CONNECTING CARE PODCAST // EPIDSODE #8 // TRANSCRIPTS

Holistic Care for Hepatitis C: Prevention, Treatment, and Policy Considerations.

Dr. Alex Walley:

Treatment for Hepatitis C is providing hope for many patients and allowing them to live long and healthy lives. However, treatment alone is insufficient and should be accompanied by a comprehensive prevention package.

Dr. Jessica Taylor:

We sometimes present these medications as... I mean, I think I used the word miracle already on this podcast as an easy cure and incredibly effective, and that is so true. And it is also true that if people don't have the other resources that they need to support themselves to manage risk, to reduce harms, these medications will not have the impact that they could have.

Dr. Alex Walley:

You're listening to Connecting Care. I'm Alex Walley, an HIV primary care doctor and an addiction medicine specialist in Boston, Massachusetts. Today, my colleagues Dr. Jessica Taylor and Dr. Sim Kimmel join me for the first in a two-part series about treatment for Hepatitis C among people with opioid use disorder. During today's podcast, we'll discuss new Hepatitis C treatment options, policy and cost considerations, and novel venues and approaches to deliver Hepatitis C treatment to people who inject drugs.

Dr. Alex Walley:

You're listening to Connecting Care. I'm Alex Walley, an HIV primary care doctor and addiction medicine specialist in Boston, Massachusetts. I'm joined again by my colleagues, Dr. Jessica Taylor and Dr. Sim Kimmel. So far in this podcast series, we have focused on HIV treatment and prevention. Today, we're going to delve into another chronic viral infection with an out-sized impact on people who use drugs. Hepatitis C. One theme that has come up in past podcasts is that of competing priorities. We've talked about people who use opioids and are at risk for HIV and how they often have multiple simultaneous urgent medical needs, including overdose prevention, starting medications for opioid use disorder, wound care, and HIV prevention or treatment.

Dr. Alex Walley:

When we think about Hepatitis C, we're thinking about a chronic viral infection that tends to cause complications over the course of many years. So Sim, I want to go to you first and hear more about how Hepatitis C fits into this picture and why providers and public health systems need to prioritize HCV treatment.

Dr. Sim Kimmel:

Thanks, Alex. I'm really excited to be here today with you both and have a chance to talk about Hepatitis C. One of the things about Hepatitis C is that it was really kind of Canary in the coal mine. So there were rising cases of Hepatitis C, particularly among young people. And we saw those increases before we saw the rise in opioid overdose deaths. So for people who are really paying attention to this, these cases are really a marker of risky injection drug use or injection drug use that could lead to overdose. So I think Hepatitis C is really important. It's particularly affecting young people. There was a kind of epidemiologic hump of Hepatitis C among older adults, sort of people who were using drugs in the '60s and '70s. And now there's another epidemiologic increase among younger people. And that has huge public health implications because Hepatitis C is a risk factor for chronic liver disease, for certain types of liver cancer.

Dr. Sim Kimmel:

Some people with Hepatitis C can get very sick when they first get infected. Although that's not all that common and it's a risk factor for HIV infection in the future. And also, as I said, for opioid overdose. So I think it's a real important priority for those of us who are working with people who inject drugs. And importantly, Hepatitis C treatment, it can also be a hook for patients, so that prompts them to come to care. There's some people who maybe are not that interested in stopping their substance use, but particularly are very concerned about the complications of Hepatitis C. And they come in and say, "Look, doc, I'm really worried about Hepatitis C." And it's a chance to talk to them and talk to them about their health and engage them.

Dr. Alex Walley:

I'm glad you bring up this idea of Hepatitis C as a hook, because this is an example of really trying to tune into the population that you're trying to help. I can remember really like in the 2000s, early 2010s, there was a lot of structuralized education and prevention messaging around HIV. And that was the time actually when the infection rates among people who inject drugs, the HIV infection rates had actually decreased substantially due to, I think, some earlier expansion and treatment for opioid use disorder and some expansion of syringe service and other harm reduction services. Turned out it was not nearly the expansion that we needed to confront the current epidemic. But at that time, I had a lot of patients who are basically bored of hearing about HIV, and it was really hard to engage them around HIV risks because they had heard it all and knew it all. And didn't really know that many new people who are getting infected.

