

Dr. Elizabeth Salisbury-Afshar: Welcome, this is *ASAM Practice Pearls*, a podcast series from the American Society of Addiction Medicine. I'm your host, Dr. Elizabeth Salisbury-Afshar. Today's episode is part of a four-part series featuring highlights from ASAM's 56th Annual Conference. In this episode, we're diving into one of the most popular sessions year after year, which is entitled The Annual Review of Addiction Medicine: Highest Impact Publications 2024-2025.

I am thrilled to welcome our experts, doctors Sarah Wakeman and Joshua Lee. I have to say that, as a longtime attendee of the ASAM meeting, this is a session I look forward to every year. I remember some of the initial years I went, it would be standing room only. We've finally gotten to a place where now you all are in the biggest room available at the conference each year because you have such overwhelming attendance. And I'm so grateful that you could be here today to talk a little bit about your session and some of the really high-impact articles.

Before we get started, I'm actually just going to ask each of you to give like a one or two-sentence intro, just in case not all of our listeners have had the opportunity to meet you.

Dr. Sarah Wakeman: Sure. Yeah. My name is Dr. Sarah Wakeman. I'm an addiction medicine physician in Boston. I'm Senior Medical Director for substance use disorder at Mass General Brigham, which is a large integrated academic health system. I'm also program director of our Addiction Medicine fellowship program and associate Professor of Medicine at Harvard Medical School.

Dr. Elizabeth Salisbury-Afshar: Thanks so much. And Dr. Lee?

Dr. Joshua Lee: Yeah, I'm at NYU Grossman School of Medicine. I work at Bellevue Hospital, a public hospital in New York City. I'm a primary care doctor and then became addiction medicine specialized. I also direct our addiction medicine fellowship. So, I see patients in primary care, doing addiction medicine and lead research, largely focused on medications for opioid use disorder, for alcohol use disorder, and often with the primary care or criminal justice population. And, really enjoyed doing this presentation in the last almost 10 years. And it's been a lot of fun.

Dr. Elizabeth Salisbury-Afshar: Great. Thank you both. And I think one of the things I always appreciate about it the most is that you are both still practicing. You both engage in research, and so really, it's very obvious in how you talk about the studies that you review, that you're always thinking about how we use this to impact practice. So, with that in mind, we'll go ahead and jump in, and I'm going to ask if you could just give a little bit more history on the session, sort of how it got started and how it's evolved.

Dr. Sarah Wakeman: Yeah, I think it's been almost a decade. I'm trying to remember exactly. I think I had zero children, and now I have three. So, it's been a while since we started this, and I think Dr. Fingerhood maybe invited us. I'm trying to remember

when it first began, but I didn't know Dr. Lee at all before this. So, we met through doing this and got asked to present on sort of the biggest topics in addiction medicine and it's evolved ever since.

But it's certainly a highlight of my year and has been incredibly fun to do it with Josh, and to go through the preparation process and then the presentation every year.

Dr. Joshua Lee: Yeah, absolutely. I think [in] earlier versions there was probably always kind of an update at a conference like ASAM. I guess the occasion came up to kind of refresh it. And we went with this idea that we'll present today of kind of using a somewhat kind of objective survey. Although it's not really objective of the literature in the last year, and using that for the basis versus kind of, "Here's what I think is important," which was often kind of how the updates were structured in years past.

Dr. Elizabeth Salisbury-Afshar: Great. And can you talk a little bit more about sort of the details of how you're selecting the articles, and I know that you sometimes have rankings that you include in the slides. Can you talk a little bit more about that?

Dr. Joshua Lee: Yeah, there was no roadmap, but we came up with one, or kind of a methodology. The first question is like, what have people been reading? What's the big article in cardiology or whatever field I'm in? And it's hard to say because you don't click on an article, you look up something that you're interested in.

There wasn't an obvious statistic to look at or data for how many people had read it. So, then you just assume that impact factor drives this, which certainly is an important part. So, that's like the big journals with the most citations historically have the biggest impact factors that's in our field for General Medicine, New England Journal Medicine, JAMA, Lancet, et cetera.

