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IN THIS ISSUE

Dr Matthew Chow

Doctors of BC president 2021

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PHOTO: JIMMY JEONG

New Doctors of BC president Dr Matthew Chow does much of his paperwork on the go, wherever there is a quiet space.

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ON THE COVER
Dr Matthew Chow with his partner Cindy and their daughter Madeleine. Photo by Jimmy Jeong.

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In the article "An inside look at BC's illicit drug market during the COVID-19 pandemic," a man convicted of dealing fentanyl and crystal methamphetamine shares his point of view on the current dual health crises.

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Vaccine goals

26 November 2020

I have a Garmin watch that I use when I exercise, but lately I have not been activating the timing or distance settings, opting instead to let the way I feel set my pace and duration. This has been quite liberating, but I still wear the watch to know what time it is. The watch buzzes randomly, and when I look down, the word *GOAL* appears on the face, surrounded by party favors. I assume some sort of achievement has been reached, but I'm not sure what—no throwing, kicking, or shooting is occurring around me. Maybe the watch thinks I should be doing some planning instead of wandering aimlessly along forested paths, and it's sending me motivational messages.

This got me thinking about goals for 2021. Seeing the end of the COVID-19 pandemic is probably the medical accomplishment most of us would like to attain in 2021. How our lives have changed in the last year!

I'm writing this editorial on American Thanksgiving, at which time daily case numbers and deaths have exploded worldwide. I watch the news with alarm, seeing how many of our southern neighbors have chosen to travel for this holiday. I shudder to think what the ramifications will be in a month's time. I think many are in for a sad Christmas. Case numbers, hospitalizations, ICU admissions, and deaths in Canada, and BC specifically, have also climbed to the highest levels since the start of the pandemic. We have been advised to cancel all social gatherings and to keep to our immediate household bubble. Many of my patients confess that they have been cheating a little, often citing mental health as the reason. COVID fatigue appears to be a growing and worrisome reality.

COVID fatigue appears to be a growing and worrisome reality.

One hope on the horizon is the promise of an effective vaccine. Three candidates have recently been fast-tracked for approval, all claiming over 90% effectiveness. The first to market is limited by the need for it to be stored at an extremely low temperature. The other two do not have this limitation but are slightly behind on the timeline.

What is not clear is how vaccines will be rolled out in Canada. Are we behind the United States in priority? Apparently, our federal government has signed contracts with seven vaccine developers but the details on timing and allotment of doses remain elusive. Since none of the vaccines are being developed in Canada, we are unlikely to be first in line. I am hopeful that this process will proceed in an orderly and calm fashion, but sadly some infighting among countries and provinces is likely.

Another issue is consumer acceptance and uptake of any available vaccines. The development process has been so politicized by the current American administration that public distrust appears to be high. Many of my patients have expressed safety concerns about fast-tracking of these SARS-CoV-2 vaccines. They are reluctant to be vaccinated; they worry about potential adverse health outcomes and ask whether I will get a shot. I explain that vaccines work by injecting dead viral protein, which stimulates the development of antibodies against the virus.

I reassure my patients of the safety of vaccines in general and add that I am a perfect immunization candidate due to my immune system being constantly bombarded by various foreign substances. My numerous scrapes and abrasions, secondary to my tendency to fall and crash my bike, are testimony to this fact.

Therefore, I will happily be vaccinated at the first opportunity available with a vaccine developed in North America or Europe. Forgive me, but I might be a little reluctant to be first in line to receive a vaccine whose name includes Sputnik. ■

—David R. Richardson, MD

My pandemic fears, part 2

15 December 2020

Since my previous editorial,[1] penned near the start of the pandemic, much has changed and much has stayed the same. The fears I expressed then have, unfortunately, proven to be founded—as evidenced by our current reality. The number of positive cases in my practice and those of my colleagues has risen steadily in recent weeks, and this is a microcosm of what we are seeing across the province and the country. Guidelines from public health officials for the containment of the SARS-CoV-2 virus have become more stringent and persistent, but they are still not strict enough for my liking. Maybe the guidelines are adequate, but the number of rule followers in the population is inadequate. Those who choose to not wear masks are relying on those of us who do to keep them safe. I suspect that the people who do not wear masks are also the people who do not avoid gatherings. Do they do so out of ignorance or denial or a bit of both?