Dr. Alex Walley:

But when I started talking to them about Hepatitis C, that's when they really tuned in, and that's because lots of people were getting Hepatitis C. It's basically a marker, like you said, of injection drug use. And I think what we're going to get into a little bit more is that the ability to treat and even cure Hepatitis C was rapidly evolving over that time. So I was talking a little bit about when I trained, that was when the earlier generations of Hepatitis C medications were being developed and first implemented. And they usually required months of therapy and had major side effects. And that really made it less tolerable for a lot of patients. And I think dampen the enthusiasm for a lot of providers to even try to offer this treatment to patients.

Dr. Alex Walley:

Furthermore, and most importantly to me, was that the success rates of the earliest treatments for Hepatitis C, which was Interferon, which was an injection that made people feel really bad. And Ribavirin, which is a pill, but has substantial chances of causing blood abnormalities and side effects. They didn't work that well. So less than 50% of people who were treated actually had a benefit. Jess, things have changed a lot. And you're really at the forefront of new Hepatitis C treatment and trying to reach out to high-risk populations. Can you tell us what Hepatitis C treatment looks like these days?

Dr. Jessica Taylor:

Yeah. This is really such an exciting story. We are incredibly fortunate that we now have a new class of medications to treat Hepatitis C that you'll hear referred to as the direct acting antivirals, sometimes DAAs. And basically this is a group of medications that come in pill form. So no requirement for the injectables that Alex was just mentioning. That are incredibly tolerable compared to past regimens, really have very few side effects, easy to take. And most importantly, they work. So almost all the patients I see these days can be cured of their Hepatitis C within eight to 12 weeks with cure rates that are well over 90% for people that take the medication. That is pretty much as close as we get to a miracle in medicine that we have had this chronic disease that has caused so much morbidity.

Dr. Jessica Taylor:

And I can say when I trained, we had a liver transplant service in the hospital where I did my residency. Pretty much everyone on the service had Hepatitis C. Some also had alcohol use disorder or other risk factors for liver disease, but it really left an impression on just the morbidity that Hepatitis C can lead to. Now, we're in this sort of new era where we expect that we can cure almost everyone of their Hepatitis C and fairly easily. So it really just an exciting time to be doing this work. And I think the other piece that's exciting is that we've seen a lot of advocacy work and a lot of improvements in who is able to access Hepatitis C treatment and the equity there. And so by that, I mean, in the past, when we first started treating with these new medications, six, seven years ago, a lot of insurers and a lot of health programs implemented abstinence requirements for people with a history of substance use.

Dr. Jessica Taylor:

And it was pretty typical that we would be asked to certify or document that a patient had been in recovery and hadn't used any drugs for at least six months prior to starting Hepatitis C treatment. And that was a time period that was completely arbitrary, not evidence-based. And luckily the subsequent work has shown that it is really not necessary and that people who are actively using substances actually have very similar outcomes to people who were either in recovery, on a medication for opioid use disorder, or don't have a history of substance use. So, it's just a great advocacy story and really good opportunity to further expand this treatment.

Dr. Alex Walley:

It's interesting that you talked about your experience on a liver transplant service. And you said that this six month time period for abstinence was arbitrary. I think the root of it was actually the arbitrary six month abstinence requirement, that both transplant for people who use alcohol or transplant for people who use injection drugs that have Hepatitis C. And it's very common and it's still in place in many transplant centers, this requirement of six months of abstinence. And as somebody who's an addiction specialist and trains addiction specialists, that I hope that there'll be this similar move around transplant requirements, where we really look at individual patient rather than applying blind, as you said, arbitrary standard, that doesn't really recognize addiction as its own condition that we can treat and manage. The whole transplant issue is another one. And I think that's where it came from with Hepatitis C.

Dr. Jessica Taylor:

Thanks Alex. One last thing I'll just mention is that I think in terms of access, the other exciting piece about the Hep-C story has been the expansion of treatment to different providers. So when this first started, we got the new medications six or seven years ago, Hepatitis C treatment was really happening in sub-specialty clinics. So GI clinics, infectious diseases clinics. And we know from all of the past podcast episodes we've done from all of our work, that requiring patients who have multiple barriers to go to a subspecialty practice for one thing, another subspecialty practice for the other, a separate primary care,

a separate addiction provider. These are just barriers that are unnecessary and that really can interfere with people getting the care that they need.