So, if there was something about addiction in New England Journal, that must be a big deal, but you still don't know how big of a deal it was relative to what they published in JAMA, et cetera.

And what has emerged since we started doing it was one particular tool, Altmetric. I don't work for this company. I think they're a private entity, but they came up with their own kind of score or algorithm for a MEDLINE index publication. If it has a serial number, which our articles do, or a PMID, it can track media mentions, blogs, Twitter (now X). They've added Bluesky, kind of what the chatter is publicly in the media or in social media about an article, independent of what the topic is or what specialty that article is from. So, now you have kind of a number. There's flaws in it. It's biased, it's not, for sure, what everyone's read versus, like, what's been picked up by wire reports or news media, which drives a lot of the score. But at least now you have a relative scale of what the world has kind of clicked on, that you didn't really have before. So, our talk going back over the years did kind of align with these new publication

metrics. And, more and more, Altmetric is embedded in these journals for each article; it seems to be kind of a score of choice to show relative attention.

So, that's how we come up with a top article or a top 10. It's not our opinion, it's kind of what we found with the highest score in our area of addiction medicine for a given time. And then it's also fuzzy: addiction medicine, what is that? You know, is it rat studies? Is it epidemiology? Is it some study that was done in a different country, about a different type of addiction that we don't spend much time thinking about or treating? Is it about the medical complications of addiction, which are quite numerous. We don't really cover, like, the year of Hep C treatment. Like, we don't go in-depth on important conditions to our patients. We do kind of draw these arbitrary lines in terms of what articles we're going to search for and review. So, understanding all that, we then kind of present our stuff. But there is a lot of limitations, and it's a work in progress. And we tweak it every year, how we're actually going to search for the articles. We'll try and add journals we hadn't been looking at previously year to year. And so, it does kind of evolve and grow each year.

Dr. Elizabeth Salisbury-Afshar: Wow. So, first I just want to say thanks. It sounds like a tremendous amount of work and it's really obvious in hearing you talk, how much thought you both put into this. With all of that background, can you maybe start by talking about what was the top paper of the year based on the methodology that you just described?

Dr. Joshua Lee: We kind of presented two top papers. So, there's a current top paper, and it's from 2025, and it is a small but important randomized trial of semaglutide for alcohol use disorder. And then there's a second paper, which was our top paper, and that was the highest-ranked one from 2024.

And that is about fentanyl seizures using law enforcement data. I think we'll talk about both of these, but let's start with the GLP-1 paper and GLP-1's in general, which was a really hot topic at ASAM this year.

Dr. Sarah Wakeman: So, shifting to that. So, the number one paper was a randomized controlled trial of semaglutide for non-treatment-seeking adults with alcohol use disorder. So, people who are still currently drinking, who are brought into a laboratory setting, and were given weekly doses of either semaglutide or sham placebo, starting at 0.25 milligrams and going up to 0.5.

And then, at the discretion of the investigator, they could increase to one milligram. And, showed significant findings that both in laboratory settings, participants who got study drugs, semaglutide, consume less alcohol. They had a lower blood alcohol content, but also in the in-between weekly assessments where people reported how many drinks they were having, they had fewer heavy drinking days and overall drank less.

So, as we think about sort of emerging areas of addiction medicine, this was obviously a really big paper, but also one paper and a sea of emerging evidence around GLP-1's. And we had actually a whole session about GLP-1's at ASAM as well. And reviewed a number of other studies that maybe Josh can sum up as well about tobacco use disorder and GLP-1's, and then some of the large data mining around opioid use disorder and overdose as well.

Dr. Joshua Lee: Yeah, the lead author was Christian Hendershot. It is JAMA Psychiatry. It's from 2025. In addition to that, there was a series of articles we presented from a group in the federal government including Nora Volkow, the director of NIDA, and the lead author there is William Wang on, I believe all these papers.

There's one in *Annals of Internal Medicine: Association of Semaglutide With Tobacco Use Disorder in Patients With Type 2 Diabetes*. There's one in *JAMA Network Open: Semaglutide and Opioid Overdose Risk in Patients With Type 2 Diabetes and Opioid Use Disorder*. There's one in *Molecular Psychiatry: Association of Semaglutide with Reduced Incidence and Relapse of Cannabis Use Disorder*.