I am thankful to see that health authorities have stepped up their testing capabilities. Since I last opined on this topic, I have seen new swab sites become operational and testing opened up to everyone. Due to recurring outbreaks at my local hospital, I have undergone four COVID-19 tests. My first nasopharyngeal swab didn't seem too bad, but the second and third swabs brought tears to my eyes. By the fourth time, I opted for the saline gargle test at a new drive-through swab site close to my home. I have been impressed by the staff I have encountered at the various swab sites I visited. They have been pleasant, efficient, and thorough. Thankfully, so far, all my tests have been negative. These days, a negative result is a positive event.

In my opinion, the next step that health authorities need to take is to start *assessing* patients at the swab sites as well. Although we are finally being adequately supplied with PPE from the government, our offices are not the ideal places to assess patients who may be contagious. These days, I treat everyone as a potential source of the virus. I am reminded of one of my clinical instructors in medical school who warned us about the prevalence of syphilis. Syphilis was also known as luetic disease, from the word "lues" (pronounced like the name Louise). I can still hear my instructor singing the line from a Maurice Chevalier love song from the 1930s, "Every little breeze, seems to whisper Louise." Today, every little breeze seems to whisper COVID. Syphilis was also known as "the Great Impersonator," as is COVID, sometimes impersonating a mild viral upper respiratory infection or a mild diarrheal illness.

It feels as if society is on one side of the scale and the comparatively small number of frontline workers are on the other side, balancing the health of society.

The pandemic has also brought out the best in people. So many health care workers and frontline workers of all stripes have stepped up to do more to help keep people safe, healthy, and cared for. Unfortunately, frontline workers, be they grocery store clerks, truckers, cleaners, doctors, teachers, or nurses, are getting burned out by carrying the burden of defence against COVID-19. If we are relying solely on our front line to keep us safe, then once that line is breached, there is no other defence. In a war, we don't rely solely on the frontline soldier to win the war. We have other means of defence and attack. In the war against COVID-19, we need everyone to do their part, by staying home as much as possible. Otherwise, the physical and emotional costs to the frontline workers are going to be greater than the financial costs to society. I understand that it's a fine balance between competing interests, but it feels as if society is on one side of the scale and the comparatively small number of frontline workers are on the other side, balancing the health of society. As the weight of responsibility on frontline workers grows heavier, we need more help on that side of the scale. ■

—David B. Chapman, MBChB

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1. Chapman DB. My pandemic fears. BCMJ 2020;62:126.

Looking to 2021 with hope and optimism

In my basement I keep a relic from another age: an instrument of the Great War. Stamped in its aging metal is the year it was made: 1918. That year has special significance. It was the year in which the world last faced a pandemic of such sweeping proportions as to leave no person untouched; 500 million were infected, tens of millions died.

The world has changed a lot since then. We now have the Internet, molecular biology, modern public health, and mRNA vaccines. In 1918, men around the world were engaged in war and there was little left to fight a pandemic. In 2020, women and men around the world are leading us in peace—our collective efforts are focused on fighting the pandemic, not each other.

It's outstanding what incredible things humanity can achieve when we aren't using our resources to fight each other—when we come together for the collective good. So it's little wonder that COVID-19 vaccines (vaccines *plural*) have been developed in record time. A whole bonanza of them actually. In Canada we are starting with two, but globally more are on their way. I am confident they will be manufactured and distributed in record time as well. As is normal, there will be some hiccups. Supply chains will be tested. Geopolitics will get in the way. Vaccine nationalism will rear its head. Physicians and our health care partners will face a task of monumental proportions. But the job will get done, I am sure of that.