Dr. Jessica Taylor:

And luckily we now have very good quality data showing that Hepatitis C treatment outcomes are just as good when Hepatitis C is treated in primary care settings by a variety of providers, including nurse practitioners in other low threshold settings, like opioid treatment programs where that's able to be done. So, I think we have a real opportunity to think creatively about the right care setting to deliver this work. And Dan, just keep in mind that people who are actively using and those on meds for opioid use disorder can do just as well. And generally do just as well in terms of cure rates as other folks being treated for Hepatitis C.

Dr. Alex Walley:

So another thing that I think historically limited access to these amazing medications for people who inject drugs or people who use opioids and are at risk for HIV, was this concern about reinfection. The thought being that these medications are so expensive because they really were. They were blockbuster drugs that were quite expensive, that would be a waste if we were to treat people and then they would go out and get reinfected. And that people with substance use disorder wouldn't be able to control themselves and would go out and get reinfected. That was the thinking. So reinfection is a really big issue when it comes to Hepatitis C treatment. Sim, how do you think about reinfection? What's the deal with reinfection?

Dr. Sim Kimmel:

Before we talk about re-infection, I just wanted to raise a point about the cost of these medications. So part of the reason that the insurance companies created these restrictions was because these medications are about $1,000 a pill per day. And so when you think about the cost and the cost savings of treating Hepatitis C, about 20% of people who are infected with Hepatitis C, go on to clear it by themselves. And then the rest of people end up with a chronic infection. And about 20% of those people go on to develop cirrhosis and then a smaller percentage of those people go on to develop liver cancer or other complications. So the complications are down the road.

Dr. Sim Kimmel:

And so if you're an insurance company thinking about your cost savings from a total healthcare system perspective, treating the Hepatitis C, it makes a lot of sense. But if you're an insurance company, by the time you treat this person's Hepatitis C, the complications are going to... The chances are the patient's going to be on a different insurance, right? It's not going to help them. And so there's a real health policy and systems issue here around how we finance this care. And we can't go into all those details today, but I think it really has implications for how we organize both how the medications are priced and how we restrict access. The risk of reinfection is a key piece here because the logic is around providing this benefit, but the downside is the cost. And so a lot of the restrictions was the idea that people who are actively using are going to get reinfected. And what do we know about this?

Dr. Sim Kimmel:

So Hepatitis C re-infection rates and people with opioid use disorder are overall quite low. And they're concentrated in people who have ongoing injection drug use. So it's about three to 33 per 100 person years. So that's epidemiologic way of describing the time when people are at risk of people who have ongoing injection drug use. And it's less one to five per 100 person years for people who have ever injected drugs. And for people who are on medications for opioid use disorder, those risks go down

considerably. And so although the rate of reinfection, it seems to be a little higher in people who inject drugs than other people who get treatment for Hepatitis C, the rate of reinfection is lower than the new rate of infections in the general population. And it really makes the case for addressing Hepatitis C in conjunction with opioid use disorder.

Dr. Sim Kimmel:

The other thing that is, I think really a key piece here is that people who are actively injecting drugs are the people who are more likely to transmit the infection to other people as well. And so there's a population and systems benefit to really treating people who are actively using. And this is supported by modeling studies, both that support broader screening for Hepatitis C infection and also for broader access to treatment.

Dr. Sim Kimmel:

For some years now, I think worldwide, the concept of treatment as prevention has been adopted as a strong rationalization and reason for expanding HIV treatment. And I think the concept of treatment as prevention in Hep C is as compelling. And I think we're in a phase now where we really need to be thinking about trying to treat our most vulnerable folks who are most likely to transmit the virus. And so that actually are the people who are most likely to get reinfected by definition. So there's a conundrum there, but I think as you said, the modeling studies have shown, and I think our own personal experience has shown that you can treat people who inject drugs successfully. When they do get reinfected, you can retreat them. And what you're doing when you're doing that is preventing probably additional infections and transmissions.

Dr. Alex Walley:

Okay. So clearly we've now made a strong case that the possibility of reinfection is not a reason to withhold treatment, even in the setting of ongoing substance use. Jess, how do you talk to patients about preventing Hep-C re-infection?

