Everything is Health, Episode 5:

Safe Supply, Part 2: What Does It Look Like in Practice?

Madeline Elder

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Contents

1. Episode 5: Safe Supply

Maddie: Welcome to Everything is Health, where we summarize findings from research being done about health on the Downtown Eastside of Vancouver.

Nick: I'm Nick Ubels, a community engagement librarian at the University of British Columbia Learning Exchange.

Maddie: And I'm Maddie Elder, I'm a first-year medical student at UBC.

Nick: This podcast is produced on the unceded, ancestral, and traditional territory of the Musqueam, Squamish, and Tsleil-Waututh people.

Maddie: This is our second episode about safe supply, and today we're going to be talking about what it is and why research says we should implement it in Vancouver.

Nick: Last time, we talked about traditional approaches to harm reduction including OAT, and we went over some of the reasons why it doesn't work for everyone, which motivates safe supply. And we ended on this really important intervention: safe supply. Maddie, what is safe supply?

Maddie: I think the best definition comes from the Canadian Association of People who Use Drugs, CAPUD for short. They wrote a concept document about safe supply in 2019, and they describe it as an element of harm reduction in that it reduces the risks associated with drug use in our criminalized context. They say that "Safe supply refers to a legal and regulated supply of drugs with mind/body altering properties that traditionally have been accessible only through the illicit drug market." [3]

Nick: So, it's just another type of harm reduction?

Maddie: Kind of, but not really. CAPUD makes a really interesting point- the paradox of harm reduction is that its supporters often advocate for interventions like supervised consumption, drug checking, and naloxone, that we wouldn't need if everyone had access to a safe and regulated supply of their preferred drugs [3]. So, harm reduction interventions actually rely on our existing punitive drug policy to have their meaning and utility [3].

Nick: Okay, and safe supply has the same goal of preventing harms, but to do it it's trying to remove the whole context of criminalized drug use [3].

Maddie: Mm-hm. They say in the concept document that the difference between safe supply and other harm reduction policies is that instead of being a response to the outcomes of inhumane drug policy, safe supply is an attempt to construct a new, human rights-based drug policy framework, that recognizes the choice to use drugs as a legitimate choice [3].

1.1 Motivation for Safe Supply

Nick: Okay, what's the difference between safe supply and OAT?

Maddie: According to the CAPUD concept document again, substitution treatments like OAT, which use drugs like methadone, buprenorphine/suboxone, and slow-release oral morphine are not safe supply because they do not cause the mind and body altering effects that some people look for in recreational drug use. But OAT is an important option to have and could be used at the same time as safe supply. It's just that OAT doesn't work for everyone [3].

Nick: So, what would the benefits be of providing a real safe supply?

Maddie: There's so many. According to a paper published in May of 2022 about the SAFER program, which we'll talk about later, providing a safe supply of substances in Vancouver would reduce overdose deaths, decrease other harms associated with the unregulated drug supply, and support patient engagement in care. [11]

Nick: There's a lot to unpack there. So, let's start with the first one, reducing overdose deaths. How would that work?

Maddie: The key argument here is that safe supply makes peoples' lives safer. For decades, people who use drugs have risked overdose, poisoning, infection, disease transmission, and death because they've been forced to rely on the unregulated drug market. A safe supply of pharmaceutical grade drugs would significantly reduce these harms because people would know what they're getting. And they wouldn't be criminalized for it, so they would have the freedom to use in safer environments [10]. Although different interventions do work best for different people, safe supply is way more effective than other treatment options like OAT.

Nick: Like how much more effective?

Maddie: There was a study done from 2011 to 2015 called the Study to Assess Longer-Term Opioid Maintenance Effectiveness, or SALOME for short. There were over 200 participants given either heroin or hydromorphone, and over 80% of them stayed with the program for over a year. Participants also experienced dramatic reductions in unregulated opioid use and improvements in their overall quality of life. In comparison, only 35% of new clients on OAT in BC remain in treatment after a year [3, 12].

Nick: Wow, so 80% for safe supply, and 35% for OAT. That's a big difference.

Maddie: Yeah, and it's beneficial when people want to stick with treatment, because it's an opportunity to provide them with access to health care on an ongoing basis.