We will leverage our relationships with our patients and our communities to combat fear, misinformation, and ignorance.

Our 2020 flu shot campaign was a dress rehearsal for the big show. We experienced challenges—communication could have been better, some innovative ideas encountered resistance, we experienced supply issues—but we overcame them and we learned from them. And when all was said and done, a record number of shots were administered in record time. Physicians were front and centre in that effort, from planning to execution.

And we will show up for the COVID-19 vaccination campaign too. We will be there to receive the vaccine in phases, putting evidence and patients first while supplies remain tight. Then we will be the ones to give the vaccine, marking the beginning of the end of this pandemic. We will use our knowledge and our experience from countless past vaccination campaigns. We will leverage our relationships with our patients and our communities to combat fear, misinformation, and ignorance. Once again, we will be front and centre.

It is not lost on me that the Canadian Armed Forces, having served valiantly in the 1918 war, is now using its logistical and technical might to support the provision of COVID-19 vaccines to all corners of the country. It is also not lost on me that women, who were struggling to achieve suffrage across Canada (and indeed much of the world) in 1918, are now some of our most cherished and respected leaders. Women are leading our pandemic response from the BC Provincial Health Office to the Public Health Agency of Canada to the federal Ministry of Health. They are also leading in nations around the world.

A lot has changed since 1918. Not everything, and some things are taking too long. But our ability to create and distribute a pandemic vaccine in record time, and the work of each and every one of you, my colleagues, give me reasons to look to 2021 with hope and optimism. ■

—Matthew C. Chow, MD
Doctors of BC President

Letters to the editor

We welcome original letters of less than 300 words; we may edit them for clarity and length. Letters may be emailed to journal@doctorsofbc.ca, submitted online at bcmj.org/submit-letter, or sent through the post and must include your mailing address, telephone number, and email address. Please disclose any competing interests.

Re: Impact of school closures on learning, and child and family well-being

Thank you for this article [*BCMJ* 2020;62:338]. It is most interesting and highlights the importance of in-person education for our children. I raise only one point—are we forgetting about our teachers? Are they being put in a precarious position without the appropriate protections, consideration, autonomy, and appreciation? This remains my bias. The article suggests low risk on the assumption that preventive measures can be taken. Dr Bonnie Henry has suggested in a statement that "teachers know best [how to stay safe] in their classroom." My assertion, though purely anecdotal, is that we are asking too much of our teachers without providing sufficient checks and balances to ensure that they remain safe. Who will be their voice when they feel unsafe? How can they efficiently and appropriately enact policy change to protect themselves and their families? Administrators vary with respect to ability to address necessary concerns. Social distancing, it would seem, is next to impossible to achieve. Teachers seem effectively neutered when it comes to implementing mask policies, and I suspect are confused as to why the policy should vary from a child in their classroom to the same child in a grocery store. I have often found myself counseling parents who are struggling personally that to most effectively care for their child (our patient), they too must take care of themselves. Should we not, as a community, be advocating the same for our teachers? If they feel afraid, unsupported, burned out, or unsafe, how can we expect them to take on the enormous responsibility of supporting, educating, and nurturing our children? Thank you.

—James Harris, MD, FRCPC
Vancouver

Re: Peer reviewers, editors, experts, and statisticians—do we need them?

I would like to congratulate Dr Brian Day on his editorial in the October issue of the journal [*BCMJ* 2020;62:266]. It clearly lays out a problem that has dogged the medical and scientific community for years. I am sure a vast amount of valuable research has been lost through the years by way of this tedious process, not to mention the discouragement of young researchers. I would be interested in his views, and those of any other readers on the phenomenon of preprints, particularly medRxiv. A paper on this subject was recently published by *JAMA* (https://jamanetwork.com/journals/jama/article-abstract/2772749, login required).