Dr. Jessica Taylor:

Sure. So this is a great counseling opportunity, and I think a very good opportunity to use our harm reduction, counseling skills, and really make sure patients have the information to keep themselves safe. So, first I like to start off by making sure folks understand how Hepatitis C is transmitted. The word is out that you can pass Hepatitis C by sharing a needle. But unfortunately I think the medical system has not done an excellent job of teaching people about other ways that adults transmit Hep C to one another. And that includes men who have sex with men who have sexual contact without a condom, and also intra-nasal substance use. And this last one is one that surprises people. Even this week, I surprised someone by bringing up the risk of Hepatitis C transmission from sharing a bill or a straw or a paper. So a rolled piece of paper used to snort a drug.

Dr. Jessica Taylor:

What we see is that when someone is using a drug intranasally, snorted through a piece of paper or a bill or a straw, there's often microscopic bleeding on the inside of the nose. And that is actually enough bleeding to often transmit Hepatitis C, if someone else then uses that same piece of paper, bill or straw to snort drugs afterwards. So, a big part of this is equipping people with the information to stay safe. And often my counseling includes for men who have sex with men, talk to your partners about Hepatitis C. Testing, ask the last time people were tested, consider condoms. If someone has active Hep C that's not been treated or is unsure of their Hepatitis C status. And then also if you are someone who's getting

into recovery, being prepared to have kind of a nuanced conversation, because often when I start to talk about preventing Hep C in the future, my patients say, "Well, look, I'm never going to inject drugs again.

Dr. Jessica Taylor:

I'm never going to use drugs again." Some patients say, "I'm never going to have sex again." And our job as the provider is to not undermine that confidence in the early recovery while also sort of having a backup plan. And this is where I steal language from Alex that I think I heard you use one of the very first days we worked together, which is to say, "Great, never using drugs again is plan A. Fantastic. You're doing everything you need to do to head in that direction." And in the event that something unexpected happens, let's talk about a plan B. Just in case you're ever in a situation of using substances again, we would want to make sure it's as low risk as possible. And for Hepatitis C prevention, what that means is using clean injection equipment every time.

Dr. Jessica Taylor:

And I mean, all of the equipment, so of course the syringe, but also the cooker, any other equipment that's being used to prepare or administer the injection. For intra-nasal use a clean paper, bill or straw. And if you're in a situation where you can't use your own equipment, where there are more people than equipment and sharing is going to happen, try to go first. So try to go first so that you're not using after someone else where you could then be re-exposed to Hepatitis C. And I find the people are pretty receptive to that conversation and generally appreciate the chance to hash out what risks can look like with a provider. And generally feel pretty empowered to manage their risk going forward.

Dr. Jessica Taylor:

The other thing I'll say is you may be getting the sense that preventing Hep-C hinges not just upon the medication, but actually on access to these harm reduction services. Like clean injection equipment, like ability to get clean paper bills, straws for intra-nasal use. And I think that's an important policy point too. There was a really great paper in the International Journal of Drug Policy last year that looked at Hepatitis C treatment in people who were incarcerated and really hit the nail on the head that we sometimes present these medications as... I mean, I think I used the word miracle already on this podcast, as an easy cure and incredibly effective. And that is so true. And it is also true that if people don't have the other resources that they need to support themselves to manage risk, to reduce harms, these medications will not have the impact that they could have.

Dr. Jessica Taylor:

So I think thinking about Hepatitis C as a prevention package is really important where we think about the treatment with the medication, solid access to harm reduction materials, like syringes, syringe service programs, and really all of these pieces being important in the treatment and prevention of future disease.

Dr. Alex Walley:

Thanks, Jess for laying that out. That's key. In my practice, I treat patients who haven't been treated before, but when it comes to re-infection, I usually get some help. So how does it work for... You guys who I think both probably treat a little bit more Hep C than I do. How does that work in practice? Do patients need to be treated with more complicated medication regimens for their reinfection?

Dr. Sim Kimmel:

The guidelines say that for people who are receiving second courses of treatment, that one should consider different regimens, but that's really meant for people who have not successfully been cured by

the first regimen. So for people who have new infection, typically you can treat with the same first-line regimen for whatever the new type of Hepatitis C that they have.