Nick: I can imagine, like with the argument for legalizing cannabis, that safe supply could help undermine the organized crime groups we were talking about last time.

Maddie: Yeah, the BCCSU has said that it would effectively eliminate a key source of revenue for organized crime, and that this could reduce associated violence and harms, not to mention improve housing affordability in Vancouver [4]. Also, the government would save a lot of resources that had been going towards the war on drugs, which could be redeployed towards improving community health and safety [4].

Nick: Right, like the argument in general for defund the police.

Maddie: Yeah, similarly, in the CAPUD concept document they make a human rights and social justice case for safe supply as well. They say that prohibition has always been a tool used to stigmatize the poor as morally deficient because they choose to consume drugs, and then this is used to justify them not deserving having their basic needs met [3]. It's degrading to individuals, society, and humanity. [3]. Also, from alcohol and cannabis to opium and crack cocaine, drug prohibition in North America has always been used as a tool of racial subjugation.

Nick: Right - I know it's pretty well established that the War on Drugs has targeted people of colour and poor people. We can link some resources about that in the episode description since we don't have time to get into it and do it justice.

Maddie: Yeah. I just think about how many people I know who use or have used illegal drugs, and how none of them have ever really worried about getting arrested.

Nick: Totally, same here - it's like prohibition doesn't apply if you have the resources and privilege.

Maddie: Exactly, and because of this the CAPUD report says that safe supply is a justice issue really- people with more economic and social resources have the means to navigate the legal system when engaging in unregulated drug use and tend to be targeted less often by law enforcement. But safe supply would let all drug users feel dignified regardless of their economic or social capital and the substance they choose to consume [3, 4].

Nick: Yeah, I feel like it would go a long way in ending the stigmatization of drug use and users. Some people have argued that safe supply would increase drug use – is there any research about this?

Maddie: Yeah, I think that idea is pretty unfounded. In their 2019 report, the BCCSU says that it may actually reduce rates of drug use overall, even though that's not really the goal. They point to Switzerland, where widespread access to prescription heroin coincided with a dramatic reduction in new heroin users.

Nick: How did that work?

Maddie: The explanation they gave was that medicalizing heroin made it less attractive to young people. And this idea is supported by the world health organization, which has found that globally, more liberal drug policy is not correlated with more drug use. But they note in the CAPUD report that it's important the research community works to collect good data from new programs in Vancouver as they start, so we can figure out quickly what works and what doesn't, as safe supply is developed and expanded [3]

Nick: Okay, so, where are we at with safe supply in Vancouver?

Maddie: Unlike other pillars of drug policy like harm reduction, treatment, and education, for a long-time safe supply policy was not developed because it doesn't fit well within prohibition [3]. But since 2019 and the approval of injectable hydromorphone for the treatment of OUD, Health Canada has funded 18 safe supply pilot programs [11].

Nick: What is injectable hydromorphone?

1.2 Injectable Hydromorphone

Maddie: Injectable hydromorphone is an opioid usually used to treat pain. Since 2019, a number of places in Canada have been making it available as a medication-based treatment for OUD, either in a tablet or liquid form [10].

These programs are based on the SALOME trial, which showed that hydromorphone was as effective as heroin in treating opioid use disorder [12]. And it's easier to get a hold of - there's a lot of regulatory barriers around getting heroin. [3]

Nick: Okay, so safe supply programs are more likely to use hydromorphone than heroin.

Maddie: Yeah, as of 2019 there were two limited capacity hydromorphone tablet distribution programs running in Vancouver [10]. It's seen as one of the most feasible and easily implementable methods of safe supply distribution [10].

Nick: Where are these programs?

Maddie: So, the first low-barrier safe supply pilot program in Vancouver was implemented in January 2019 at the Molson overdose prevention site and learning lab. Here they distribute hydromorphone tablets and injectable hydromorphone for onsite use [6]. It runs from 1:30-10:30 pm, and people can get up to five prescribed doses of hydromorphone per day. It's also integrated with primary care, so there's access to an on-site physician 2 days/week, and a social worker 1 day/week, and OAT is provided on site [13].

Nick: Has there been much evaluation done of the program so far?

Maddie: Yeah, there was a study done in 202 led by Andrew Ivsins, where they interviewed 42 people enrolled in this program [13].

