



Clinical Education Initiative
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HEPATITIS C AND ALCOHOL

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Hepatitis C and Alcohol [video transcript]

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Speaker for today, Dr. Barbara Turner. Dr. Turner is a practicing general internist investigator at the Keck School of Medicine of USC, and a senior advisor at the Gehr Center for Health System Science and Innovation. She has over 190 peer reviewed publications from her research on health disparities, substance use and health services research to advance primary care for vulnerable patient populations. She's trained in Medicine at the University of Pennsylvania, where she rose to tenured professor. In 2010, she founded the Center for research to advance Community Health at University of Texas Health at San Antonio since 2018. She's a professor of clinical medicine at USC, and serves as the American College of Physicians deputy editor for a cooperation with Dynamat, an online clinical practice resource. Very happy to turn it over to you, Dr. Turner.

01:04

Thanks so much for that kind introduction. I think just to start things out, I'll put on my sunglasses and show you that I'm out here in LA. But since I can't see anything, I'll take them off. So I don't have any conflicts of interest. And we develop this project with funding from Texas. Here this sort of general learning objectives for this project this talk, although I'll be zeroing in on some of these aspects Morris more than just understand broadly how alcohol affects the course of Hepatitis C virus infection, and ways to manage alcohol use in patients with HCV. But also patients do not have HCV. And then a bit of a refresher about SBIRT in the care of persons with alcohol use. But here are some more specific learning objectives that I really hope you'll be able to achieve at the end of this hour or so want us to be able to describe some of the criteria for alcohol use disorder, and also to be able to list at least for the medicines we use for treating alcohol use disorder along with behavioral therapy, and some of the side effects of each medication and finally, to prioritize them by effectiveness and safety for people who have liver disease. So, liver cancer in particular is a rising threat here in the United States. In fact, the ACS says that most of these are preventable, and we should be able to address it, especially with things like treating Hepatitis C. And connecting the dots Hepatitis C is one of the most common causes up out of cellular carcinoma or HCC. In fact, it's HCC as the dominant type of primary liver cancer with markedly effective treatment, which I'll talk about in a sec. So here are a variety of causes of liver cancer. I notice in here, it doesn't really highlight fatty liver disease mash, but it is also a major cause. So the USPS t have recently updated their screening for Hepatitis C, because of the effectiveness of this treatment and the risks of chronic liver disease. What I've listed here and we have really well over a million people have been diagnosed with this the United States. So we have to really think about how we can find those people and cure them. And actually, in recent years with the opioid pandemic, and other issues related to near needle sharing, we've had 1000s of new cases. This is this great news. Hepatitis C can be treated and cured, and we're talking cured within eight weeks. For many people. The treatment is well tolerated. And most of these patients can be treated in primary care. In fact, that was the focus of some of the research that I did in Texas was helping patients in practices serving low income populations to treat them themselves if they had chronic HCV, but alcohol