Without going down into all the details, they used a huge health claim data set to retrospectively contrast, in diabetics, semaglutide with other diabetic medications. And then in diabetics with a tobacco use disorder, look at kind of future claims for tobacco use disorder care in the group of opiate use disorder patients to look at rates of opiate overdose in the medical claims downstream.

And in the cannabis paper, use that similarly look at claims for cannabis use disorder after the start of semaglutide versus other diabetes treatments. And in all these, all of which were high ranking articles in those journals, they found associations with kind of reduced burden of disease, less cannabis, tobacco, and opiate use disorder claims, including less events of opiate overdose if GLP-1's were the treatment versus other diabetes medications. That's independent of other opiate use disorder, tobacco or cannabis use disorder treatments those populations may have gotten.

So, again, this was kind of data mining. It's a retrospective on a claims analysis, so these medications were never prescribed, that we know of, with the intent of reducing overdose, say, but it's quite a signal from this naturalistic data that we're already seeing in people that otherwise are on GLP-1's improved addiction-related outcomes. Thus, [there is] a lot of the excitement around these medications going forward.

Dr. Elizabeth Salisbury-Afshar: Yeah, so definitely hearing from you both, on the whole, a lot of promising evidence coming forth, and something I imagine we'll continue to see more of in future years.

Dr. Sarah Wakeman: Absolutely. I think an explosion of clinical trials are coming out as well to complement some of these naturalistic studies. And I think it's important to

note, obviously this is a hot topic and in the sort of lay press and on social media and lots of anecdotes about people's experience, but there's actually been a ton of preclinical work too in rats and monkeys.

This is not something brand new in terms of the body of evidence around addiction and substance use-related outcomes. And we need to wait to get really good, high-quality data. So, I think there's tremendous enthusiasm, and it's important that there's also a lot of rapidly emerging science, and really important for us to follow what evidence shows.

Dr. Elizabeth Salisbury-Afshar: Great. Maybe we'll hear from you both more next year at the next one of these sessions to see sort of what happens in 2025. So, I'm curious, what other trends did you see in the literature that you reviewed at this session this year?

Dr. Joshua Lee: Our presentation has been fairly dominated by opiate use disorder questions, papers, treatments for years now, and that's, of course, reflecting the opiate use disorder crisis that's gripped our field and our country for so many decades now, and stuff related to overdose rates, causes, and then treatments and preventative measures.

So, this year, was no exception. The number one paper from 2024, let me give some citation details. Joseph Palamar, who happens to be a colleague of mine at NYU, is the lead author and some distinguished other authors. And it comes from the NDUs National Drug Early Warning System Consortium, which is a NIDA-funded effort to do all types of surveillance with all types of available data, including law enforcement data, to kind of track and be aware of emerging drug trends. This was in *International Journal of Drug Policy*. The title was *National and Regional Trends in Fentanyl Seizures in the United States, 2017-2023*. And pretty simply, it showed a rising rate of law enforcement, seizure of fentanyl as the kind of product that they're seizing.

It contrasted powder seizures, like an envelope or plastic bag with fentanyl powder versus pills. So, increasingly, law enforcement, and I think people report in terms of drug user epidemiology pressed pills that are pressed out of the country, presumably in Mexico. And then are kind of the form of fentanyl sold on the street. It's different than counterfeit pills, which are also a problem. Like you think you're buying Xanax or Adderall, but you get a fentanyl pill. In this case, it's pills that are marketed on the street as fentanyl. And those seizures are going up, particularly in the western United States.

We noted this in the presentation, virtually no seizures from Canada into the northern U.S. From other data, we know most of Canadian fentanyl comes from the United States. And ultimately most of it's coming from Mexico. So, that was a pretty straightforward paper. It didn't have a ton of like, "And now I will do this in my practice," but it really helps us understand how fentanyl trafficking and fentanyl product formulation, if you will, in the illicit market is tilting towards kind of pill forms.

