Opioids, Benzodiazepines and Z-Drugs: Alberta Physicians’ Attitudes and Opinions upon Receipt of their Personalized Prescribing Profile

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ABSTRACT: Opioid prescriptions have been monitored by the College of Physicians and Surgeons of Alberta (CPSA) since 1986, and benzodiazepine prescriptions since 2015. Recently the CPSA developed the “MD Snapshot-Prescribing Profile,” a feedback intervention consisting of a personalized report for physicians to see how many opioids and/or benzodiazepines they have prescribed to their patients. The aim of this study was to determine the attitudes and opinions of physicians in Alberta who received their prescribing profile from the CPSA in December 2016. Following mail-out of the prescribing profile, an online survey was emailed to recipients (n=8,213). The mixed survey asked five closed-ended questions, and an open-ended question asking for comments. Results from the closed-ended questions were compiled via Survey Monkey and responses to the open-ended question were analyzed using a qualitative content analysis method. Total survey response rate was 27% (n=2,148). More than half of physician-respondents indicated that they plan to make changes to their prescribing practice based on the prescribing profile and two-thirds of respondents found the information in the prescribing profile useful. Responses to the open-ended question were mixed. Physicians’ attitudes and opinions regarding the receipt of their prescribing profile are diverse. Most recipients found benefit in their profile, and plan to use forthcoming versions as a useful instrument in their practices. Given the high rates of opioid/benzodiazepine prescriptions and related opioid epidemic, the MD Snapshot-Prescribing Profile is an innovative and important tool that can assist in improving physician prescribing practices.

Introduction

Opioids and benzodiazepines (BDZ) are drugs with high potential for misuse and/or diversion, and are two of the most commonly-prescribed medication classes involved in pharmaceutical-related overdoses. Alberta has some of the highest rates of prescribed opioids per population in the world, and — not by coincidence — equally high rates of opioid overdoses and deaths. Albertans have very high rates of BDZ and benzodiazepine-like drug (e.g., Zopiclone) prescriptions, including prescriptions to seniors aged 65 years and older who are more susceptible to adverse consequences from these medications. The College of Physicians and Surgeons of Alberta (CPSA) is the Medical Regulatory Authority (MRA) in Alberta and regulates the approximately 10,000 registered physicians in the province. Opioid prescriptions have been monitored by the CPSA since 1986, and monitoring of BDZ prescriptions is a relatively recent practice in the province (since 2015). Alberta’s Pharmaceutical Information Network (PIN)/Triplicate Prescription Program (TPP) is the primary data source for community-based (e.g., non-hospital) opioid and BDZ prescription monitoring by the CPSA.

Various interventions have been employed by MRAs in order to improve physician prescribing practices. A systematic review of the literature detailed the estimated effectiveness of professional interventions to improve prescribing of antibiotics by healthcare providers. Authors’ conclusions were that the “effectiveness of [a prescribing] intervention... depends to a large degree on the particular prescribing behaviour and the barriers to change” (p.2). Furthermore, multi-faceted interventions (e.g., providing information and education to physicians) appear to be most effective in improving prescribing behaviour. A recent study examining associations between prescriber risk-indicators and disciplinary actions against physicians suggested that the development of prescriber profiles based on...
this audit and feedback tool to better serve the information requirements of physicians, and ultimately to improve practice quality and enhance patient care in Alberta.

Methods

Physicians in Alberta were notified of the inaugural MD Snapshot-Prescribing report by way of an article posted in the December 2016 edition of the CPSA’s online monthly newsletter, The Messenger. The article stated:

“This month, the CPSA will send every Alberta physician who prescribed an opioid or benzodiazepine between July 1, 2016 and September 30, 2016 a customized prescribing report. Using data from Alberta’s Triplicate Prescription Program, MD Snapshot outlines your opioid and benzodiazepine prescribing as well as how your prescribing of these drugs compares to other Alberta physicians during the same time period. It also includes details on average daily doses, multi-doctoring situations and patients on multiple medications. The CPSA developed MD Snapshot as a quality assurance/quality improvement initiative. It is intended to increase your awareness of your prescribing practices and may help you identify opportunities to help your patients. NOTE: If you are the primary prescriber, abruptly stopping or rapidly tapering the dose is usually not appropriate as this will often result in negative consequences for your patient. Approximately one week after receiving your MD Snapshot, the CPSA will send you an email survey asking for feedback. Please take 2 minutes to share your thoughts.”

The first iteration of the prescribing profile was sent via mail in December 2016 to all physicians in Alberta who had prescribed either an opioid and/or a BDZ in the third quarter of 2016 (July 1–September 30, 2016). According to the CPSA’s registration databases, at this time (2016) there were a total of 10,001 physicians in Alberta, of whom 9,549 were actively seeing patients. The mean age of Alberta physicians was 49.78 years,
and 32% were female. Approximately 48% were classified as Family Medicine/General Practitioners and the remaining 52% were registered as all other specialties (General Surgery, Internal Medicine, Ophthalmology; Oncology, etc.)