use has to be addressed. It's highly prevalent, as we'll hear about in HCV. And the concurrent use of alcohol is very dangerous for the serious consequences of liver disease. And it happens even if you've been cured for HCV. So it's interesting because alcohol appears to increase the risk of even having chronic HCV. Normally, people anywhere up to 45% of people who are acutely infected with HCV can spontaneously clear the infection. But people with a history of alcohol use disorder or half is likely to clear this infection which probably contributes to their having higher prevalence of chronic infection and in Turners. And this has been borne out in national on surveys, so anti HCV positive persons were two times more likely to have a drink a day than those who were negative, and eight times more likely to have three or more drinks per day. And another survey, they were persons with product HCB, were currently three times more likely to add five or more drinks per day on most days in the month, which is clearly getting into alcohol use disorder. And you can see, it was 44% versus about 14%. And a 30%, higher prevalence of having five drinks per day, currently and ongoing. So it's been a challenge for patients to recognize the severity of this interaction with alcohol. And it really makes it important for us to understand what alcohol does in the context of HCV liver damage. So one of the things it does is it stimulates viral rapid replication. It accelerates the inflammatory cascade. It compromises mitochondrial function, and it leads to damage from oxidative stress. And it's a primary liver toxin. So it makes sense that this is a bad combination for people who already have a virus that's attacking the liver. And in terms of the risk of hepatocellular carcinoma, take a look at this. So patients who have no alcohol use and no longer have an HCV RNA, and are really very unlikely to get HCC if they even if they have compensated cirrhosis. But if they have both together, it's up to about 30% over a five year period can get develop HCC. And unfortunately, it's as little as one to two drinks per day that can increase this risk. Regardless of HCV, we have a big problem with alcohol consumption. And this shows you that in this is our 2020 goal to have less than a little more than two gallons per capita, and most of the states have not met this goal. It's only gotten worse during the pandemic in 2020, alcohol was consumed One Day More front by the majority of adults compared to 2019. And this has been a particularly big problem for women who've had more heavy drinking days, and alcohol related problems, interestingly. So just to back to these specific learning objectives, let's first focus a little bit on defining alcohol use and alcohol use problems. So I just want to remind you, and I imagine most of your practitioner says that alcohol consumption needs to be assessed in practice. And one of the things I think that we forget is that these are little glasses and little servings that we're talking about as counting as one unit, we're talking a can of beer, not a huge bottle of beer. We're talking a small glass of wine that isn't full, we're talking a shot. And it's unfortunate because when you address alcohol consumption, you say how many drinks per day you have to almost add that context. But even then we don't do a very good job of it primary care. But here are the limits for alcohol consumption. Just to remind you, according to ni AAA is for men, it's four drinks per day, women three times per day, or 14 and a week for men and seven in a week for women. This is kind of an eye opener, especially for women. But I just want to remind you, there is no safe level of alcohol use with chronic HCV or any chronic liver disease. So just to reiterate, an alcohol consumption unfortunately, has been hard to pin down there's lots of terminology for it, but it seems to be settled down into these categories, which is abstinence. Of course you don't drink at all. lower risk is within the NI AAA guidelines, unhealthy exceeds these guidelines. Binging is five or more drinks in a day or an occasion for men and for men more for women and alcohol use disorder and I'll go through this in more detail is having a

two or more of 11 symptoms that really have to do with unable to control use having problems due to it and having tolerance or withdrawal symptoms. So a lot of you probably know about the audit. See, just to remind you because I think it's a well accepted tool that predicts for future or consequences from alcohol consumption? And it has these three levels, which is how often do you have a drink containing alcohol? And how many standard drinks? Remember, standard is not a big drink containing alcohol you have in a typical day. And then how often do you have six or more drinks on one occasion, this is pretty darn generous if you think about it for women, which is way above the guidelines. And this is the way audit C is scored. So you can get to this range of moderate risk pretty quickly, if you drink regularly and drink a little bit more than two drinks on an occasion. So these are fairly low bars. What I think is fascinating is this from the UK and take a look at this, they have much more generous guidelines for bingeing than we do eight or more for men.

10:57

So here's interpreting the score. And so lower risk is one to three, and then everybody else is pretty much got to have some kind of intervention. And I think it's important for people with HCV, to realize everybody in this triangle needs to have counseling, as long as it's zero. In other words, you're not drinking at all. And this score helps inform your intervention. So back to this alcohol use disorder, it's now in the DSM five replaces this term that we had in the past abuse dependence. And there are seven dependence and four abuse criteria that all packaged into this used to have have one of the criteria was having legal problems. But that was infrequent enough. And so they added craving, which is very frequent. And to have alcohol use disorder, you have to meet at least two of 11 criteria, and within a year. And here they are. And I'm not going to read through them all. But I hope you'll take advantage of them being online when you're taking care of a patient who has more significant drinking problem. Because these are not that unusual. Drinking more longer than intended, I run into that fairly frequently. Having a persistent desire to drink is not that uncommon, either or craving or strong urge to drink. And then some of these others are much more unusual being in situations where it's physically hazardous. Although I've often found that when I asked people have had issues with drunk driving, so I think it's useful for you to remember the criteria they are now codified. So in terms of the prevalence of alcohol use disorder in the United States, it's really fairly common, meaning about 14% of individuals in national surveys have had an alcohol use disorder or meet that diagnosis in the past year, and almost 30% in a lifetime. Now, most of these, I admit are on the milder side, meaning they only have a few, then a full seven or so percent, six to 7% are moderate or severe. Now, these rates of alcohol use disorder higher for men, whites, younger persons and lower income as well as persons in an urban residence, many of you serve those populations. What is really tragic is that in 2015, only about 8% of people who said they needed treatment for alcohol problems, were able to get this care. Most commonly it was the fall step counseling program. And much more infrequently is through the healthcare system. in an outpatient setting, or a rehab setting, so it's pretty difficult to get this care or at least it's been poorly accessed by people who need it. In a longitudinal study, among people, this is back to HCV. Among a very large sample of adults who have chronic HCV versus those who don't, the adjusted odds of death were five fold higher for those who had two or more drinks per day. And it was even about half that still significantly higher for moderate drinkers. So it is a poison, a poison for people who have chronic HCV. And this is an interesting veteran study that I ran