Dr. Jessica Taylor:

Let me just add that sometimes we're in a little bit of a clinical dilemma where we've had someone who's been treated in the past, but maybe was lost to follow-up. And so didn't come back three months after treatment for the blood tests that we use to say, if someone is cured or not. We often look for a sustained virologic response. We'll use the abbreviation, SVR in medicine. And that lab draw has to happen 12 weeks after finishing treatment. When a lot of people might be in a different circumstance than they were when they started treatment.

Dr. Jessica Taylor:

So often I'm taking care of someone who I know has been treated in the past. I don't have proof that they were cured of the first infection, but I also know there have been risk factors for re-infection. And in my practice, I typically treat those folks as if it is a new first infection. And so far that's been effective. There are definitely cases where I'm concerned about the first treatment not working, but we might call it treatment failure. And then that does become a bit more complicated where we would choose a different treatment regimen, but it hasn't presented the clinical challenge that I think I expected when I started doing the work because the medications are so effective. And retreating as a first infection in cases of reinfection has been successful in our practice.

Dr. Alex Walley:

Yeah, that's really interesting that in practice re-infection is more of a problem than treatment failure. So I find it with my patients who have substance use disorders, they either take their medication or they don't take their medication. So if the sort of partial taking of medication among people with substance use disorders, I think is an overblown concern. I mean, it is something we want to educate our patients about, but if they're going to take their medication, they can take it. So it's clear that we should be treating Hepatitis C and people with substance use disorders, including those who are actively injecting if they want to be treated.

Dr. Alex Walley:

Let's talk a little bit more about how our medical and public health systems can set patients up for treatment success. We are using the term treatment failure. And I think in most settings, we think of that as the patient's failure, but I've learned that it's really important that we should reframe treatment failure as a failure of our healthcare systems to get people the care that they need. So Sim, what are your thoughts about how the medical and public health systems can promote treatment success?

Dr. Sim Kimmel:

There's a lot of issues here. So if you think along the kind of care cascade around what needs to happen for a patient to actually successfully get treated. So first we need to make sure that the patient knows that they have an infection, right? So we need to have broad access to Hepatitis C screening. The guidelines now recommend much broader Hepatitis C testing than they used to. But in addition to kind of screening of people who may not have identified risks, we need to make sure that we have access to screening at places where people who use drugs go. So testing at drop-in centers or syringe service programs or at opioid treatment programs or in emergency departments so that the diagnosis can be made. Then people need to actually be linked to care. So what does that mean?

Dr. Sim Kimmel:

And I think Jess already talked about some of the barriers that are set up both by restricting treatment initially only to subspecialty settings. So as treatment access has been broadened to more general settings, there's more opportunities for people to link to care, but there's still a lot more to be done. So do people have access to Hepatitis C treatment at drop-in centers, or at syringe service programs, right? Opioid treatment programs. And all of these settings, there's evidence that Hepatitis C treatment is feasible in those settings, but in Massachusetts, for instance there's not a mechanism to reimburse opioid treatment programs to actually dispense the Hepatitis C medication along with their methadone, which is a real missed opportunity.

Dr. Sim Kimmel:

Think about all that we could do to cure patients who are engaged in a daily observed medication receipt. So I think moving the treatment to settings where people who use drugs are accessing other kinds of care, just like we talked about with PrEP, I think is an important thing that we should be thinking about moving forward. And then another key piece is that the kind of treatment that someone gets is dependent on some of their risk factors, particularly whether somebody has cirrhosis. That can change the duration of treatment and in some cases change the kind of treatment that we'd be giving people. So it's important to be able to risk stratify somebody for cirrhosis. And typically that was done with an ultrasound test and there's some specific kinds of ultrasound tests that are maybe more difficult to access and more difficult to schedule.

Dr. Sim Kimmel:

And then there's some proprietary blood testing that can be done. And then there's also some other calculations. And so each of these has some pros and cons about how well they identify cirrhosis versus the kind of barrier that they present for a patient. And so we need to be thinking about in which patients, this kind of testing is actually really necessary? And in which patients, they just present a barrier where that is an extra step for someone to go through before they can actually access the treatment.