I believe that this new method of publishing will speed up exponentially the communication of scientific and medical information as well as give instant feedback and encouragement to researchers. It in no way impedes the traditional publishing method, which can continue in the old way, albeit at a glacial pace.

—A.F. Shearer, MD
Surrey

Re: Opioid prescribing

The letter about appropriate access to opioid-based analgesia from Drs Gallagher and Hawley [*BCMJ* 2020;62:315] notes the steady decline in the proportion of people over 65 being started on opioids and the harm that such a reduction has for seniors. Mention is made of patients' regular physicians refusing to prescribe opioids, along with the unlikelihood of seniors having problems with addiction after being started appropriately on opioids, and the consequent irrelevance of concerns about the toxicity of preparations that might be obtained from the illicit drug market.

As a senior and a retired family practitioner, I have personally noted the reluctance of younger physicians to prescribe codeine-containing preparations, and I have heard the suggestion that a drug contract should be signed before doing so. The impression has been gained that a push toward not prescribing takes precedence over attention to alleviation of symptoms. When a prescription is granted, only a small number of tablets are given.

What is actually going on to produce these putative manifestations? My feeling is that primary care physicians are under the impression that their licence to practise is in jeopardy if they prescribe opioids, and that such acts place them under increased scrutiny from licensing authorities. This leads to a reluctance to prescribe opiates and to undue weight being placed on resisting requests for opioids, however appropriate such prescribing might be.

If my impression is correct with regard to opioid prescription, then physicians, licensing authorities, and regulatory bodies need to get together and move the pendulum back toward concern for appropriate patient care and away from the fear of retribution.

—Anthony Walter, BA, MB BCH
Surrey

Re: Physicians suffer infertility too

I wanted to thank you for shining a light on the darkness of infertility, which affects 12% to 15% of couples in Canada.[1] Physicians are disproportionately affected, as highlighted by Dr Dunne's editorial.[2] In addition to the financial burdens of infertility treatment, infertility among female physicians can cause myriad downstream effects, including increased burnout; mental health effects[3] with depression and anxiety rates similar to those in people with cancer; and feelings of regret, sadness, and shame over career decisions made while family planning.[4]

I am a physician in BC and have undergone multiple treatments for infertility. I know firsthand the grief and hardship that come from a multiyear struggle with infertility. I am happy to report that since my previous correspondence several years ago,[5] I have had successful treatment. Unfortunately, despite multiple

letters, I have not been successful in convincing the BC Ministry of Health to cover infertility treatments so that others with lesser financial means can receive the same opportunities for treatment. This is despite the Ministry of Health's first expressed mandate being "to make life more affordable. Too many families were left behind for too long."[6] Many infertile patients in BC continue to struggle to afford the high costs of treatment, which is not covered by MSP. Those without the financial means to undergo treatment when medically indicated may spend years saving resources, only to have their chances of success decline in those intervening years. It is time that BC stops making excuses and define infertility as a disease, as recommended by WHO,[7] worthy of care under the universal health coverage that we Canadians are so proud of.