Following the mailing of the MD Snapshot-Prescribing report, an anonymous online survey was developed using Survey Monkey. An email with a link to the survey was sent in late December 2016 to all physicians who had received their report (n=8,213 physicians). A reminder email was sent two weeks later to the same group of recipients. The survey was closed in January 2017. The short survey was comprised of five closed-ended questions:

• “Did you receive your MD Snapshot?”
• “Did you review the information in your MD Snapshot?”
• “Do you plan to review your MD Snapshot?”
• “Did you find the information in your MD Snapshot useful?”
• “Do you plan to make changes to your prescribing practice as a result of your MD Snapshot report?”

In addition, an open-ended question at the end of the survey asked for any “comments.” Results from the first five questions on the survey were compiled via Survey Monkey in January 2017; and analysis of the final open-ended question was conducted by a member of the research team with experience in qualitative and mixed-methodological research approaches and analyses.

A content analysis method — specifically an inductive qualitative content analysis method — was used to analyze the responses to the open-ended question. Qualitative content analysis is one of numerous qualitative analytic research methods that may be used to describe and summarize survey and additional varieties of textual data. Relative to other forms of qualitative inquiry, such as phenomenology or grounded theory, data are interpreted with a lower degree of inference focusing on the content or contextual meaning of the text. Contrary to simply counting words or phrases, qualitative content analysis entails examining data intensely and iteratively to classify large amounts of text into a manageable number of categories or themes (e.g., “codes”) representing similar meanings. For the purpose of this project, qualitative content analysis was applied to participants’ open-ended responses in a systematic fashion in order to describe, group and understand the attitudes and opinions of Alberta physicians who had received their prescribing profile. NVivo™ 11 Pro for Windows qualitative data analysis software was used to assist in grouping the data into themes for analysis. The qualitative content analysis was completed in May 2017.

This research, as a component of a larger evaluation and re-design of the CPSA’s continuing competence programs, received ethical approval from the University of Alberta Health Research Ethics Board.

**Results**

The survey had a total of 2,184 respondents, correlating to an approximate response rate of 27%. Results from the first five questions indicated that 90% of respondents reported receiving their prescribing profile. Almost all (98%) reviewed the information in their report. Ninety-one percent of respondents indicated that they planned to review their prescribing profile, and two-thirds responded that they found the information in the report useful. Over half of physician-respondents indicated that they plan to make changes to their prescribing practice based on the prescribing profile.

1,296 physicians provided a comment to the concluding, open-ended question on the survey. Comments ranged in length from one word to...
multiple paragraphs in length. Salient themes emerging from the data are described below.

**Practice Support**
The majority of respondents’ comments seemed to be positive. Most survey participants identified their prescribing profile as being either helpful and/or supportive in their day-to-day clinical activities; or they recognized that even if their profile was seemingly not of direct use to them personally, they could understand the importance and timeliness of the report being distributed (e.g., given the current opioid crisis in Alberta and the high rates of BDZ prescriptions to seniors). Respondents who voiced positive comments described the prescribing profile as a “great initiative,” a “great support,” and a helpful resource. Several participants described the report as a useful tool and support for the assistance of discontinuation and/or tapering of opioids and BDZ use in their practice. Many positive comments also expressed gratitude or thanks to the CPSA for either the prescribing profile itself, or the opportunity to provide feedback regarding the report, or both.

“[The prescribing profile] has increased my conviction to be more thoughtful around prescribing…I applaud the College for taking this bold but important step.”

**Offensive, Insulting**
Counter to the abundance of positive comments, numerous negative comments were also detailed. Some respondents reacted negatively and sarcastically upon receipt of their personalized prescribing information, indicating that they would “use” the report as ammunition to rid themselves of their triplicate prescription pads (required for a practitioner in Alberta to prescribe an opioid or a BDZ). Some respondents found the prescribing profile to be personally offensive, or insulting.

“[The report is] a reprehensible, poorly explained, poorly assessed and poorly presented data piece that has no capacity for anything other than patient harm.”

**No New Information**
In addition to the many varied positive and negative comments, neutral responses were also received, often simply stating that the prescribing profile provided no new information. Some participants merely responded that they received the report, that they had “no comment,” or that the information received was as expected.

“I don’t do much opioid prescribing so there wasn’t anything really new to learn. Thanks.”

**Confusing**
Several participants indicated that they found the prescribing profile to be confusing. Some respondents simply indicated that they did not understand their personalized report or why it was being sent to them. Other respondents mentioned specific aspects of the prescribing profile that did not “make sense” or that were unclear or confusing to them.

“I’m an anesthesiologist and the information in this document made no sense to me. I am mystified as to where you get your information.”

**Questions**
Several survey respondents had questions regarding their prescribing profile. Although sometimes rhetorical (e.g., “How is this supposed to help?”), numerous physicians had specific questions about the information in the report. Questions were often posed in the context of also providing a recommendation or suggestion to the CPSA, such as learning sessions or webinars for physicians focusing on understanding new tools like the MD Snapshot-Prescribing Profile.

