



## VOLUME 2 – ISSUE 12: TRANSCRIPT

### Featured Cases: HIV and Alcohol

Our guest author is Geetanjali Chander, MD, Associate Professor of Medicine at Johns Hopkins University School of Medicine.

After participating in this activity, the participant will demonstrate the ability to:

- Describe how and when to screen for alcohol use and determine the severity of alcohol misuse among individuals with HIV.
- Explain the impact of alcohol use of HIV medication adherence, transmission risk behavior, HIV outcomes, and liver disease progression.
- Describe interventions that can be used in HIV treatment settings to support a reduction in nondependent alcohol use.

This discussion, offered as a downloadable audio file and companion transcript, covers the important topic of HIV and alcohol in the format of case-study scenarios for the clinical practice. This program is a follow up to the Volume 2, Issue 11 eHIV Review newsletter—[HIV and Alcohol](#).

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#### Unlabeled/Unapproved Uses

Dr. Chander has indicated that there will be no references to unlabeled/unapproved uses of drugs or products.

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**LAUNCH DATE**

May 28, 2015; activities expire 2 years from the date of publication.

Length of Activity: 30 minutes

**STATEMENT OF NEED**

- As the demographics of HIV have shifted to include many older adults, clinicians require education regarding the treatment of common comorbidities.
- Clinicians may be unclear about issues specific to the diagnosis and treatment of women with HIV.
- Many clinicians require education regarding current treatment and new emerging hepatitis C medications in patients coinfecting with HIV/HCV who require antiretroviral therapy.
- Clinicians may need an update on current recommendations for the treatment of HIV with HAART.

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**MR. BOB BUSKER:** Welcome to this eHIV Review Podcast.

Today's program is a follow-up to our newsletter on *HIV and Alcohol*. With us today is that issue's author, Dr. Geetanjali Chander, Associate Professor of Medicine at the Johns Hopkins University School of Medicine in Baltimore.

eHIV Review is jointly presented by the Johns Hopkins University School of Medicine and the Institute for Johns Hopkins Nursing. This program is supported by educational grants from AbbVie, Inc., Merck & Co., and ViiV Healthcare Company.

Learning objectives for this audio program include:

- Describe how and when to screen for alcohol use and determine the severity of alcohol misuse among individuals with HIV.
- Explain the impact of alcohol use of HIV medication adherence, transmission risk behavior, HIV outcomes, and liver disease progression.
- Describe interventions that can be used in HIV treatment settings to support a reduction in nondependent alcohol use.

Dr. Chander has indicated that she has no financial interests or relationships with a commercial entity whose products or services are relevant to the content of her presentation. She has further indicated that her presentation today will not include any reference to unlabeled or unapproved uses of drugs or devices.

I'm Bob Busker, managing editor of eHIV Review. Dr. Chander, thank you for joining us today.

**DR. GEETANJALI CHANDER:** Thank you for having me, Bob.

**MR. BUSKER:** The articles reviewed in your newsletter issue gave us a broad-spectrum look at the effects of alcohol on the health of patients with HIV infection. Today I want to see how we can translate some of those findings into clinical practice. So start us off, if you would Dr. Chander, by describing a patient situation.

**DR. CHANDER:** JD is a 57 year old man who came to the clinic after a five-year hiatus from his HIV care.

He reports that his last provider told him that he didn't need to be on treatment. He's a former injection drug user now on methadone maintenance; he does not use other illicit drugs. He does report social drinking and smokes one half pack of cigarettes daily. He has no other drug use. His other medical problems include a history of congestive heart failure with a preserved ejection fraction and chronic hepatitis C infection.

His most recent laboratory studies show a CD4 cell count of 307. Five years ago his CD4 cell count was 1,236 cells. His HIV viral load is 48,892 copies. His liver function tests are notable for an AST of 110, an ALT of 30, a T bili of 0.7, an albumin of 4.2. Imaging of his liver shows no evidence of hepatic masses.

**MR. BUSKER:** Between his liver function test results and his hepatitis C infection, I think we can assume you're concerned about his alcohol use.