across that shows again, emphasizes this point about mortality. So these this is the adjustment hazards of unhealthy drinking versus non drinking among people with chronic HCV. And across the board, even with people who got a sustained violent response. If they're heavy drinkers, they're still about almost 50% more likely to die than those who have stopped drinking altogether and that's across the board here for people with or without cirrhosis, and E. And obviously, it's worse for people who never did get a sustained by our response. So what about managing unhealthy drinking, I've already given a lecture in the past about screening and brief intervention, I'm not going to go through that a lot. Although I'll touch on it briefly, I think it's super important for all of us to have those skills. And I find myself using it all the time with my own patients. I fortunately have not had as many patients with an alcohol use disorder, but they require a much more intensive intervention. So here's this, this brief intervention, which by the way, you can bill for it's 15 minutes. And, in general, you remember the three A's advise, assist and arrange. You want to think about where your patients are in terms of their stage of change, willing to address alcohol consumption and their patterns. And using motivational interviewing as a conversational strategy, it's a very non threatening receptive strategy that you can use to help people build self efficacy in reducing alcohol use. So about this three A's approach. So advising its risk, you know, you assess their risk, you use the audit, see, and, and then if needed the AUD, and you tell them where their risk is faced based on that. And I think it's really important to inform them what normal, so called normal drinking guidelines, our course on how, you know, lower risk drinking is not lower risk for people with HCV. But nevertheless, for the run of the mill person out there doesn't have chronic liver disease, you would go over the anti AAA guidelines, nobody knows this, when I tell them. And then you tag it on with a recommendation to reduce risk. And if they're willing to listen, you want to stimulate a motivation to set goals, to address alcohol consumption, and you want to make that plan reflect their stage of change. I have another slide about that. I think that'll make it clear. And then finally, you do this range, which is reinforced adherence, tell them when you're going to follow up rescreen renegotiate. So it is this longitudinal conversation that you want to be having, if you're in a relationship, like I am, fortunately, as a general internist. So here it is based on the stage of change. And here's the advisor system range, not everybody needs to have these approaches, if they really are not even clued in and willing to think about it. So you want to at least raise these issues with people who are just barely they're thinking about their alcohol. But if people are really willing to prepare, then you of course, set your goals and assist. And then action plans would be identified, like telling people to start counting the number of drinks they have avoiding going to bars on Friday nights thinking about ways of switching to non alcoholic drinks, there's just a lot of suggestions that you can make, and then helping people maintain success and relapse. And I gotta tell you, this works. And I'll show you some data about that. So the benefits are really measurable in many studies, in terms of the amount consumed heavy drinking days and craving. And there have been studies that have looked at laboratory markers of success, although they're, you know, little less useful than other laboratory markers of alcohol of drug use, I would say. But this is this is a really encouraging study, I think that just recently came out, which shows that this counseling, which occurred while people were taking direct and acting antivirals, or DEA is for Hepatitis C, shows that they were able to reduce their mean grams of alcohol that were being consumed during HCV therapy, very low amounts. And then this success largely was maintained more than 24 years, sorry, 24 weeks, I wish after treatment. So I think this is very hopeful that when you get patients in a kind of teachable moment, like this, like I'm saving your