We then got into declining overdose rates, which was not a paper because the CDC generally just has a dashboard now for updating the country on overdose rates. But, of course, we saw a decline in 2024 year over year, and that was welcome news.

Dr. Sarah Wakeman: I think one thing we highlighted that's important to note is obviously amazingly positive news to see a 24% decrease in overdose deaths, and also worth noting that that's almost entirely driven by lives saved amongst White individuals and that death rates have continued to rise in Black communities and American Indian and Alaskan Native communities.

Dr. Joshua Lee: We focus quite a bit on some papers about buprenorphine induction and challenging inductions in the face of what's predominantly known most of the United States, fentanyl use/fentanyl dependence.

Dr. Sarah Wakeman: I think, you know, as a practicing clinician, the last couple years there's been lots of, I think, focus on, attention, conversation with my colleagues about how do we think about starting buprenorphine in the era of illicitly manufactured fentanyl. And lots of concern, anecdotes, mixed evidence about the frequency of buprenorphine-precipitated opioid withdrawals.

This idea that because of fentanyl's lipophilicity and the way that it builds up in fat stores, even though it's a quick on/quick off drug, that in people who are using it chronically, that they may actually have a long tail half-life and that that could explain why we've seen these cases of patients who, even after waiting, what would, traditionally in the era of heroin been more than enough time, 12-24 hours, sometimes 72 hours, are experiencing what seems like precipitated opioid withdrawal when initiating standard doses of buprenorphine. And so, that has led to this emergence of different ways of starting buprenorphine. So, in the olden days, not that long ago, we would start with the standard dose of four milligrams.

Basically no one does that anymore, at least in my world. The only time people do that is when someone is confirmed to be using prescription opioids, and most people are going to either sort of low dose or "microdose" initiations with a full opioid agonist bridge or higher dose buprenorphine initiation, which is something we covered last year in our review.

And I think it's made what we had hoped to be a really simple thing that we could pass on to generalists of, "Just start buprenorphine and don't think too much about it," into a bit of a murkier field of the nuances in starting buprenorphine. And so, having more evidence both about how often precipitated opioid withdrawal happens and then different strategies for starting buprenorphine, I think is really welcome.

So, one important paper that we looked at was actually a way of initiating buprenorphine in people who are only experiencing minimal or mild withdrawal. So, unlike our kind of traditional sublingual initiations where we want to wait until someone has a COWS of 8 or 15, or objective signs in addition to symptoms of opioid

withdrawal, some colleagues in emergency medicine addiction medicine looked at initiating extended-release weekly buprenorphine in people with mild to minimal withdrawal.

So, this is a paper in JAMA Network Open that was published by Dr. D'Onofrio as the lead author. The title is *Extended-Release 7-Day Injectable Buprenorphine for Patients With Minimal to Mild Opioid Withdrawal*. What they looked at is with weekly extended-release buprenorphine, in particular, there's a relatively slow rise in the serum buprenorphine levels, slower than taking a sublingual dose, for example, and slower than the monthly formulation.

And so, the authors hypothesized that you could sort of take advantage of that slow onset of action, and it would almost be like a low-dose buprenorphine initiation. It was a multi-site trial. They took individuals who were coming into the emergency room who really didn't have significant withdrawal yet. So, they had a COWS of seven or less and looked at what would happen if they initiated weekly buprenorphine. And they found that in the folks that had a COWS of four to seven, so really kind of mild withdrawal, but some COWS scores, people did really well. The rate of precipitate withdrawal was less than 3% in that population. In contrast, the folks who really had no withdrawal yet, so the COWS of zero to three, and the rates of precipitated withdrawal were higher.

So, it's 13.5% in that group. And they found that overall people did really well, even those who experienced precipitated withdrawal. Almost three-quarters were still engaged in opioid use disorder treatment after they finished that first week's dose. 60% reported no opioid use, and people were overall really satisfied with the medication.

I think, really, potentially very practice-changing. I know, you know, I work in a hospital-based setting and we're really excited about this study and thinking about it as a way that we can more readily initiate buprenorphine in people who are only experiencing mild opioid withdrawal.