**DR. CHANDER:** I absolutely am concerned about it.

**MR. BUSKER:** How would you initially approach him about it?

**DR. CHANDER:** The first step is to determine how much the patient is drinking. The easiest way to ask about alcohol use as a first initial question, is to ask individuals on how many occasions in the last year have they had more than three drinks on one occasion for a woman, or more than four drinks on one occasion for men, this is considered a binge episode. And by casting a wide net, you are then more likely to get an individual to open up about their alcohol use and discuss whether they drink at all. And if the individual has had more than one occasion with one of these episodes I would really follow up then with more detailed questions about the alcohol use, how many drinks does this individual have on a specific occasion, how many drinking days per week does the individual drink, and then I would also follow up and ask if there have been any consequences from the alcohol use, any harm, missed work, social/psychological consequences.

**MR. BUSKER:** You've been using the term "drink." How is "drink" defined?

**DR. CHANDER:** That's a good point, it's very important to determine what a patient is drinking. A standard drink is considered any drink with 14 grams of alcohol, and this is typically 12 ounces of beer, 1.5 ounces of liquor, 5 ounces of wine. The important thing to realize is that patients don't always drink in standard drinks. For example, if an individual typically consumes 40 ounce beer cans, that's closer to 3-1/2 standard drinks. So the NIAAA guidelines for drinking all refer to standard drinks.

**MR. BUSKER:** Let me propose a hypothetical situation with this patient. Let's say that this guy likes sports, and Saturdays and Sundays he's watching the games. He's drinking maybe five or six beers each time — sometimes maybe a few more than that, but not all that often. Now you find he's had no tolerance or dependence, he's not had alcohol withdrawal — how would you counsel him?

**DR. CHANDER:** I would classify him as an at-risk drinker, given that he is binge drinking. The NIAAA defines hazardous alcohol use, or at-risk alcohol use, as more than 14 drinks per week or more than four drinks on one occasion for men; and more than three drinks per occasion or more than seven drinks per week for women. And for people over 65, they all follow the guidelines for women.

So not knowing if he's had any further consequences, but assuming he hasn't, given his level of alcohol use I would assume he's a hazardous alcohol user, and I would do what's called a brief intervention. This is used in individuals with nondependent substance use and is a brief, directive interaction that provides personalized feedback on alcohol and alcohol-related problems. It follows a five A's format: the first is to **ask** about alcohol use. You **assess** the severity of alcohol use, whether the person had mild, moderate, or severe alcohol use disorder versus at-risk alcohol use with no consequences. You **advise** the person to cut down or abstain. You will **assist** in goal setting and further treatment when necessary and **arrange** for follow-up to monitor progress. You can bring in elements from the history when you're giving advice and feedback such as elevated liver function tests, or depression, or hepatitis C, or HIV medication adherence.

**MR. BUSKER:** Let's focus on his hepatitis C coinfection for a moment. Now he is HIV positive, but he's not on any HIV medications right now. So how would you address his HCV?

**DR. CHANDER:** First I'll address the alcohol use with hepatitis C. Ideally he would abstain. A recent study from the Veteran's Aging Cohort, the VACs cohort demonstrated that any level of alcohol use among individuals with HIV and hepatitis C coinfection is associated with increased hepatic fibrosis. We know that alcohol use does harm the liver and can make it even worse among people with HIV and hepatitis C. So abstinence would be desirable, but it's not always achievable. The approach I take is that while I would recommend abstinence, even a reduction to say four drinks is an improvement. If this patient could get below four or five drinks on those binge drinking occasions to maybe two or three, that's probably better than continuing to drink five or six drinks on that occasion, though I would definitely first recommend abstinence. I would also counsel on the interactive effects of alcohol, HIV, and hepatitis C, and at routine follow-up do this.

For the patient's next steps, I think antiretroviral therapy initiation is very important, not just for HIV, but also we know that among people with HIV and hepatitis C coinfection, antiretroviral therapy for HIV can also slow progression of liver disease. I think very important to get him on medication not only for his HIV, but also to optimize treatment for his hepatitis C infection.

I would also spend time talking to him about his concerns about taking his medications, counsel him on adherence, and most important, stress the importance of taking his medications even if he drinks alcohol, because a number of people think they should hold their HIV medications if they're going to drink because there may be interactions between the alcohol and the antiretroviral therapy.

