Opioid Prescribing Trends by Dentists in Manitoba

Chiraz: Hello and welcome to CDA Oasis, my name is Chiraz Guessaier. We continue our conversation about opioid prescription trends among Canadian dentists. After looking at Ontario and Nova Scotia, we look at Manitoba, through a very recent article that was published in the Journal of the American Dental Association titled "Opioid prescribing by dentists in Manitoba, Canada, A longitudinal analysis." To that end, I have invited Dr. Jamison Falk, the study corresponding author. Dr. Falk is Assistant Professor in the College of Pharmacy in the Rady Faculty of Health Sciences at the University of Manitoba.

Dr. Falk: To be honest, we had heard from time to time statements like dentists prescribe opioids like candy and even saying it sounds somewhat comical, but we, I think it's human nature to stick to these controversial anecdotes that we hear and we felt that this probably wasn't a sentiment of the general public or most healthcare professionals, but we were hearing it being a prevalent enough statement from time to time and we thought we should probably test that idea. So, we've been in this opioid epidemic era for quite some time. There have been a lot of solutions put forth and that's always good to see. What we felt was important for our local landscape is to see where our sources of opioids were coming from. We have more and more prescribers of a variety of medications now and we wanted to see what the source of opioids were in Manitoba. We also saw the report coming out of Ontario that showed a relatively high rate of opioid use from dentists, or at least higher than we were expecting to see. And not uncommonly, those opioids were higher-potency opioids as well. So, our key question in this was when we look at our provincial landscape, what is the Manitoba dentist contributing to the prescription opioid picture?

Chiraz: How did you design the study? Where did you find your data and why did you choose the longitudinal method to research the topic?

Dr. Falk: Right, so in Manitoba, we have quite a robust database. It's a provincial database that covers all residents in Manitoba. And within that database is a complete dispensation record that captures all prescriptions filled in community pharmacies. So, our team has been working in the area of opioid utilization for quite a while now. And we've had the aim of providing clinicians, primarily physicians, with an understanding of prescribing patterns and opioid utilization so that they have an understanding of that so that they can hopefully do something with that in their practices. But we didn't know what that looked like for dentists. And so, when we asked that question, despite our rich database in Manitoba, we realised that we actually couldn't ask that question because dentists weren't separated as prescribers. It was all prescribers together. And so, what we needed to do is force change in our administrative process in order to separate-out prescribers. And we were able to do that so that we're able to look at specifically dentists as prescribers. And we got the ability to do that about six months before we started the study. So, we took a longitudinal approach and we looked at a period over
time of 2014 to 17, knowing that that would give us a fairly good depth of information to follow and bring us at that point, at least up to a current practice.

Chiraz: And, what did you find out?

Dr. Falk: Yeah. So, it was quite interesting. We found that the findings were contrary to some of the statements that I alluded to earlier. Looking back over that period of time, we found that dentists accounted for about 4% of opioid prescriptions in the province. And this was interesting because dentists represent about 14% of licensed providers for opioids. So, it suggested that they're certainly not overrepresented in opioid prescribing. We also looked at total volume of opioids prescribed and I think you've reported on this before, the idea of milligram morphine equivalent, so MMEs is what a lot of groups are reporting. So, this is really a way of saying, so what is the total volume of opioids that's prescribed in a common currency? And we think of morphine as a common currency. So, we basically convert all opioids in the database into morphine equivalents. And, when we looked at that, we saw that dental prescribing accounted for less than 1% of the provincial MMEs, about 0.6% actually.

Dr. Falk: So that was encouraging as well. And it became quite clear fairly early on why that was the case. Almost all it's about 97% of our opioids were Codeine, which is our lowest-potency opioids and Acetaminophen combinations. Almost entirely made up of Tylenol threes. So, we also looked at other opioids that were accounting for that. So, Tramadol was almost 2%, so a small portion. And one of the agents we're most concerned about, one of our higher-potency opioids, Oxycodone was less than 1% of the opioids prescribed. So again, that was encouraging and that was exciting to see for us. As you and your listeners probably know, the Canadian Opioid Guidelines in 2017 had suggested that a dose to start watching out for regarding safety, significant safety concerns was 50 MMEs per day per patient. So, we took a look at that as well. And what we found was that only about 5% of dental opioid prescriptions were for greater than 50 MMEs per day. And this was in contrast to the recent publication that came out from Ontario data that showed it was about 14% had greater than 50 MMEs in their province for dental prescribing. Another consideration, obviously if you're going to think about using opioids in any scenario, we want to make sure that we're using the smallest amount possible. So, we looked at the RCDSO, recommendations and used them as a guide. And when we looked at the number of prescriptions that were less than 30, it was almost all of them were less than 30 tablets given that was about 96%. We also looked at the day supply. So, if we look at less than five days, almost 90% of cases had less than five days' supply, about 95% had less than seven days' supply.