Nick: What did they find?

Maddie: They found that people really benefited from the program. It accomplished its main goal, in reducing peoples' unregulated drug use and overdose risk. It also improved peoples' health and well-being- people frequently accessed the physician and nurses for things like wound care and pain treatment. Because they no longer had to spend time and resources on accessing the unregulated drug market or managing withdrawal, people experienced improved nutrition and sleep. [13] Another thing they found was that it improved peoples' ability to comanage their pain, even though this wasn't a stated objective of the program. [13] There were also economic benefits. Because people no longer had to spend money on drugs, they were able to spend it on food and other things. It also decreased peoples' need to engage in stigmatized and criminalized forms of income

generation, like informal recycling, shoplifting, and sex work. People were also able to pay off debts they had to drug dealers, allowing them to escape debt cycles. [13] Similar programs were in the works but not running before the COVID began [6].

Nick: Injectable hydromorphone sounds really promising - are there any drawbacks?

Maddie: Well, it is cost effective in the long run, but implementing and operating an injectable hydromorphone clinic is expensive, and it requires dedicated infrastructure and resources [4]. This makes it difficult to scale up and implement in remote settings [10].

One thing that's helped is the movement away from liquid hydromorphone to tablet form, which is much cheaper [3]. But even so, injectable hydromorphone is not suitable for everyone with a diagnosis of opioid use disorder, much less everyone who uses opioids. For instance, it requires frequent engagement with the healthcare system, which isn't feasible for everyone. And on top of this, the changing drug supply has actually made treatments like this less effective [11, 10].

Nick: Yeah, all of this relies on people being engaged with the healthcare system to some degree, right? Like you have to have a prescription from a doctor to access this program at the Molson?

Maddie: Yeah.

Nick: Can doctors prescribe opioids?

1.3 Prescription: Risk Mitigation Guidelines

Maddie: Yeah, there were actually new risk mitigation guidelines published in 2020 that were developed in response to COVID-19 by the BC government in collaboration with researchers, clinicians, and people who use drugs [6].

Nick: And what did they say?

Maddie: Well, they're meant to guide clinicians and improve access to prescription opioids such as hydromorphone and sustained-release oral morphine, stimulants like Dexedrine and Ritalin, and benzodiazepines for people who are otherwise dependent on the unregulated market [6].

Nick: So, are they somewhere between harm reduction and safe supply?

Maddie: Yeah – their explicit intent was to "support a reduced risk of withdrawal, exposure to COVID19, and exposure to a limited and toxic drug supply."- so to facilitate reliable access to opioids and stimulants of known contents and potency [6].

Nick: And what was the impact of these new guidelines?

Maddie: Well, between the end of March 2020 and February 2021, opioid medications were dispensed to 3,771; for reference, approximately 100,000 people are estimated to have an opioid use disorder in BC [6].

Nick: Okay, so this is reaching a really small fraction of opioid users

Maddie: Yeah, to better understand the impacts of the guidelines, Ryan McNeil led a study in 2021 where they interviewed 40 people who had attempted to access a prescription since March 2020 under these guidelines. [6]

Nick: And these were people who weren't in conventional OAT treatment programs?

Maddie: Yeah, they say in the study that although participants experienced more sporadic drug use patterns at the onset of the pandemic due to supply shortages, rising prices, and reduced income, they emphasized that they remained uninterested in addiction treatment, but still wanted greater control over their drug use. This was often due to past negative experiences with medication-based treatment and recovery services. [6]

Nick: Okay, so what did the study find?

Maddie: They found that providing access to no-cost pharmaceutical alternatives to the unregulated drug market gave participants greater control over their drug use. For some, it allowed them to establish stable drug use patterns that enabled them to avoid cycles of withdrawal and cravings, avoid bingeing, and in some cases reduce overall drug use [6].

Nick: That's amazing, and I'm guessing there were benefits to knowing what was in the drugs as well.

Maddie: Totally, they say in the paper that this consistency and transparency made the pharmaceuticals protective against overdose. Participants described the drugs as "cleaner" and "safer" than the unregulated supply, and although half of the participants experienced an overdose over the study year, no one experienced one from prescription opioids or stimulants. [6]

Nick: That's really promising. How did it affect peoples' wellbeing more broadly?