**MR. BUSKER:** Thank you, doctor. And we'll return, with Dr. Geetanjali Chander from Johns Hopkins, in just a moment.

**JEANNE KERULY:** Hello. I'm Jeanne Keruly, assistant professor of medicine in the Division of Infectious Diseases at the Johns Hopkins University School of Medicine. I'm one of the program directors of eHIV Review.

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**MR. BUSKER:** Welcome back to this eHIV Review podcast. I'm Bob Busker, managing editor of the program. Our topic is HIV and Alcohol. And our guest is Dr. Geetanjali Chander, associate professor of medicine at the Johns Hopkins University School of Medicine.

We've been discussing how some of the new information Dr. Chander presented in her newsletter issue can be applied in the clinic. So to continue, doctor — if you would, please — describe another patient for us.

**DR. CHANDER:** We have a 25 year old man recently diagnosed with HIV while hospitalized for depression. Post discharge from the hospital he attended a three-week alcohol detoxification program. He does not use illicit drugs. When he was drinking, he drank two 40 ounce beers daily, but has had no alcohol in the past 3 weeks. His CD4 count is 342 cells and his HIV RNA is 53,000 copies.

**MR. BUSKER:** With this patient, doctor — what's your initial approach to his alcohol use?

**DR. CHANDER:** Since he has just gotten out of a detox program and prior to that was hospitalized for depression, the first thing I would do is assess his mood and depressive symptoms to get a sense of how he's doing now that he's no longer drinking and no longer in the hospital for depression because his mood certainly could affect his drinking and result in relapse.

I would also assess for cravings for alcohol. He's been out of treatment for just three weeks, and typically someone comes out of detox who had been drinking quite a bit may have cravings that include thoughts, physical sensations, or emotions that might tempt him to drink. After I assess if he's had cravings, if he

has had them I would probably probe a little more in depth to discuss his triggers for alcohol use including risky moods and situations; external triggers such as people, places, and things; and internal triggers such as thoughts and emotions to get a sense of how he's coping with not drinking. And after I've assessed all of that, if he tells me that he is having cravings for alcohol, I would consider pharmacotherapy to prevent relapse into alcohol use.

**MR. BUSKER:** Pharmacotherapy to prevent alcohol use relapse — what options are available?

**DR. CHANDER:** First, alcohol pharmacotherapy can be helpful for relapse prevention among people who have had a severe alcohol use disorder and have stopped drinking. It's important to consider when someone comes into the clinic after a detoxification and they're having cravings. Currently three medications are FDA-approved: naltrexone, acamprosate, and disulfiram. Naltrexone has been shown to be effective in reducing cravings for alcohol, decreasing relapse in multiple studies and meta-analyses. The most important thing to know about naltrexone, however, is to avoid using it in people who are taking opioids.

Acamprosate has also been shown to be effective in multiple clinical trials and in meta-analyses. Acamprosate increases abstinence time.

The third medication is disulfiram, which does not directly address cravings related to alcohol use but instead is aversive therapy, which most people are very familiar with because it is the one medication that most individuals learn about for alcohol use.

**MR. BUSKER:** Are there any concerns with using these agents in combination with HIV medications?

**DR. CHANDER:** There don't appear to be any significant drug/drug interactions between these medications and the various antiretrovirals. However, it's important with any of these medications to follow liver function tests after starting them because both disulfiram and naltrexone can cause elevated liver function tests.

**MR. BUSKER:** Another aspect of potential drug-drug interactions I want to ask you about. This patient is three weeks out of a detox program, but before that he was hospitalized for depression. Let's assume that he

got medication to manage that depression, most likely an SSRI. Does having that drug on board make any difference in how you would start his HIV treatment?

**DR. CHANDER:** My biggest concern in someone who has depression is whether to use efavirenz, given its CNS side effects. He is on an SSRI, but since we have so many other antiretroviral therapies now, I would probably avoid efavirenz in him.

Currently he meets guidelines for initiating treatment, and I would assess his readiness to begin therapy. I might have him come back for a visit or two if I were worried about his not following up with appointments, but in general, if he is ready to start treatment I would. I would probably use a regimen with a higher threshold for resistance such as one consisting of a boosted protease inhibitor. It would be important to treat him to optimize his long-term outcomes and also to avoid transmitting HIV to others, and the best way to do that is to treat him and have him achieve an undetectable viral load.