“[It] would be beneficial to be able to review the findings with other docs and someone who could explain the discrepancies that there seem to be from what I believed my profile would look like. Perhaps, some evening sessions where we could sign up with a choice of nights?”

**Explanation/Defense**
Some respondents used the comments section to explain or defend their prescribing, for example providing an explanation about particular patient(s) and why their dose(s) of opioids and/or BDZs was high; or why their prescribing habits noted in the report may be higher than the average for Alberta.

“My report is not necessarily reflective of my prescribing practices. A large part of my practice is covering for doctors in our clinic when they are away. So the report shows that I have more patients than I actually do on opioids and benzos. So it is difficult for me to say that my prescribing habits will change.”
Numerous respondents had recommendations for the CPSA to incorporate into future iterations of the prescribing profile, or considerations regarding the current opioid crisis. Many recommendations included concrete suggestions for the CPSA, such as implementing a specific prescription registry for certain specialties (e.g., palliative care); and sending prescription information to patients directly. Other suggestions included adding more medications to the prescribing profile (e.g., antibiotics, codeine) and emphasized the importance of the CPSA in continuing to provide relevant, detailed prescribing information to physicians. Respondents overwhelmingly indicated that they would like to see their prescribing in comparison to peers with similar practices.

“I would have wanted to know how my numbers compared to other family physicians, as opposed to all physicians across Alberta.”

Discussion
The results from this research indicate that overall, Alberta physicians’ attitudes and opinions regarding the receipt of their personalized prescribing information are diverse. The high response rate to the survey could be interpreted as an indication that opioid and BDZ prescribing information is an important practice improvement tool for Alberta doctors, especially given the current climate of amplifying misuse, abuse and diversion of controlled substances. A wide range of reactions was received to the MD Snapshot-Prescribing Profile from almost one-quarter of all physician-registrants in Alberta. Some comments were very positive, and respondents were grateful for the opportunity to both receive personalized prescribing information and also to provide feedback to the CPSA. Some comments were neutral and included questions about the report. Others were negative, and included derogatory comments regarding the CPSA. Survey respondents emphasized that future iterations of the prescribing profile should include an enhanced (e.g., more specific) peer comparison of prescribing data, and that the report should be accompanied by clear information regarding the purpose of the information and related opportunities for practice-related improvement. As the CPSA continues to refine and revise this tool, it will be important for physicians to have access to an individual or department at the CPSA that can respond to their questions and incorporate feedback regarding the prescribing profile.

Results from this research are being directly incorporated into future iterations of the MD Snapshot-Prescribing Profile. Physicians will see how they prescribe opioids and benzodiazepines (including Z-drugs) compared directly to their peers/specialties/sub-specialties. Certain specific subspecialties — palliative care, for example — may not be sent the Snapshot on a regular basis, given its apparent minimal use as a practice improvement tool in these groups. Codeine prescription data is now incorporated into report calculations, and other medications such as antibiotics may be integrated in the coming years. Various tapering tools and other practical suggestions and assistance will be sent along with the MD Snapshot-Prescribing Profile to help support physicians upon receipt of this important information.

In 2018–2019, the CPSA anticipates that individualized prescribing profiles will be securely sent or made available to every physician who prescribes an opioid (including codeine) and/or a benzodiazepine (including Z-drugs) four times per year. The data and analytics team at the CPSA is working to enable online access to the MD Snapshot reports and tools via a secure physician analytics portal, which commenced pilot testing in 2018. The research team will continue to elicit feedback from physicians and other stakeholders regarding revised iterations of the MD Snapshot-Prescribing Profile, among other practice improvement tools and initiatives, in order to maintain an iterative, evidence-based approach to advancing practice quality and enhancing patient care.
This research is not without limitations warranting attention. One such limitation is that the responses received are a sample and may not represent the attitudes and opinions of all Alberta physicians regarding the receipt of their personalized prescribing profile. However, given the large response to the survey we estimate that this limitation is mitigated. Due to the fact that the population of Alberta physicians may be unique compared to the population of doctors in other regions, the results of our study may not be generalizable to all physicians in Canada and internationally. Nonetheless, we maintain that providing doctors with their personalized prescribing profiles—while also offering these physicians an opportunity to provide feedback about their individualized report as a practice improvement tool—is an innovative and crucial step to opening a dialogue between medical professionals and regulatory bodies and promotes a broader understanding of such initiatives to improve prescribing practices.

THE HIGH RESPONSE RATE TO THE SURVEY COULD BE INTERPRETED AS AN INDICATION THAT OPIOID AND BDZ PRESCRIBING INFORMATION IS AN IMPORTANT PRACTICE IMPROVEMENT TOOL TO ALBERTA DOCTORS, ESPECIALLY GIVEN THE CURRENT CLIMATE OF AMPLIFYING MISUSE, ABUSE AND DIVERSION OF CONTROLLED SUBSTANCES.

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References