Maddie: Downstream, for some participants the prescription reduced the need to engage in criminalized and stigmatized income-generating opportunities (which were becoming more scarce due to COVID anyway) [6].

Nick: Did they find any drawbacks to this model of prescription?

Maddie: Well, first off, more than 80% of participants were still regularly using unregulated drugs to supplement their prescriptions, which means that people are still being exposed to an unpredictable drug supply to some extent.

Nick: That makes sense with what you were saying about half of participants having overdosed due to non-prescription drugs – why did people need to supplement?

Maddie: The guidelines were oriented towards decreasing withdrawal symptoms and cravings, but many participants still wanted to be able to get high, and others found that the doses they were prescribed weren't enough to meet their basic needs, like managing chronic pain or even just mitigating withdrawal symptoms. To fix this, participants really emphasized the need to expand options to include regulated versions of illicit drugs, like heroin [6].

Nick: Hm.

Maddie: So, the two things I really took away from this study were that safe supply can reduce overdoses, but it needs to align with the experiences and desires of people who use drugs- so it'll require expanding options to include regulated versions of criminalized drugs that people are used to using, like methamphetamine, cocaine, heroin, and fentanyl. [6]

Nick: Has this been put into practice in Vancouver at all?

Maddie: Yeah, there was a policy directive in July of 2021 that expanded the prescribing guidelines to include some forms of fentanyl. And there was actually a paper published just this month about a new program called Safer Alternatives for Emergency Response, or SAFER for short.

Nick: Is it some kind of safe supply program?

Maddie: Yeah – in the paper it's described as a low-barrier, flexible safe supply program that provides opioids like fentanyl and hydromorphone, and stimulants, and it's integrated with other health care and social services. It is operated by PHS community services society, in partnership with VCH, and it's funded through Health Canada's Substance Use and Addiction Program [11]. It looks exciting in that they're really trying to create a safe supply program. They describe in this paper how the end goal of OAT is often abstinence, but the goal of SAFER is to prevent overdose and other harms by reducing peoples' reliance on a variable and unregulated drug supply. [11]

Also, in line with CAPUD's definition of safe supply [3], medications provided by SAFER include those like fentanyl with mind and body altering effects that are typically unavailable in treatment programs such as OAT, and only accessible via the unregulated drug supply [11].

Nick: Who's eligible?

Maddie: To be eligible for SAFER, you have to be using substances on an ongoing basis, and vulnerable to the associated harms. Participants are assessed when they first get there to determine the right medications considering factors like other substances you use, your age, and whether you might be pregnant. If it aligns with peoples' goals, SAFER will also help connect participants with evidence-based treatment for substance use disorders [11].

Nick: How is the clinic run?

Maddie: It's run by a multidisciplinary team of physicians, nurses, pharmacists, social workers, and people with lived or living experience of substance use [11]. But it's different from OAT in that the dosage protocol is largely overseen by nursing staff, whereas OAT typically requires physician assessment for dosage changes.

Nick: Who decides the dose?

Maddie: Doses start at a standardized level but are adjusted to achieve the desired effect. They say that this is one way that SAFER promotes participant autonomy and engagement in decision making around substance use [11].

Nick: That seems important.

Maddie: Yeah, and they do other stuff to maximize engagement as well. You're allowed to use unregulated substances on-site, so the clinic really doubles as a supervised consumption service. And they provide a de-medicalized space staffed by peer support workers, and don't have a predetermined schedule for accessing medications, so participants can return multiple times per day or be absent for periods of time. This is in contrast to OAT, which is typically administered once daily and cancelled after a few consecutive missed doses. SAFER participants are not required to remain on OAT concurrently, keeping its focus on the promotion of participant autonomy, harm reduction, and the improvement of participant-provider relationships [11].

This paper also describes how SAFER is going to prove that harm reduction, primary care and treatment for substance use disorders can effectively coexist- the SAFER program is integrated with health care and social services, and participants have access to on-site primary care from addiction

medicine specialists. A collocated low-barrier overdose prevention site provides syringes, take-home naloxone kits, and drug-checking services [11].

Nick: I could imagine that people would worry about diversion with a program like this. How do they address this?