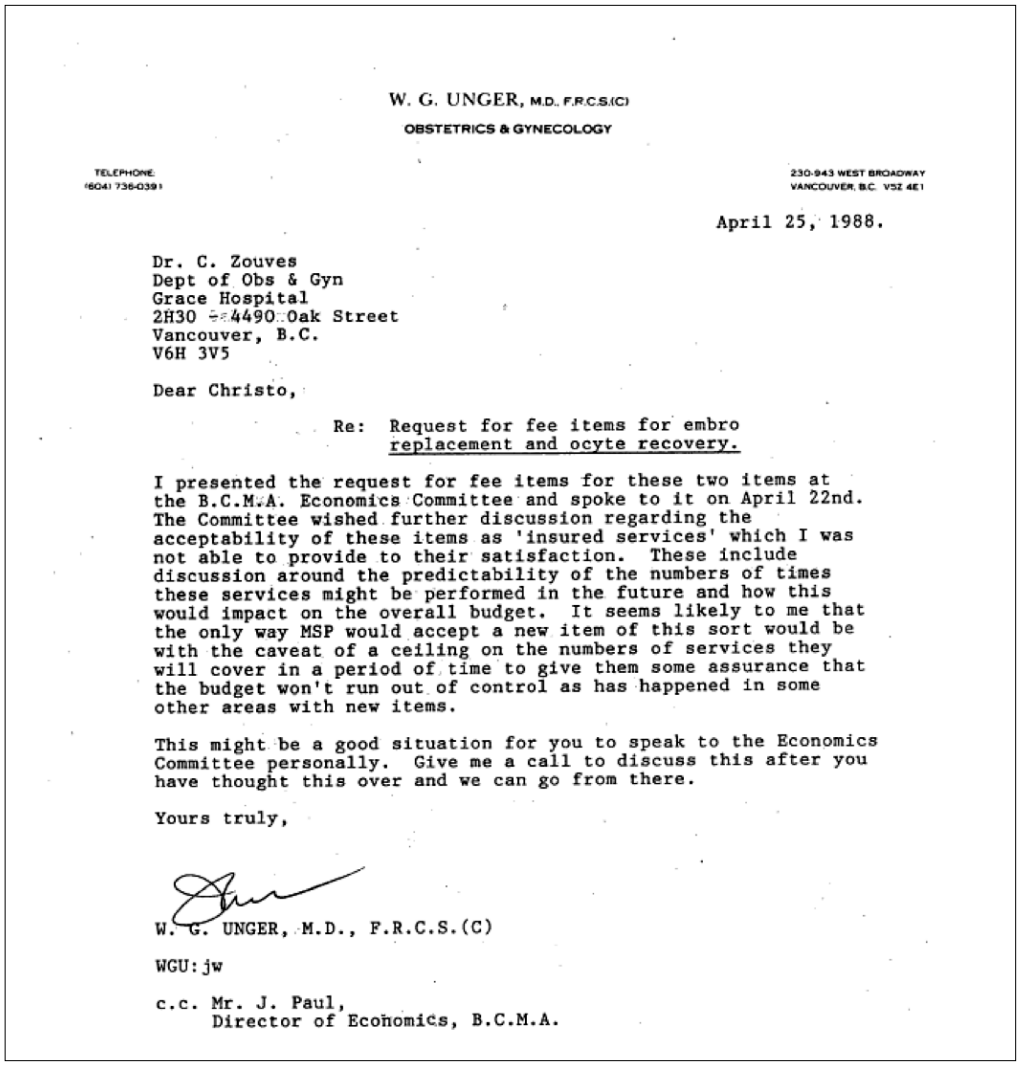
One of the responses I received from the Ministry of Health was that "MSP relies on the advice of the medical profession in determining the medical necessity of procedures. To date, there has been no indication from the medical profession that it considers IVF to be medically necessary." Interestingly, one of my obstetrician-gynecologist colleagues was able to determine, that in fact, the Obstetrics and Gynecology Section of Doctors of BC has been advocating for coverage for over 30 years, as shown in a letter from 1988 **[Box]**. How long do physicians need to make a request before it is considered? Surely 30 years is too long.

Unlike some other diseases, infertility lacks a vigorous, well-funded advocacy group.[8] The reasons are multifactorial, although one could speculate that financial depletion, emotional exhaustion, and stigma may contribute. At any rate, the infertile population would benefit from more physicians speaking up for them, so I thank the *BCMJ* and Dr Dunne for doing just this.

To support physicians struggling with infertility, I have written several requests to the Doctors of BC Health Benefits Trust Fund to stop singling out infertile patients for exclusion of coverage. Currently, infertility is the only disease category with a lifetime maximum for medication coverage (limited to $2400, which may not even cover medications for one IVF cycle). Removing this lifetime maximum would be a small but meaningful step toward demonstrating that physicians of BC are supporting each other in the face of infertility.