**MR. BUSKER:** So you've got this patient on an alcohol relapse prevention agent, and you've started him on ART. How would you monitor him for the effects of both these treatments?

**DR. CHANDER:** If I also started him on alcohol pharmacotherapy, I would either have frequent follow-up appointments, or if that's not possible, I would over the telephone discuss difficulties taking his antiretroviral medicines, his alcohol pharmacotherapy, any side effects from the medications, and I would touch base regularly, especially if we're starting both pharmacotherapy for alcohol use and the antiretrovirals.

In discussing alcohol pharmacotherapy over the telephone I would ask whether he has any cravings, does he attend mutual self-help groups, and then I would also ask about difficulties taking the antiretrovirals, and particularly in the context of alcohol use. I'd remind him that even if he drinks, it's important to continue to take the antiretroviral therapy. And finally, I would make sure he comes back in in about a month to check liver function tests and follow-up on initial viral load response to therapy.

**MR. BUSKER:** Thank you for that case and discussion, doctor. Let me ask you now to bring us one more patient scenario, if you would please.

**DR. CHANDER:** DB is a 54 year old African American woman with HIV infection who is on antiretroviral therapy. Her current CD4 count is 761. Her most recent viral load is 1,300 copies, after being undetectable for two years. She's on a regimen of tenofovir, emtricitabine, and rilpivirine. She has a history of alcohol use and notes that most recently she's been drinking a pint of vodka with orange juice, usually at dinnertime, and has been missing her antiretroviral therapy as she previously took her antiretrovirals with dinner. She most recently sought psychiatry and was started on disulfiram. She has not had alcohol in the past week.

**MR. BUSKER:** Her increased viral load is troubling. How would you approach it?

**DR. CHANDER:** First, she admits she has not been taking her antiretrovirals, she's been missing dinner, and as a result is missing her medications, which she relates to alcohol use. It is important to reinforce that alcohol use can result in antiretroviral therapy interruption and discontinuation, resulting in an increased viral load.

I would discuss her patterns of antiretroviral therapy use and think about ways in which she can incorporate taking her antiretrovirals into her schedule even if she is drinking. Since she previously always took her antiretrovirals with dinner, is there an alternate way for her to take her medications or an alternate time for her to take her medications? We may not be able to address the alcohol quickly, although we do know we need to address it; but we also need to get her back taking her antiretrovirals appropriately and getting her to an undetectable viral load.

I would also discuss with her her beliefs related to interactions between antiretroviral therapy and alcohol. A recent study among a sample of individuals who drank demonstrated that a large proportion of people did stop their antiretrovirals when they either knew they were going to drink or after they were drinking, or if they were hung over. Some of the people believed drinking alcohol would cause the antiretrovirals to be less effective. So I would also want to get a sense of what are her thoughts or beliefs about the interactions between alcohol and HIV medications, and then also whether her alcohol use affects how she takes her antiretrovirals.

Finally, I would obtain a genotype to ascertain whether not she has acquired any antiretroviral resistance with her viral load of 1,300 copies.

**MR. BUSKER:** Now you said psychiatry has started her on disulfiram, which as you noted earlier, is an aversion therapy. How would that affect how long you might wait to begin ART?

**DR. CHANDER:** There is no interaction between the antiretroviral therapy regimen she was on and disulfiram, so if the genotype shows no evidence of resistance, I would restart this regimen. I would counsel her on the consequences of drinking alcohol while using disulfiram, which include flushing, headache, nausea, vomiting, and anxiety, and I would also just ensure that she returns for repeat liver function tests. Finally, a couple of other things: I would discuss her cravings and make sure that she's either participating in mutual support groups or continuing to follow up with psychiatry. And if she did have evidence of resistance to her current regimen, I would likely select a regimen again with a higher barrier to resistance, given that she has discontinued her antiretroviral therapy or interrupted her antiretroviral therapy within the context of alcohol use.

**MR. BUSKER:** So let's say — again, for the purposes of this discussion — that this patient comes to you and says: "I'm really having intense cravings for alcohol." How might that affect your treatment?

