What The Fentanyl! Understanding Fentanyl from the Primary Care Setting

Key "Take-Aways":

1. Primary Care is an essential access point to care for people who use fentanyl.
2. Become a prescriber! Buprenorphine is a gold standard in combating the overdose epidemic.
3. Ensure access to naloxone; in-hand naloxone saves lives.

Presentation Transcript:

Hello, I am Arianna Campbell. I am a PA. I work in a rural hospital in Northern California as well as an FQHC, and I am here to talk to you about clinical provider quick tips, how we are **addressing fentanyl use in primary care settings.**

As a PA, I can tell you I started a program in my emergency department, which is my primary area of clinical expertise. And this was five years ago. I found that my community needed better access to treatment for opioid use disorder, and I started something where we just give them right medication at the right time to the right patient. I started working in an FQHC, realizing that the work I was doing was so impactful in my community. And so, now I work in both settings, both in a primary care FQHC, as well as an emergency department. And I have to say, from a PA perspective, it's important. We've certainly been able to build capacity in my own community and I encourage all PAs to do the same. I encourage all primary care physicians and clinics to make sure you're utilizing your PAs and nurse practitioners in this role.

So, let's get started. Let's talk about some of the takeaway tips.

- What I can tell you is that **primary care is an essential access point to care for people who use fentanyl**. Now, when I started doing this work five years ago, this was all heroin, and now it is all fentanyl. We are going to talk about that today. It is very important.

- **All primary care clinicians should be getting their X-waiver. Buprenorphine is a gold standard treatment** in combating the overdose epidemic and we all need to be involved in this.

- And we also want to make sure that we are **ensuring access to naloxone**. In-hand naloxone saves lives.

I am one of the co-principal investigators for the California Bridge Program. California Bridge is a program of the Public Health Institute, and we are funded through the Department of Healthcare Services through grant monies. I have no disclosures other than that. All right, let's get into fentanyl.

Overview of Fentanyl: (02:13)

I can tell you **fentanyl is in all communities in California** right now. When we started this work, again, five years ago, it was primarily heroin in California. And you can see across the country that we initially had increased overdose deaths from commonly prescribed opioids. This is starting back in 1999, is when I started my career. We saw increased overdose deaths really driven by that. And then we started seeing a little spike in heroin about 2012.

And then around 2014, 2015 there, we started seeing a spike in fentanyl overdose deaths. And that is what you can see is really driving this spike in opioid overdose deaths, which was about 108,000 overdose deaths last year.

Opioid Stewardship and Overdose Deaths: (02:58)

So, why? Why is this going on? And I do feel, as any primary care clinician, all of us in medicine need to take some ownership of this. There was certainly **overprescribing of opioids** for quite some time. And you can see back to 2010 that that was a time when we started looking at this. So, let's get control over opioid prescribing. At one point, it was about one prescription for every person who lived in the US. And then what we saw is, hey, let's turn the faucet off. We see a big spike in overdose deaths, so we need to turn the faucet off. Let's stop prescribing as many opioids as possible.

There was a lot of large campaigns. You probably have been a part of this from your setting to decrease opioid prescriptions. This was in the form of, which I primarily focused on, avoiding new starts of opioids, especially for chronic conditions. But we also started **decreasing MOUDs**. And I want you to see that dark blue bar *[see slide 5],* as we decreased opioid prescribing, unfortunately, what we still saw was this **increase in overdose deaths**. So, what I can tell you is that this approach did not work. Yes, we had to turn the faucet off. Yes, that is important long-term in order to really get a handle on the overdose epidemic. But I do have to point out that at the same time we decreased opioid prescribing, we unfortunately saw an increase in in overdose deaths. Why?

The Current State of Addiction Treatment: (04:22)

Well, I can tell you that the current state of addiction treatment, so, for folks who were more dependent on opioids, who were experiencing a substance use disorder or opioid use disorder, the system that was in place at that time was designed to fail.

Why? Because the places that we are relying on, the places that were already built up in our communities, require **long distances** to treatment. This super-specialized area**, long waits** to get treatment. There's the list. You may have one in your primary care office. I know we've had them in emergency departments in hospitals. And the list is full of treatment centers that unfortunately require a lot of money to get in, long waits to get in, insurance authorization, co-occurring behavioral health requirements, stigma, and then these really complex assessments prior to getting in. And then a lot of the treatment was **dependent on urine drug screens**.