liver with these really expensive, effective drugs, you can get people to cut down on their alcohol consumption. So back to our learning objectives and thinking a little bit more about the medications. I just want to mention right off the bat, that medications really are great, but they're part of a treatment plan. And to be honest, you should be combining. If you have a person who really needs treatment for alcohol use disorder, you want to combine it with the mutual help groups, you know, Alcoholics Anonymous, etc. But even better with behavioral therapies through a professional support. So these are all the pieces of the puzzle, and you really want to make sure you have access to those for your patients. So, here are the behavioral therapies that are most evidence based. I just want to emphasize these, which should be familiar to many of you, for the conference, pharmacotherapy, I'm really not going to be focusing so much on the logistics of those.

20:49

But I want to stop for a moment. And have you tell me, has anyone in this audience had much experience with prescribing medications for alcohol use disorder? Okay, well, I'm delighted to see that some of the attendees have done that. And I think this is great to have that expertise in the group. But I'm not surprised that it's the vast majority of people said, they haven't done it. Right ahead. So I just wanted to I think, yeah, I wanted to review the key ones that are out there. Because this is another example, I have to say they're common out there where FDA approved drugs are really not the whole story of medication assisted treatment for alcohol use disorder. So here are the biggies that are out there now. *Trekzone* is a good drug, per se, they're all FDA approved. And I'll tell you more about them. But really, there's an increasing tendency to use off label drugs. Interestingly, your *made* has been endorsed by the VA, for use in alcohol use disorder. But here are some of the others that are probably familiar drugs to you, but not in the context of alcohol use disorder. So the drugs for alcohol use disorder, they're again listed here with the dosage, which I'll be reviewing again. But what I just want to point out here is that yes, they're the three that are approved, but we have a lot of issues with patients who have liver disease. There are and I'll point these out in more detail. Now *Trekzone* is a good drug but has limited a range of people, because you can't be acute Hepatitis and you can't be deacons, decompensated cirrhosis, but there are a lot of patients with liver disease who don't fit into that. Those categories. Adults, our firm is a no no, it can't proceed. You can use *baclofen*, sort of. But the the other ones really have very limited data. I will go back to *Topiramate* because I think it's more promising than this slide shows. Just to review with you this is a interesting meta analysis that just came out about all of the studies that included our interventions to maintain abstinence from alcohol. And these are conducted in the context of primary care. And if you look here, you can see by the size of dot most everything uses a placebo. As the comparison group, it can proceed has the most studies of all of the drugs. Now, *Trek's* own next year's *die sulfur*, I'm fairly small. Here's *Topamax* *Topiramate* here, a fairly small number of studies. And down here in orange, are the behavioral interventions. And many of these studies reasonably look at the effects of the drugs in the context of patients receiving behavioral interventions. That's because everything works, sort of. In other words, you need to put together as much as you can to address this substance use problem. So oral *naltrexone* and here are some of the trade names is a non and you probably all know this a little bit more in terms of opioid dependence is an antagonist of opioid receptors treated for opioid use dependence. And it gets rid of some of those rewards the dopamine system, beta endorphins