**DR. CHANDER:** If she's having cravings, I would take her off of aversive therapy for alcohol use, disulfiram, and switch her to a medication such as naltrexone that can address cravings. There are no interactions between her antiretroviral therapy and naltrexone, so the most important thing to do is prescreen her for opioid use; if you are concerned that she's using opioids, also ask for a urine toxicology prior to prescribing. But otherwise I think naltrexone would be a nice choice if she's having cravings.

**MR. BUSKER:** Let's say that you do switch her to naltrexone, but she reports she's still having cravings — and even more, she's continuing hazardous use of alcohol. What would your next steps be?

**DR. CHANDER:** It's important in that scenario to make sure she has access to more intensive treatment. In that case, she definitely should also be undergoing

behavioral therapy to learn coping mechanisms and to learn how to handle and manage risky situations, manage her triggers, manage her coping. I think this would require a team of individuals, including a substance abuse counselor, a behaviorist, and a psychiatrist. I think once you get past a certain point, some individuals require more intensive therapy and she would fall into that category. So it's being familiar with what resources are available to the patient in your clinical practice.

**MR. BUSKER:** Thank you for today's patients and discussion, Dr. Chander. I'm going to switch gears on you now and ask you to talk a little bit about what you see as the future of managing alcohol use in the setting of HIV care.

**DR. CHANDER:** In general, I think alcohol use management is moving into primary care settings from specialty settings. And a lot of this is because the majority of people who present with some sort of alcohol use disorder do not present to a specialty treatment clinic or to a psychiatrist; they present in the primary care settings and it's generally picked up by the primary care doctor because there's been a change in the health status. And that's why it's important that HIV primary care docs have a sense of how to appropriately identify risky alcohol use; how to recognize mild, moderate, and severe alcohol use disorders; and to understand what they can do in their office versus what they might need to refer.

It's increasingly important for providers to be comfortable screening for alcohol, performing brief advice within the clinic visit, understanding when we may initiate pharmacotherapy, and then how to monitor for alcohol use.

**MR. BUSKER:** Thank you for sharing those insights, doctor. Let's wrap thing up by reviewing the key points of today's discussion in light of our learning objectives. So to begin: how and when to screen for alcohol use and determine the severity of alcohol misuse among individuals with HIV.

**DR. CHANDER:** The major points here are that it is important to screen our patients when they come in for alcohol use and that we can use a single question as an initial screener. If someone does not drink or has not had more than one binge episode in a year, you don't need to ask further questions. But if they have, you want to ask more detailed questions about

their alcohol use, clarify exactly what they're drinking, and determine how severe their alcohol use is by reviewing consequences and harms that may have occurred related to their alcohol use, including tolerance and withdrawal.

**MR. BUSKER:** And our second learning objective: the impact of alcohol use on HIV medication adherence, HIV outcomes, and liver disease progression.

**DR. CHANDER:** Today we discussed how alcohol use can affect adherence and antiretroviral therapy interruption; an individual can forget to take medication or stop taking them altogether, and this can affect virological suppression; and it's important to probe beliefs about interactions between alcohol and antiretroviral therapy, as this may play a role in their stopping or interrupting their antiretrovirals. Finally, it's important to note that alcohol use does hasten the progression of liver disease among people coinfecting with HIV and HCV, so it's important to screen and discuss alcohol use with people with HIV and hepatitis C coinfection.

**MR. BUSKER:** And finally: interventions that can be used in HIV treatment settings to support a reduction in nondependent alcohol use.

**DR. CHANDER:** Key takeaway points here are that you can screen and perform a brief intervention in your HIV primary care clinic, and it can be done very simply with a single screening question, followed by more directed, detailed questions, and then giving brief advice on alcohol use.

We also reviewed different pharmacotherapies for alcohol use for people who have more severe alcohol use disorders and who may have cravings. It's important to be familiar with these medications, as that will ultimately improve uptake of the medications among patients who need them. Finally, it's important to note that people who have severe alcohol use disorders absolutely may require more intensive therapy, and brief alcohol intervention alone will likely be insufficient. In these cases, we must ensure that the person has access to psychiatric treatment, behavioral counseling, and further assessments for pharmacotherapy.

**MR. BUSKER:** Dr. Geetanjali Chander from the Johns Hopkins School of Medicine, thank you for participating in this eHIV Review Podcast.

**DR. CHANDER:** Thank you for having me today, Bob.

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