So, what I can tell you is the folks who need treatment the most are **unable to access this system**, especially if they must pay up front, especially if they are told they have to stop using drugs before they can be admitted to them. This is important to acknowledge, that at the same time we were decreasing prescribing, **we were not providing capacity to treat**. And history is currently being written. Again, as we saw this massive and sustained exposure of the US populace to opioids and then this abrupt regulation and decrease in opioid prescribing, we did not pair it with increased capacity to treat.

So, what happened? **Organized crime filled that vacuum** with fentanyl and methamphetamine. So, here comes fentanyl.

A Changing Epidemic: (05:53)

What I can tell you is this is a changing epidemic, so no longer a prescription opioid epidemic. You can see how we, in the last slide, how we decreased opioid dispensing. And here you can see from 2006 to 2019, we substantially decreased the amount of opioids that we are prescribing. But what we have seen is that de-prescribing can **drive illicit use**. And what does that illicit use look like? Again, heroin, synthetic opioids, fentanyl contamination of other drugs.

We have seen fentanyl contamination in the form of street benzos. We have seen fentanyl contamination of methamphetamine, cocaine, stimulants, et cetera. And really, what we're seeing right now is fentanyl as drug of choice, so we'll talk about that a little bit more.

What is Street Fentanyl? (06:39)

Fentanyl is a **synthetic opioid**. It's not **detected on most urine drug screens**, so if this is something you're intending to find on a urine drug screen, you won't be able to find it.

It is **extremely potent**, in fact, about 40 times more potent than heroin, and it has a **very high affinity**, high efficacy at the mu receptor. That's that opioid receptor. And it **varies significantly in type, potency, and purity**. So, that's what is really causing high risk for overdose. It's not as predictable.

We frequently know fentanyl as having a **short half-life**. However, with repeated use, with folks smoking fentanyl very frequently, that leads to **accumulation in the adipose tissue**, and it makes it **last a little bit longer**. That's important to acknowledge.

Pharmacology of Street Fentanyl: (07:26)

And let's talk a little bit about the pharmacology. Again, 40 times the potency of heroin, about 100 times the potency of morphine. So, just think about that. Has a **very narrow therapeutic window**. Again, **it's very lipophilic**, so high volume distribution. **Rapidly crosses the blood-brain barrier**, which makes folks enjoy using fentanyl. It's **rapidly distributed** to the adipose tissue, muscles, and slowly returns. Again, we know this as being **very short-acting**, so the distribution time is very quick, just about 1.7 minutes, and redistribution time is about 13 minutes. But the elimination half-life, about three to five hours, and we see this short life, the half-life after the bolus**. Long half-life with repeated use**, so with ongoing administration. So, it very slowly disassociates from that receptor.

And what we can see is that UTox can be positive for a little over a week if somebody is in a treatment program and you're looking for fentanyl. Again, it's not in most urine drug screens, though many places are getting better drug screens right now that will include fentanyl. I, however, do not recommend treating based on urine drug screens.

When Do You See Fentanyl? (08:38)

You can see the difference, the real Xanax and what a street Xanax is. And that street Xanax right now, or that **street alprazolam is frequently fentanyl**. Again, we see fentanyl contamination in **heroin**. I just had a patient who thought she was using black tar heroin, but when we did a test, there was fentanyl on board.

So, opioids, like when we see Perc 30s on the street, **benzo** pills, again, 27% of the pills seized by the DEA in 2019 actually had fentanyl in them, and I do believe that it's much higher right now.

We can also see some contamination **in cocaine and methamphetamines**. And these are, so when we do see stimulant overdoses and we see **respiratory depression**, of course, this is important for in terms of the role of naloxone, so everybody needs naloxone at this point.

And usually, **fentanyl**, a lot of my patients are actually smoking fentanyl. It's pretty easily smoked. It's really small amounts, so it's easy for them to carry and they use it pretty frequently, typically every two or three hours.