Maddie: Yeah, they acknowledge in the paper that safe supply can carry a risk of diversion, and that's reflected in how in the risk mitigation guidelines have recommendations around monitoring dispensation. [11]. So initially all SAFER participants are asked to use the substances on site, and to complete urine drug tests to screen for potential diversion. [11]

Another concern that they talk about in the paper is that providing pharmaceutical alternatives could perpetuate substance use and undermine engagement in treatment. But they make it really clear that safe supply and treatment for substance use disorders are not mutually exclusive, since the aim of SAFER is to reduce overdose risk, and you can provide the two at the same time [11].

Nick: Is more research going to be a part of SAFER's future?

Maddie: Definitely – even in this paper they say that SAFER will be evaluated through the recruitment of a 200-person cohort, using questionnaires, interviews, program data, and health data over a 2-year period, in hopes of evaluating the program quantitatively and qualitatively. [11]

Nick: So, the SAFER program is going to dispense fentanyl and hydromorphone, but still not heroin? How important is providing heroin, given that it seems to be so difficult with all the regulatory barriers?

1.4 Why Heroin?

Maddie: That's a great question. It's really clear in the research how important it is going to be to provide people the drugs they're used to, and the ones they want. Although the concentration of heroin in the unregulated drug supply has been decreasing as it's replaced with fentanyl and other adulterants, there was a 2019 survey done by the BCCSU showed that of 650 surveyed who use opioids, 80% preferred heroin, 16% for fentanyl, and only 4% expressed an interest in prescription opioid pills such as morphine or hydromorphone [4].

Nick: So, heroin is still really a preferred drug for a lot of people

Maddie: Totally. As we were talking about before, the SALOME trial compared the effectiveness of hydromorphone to heroin and found that they were similarly effective. But after the trial

concluded, of the 135 participants at the Crosstown Clinic, more than 85% had either switched to or stayed on prescription heroin by 2019 when given a choice between the two. [4]

Nick: Hm. I was reading the other day about the Drug User Liberation Front and the work they're doing on the Downtown Eastside to provide a safer supply of exactly the drugs people want- heroin, cocaine, methamphetamine.

Maddie: Yeah, they're doing amazing work in the face of a lot of opposition and personal risk.

Nick: Agreed. I was frustrated to hear that their request for an exemption to the controlled drugs and substances act is likely going to be rejected.

Maddie: It's infuriating. Do you want to talk about that actually?

Nick: Yeah, my understanding is that the exemption would allow them to purchase, test, and distribute safer heroin, cocaine, and methamphetamine. Which they've been doing already, to show that it's possible and that it's safer, because they're testing the drugs using mass spectrometry, FTIR spectrometry, and immunoassay to make sure they don't have fentanyl and benzodiazepines.

Maddie: Right, but ideally with government support, first of all this would be legal so they wouldn't be taking such a huge personal risk, and secondly, they might actually be able to buy pharmaceutical-grade drugs. This would be even safer and prevent so much money going to organized crime. [4]

Nick: Yeah, has there been much research published lately about the com passion club model they're using?

1.5 Compassion Clubs

Maddie: Actually in 2019, the BCCSU published a report proposing the creation of heroin compassion clubs. The compassion club model was inspired by cannabis compassion clubs and buyers' clubs, which emerged in response to the AIDS epidemic in the 1980s and 1990s. [4]

Nick: How do they propose these would work?

Maddie: They propose a cooperative model in which heroin would be legally obtained through a pharmaceutical manufacturer, and then access to it would be restricted to members of this buying co-op. [4].

Nick: What's the cooperative part mean?

Maddie: Member-driven purchasing cooperatives allow people to bring together their demand to purchase products at lower prices from a supplier. Because members pool their resources and each take a share of the financial risk, the cooperative model is economically resilient. In BC, it's been shown that cooperatives have nearly twice the 5-year survival rate of traditional forms of enterprise [4].

Nick: What are some benefits to this as opposed to the safe supply via prescription model?

Maddie: I think the main thing would be how it's accessed, in that doctors would not be gatekeepers in the compassion club model. I remember I was listening to the Crackdown Podcast a while back, and they brought in Christy Sutherland. And she said something that really stuck with me, that opioids shouldn't be the purview of physicians. Physicians have taken on the role of gatekeepers, but that they shouldn't be, and don't necessarily want to be. This model could also be implemented without much of an upfront cost to taxpayers, and over time it could actually act as a source of revenue for addiction services [4].