from drugs and alcohol. It has modest benefits in stopping alcohol number needed to treat his 20 binge drinking number needed to treat is 12 which is a little better, and you'll find that that's a pretty typical number for the more effective treatments. But again, you really don't want to prescribe it for somebody who is taking opioids for a reason, because you can put them right into withdrawal. Treatment needs to be long term. That's true for almost all of these. But happily, there's almost no potential for upper tolerance or abuse of this drug. But really, like all of these, it is critically dependent on adherence. If you don't take the drug, it won't work. Now in liver disease, and here's that nice looking cirrhotic liver, unfortunately, not Trek's own is primarily metabolized in the liver. Usually, I love this term, usually not hepatic toxic at recommended doses, but it can increase LFTs. As I mentioned, it's really contraindicated and more early or late liver disease. But you need to monitor these patients really closely, like every few weeks initially, and then every several months to look for hepatic toxic effects. And you can change the dose in recognition of some of this if it becomes an issue. So if you are prescribing it, this is the maintenance, it's pretty nice that it's once a day. And here are the reasons why you might want to drop that dose, you can go as low as 12.5 milligrams for days a quarter of a tablet, sort of the pain to get to. And so if they have moderate liver disease, but only if the LFTs hadn't really gone very high renal disease, you might want to cut it down, or somebody who hadn't been abstinent for a while. In general, it is to maintain abstinence, and you'd like to have somebody have stopped when they start this. Other tips are to have a ticket with a high carbohydrate. And I'll talk more about the side effects of these drugs in a minute. I like this needle. Here. It comes in a long acting injectable form. Again, people recommend some abstinence before initiating but others and I give you a reference here say they're not so sure it has to be an abstinence before you start it. Then here's the dose, it's an injection usually given in the office. And it appears in early studies to have about the same effectiveness maybe even a little bit better, because it is maybe easier to enforce adherence to the drug. But it reduced binge drinking and fewer heavy days drinking per month, but it is pretty expensive. And if somebody has low platelets, which you can see more advanced liver disease, you're at risk for hematomas from the injection. Now it can't say camprial is interesting. It's a modulator of GABA. And it again is for maintaining abstinence. So again, you have to have the behavioral supports to really get there. But it maintains absence from alcohol. And it is a bit of a pain. If you ask me to have multiple dosing you have to reduce it for renal impairment. And in a meta analysis, pretty big one with a large number of studies. It did reduce the risk of drinking among abstinent patients. Again, that number needed to treat is that familiar 12. But it didn't have a significant effect on binge drinking. So you know, sort of a mixed picture. You can use it with people liver disease, but not with people with stage four or five renal disease. You really want to avoid it if people are at risk of encephalopathy, and that is true for other these drugs. Now anti abuse has been around for eons. It has been around just after World War Two. And it inhibits acid aldehyde dehydrogenase and you come up with a lot more acid out aldehyde in your system, and boy does it make you sick. So you get nausea, flushing hypotension, I mean it's can be very serious for some people. So the effectiveness is that it's a scary deterrent. Again, success is pretty much in abstinence and fewer drinking days. You can imagine that drinking day would be a memorable experience. But you have to be a committed patient for this one. Again, it's nice because it's once a day you got to keep it going for quite a while and it needs to be more than 12 hours after your last alcoholic drink the reaction if you are drinking begins pretty quickly after drinking, and it lasts for a while. So you do have to watch, watch liver function and avoid it. Unfortunately, this

isn't a great drug for people with liver disease because you can get potentially fulminant Hepatitis and has a lot of drug interactions also. So cough syrups, etc. And watch it with phenytoin Dilantin.

30:29

Now, this one is a popular off label. As I mentioned, the VA actually endorses it, you all know and maybe he loved Topamax is medicine for seizures. And for migraines. It's been generic for many years. So it's kind of hopeless for anybody to do any good studies in alcohol use disorder. Nobody really knows too sure why it works. Here's some of the theories. It has small to moderate effects. And a meta analysis of early placebo controlled trials showed that it resulted in fewer heavy drinking days, more active days, and decreased GGT levels. It was even found to be superior, in one study to now trek zone on a variety of measures of alcohol consumption and dependence at six months. So it it has a fair amount of promise. So the one of the big pluses here is that the patient doesn't have to be abstinent before you start it. And it's not metabolized in liver. But if the person has more advanced liver disease, you really have to watch it because if they're it has CNS effects anyways. And it can be really a problem. If somebody's at risk for hepatic encephalopathy. Here it is a titrated dose up. And a lot of people do with sort of an intermediate dose again produced for liver disease. And and I think Oh yeah, and if you ramp it up slowly, it does help minimize the side effects, which we'll talk about. The other off label ones, Gabapentin. And it seems to have a special role for people who've had alcohol withdrawal issues. But it is sedating, and it certainly has an abuse potential veranda clean which is as you know, we use for smoking cessation. And it is very useful in reducing craving and may reduce heavy drinking days. So it's another useful thought for you to be able to another option may be for you to think about. baclofen has been shown perhaps to reduce time to drinking again for people who are not drinking not metabolized by the liver. But again, it can be sedating, even at low doses. And here's a drug that is been used in Europe as sort of like a long acting naltrexone, which oddly hasn't been approved here, but seems to be quite promising. There is a lot of work in this field, you can imagine alcohol use disorder and alcohol problems is extremely challenging in our in the United States and elsewhere. And there are a lot of groups out there because if we can really find an effective drug they're going to be it's going to be very widely used, just to let you know, these are some of the receptors that are being worked on right now. Such just want to review again. So here are the main ones that I think you should be focusing on the typical dose and a bit of a pain here the Ti d issue with a campus aid camp Raul and the dose reduction. Here's a few of the other things that we should be thinking about if we use these drugs, and so I just want to go through with sort of question for you. Here's a case. Here's a guy who says he has cut down and he wants to try. He wants to try to cut down to almost none. So we'll call him almost absent right now. And he wants to try treatment. So what drug would we avoid if he's got an EGFR? 28? And what if he's actually still drinking? What if he has cirrhosis and may be at risk for encephalopathy? What are we going to avoid if he's taking opioids being prescribed opioids for pain? And what are we going to consider if he uses tobacco? And I'm sure you now know the answer to all of these. So they can proceed is off the the checklist here if he has stage four or five CKD sulfur M would be the pit If you're still drinking encephalopathy, there's a lot of CNS effects that Topamax has to pyramid. So you wouldn't probably want to think about that one. Now trek zone would be a problem if you still using opioids. And, you know, I think that burns rennet. Brenda clean is really a great drug