Thank you again for bringing attention to this heart-wrenching yet common problem that British Columbians face. I wish all those struggling with infertility the very best with achieving their family goals, but most of all, I hope they will be treated fairly and compassionately by their physicians and our health care system.

—Susan M. Lee, MD, FRCPC, MAS
Assistant Clinical Professor, UBC



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April 25, 1988.

Dr. C. Zouves
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Grace Hospital
2H30 - 4490 Oak Street
Vancouver, B.C.
V6H 3V5

Dear Christo,

Re: Request for fee items for embro replacement and ocyte recovery.

I presented the request for fee items for these two items at the B.C.M.A. Economics Committee and spoke to it on April 22nd. The Committee wished further discussion regarding the acceptability of these items as 'insured services' which I was not able to provide to their satisfaction. These include discussion around the predictability of the numbers of times these services might be performed in the future and how this would impact on the overall budget. It seems likely to me that the only way MSP would accept a new item of this sort would be with the caveat of a ceiling on the numbers of services they will cover in a period of time to give them some assurance that the budget won't run out of control as has happened in some other areas with new items.

This might be a good situation for you to speak to the Economics Committee personally. Give me a call to discuss this after you have thought this over and we can go from there.

Yours truly,

W. G. UNGER, M.D., F.R.C.S.(C)

WGU:jw

c.c. Mr. J. Paul,
Director of Economics, B.C.M.A.

The Obstetrics and Gynecology Section of Doctors of BC has been advocating for coverage for over 30 years, as shown in a letter from 1988. This letter reproduced with permission.

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An inside look at BC's illicit drug market during the COVID-19 pandemic

A man convicted of dealing fentanyl and crystal methamphetamine shares his observations, motivations, and opinions on the current circumstances for people who use illicit drugs.

Nickie Mathew, MD, MSc, ABPN, FRCPC, ABPM, James S.H. Wong, BSc, Reinhard M. Krausz, MD, PhD, FRCPC

ABSTRACT: More British Columbians died from illicit drug overdoses than from COVID-19 in the first 8 months of 2020. During a recent forensic assessment, an individual convicted of drug distribution in BC was interviewed. He described changes in the illicit drug market during the COVID-19 pandemic—the changing patterns of use among people who use drugs and the consequences of the safe supply program. His insights outline some key lessons for health care providers.

Dr Mathew is the medical director for complex mental health and substance use services at BC Mental Health and Substance Use Services, Provincial Health Services Authority; a clinical associate professor in the Department of Psychiatry at UBC; and an addiction and forensic psychiatrist. Mr Wong is a graduate student in the Department of Psychiatry at UBC. Dr Krausz is the UBC-Providence leadership chair for addiction research, the director of addiction psychiatry, and a professor in the Department of Psychiatry at UBC.

This article has been peer reviewed.

Introduction

In July 2020, 175 British Columbians died from drug overdose as the province marked the third straight month with over 170 overdose deaths.[1] Since the opioid overdose crisis was declared a public health emergency in 2016, nearly 6000 illicit drug overdose deaths have been reported in BC.

A male with the pseudonym John Doe was seen for forensic evaluation in August 2020 following a conviction for the distribution of fentanyl and crystal methamphetamine. During the assessment, he spoke about distributing drugs and how the illicit drug market had changed during the COVID-19 pandemic. Because he had already been convicted of this crime, he was not in jeopardy of incriminating himself by disclosing this information. He agreed to have his information presented as a case report because, in his words, "I want to provide information that hopefully can prevent overdoses and save someone's life. I think it'll be useful for the medical community." Written informed consent was obtained. Of note, the term *opioids* is used in this article to refer to the street-level illicit opioids sold that can include any mix of carfentanil, fentanyl, and heroin.