1.6 Considerations for Implementation

Nick: Does the BCCSU report give you any sense of how to choose between these models, like prescription vs. compassion clubs?

Maddie: The sense I get is that it doesn't need to be a choice, that the urgency of this crisis actually demands that we do everything we can. Knowing that different models of safe supply and harm reduction work well for different people, we can actually support all of them. But the CAPUD concept document does give some general considerations for how to implement safe supply programs.

Nick: Oh, like what?

Maddie: Well, to start, they say that strategies need to balance the risks of a drug itself with the need to ensure that dispensing models are accessible enough to out-compete the illicit market and prevent overdoses [3].

Nick: Right, because models that overburden clients with surveillance, punishments, safety controls, or requirements that are time consuming or invasive run the risk of not being effective because they don't attract the people they are meant to serve. [3]

Maddie: Exactly, and in the same vein, programs also need to be appealing to people. and to do this they need to be developed in partnership with people who use drugs. Drugs provided should be as

close as possible to the drug sought, and the spaces should resemble those that people would use drugs in, not overly medical. Even better, models that allow people to bring home doses would increase retention, as multiple daily visits to a clinic or care facility can be a barrier for some people. [3].

Nick: Right, I read that these take-home doses of heroin, or "carries," were being offered at Crosstown Clinic for a period of time in 2021, and that it was thought to be really beneficial for clients there.

Maddie: Totally. Also, the fact that people use drugs to provide euphoria must be respected: if doses are too low, people will continue to use the unregulated drug supply [3]. CAPUD also notes that punishing people by withholding drugs, without a process to address the power imbalance between staff and patient is unethical [3].

Nick: That makes sense.

Maddie: Options also need to be expanded. This includes diversifying opioid. Some people have complained that pharmaceutical opioids lack the feeling of opioids found in the illicit market [3] but also includes providing a safe supply of stimulants like cocaine, methamphetamine, Dexedrine, Ritalin, and Adderall [3]. These are drugs that have a purpose, and in this paper, they point out that even methamphetamine is on health Canada's special access program in a pharmaceutical form, called desoxyn, and it's FDA-approved for the treatment of ADHD and obesity [3].

Nick: Wow. How common is stimulant use?

1.7 Stimulant Safe Supply

Maddie: It's dramatically increased in recent years [6], to the point that globally the number of people who regularly use psychoactive substances such as cocaine, amphetamines, and methamphetamines is greater than the number of people using opioids and opiates [14].

Nick: Is this true in BC as well?

Maddie: Yeah, it's having disastrous effects in BC. In that 2020 toxicology study led by Alexis Crabtree, stimulants were found to be relevant to 70.6% of illicit drug deaths, and, of these, less than 1% of people had been prescribed the stimulants detected. [5]

Nick: What kind of resources do people who use stimulants have access to?

Maddie: Unlike with opioid use disorder, there is no medication-based model for PSUD treatment, and as of 2019, there were no approved pharmacotherapies for the treatment of stimulant use disorder. [14]. The only approved treatments are psychosocial interventions [15].

Nick: But I could imagine that given the success of agonist-based pharmacologic interventions used in the treatment of opioid and even tobacco use disorders [15], I'm thinking of nicotine gums and patches for example, people would be trying to prescribe stimulants?

Maddie: For sure. In 2007, even Vancouver City Council was seriously considering the implementation of a large-scale stimulant replacement program testing a number of pharmaceutical options, but they didn't follow through with the idea [3]. And pre-COVID, the only pilot program providing access to an alternative stimulant (Dexedrine) was accessible only at the Crosstown Clinic to those already receiving injectable hydromorphone or diacetylmorphine for opioid use disorder [6].

Nick: Was that program successful?

Maddie: It looks like it really was. There was actually a case report published in 2021 about a patient there, led by Heather Palis. It was written about a man who was diagnosed with concurrent cocaine-type stimulant and opioid use disorders, and his goal was to decrease his cocaine use because he was experiencing health complications. They found that he tolerated the replacement stimulant medication well, experienced no adverse events like sleeping problems or changes and appetite, and was able to achieve his goal of reducing his cocaine use. [16]

Nick: That's really encouraging, although it seems like you'd only reach a subset of people using stimulants with this program.