Dr. Jessica Taylor:

Thanks, Sim. I completely agree. And I think it's also important that providers, number one are working in interdisciplinary teams and two are sort of leveraging the expertise of multiple types of providers to really understand what the specific barriers are that a patient in front of them might face. And are taking that into account when we decide on a Hepatitis C treatment regimen. So the example that is the most relevant to me in Massachusetts, where one of the Hep C treatments called glecaprevir/pibrentasvir is a preferred treatment regimen under our Mass Health, our state Medicaid. It's also a great treatment regimen because almost everyone can be treated with any weeks. It's a preferred regimen. It's become first line in a lot of settings, but a lot of providers may not know that it comes in a packaging box that's pretty large and would actually be very difficult to carry and keep safe.

Dr. Jessica Taylor:

If you're someone that is experiencing homelessness, that doesn't have a safe storage place for medication, that might be carrying all of your possessions in a backpack. So little things like that can really impact number one, whether we're demonstrating to our patients that we understand the barriers they face. But number two, if we're setting people up for success. Other considerations are that some of our Hepatitis C medications should be taken with food. So we want to make sure we understand if people have access to regular meals and are able to eat on a fairly regular schedule. And then we can think about ways to get around these barriers. So do we collaborate with a pharmacist that can repackage medications? Or can we set up a strategy to dispense less than a one month supply at a time for people that have challenges with storage or might be at risk of medication theft? I think all of

these are important to talk about, and this is where working on an interdisciplinary team and really thinking about intensive navigation support can be incredibly helpful.

Dr. Alex Walley:

So today we've, I think covered in a new topic, Hepatitis C, a recurring theme that has come up throughout this podcast series, which is about how we need to do a better job of tailoring our treatment delivery and our systems to meet the needs of the people who we're trying to care for. And when we're talking about opioid use disorder in HIV prevention, a lot of times these are going to be people who are historically marginalized from the rest of society who are more likely to be homeless or to be poor. And so, this is a tall effort in the setting of a care system that is often fragmented and siloed, particularly when we're talking about addiction care and the rest of medical care. And even here, we've had examples of how Hepatitis C treatment can be siloed from the rest of care. And so integration of this care in ways that are patient-centered is really a direction that I think we hope to move. Any other final comments from either of you before we wrap this up and give a little prelude to our next episode?

Dr. Sim Kimmel:

One of the things I wanted to highlight. We've heard several kind of successful advocacy stories in the Hepatitis C treatment space around insurance requirements and around kind of democratizing care. And the story that Jess just shared about the Mass Health preferred Hepatitis C regimen and the large box that's challenging for people. I think it really gets at the importance of engaging people who have lived experience in our policy environment and in our programs and at every level, which is a challenge, but it's something that we really need to be prioritizing. Right? You can imagine that the room of insurance and policymakers and infectious disease specialists, were definitely not thinking about what the box looks like for people who are experiencing homelessness. And how they were going to hold that large box of medications. And that's a voice that needs to be included in our policy circles.

Dr. Alex Walley:

Here, here.

Dr. Jessica Taylor:

Absolutely. And I'll just add that in case I didn't say it earlier that treating Hepatitis C is one of the most fun and rewarding things that I do. I think really a privilege to get to be a part of a treatment course with a patient to cure an infection that for years we thought was going to be a chronic, lifelong, not curable infection or one that could possibly be cured. But as Alex was saying with a treatment regimen that was miserable to take and only had a success rate that worked half the time. So, this is really fun medicine. It's exciting to have new treatment options. It is really fantastic to get to work with a patient through treatment, to see their viral load go undetectable and stay undetectable. And just to know that their medications work.

Dr. Jessica Taylor:

And so, for the providers out there that are doing addiction treatment or running programs, really think about pulling this in because it is incredibly rewarding work in addition to all the benefits to our individual patients and to the community that we were talking about today.

Dr. Alex Walley:

So we hope today's introduction to Hepatitis C has piqued your interest in treatment for people with opioid use disorder and at risk for HIV. Stay tuned for our next podcast, when we were all excited to talk about what this looks like on the ground with our special guests, Maggie Biser, a nurse practitioner from

the Boston Healthcare for the Homeless Program who will share lessons learned from running a low barrier Hepatitis C treatment program.

Dr. Alex Walley:

You're listening to Connecting Care. Our program was produced today by JSI and Boston Medical Center. Connecting Care is supported by the HRSA-funded project strengthening systems of care for people with HIV and opioid use disorder. The project aims to enhance system level coordination and networks of care among Ryan White HIV/AIDS Program recipients and other federal state and local entities. You can learn more about the project and find resources at www.ssc.jsi.com.