Medications for Addiction: (09:44)

So, what do we do? We certainly know that medications for addiction treatments still work. In fact, I just have to highlight the **significant decrease in mortality** when folks are being given medications for addiction treatment. You can see the general population. This is a standardized mortality ratio, and without any treatment, we see this enormous increase in the risk of mortality, and we can significantly, more than 50%, decrease that by giving medications. So, really important role for medications. And typically, in primary care, we're talking about **buprenorphine**.

I just have to put a plug in here. I am treating in an FQHC. I can tell you that patients **are able to self-start** on buprenorphine. This is one of the resources from California Bridge, and studies show that folks are able to really determine when they are in a withdrawal to start buprenorphine. My partner, Reb Close, is going to talk about this more in the next video, so please pay attention. This is easy to do. But remember, folks can start at home, so it's a safe and effective option.

Let me emphasize again that **buprenorphine does work even for folks who are using fentanyl**. There's some misinformation out there. But I'd encourage you to look at this study from Sarah Wakeman, which does show very similar rates to treatment retention and opioid abstinence for folks who are using fentanyl who are started on buprenorphine. Again, pay attention to the next lecture. Get folks started on buprenorphine.

Just remember that **detox does not last**, so it is very important to encourage folks to continue buprenorphine treatment. If you are sending somebody to a treatment facility, and they are detoxing them; they are getting them off of buprenorphine; they are getting them off of **fentanyl without giving medications, this works for less than one out of 10 people**. And you can see in those first 30 days, if somebody is discontinued on buprenorphine, that this, it doesn't last, and in fact puts them at **higher risk of mortality** - 2.4 times greater mortality than when they're in treatment if they are taken off of medications. Again, we want to make sure we are encouraging our patients to continue treatment, especially given this surge in overdose deaths currently.

Different Treatment Models: (11:59)

All right, so know that there are different treatment models. Consider **opioid agonists** first line, and then consider **higher doses**. Again, Reb Close is going to talk about that.

Offer treatment for **comorbid** mental health substance use. So, really important. We are able to do this, all of us can do this. We just wanna make sure we are treating the person as a whole person.

And I really want to encourage **low barrier, high support** for folks. We can do this from primary care. And please embed **harm reduction** into your programs, into what you do really in daily practice, and I'm gonna talk about that a little bit more here.

Harm Reduction Strategies: (12:33)

First of all, let's prevent people from dying. When people are purchasing fentanyl, if they're using other drugs, it's just important to encourage folks, number one. Let's say they're not ready for treatment; they're not ready for medication. Let's say you know that they've been buying some pills off the street, or they occasionally use methamphetamine or cocaine. This is important to discuss with your patients. **Never use alone**.

Start with some **test doses. Start low, go slow**.

Certainly, fentanyl can be smoked or snorted, and you want to make sure that they are **using fentanyl in a safer way**, so you can give them some information about how to use more safely.

And then talk about medications. **Always offer medications** and let them know this is open door to treatment, okay? And let's talk a little bit about naloxone quickly. **Anybody with chronic opioid prescriptions should have naloxone** in hand. I'd like you to know, out of those who need it the most, only about 1.6% of people picked up their prescriptions for naloxone. So, if you can get naloxone in hand from your office, please do so. And this should be really for anybody using stimulants, benzos, opioids from the street.

We want to let folks know that **you need to call 911** if you need to use naloxone, please do **rescue breaths** when needed, and that this works quickly in two or three minutes. But we have a couple of nasal sprays in each box and there's very clear instructions. You just have to watch a really quick video in order to give Naloxone in hand, and I'm going to give you a little bit of information. We have a guide to naloxone distribution at cabridge.org. And just from emergency department and hospital-based in hand naloxone, we've almost reached 100,000 numbers of naloxone that's been in hand to patients. We really want to make sure we flood the community with naloxone. Again, try to get in hand naloxone in your offices.

We also provide harm reduction in the way of **sterile syringe access**. And we're just trying to make it safer, folks. We're trying to keep people alive, keep people free of other diseases, really make it safe for folks until they're ready for treatment.

I thank you for your attention today. There's, again, this is part of the clinical provider quick tips addressing fentanyl use in primary care. And stay tuned for Reb Close, and she's going to tell you how to give buprenorphine. All right, thank you.