to think about if he's using tobacco and maybe you can kill two birds with one stone. That's expecting one. So now, what about those side effects, and I just I started staring at this slide that I made and realize that really, they fall into two categories. And you probably see that two, CNS, CNS, CNS, you know, there's a lot of CNS effects headache of these drugs, and a lot of Gi, nausea, diarrhea, um, decreased appetite. So, abdominal pain. So these are all very common issues with these drugs to manage. And, of course, you know, and abuse can make you collapse if you drink. So it is a very serious side effect. So let's think about how we might prioritize those drugs for alcohol use disorder, by effectiveness and safety is I'm, you know, I think it's pretty much a toss up here. I was working with an expert, when I was in Texas, and he really, and he did a lot of treatment in the VA, he really loved the pyramid. And he thought it was a really great drug for patients with HCV, since it wasn't metabolized in the liver. And, you know, I mean, I have to say a lot of people with liver disease are not at risk for encephalopathy. So it is an attractive option. It can, per se is also not metabolized, and liver has that limitation with its the renal function. And I think that's also a reasonable alternative. Now trek zone is metabolized in the liver, you can watch LFTs. And still there are a lot of people who probably have less severe liver disease that you could consider the either the oral or injectable. And then, you know, I put this one at the bottom of the list, because I just don't think it's a great drug. I just want to give you a PEP talk at the end here about the role of primary care. And I think that all of us feel like we've taken on so much in our patient management, how do we manage this also, and I should probably realize that a lot of the people listening may be HCV HIV providers, and I think I would put you in the same category. So it is important to consider primary care or primary HIV care because patients without insurance or other barriers, have trouble getting to specialty services. They may refuse specialty care, because that requires them to go to a whole different place that may be stigmatizing or they think it is and the patient centered medical home or team based care is a very favorable setting when you think about addressing behavioral and addiction counseling, in addition to the medication. So here's a study that was conducted in the VA of specialty care versus primary care in primary care involved training the dogs to deliver now trek zone. This is not for HCA, this is just for people with alcohol use disorder and offer the behavioral support interventions. And what they found was that with that reinforcement, the primary care Doc's prescribed a lot more now trek zone for the patients then pet specialists did. And more of the patients stayed in care in the primary care setting after half a year, there were fewer drinking days in primary care and abstinence didn't differ between the two groups. This definitely gives a lot of credibility to the opportunity of primary care management. Here is another study that is alcohol use disorder or opioid use disorder in primary care. And this was a study where they offered brief psychotherapy. And depending on the problem, you had buprenorphine Naloxone for opioid dependent or long the, the long acting injectable naltrexone versus usual care and what they found was that combination increased 30 Day abstinence significantly, and yet disappointingly few patients received these meta Patients,