Dr. Elizabeth Salisbury-Afshar: Yeah. Thanks so much for that and I really appreciate you sort of highlighting some of the background of how we were kind of all, at one time, doing things in a similar way, and then low-dose and then high-dose and now sort of this direct-to-inject and the different, you know, settings where each of these initiation practices have been studied.

So, super helpful and I think really helpful for those of us in a variety of settings, outpatient, inpatient, ED-based care to continue to think about and evolving practices. Anything else on initiating buprenorphine or did you want to move on to talking about some of the studies focusing on hospital consult services and buprenorphine initiation in those settings?

Dr. Joshua Lee: There were several large, very important randomized clinical trials, in addition to Gail's study. And one was the HEALing Communities Study. So, arguably the biggest story in NIDA-funded science in the last decade is the HEALing Communities Study. Main results published in New England Journal of Medicine, in June of '24. The title is *Community-Based Cluster-Randomized Trial to Reduce Opioid Overdose Deaths*. The lead author is the HEALing Community Study Consortium. We don't have time to detail HEALing Communities. It was a four-state kind of mega implementation science, stepped-wedge clustered randomized trial. A somewhat complicated design, but made sense, and had this very ambitious goal of driving down overdose rates in the randomized counties.

So, it was a county-by-county comparison, by 40%, kind of pre to post trial. It was taking place simultaneously in Kentucky, Massachusetts, New York, and Ohio. It cost a lot of money, and the rate of reduction when putting in place as much as possible and during COVID, all the evidence-based strategies they could from naloxone to more buprenorphine prescribing to safer controlled substance prescribing, they were able to reduce rates, but not by 40%. So, the main results were a reduction of, I believe, around 10% total, which did not meet significance. This paper, as a consequence, perhaps, did not generate as much kind of attention or excitement as maybe some of us had expected, but it goes down in history as a landmark study. There's a lot of publications coming from this.

There's a lot of important other results in terms of community-based consensus building and picking a strategy and putting it in place. And then COVID breaks out, so there's a lot of lessons learned from that public health crisis. And things did change in the intervention counties, but not as much as they had hoped.

That also came in the face of kind of rising rates of fentanyl and fentanyl-related deaths. So, COVID plus fentanyl may have overwhelmed a study design, but there's a lot of lessons to be learned, and I think we'll be digesting it for years to come. And then we showed two studies. One just came out, one was earlier last year, and we finally have very high-quality looks, and they're different studies.

And the results are, I think, similar as well as a little different, but looking at inpatient consults.

The first one we presented was from Jennifer McNeely and colleagues. Again, a buddy of mine at NYU. Shout out to Jen and her team. And this was in JAMA Internal Medicine from '24, *Addiction Consultation Services for Opioid Use Disorder Treatment Initiation and Engagement: A Randomized Clinical Trial*. That one was done in New York City public hospitals, which were rolling out inpatient consult services for addiction. It was a new thing, and they decided to do it in random fashion. It was another clustered, stepped-wedge trial. And it showed impact on initiation, especially if the CATCH service was in place at a hospital verse before or at a hospital that didn't have it yet.

You saw higher rates of medication prescribing for opioid use disorders. You saw slightly higher rates of post-discharge continuation, and you saw a little bit higher rates of retention, but also, overall, the rates in all these arms, treatment as usual. You got the intervention, or you're kind of in the inventor phase at your institution among all patients that were treated at the hospital at that time. So, it isn't all comers and the bad and the good are all in the patient outcome sample.

The rates of overall prescribing were kind of 5-15% and not 55-90% as you might expect for all the patients in this analysis have opioid use disorder. So, CATCH made a difference. CATCH being an inpatient consult, that's what we've been calling it in a lot of New York hospitals. But there's still a lot of room to grow in terms of just higher rates in general of medications for these problems. When you're in the hospital and when you're leaving, and then Sarah, you presented the next consult study, which was also in JAMA Internal Medicine.

Dr. Sarah Wakeman: Yeah, exactly. And a little bit of different findings. And I think your point about rates of MOUD are probably what things anchor on. So, this is another JAMA Internal Medicine study. The first author was Dr. Ober and the last doctor was Dr. Danovitch.

