitis.va.gov/patient/alternative-therapies/index.asp

Appendix D—Managing Side Effects of Hepatitis C Antiviral Treatment

Side Effect	Potential Management Strategy
Bad taste in mouth	• Try sugar-free lemon drops or lemon wedges. • Eat a small amount of yogurt ½ hour before meals. • Eat dark chocolate or drink lemonade or cranberry juice. • Eat food cold or at room temperature. • Brush teeth frequently. • Use plastic utensils if experiencing metallic taste.
Cough	• Increase fluid intake (noncaffeinated). • Use a humidifier. • Try sugar-free hard candy or cough drops.
Diarrhea	• Eat more fiber foods like bananas, white rice, applesauce, and white toast (the BRAT diet). • Avoid spicy or acidic foods (like citrus) and dairy products for several days after diarrhea resolves. • Drink plenty of fluids (six to eight 8-oz glasses/day).
Dry mouth or mouth ulcers	• Brush teeth frequently, especially after eating. • Avoid mouthwash containing alcohol. • Drink plenty of water or use ice chips or sugar-free lemon drops. • Ask medical care provider about medications for mouth sores/ulcers.
Dry skin/rashes	• Avoid long, hot showers or baths. • Use moisturizing soap and lotions, sunscreen, and mild unscented laundry detergents. • Avoid fabric softeners. • Rub or press on the itchy areas rather than scratch them. • Use petroleum jelly on affected areas and ask medical care provider about other solutions.
Fatigue	• Try low-impact exercise such as walking or low-impact aerobics, if approved by medical care provider. • Drink plenty of fluids and get plenty of rest. • Lessen work schedule if possible. • Eat well-balanced meals every day.

Side Effect	Potential Management Strategy
Fever/Chills	• Notify medical care provider if the temperature is above 101°F for more than 24 hours. • Inject interferon at bedtime. • Take acetaminophen 30–60 minutes before weekly interferon injection and repeat 4–6 hours later, if approved by medical care provider. • Use ibuprofen or naproxen, if approved by medical care provider. • Try a cool sponge bath, ice pack, or cold pack. • Use extra blankets and clothes.
Hair thinning or hair loss	• Avoid harsh hair products such as dyes, perms, gels, sprays, and mousses. • Use mild shampoo such as baby shampoo. • Avoid braiding hair. • Use a wide-tooth comb or soft brush.
Headaches	• Drink plenty of fluids and get plenty of rest. • Try taking acetaminophen or ibuprofen, if approved by medical care provider. • Keep lights dim, wear sunglasses, or stay in darkened rooms.
Injection site reactions	• Warm the vial by gently rolling it in between two hands for a minute before injecting. • Rotate injection sites—thigh, upper arm, and abdomen. • Do not inject into an area that is irritated, bruised, or red. • Do not rub injection site. • Apply a cold pack. • Apply hydrocortisone cream or other medications, if approved by medical care provider.
Insomnia	• Go to bed and get up at the same times every day. • Do not read or watch TV in bed. • Limit daytime naps. • Take ribavirin in the late afternoon instead of before bedtime, if it causes the jitters. • Limit fluid intake for 2 hours before bedtime to avoid getting up to go to the bathroom. • Avoid caffeinated products, especially in the afternoon and at night. • Avoid heavy meals close to bedtime. • Take warm baths, read or listen to music, get a massage. • Drink a glass of warm milk (contains tryptophan, a natural sleep agent). • Take diphenhydramine (Benadryl) or other medications recommended by medical care provider.

Side Effect	Potential Management Strategy
Muscle and body aches	• Try low-impact exercise such as walking or low-impact aerobics, if approved by medical care provider. • Drink plenty of fluids, at least six to eight noncaffeinated 8-oz glasses/day. • Apply warm moist heat or massage affected areas.
Nausea and vomiting	• Take ribavirin with food. • Eat small meals. • Avoid foods or smells that trigger nausea; eat cold foods and avoid cooking smells. • Eat healthful foods; avoid greasy, spicy, acidic, or sweet foods. • Try ginger tea, ginger ale, or gingersnaps. • Eat crackers or dry white toast for morning nausea.
Poor appetite	• Eat small, more frequent (4–6) meals throughout the day. • Try protein drinks and snacks (cheese, peanut butter, eggs). • Eat whatever appeals to you even if not hungry; eat a variety of foods. • Walk before a meal.

Source: National Hepatitis C Program, U.S. Department of Veterans Affairs, http://www.hepatitis.va.gov/pdf/treatment-side-effects.pdf