40:02

suggesting that training the dogs and getting them and remember it and having patients receive them was another barrier that needs to be addressed. So a lot of this is just saying that that counseling is effective, I think in this setting. And we have to think about how to reinforce and train primary care providers to deliver these drugs. And I know the barriers for buprenorphine are going down dramatically, I think it's important to piggyback on that initiative. So here are our

learning objectives one more time. And I want to just run through them. Again, I wanted you to be able to define at least three criteria for an alcohol use disorder. And, you know, I was looking online trying to find whether this is easy for me to access while I'm in my practice. And I use MD calc a lot for a bunch of screeners and it's not available there. So but it is easily accessible online. And you can run through these questions with patients. But it does make a difference because patients who have more of these things going on, we'll definitely need to have the more intensive approach, behavioral therapy and medication. About four medications to treat alcohol use disorder if you're awake, still, you know these. Fortunately, naltrexone can preset myself around and Topiramate there are others that are told you about but and again, think about the fact that CNS and gut are major issues for a lot of these medications. In terms of prioritizing them by effectiveness and safety, I think that Topamax and Topiramate and a can proceed are pretty much tied. Naltrexone is up there. I think also with few more limitations because it is metabolized in the liver. It can't per se it has that challenge of being T ID. And frankly, those of you who are HIV Doc's know how horrible multiple dosing is to get patients to adhere to. So that's another issue. That sort of there's a lot of factors to consider when you choose a drug for patients with alcohol use disorder and who has liver disease. Obviously, it is an important health threat. And I should connect the dots of course, that patients who have alcohol use disorder probably also are at significant risk of alcohol related liver disease. And so this all kind of generalizes to those patients too. And I would say that, just like in patients who have alcohol, liver disease, chronic HCV and alcohol are a hideous combination in terms of the patients consequences from liver disease, reaching severe cirrhosis, needing a liver transplant or even dying of chronic liver disease. The best practices are really to combine interventions, because to be honest, nothing is magical. And these are the drugs that may be safer. I already mentioned that Naltrexone is a good option if you're especially if to keep track of the LFTs. But I wanted to emphasize that this can be done in primary care. And we were delighted with the response. In our practices. These are mostly put on federally qualified health centers. In in Texas, where we had a support program for them to start to prescribe the drugs for HCV. And patients did marvelously well, through that program, we were able to get the drugs through the free pharmaceutical benefits for people who are low income. You know, I think this is important for us to realize with sufficient support, we can really help patients who have significant negative effects from alcohol, and also from chronic HCV. So I want to acknowledge the team that I had in Texas, this is actually a website that's still out there. Stop HCV. And I hope that you'll be able to take a look at has some of the slides here and I'll make these slides available in a PDF after this talk also, and I had a whole lot of people who helped with this talk. So I want to acknowledge them. contributions.

44:56

Thank you so much, Dr. Turner. I don't think I

45:02

love the chat here. informaton Are you joking? Me?

45:06

Want to elaborate on that?

45:09

Oh, my God. Well, I mean, I thought it was really horrible. In the New York Times today they had the story about a woman who had a lawsuit or something to be able to take that poison, and she died, you know, whether with her COVID Whether it was the COVID, or the drug, but it is poison. Ella her poison. And so, you know, it's great for horses, but not for people.

45:34

Dr. Chen, I want to start off and as I was struck by the word abstinence, of course, in all the meta analyses and systematic reviews, and obviously, that's the basis of, you know, the primary outcome and studies done on alcohol use disorder. But given that so many are working from more of a harm reduction perspective, and looking at reducing alcohol use, maybe not necessarily abstinence, you know, curious your thoughts on that, and also the need for research on alcohol consumption reduction as opposed to abstinence, right.

46:14

I mean, I think that one of the things that might have stuck in your mind is that starting a lot of these drugs require you to be abstinent. But I mean, I think the outcomes, if you look at a variety of them are fewer heavy drinking days and fewer bingeing episodes. So all except for Antabuse, which means you die practically, if you are drinking, the others, generally are a you know, the outcomes are cutting down drinking. And you know, what's striking to me is a lot of the studies show like, you know, three fewer drinking heavy drinking days per month, they say, so that's not a big deal. But, in fact, that kind of reduction has been shown to benefit patients in terms of the effects of alcohol consumption, on their livers on their lives, etc. So, you know, I think that it's important to acknowledge that abstinence is a goal that's very tough to reach, really, really important to try for in people who have chronic liver disease. It's so discouraging, frankly, really, the evidence that if you just have a drink, or two a day, you're going to be ruining your liver.