This is called the *START Randomized Clinical Trial*. And it was a three-site randomized controlled trial. Three different hospitals: California, New Mexico, and I think Tennessee. So, pretty wide geographic spread, and it was at randomized sites to have an addiction consult team, which was defined as an addiction physician and then a sort of care manager type role. And they looked at rates of MOUD initiation and then linkage to care following discharge and found significant differences between sites that had a consult team versus usual care. And, I think, notably, compared to the CATCH study where the rates of MOUD in the intervention arm were 11%, the rates of MOUD in the intervention arm in the START trial were 57%.

So, really significant number of people getting started on medication treatment, as opposed to 26% in folks who got usual care. And they saw an impact also with an increased likelihood of being linked to care following discharge was 72% of those who were seen by the consult team linked to care versus 48% in the usual care. So, overall higher rates of MOUD treatment, both in the usual care and the treatment arm, but really significant differences that folks seen by the consult team much more likely to get started on medications for opioid use disorder, and also higher rates of linkage to care.

So, I think, kind of adds to the evidence that being seen by a consult team is important and impactful, and one of the ways that it really leads to such improvements in outcomes are through higher rates of medication treatment initiation.

Dr. Joshua Lee: I got a lot of questions about these two papers after the presentation throughout the conference. One was kind of underwhelming, and one was clearly

successful, and I have a whole take on that. But just to point out, one is a cluster trial across the entire hospital.

So, the unit of study here is an entire kind of year of a hospital doing consult work. And the second trial, the START trial, is consenting and enrolling individual patients who then have to volunteer for the study, presumably from their hospital bed, and then they become the unit of the study throughout the trial.

Those are very different ways to look at a similar treatment. In this case, the inpatient consult. And you can imagine that the people that sign up for a trial like that are more enthusiastic, more kind of with it, more kind of able to take action on their treatment plan in general and are interested in a trial.

And that's a little different than the first study, the New York study, where you didn't even know you're in a trial. We're just trying to improve our outcomes with this CATCH service and we're going to study the entire hospital's experience. And then you get a lot of people kind of included in your dataset that we're probably less likely to do MOUD in general or long term.

And that can in a sense, kind of water down the results. But the contrast of the intervention versus the control in both these studies have a similar treatment effect. Like, percent increase is similar in the two in terms of what a difference CATCH makes. So, I think it's great to have both and they both kind of show CATCH is likely a positive and effective intervention.

Dr. Elizabeth Salisbury-Afshar: Thanks so much for sort of drawing out the difference between the study design. And I do just want to let listeners know that as part of this four-part series, we did interview Dr. Danovitch about the START study and the presentation at ASAM. So, if folks are interested in hearing more, you can listen to that podcast next to hear more details on that specific study.

With our remaining time, I know that you sort of had a category of articles related to adolescents as well as the impact of parental loss from use overdoses and use disorders for young people. I'd be interested to hear the highlights from some of those studies.

Dr. Joshua Lee: So, thank you for asking that one. The number three paper was *Estimated Number of Children Who Lost a Parent to Drug Overdose in the US From 2011 to 2021*.

Lead author is Christopher Jones. It's in JAMA Psychiatry in 2024. Chris Jones is pretty well known in our field. It's an example of another paper written by largely government employees and scientists, just kind of emphasizing the power value and contribution of people that work for the federal government in science in terms of the work they do, and what we learn from what is often, no matter if you're in

academics or government, you're looking at a survey that is funded, entirely administered by the federal government.

In this case, they're looking at National Household Drug Use and Health data and then pairing it with Vital Statistics to look at overdose deaths, and then what the estimated number of kids of victims of overdose in terms of kids they left behind. And the estimated is around half a million plus kids in the last decade are parentless, either both parents or one of the two as a consequence of drug overdose.

Just something we've all kind of been aware of in your community. It might be particularly important to the school district to social services and to future kind of drug use trends and burden of disease. But really kind of putting a kind of a new, detailed estimate on the number of lives kind of affected and kids in those situations.