Maddie: That's definitely true – concurrent cocaine use is prevalent in people undergoing iOAT treatment, but it obviously only represents a small fraction of people using stimulants. One interesting point they made in the case study was that the daily contact required for opioid medication treatment promoted adherence to the stimulant medication and allowed for monitoring of this patient's dose and tolerance [16].

Nick: What evidence is there to support the creation of this kind of stimulant prescription program?

Maddie: There's a fair amount. And I think it intuitively makes sense- up to a third of people diagnosed with substance use disorder are found to have ADHD [15], which to me is this really clear example of self-medication, so of course the answer is to give people replacement stimulants like Dexedrine and Ritalin, which are used to treat ADHD in the first place. But also, to go beyond this, giving people drugs they actually want or use, which might include things like cocaine and methamphetamine.

Nick: That's a really interesting way of thinking about it, makes sense.

Maddie: But anyway, back to the research, in 2016 there was a Cochrane review done of 26 studies and nine potential replacement stimulant medications. They found that the evidence was a bit unclear, but the treatments looked promising and that the concept should be investigated further. [3] Then was a discussion paper written in 2019 by the United Nations Office on Drugs and Crime in conjunction with a group of experts from 25 countries, about current practices, and promising treatments for stimulant use disorder. [14]

Then in 2020, there was a review paper published by Vitor Tardelli, that reviewed treatments for cocaine and amphetamine-type stimulant use disorders. The agonists they looked at were prescription amphetamines like Adderall, methylphenidate (Ritalin), and modafinil (Provigil) [15]. They found that these drugs were effective in treating cocaine-type SUDs, decreasing peoples' use of unregulated drugs. Prescription amphetamines like Adderall or Dexedrine worked particularly well in promoting sustained abstinence in patients with cocaine use disorder, especially at higher doses, and especially for people with opioid use disorder who were on opioid agonist treatment [15]. Interestingly, the prescription stimulants they looked at had no effect on amphetamine use. [15].

This was supported by the 2019 united nations discussion paper, in which they explain that while high doses of extended-release amphetamines may be useful in cocaine dependence, it doesn't appear to be effective in amphetamine dependence. And vise-versa- another drug, methylphenidate (Ritalin) may be appropriate for the treatment of methamphetamine use disorder, but not cocaine use disorder [14] The UN also suggested accompanying the integrated treatment programs with comprehensive social services like housing and food, and emphasized the need to involve individuals who are affected by PSUD in the design and implementation of interventions [14].

Nick: Super analogous to how people are thinking about opioid safe supply. What's interesting to me is that I recognize all these drug names, unlike hydromorphone, methadone, or heroin, stimulants like Adderall and Ritalin are used to treat common conditions like ADHD, or narcolepsy, or even depression sometimes.

Maddie: Yeah, even methamphetamine, which is so stigmatized, is actually FDA-approved for the treatment of ADHD and obesity, and it's on Health Canada's special access program in a pharmaceutical preparation called desoxyn.

People are concerned about the health risks of using these drugs long term to treat substance use disorder, but those of them that are used widely for the treatment of ADHD have been found to have good cardiovascular and psychiatric safety profiles in that population [15].

Nick: Where are we at with stimulant safe supply post-covid?

Maddie: In the SAFER program we were talking about earlier, participants can access opioids like hydromorphone and fentanyl (injectable, sublingual, oral, and trans-dermal formulations available) and stimulants like Ritalin and Dexedrine [11].

1.8 Limitations of safe supply

Nick: What can we expect of safe supply if or when it's implemented fully?

Maddie: The safe supply concept document from CAPUD makes the analogy to alcohol prohibition- the safe supply of alcohol did not end the problems associated with alcoholism, but it did eliminate many of the problems created from it being illegal. Safe supply of other drugs is analogous in that it'll work toward ending the criminalization of vulnerable people, but it won't be a cure all.

Nick: Hm, but it's still a necessary component of ending the War on Drugs, which we know has caused so much harm.

Maddie: Definitely.

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