Dr. Falk: And then the last thing we want it to look at was knowing that opioids have a fairly strong potential to result in things like dependency and in some cases, addiction and diversion, we wanted to make sure that when dentists were prescribing, that didn't result in subsequent use after that. So, what we found was when we looked at first opioid prescriptions, so, when a dentist was providing a first opioid prescription, in about 88% of the cases, that was the only prescription they got from a dentist when we look to 90 days after that prescription; and then in about 10% of the cases, patients got
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a second prescription. So again, that at least provides some reassurance that when dentists are prescribing an opioid, that it's not leading to significant use later on.

Chiraz: So, I mean in conclusion dentists are responsibly prescribing opioids and when they are doing it, they are doing it at the lower scale using codeine and acetaminophen combination like you mentioned. Now, have you noticed any differences or trends or anything related to specialists versus generalists, location, region disparities, things like that?

Dr. Falk: Right. So, region is something that's, that we're interested in looking at and we haven't looked at that yet. So, does it make a difference if it's a patient that is seen rurally versus in an urban setting, if they're seen in the northern part of the province versus the more densely populated southern part. When it comes to defining different types of dental prescribers, whether they be dental surgeons or not, we are still in the process of defining that within our database. So, as I said, we're fairly new in separating dentists out, and the next step is to see if we can divide that further into dental surgeons and non-surgeons.

Chiraz: Perfect. We will follow up on that, I promise. Can you tell us a little bit about some of the implications that your study would have on dentists and dentistry in general, as well as some of the recommendations that came out in your article?

Dr. Falk: Right. So, as you alluded to these were encouraging results for our province and one of the things, one of the assets we have in Manitoba is really the regulatory monitoring program that we have in our province. So, in addition to an electronic program that helps to monitor through community pharmacies the use of opioids and how often they're prescribed, we also have a really--what were you could probably call a physical barrier in that, in order to prescribe higher-potency opioids, you need to have a specific prescription pad to do that. And that prescription pad comes with its own set of rules. And when we compare ourselves to other jurisdictions that have looked at this question that don't have as stringent [inaudible] we have seen, that our numbers are quite a bit lower when it comes to higher-potency opioids being used. So certainly, opioid stewardship from a dental standpoint is something that can be encouraged through these types of regulations being put in place.

Dr. Falk: Also doing local reviews. And I think ours could be thought of as a local review. It's a provincial review, but certainly dental practices looking at their own opioid use would be helpful in the stewardship area to just guide efforts on how each individual can change their prescribing patterns. As I said, we were encouraged by the findings, but I think collectively we always want to make as many efforts as possible to continue to improve prescribing. And one of the, I think most important ways is to continue to use smaller and smaller quantities of opioids. I think patients often report, whether it's in dental prescribing or medical prescribing, we hear the anecdotes of people that had a bunch of opioids left at home and it sits in their cabinet. And I think this is something we need to continue to work on is just providing smaller and smaller quantities that make sense for that condition. And I feel that this is a fairly commonly held view that for most dental procedures, we don't need to be using opioids. And, in a lot of cases, I think what
we need to be doing is that the first option is an NSAID or Acetaminophen. And if that's not appropriate for that patient or isn't adequate, it's only then that we go to that next step. So, I think continuing to strive to avoid opioids on a greater level in general in dental prescribing is an important goal probably to look to.

Chiraz:  Perfect. Thank you so much. These are really positive and good news for dentistry in Canada in terms of the opioid use and abuse. Dr. Falk, thank you very much for taking the time to speak with me. Again, I promise to follow up once your other research is out and I wish you all the best in all your endeavors.

Dr. Falk:  Sounds great. Thanks a lot for having me.