We then jumped to two other papers that were in our top 10: Adolescent $\Delta 8$ -THC and Marijuana Use in the US, by Dr. Harlow, I believe from the CDC, and that was in JAMA in 2024. The point here was Delta-8 THC is hemp-derived, essentially pot, but it's not Delta-9. So, it is distinct from the federally scheduled and legislated marijuana. This is hemp-derived cannabinoid, which is active. It's also not synthetic cannabinoid, which is Spice/K2. That's a different thing. We're not talking about that. What we're talking about is like when you go into the gas station now and you'll see a cannabis soda, how is that possible?

I'm not in a legal state, or I'm not in an adult-use legal dispensary where otherwise these products can be available. And the loophole is that it comes from hemp, which only has it in a very low concentrations, but then you can concentrate Delta-8. You can put it in consumer products like Cheetos, or a vape pen, or a soda.

And it is psychoactive, and it's to most users, it's indistinct from actual cannabis-derived THC. So, it's, it's a different version of THC. It comes from hemp, but it's completely psychoactive and a similar kind of user experience to regular cannabis. And the rates that were detailed in this article were higher in youth in particular in non-legal states.

And that clusters in kind of the south and Midwest, so states that don't have legal marijuana. The emerging adult and youth population is more likely to be using Delta-8 THC. And then the final article was kind of an update on smoking and tobacco use, including e-cigarettes in youth populations.

This is from the Youth Tobacco Survey. It's looking year over year from '23-24. It shows declining rates of any tobacco product, which we're celebrating, and declining rates of e-cigarettes or vape products, which have been the predominant form of nicotine use in middle school and high school students for years now.

They far outpaced by a factor of like 4 or 5x the use of cigarette cigars or other actual smoke tobacco. And then we did pick up in the conference, we had been asked over

the last couple years about nicotine pouches. There was a slight though non-significant uptick in nicotine pouch use reported by middle and high school kids.

That would be like ZYN Pouches. So, we did a little bit of an intro on that because we haven't covered it yet, but that would be, you know, in consumer tobacco, that's one of the hottest products in terms of growth rate. It's largely in adults. It definitely trends towards like white men with these ZYN Pouches and many other brands at this point.

And we will be monitoring this to see if that becomes popular in kids, but the headliner here was like overall declining use of tobacco products and declining e-cigarette use year to year in this youth tobacco survey.

Dr. Elizabeth Salisbury-Afshar: Any big takeaways from this year? Anything that you'd like to add?

Dr. Joshua Lee: Yeah, we refer people back to the available slides, the recorded session. We have a blast doing this every year. It is always like a little too much. We can't say no to that last article. We're always open to suggestions if we're able to keep doing it, we do have to submit every year and keeps getting accepted.

So, we're thrilled about that. But we're certainly open to making this more efficient, more high-powered, and more helpful to the audience.

Dr. Sarah Wakeman: Echoing what Josh said, this is so much fun. We really enjoy doing it and learn a lot through the process. It's a great way for us presenting it to review the literature and hopefully to be able to share that back in a way that's fun and lively and somewhat digestible, even with tons of papers that are viewed and seeing the kind of changing landscape of addiction medicine here every year.

Dr. Elizabeth Salisbury-Afshar: Well, thank you both. You know, I have to say, I was really glad that I was asked to host this session because I thought, "Oh good, I'll get to hear it a second time." And even hearing it a second time, I'm like, "Oh man, so much information so quickly." So, I will definitely be among those going back to listen to it again and really going back through the papers.

I think this is just an incredible download of information and it's always so obvious how much work you put into really knowing all the ins and outs of the studies and thinking critically about how we may use this information and how it fits in the broader landscape. So, thank you both. And I'd like to thank all of our listeners today for tuning into *ASAM Practice Pearls*.

We were able to hear from Dr. Sarah Wakeman and Joshua Lee, who shared their insights on the most impactful addiction medicine publications of the past year. As a reminder, the full recording of their session is available in ASAM's e-Learning Center,

so be sure to check it out. I encourage everyone to subscribe and share this episode with any colleagues who might find this information helpful.

Thanks so much for listening in, and we look forward to seeing you next time on *ASAM Practice Pearls*.