47:32

Thank you. We have a question from Andrew Reynolds. Whether there's been work on contingency management and AUD, specifically and people living with hep C. He said he's a big fan of contingency management.

47:48

Yeah, I think that some of the bigger centers that have that manage specialty centers do have contingency management. And, you know, I think it's a little harder for those of us in primary care settings to use that tool. It's more the motivational interviewing, I think, co management with specialty specialists, then you start getting into that, yes, alcohol use disorder is very effectively manage? Well, it is effectively mentioned No, but very, but contingency management is remarkably helpful for all forms of substance use. And I think it is a great tool. I should ask back have Have you used it much?

48:31

No. So personally, no. But at the San Francisco AIDS Foundation, we actually do a lot of contingency management for a variety of substances, just like you said, Dr. Turner, and, you

know, I forget who it was somebody said, If contingency management were a medication, it would be FDA approved like that.

48:52

And I've actually risk

48:54

I've been thinking about trying to kind of do a special contingency management program for some of my Pepsi folks who do drink fair, as a sort of harm reduction tool to help them move towards a healthier liver.

49:10

You know, you know, you mentioned though, that FDA approval, I mean, I'm old enough to remember the days when the folks at Yale were proposing contingency management for substance use treatment. And it was the time when people said, why reward people with substance use? So we've come a long ways since then, that it isn't, you know, just making life better for people with substance use. It's, it's it's focusing on something they need to do, but I mean, I think it is an important tool. Yeah, thanks. And I hope you try it and brighten it up. More. I actually haven't done much of a lit search on that. So I have to say that it would be worth taking a look and see who has already been working on that. But I would guess that they probably they have. There's another quick question over here, which is how soon after successfully treating with one of them, is it okay for pit? Oh? Yeah. Hmm. Well, you know, I mean, one alcoholic drink, I just feel like, you know, if they have absolutely no evidence of it's very early, no liver damage at all and they're cured, you can have, you know, within guidelines, I don't think people have studied that a whole lot. You have had a liver that's been affected by a virus and and it makes sense to me that you would want to be really telling people an alcoholic drink on special occasions. Sure. But I wouldn't go beyond that. I mean, I just don't think we have enough to say it's completely safe. I mean, in terms of HCC, the data are presented. If you're cured, and you're not drinking at all, you're not going to get HCC. But if you drink a little bit, and you're cured, it's still a little bit of an issue. Let's see. Recovery now has health home. Wow. Well, it's great to have somebody who went from one side to recovery. Well, we need to learn more. I think one of the things that we still don't know is we need to learn more from people who successfully stopped drinking and what the infrastructures that worked for them. My sister who had an alcohol use disorder years ago, and has been a faithful member of AAA ever since. And her husband continues to drink. You know, I always think, Boy, you know, having a family situation like that is tough, but so the AAA can be very powerful. And we need to learn more about success stories like that. Let's see if there was anything else there was think it was cute comment about booze and COVID. Yeah, and it is true boy, I mean, if you guys are out there doing primary care, you're going to be and you ask about alcohol consumption. I think you'll be running into a lot more. One of the things that bothers me as a primary care physician is that we often ask about at the initial visit and then we don't reopen it so much. And people do change a lot with stressors like this. So it's important to reconsider how much they're drinking in a you know, environment that's so high and stressful as we have right now. Do you believe medications are under prescribed Are you kidding me? Of course, our immune people can't even get care most primary care Doc's this is way off their radar. And most Many patients have

trouble getting to specialists as we saw. So yeah, I mean, we just start prescribing these drugs. We know there are very effective well, very, we are moderately effective drugs way better than nothing. In conjunction with Dr. Reynolds contingency management

53:19

under wonderful, we will wrap up there for today. I want to Firstly, thank you again, Dr. Turner, for being with us for this wonderful presentation.

[End Transcript]