Experiences in BC's illicit drug trade

According to John Doe, the main opioid of choice in the BC drug supply is currently carfentanil from China. He reported that his distributors aim to mix one part of carfentanil to nine parts of heroin, sugar, and other substances. He has seen people make fentanyl twice by mixing carfentanil with other ingredients and then microwaving it. The mix is mashed down with a fork to form clumps. He says most of the opioids are made in drug houses, and most of the crystal meth is made in BC, but he does not know how it is made.

Prior to the COVID-19 pandemic, for street-level opioids John Doe bought an ounce of opioids for $1500 on a weekly basis. During the week he sold this amount for $2500 to $3000. He estimated that he netted $4800

to $6000 a month after losses from providing samples and "fronting" drugs (i.e., providing drugs to individuals who may not immediately have money to pay for them, with the intention that they use some of the drugs and sell the rest to repay the dealer). John Doe would often not be paid back for the drugs he fronted. For opioids, he sold 0.1 g (1 point) for $20, 0.4 g (a quarter) for $50, 1 g for $90, 1.75 g (a half ball) for $150, and 3.5 g (a ball) for $275. He also sold crystal meth at $10 for 0.1 g (a point), $30 for 0.4 g (a quarter), $60 for 1 g, $100 for 1.75 g (a half ball), and $175 for 3.75 g (a ball).

John Doe started street-level drug dealing in September 2019. He became involved in drug distribution because he found it financially rewarding and it provided flexibility to his schedule. His last legal employment was at a grocery store where he made $300 a week after taxes. By distributing drugs, he made $400 to $600 daily before the COVID-19 pandemic. On average he worked 6 hours a day, 7 days a week, sometimes making "$300 an hour, and other days [making] $20."

John Doe described the downsides to this line of work. The main one was interacting with the police. He claimed the police confiscated his money, confiscated his drugs and destroyed them, and breached him and took him into custody. Another downside was dealing with overdoses: "Some people can't take it because you are killing people. What you're selling can kill someone." Participating in the drug trade also meant being a victim of violence. In John Doe's case, people who use drugs (PWUD) tried to stab him: the first time it was with a knife and the second time it was with a used needle.

When asked why he continued to sell drugs, he answered, "I know it's bad, but the money is really good. Especially if I move up to higher ranks, you can make a lot of money off it." John Doe hoped to move up the ranks.

Quality control

When asked what his products consisted of, John Doe replied, "I'm never really too sure what's in my product." When he purchased cannabis for his own use, it was always from a dispensary: "I don't trust weed from anyone." John Doe maintained quality control in his own products, he explained, by giving samples to his clients. "They're not going to deny free dope," he said. After his clients used the samples, John Doe would ask them, "What does it taste like? How does it burn? Is it strong?" He then informed his supplier who would modify the batch with more or less carfentanil to make sure it met the standard for the street trade.

John Doe's customers generally trusted what he provided them because, "From a business point of view, it's best to have customers who trust you, so all the customers come to you. It does benefit the drug dealer. A lot of people sell fake [drugs]. If people try your stuff and it's good, they'll tell more people." John Doe said he did not lie to his customers, so they would trust him. When asked about selling a bad batch of drugs and people overdosing, he said, "If it's a bad batch, I'll probably still sell it because I don't want to waste it and lose profit. That's just the truth and the reality." He did say that people in the drug trade use drug-testing strips. "A lot do. A lot who buy a batch of pills do. Because in a way, [then] you're not misinforming the consumer. A lot of people test their own, and if you lie to them they won't be your customer in the future." He also said that PWUD use drug-testing strips: "Some addicts use [them] for Xanax, molly (MDMA) Moli, benzos, Percocets, T3s, Adderall. The people who use fent, they want fentanyl in it."

Why many PWUD seek out fentanyl

"For a lot of users, once you use heroin for a long time the high isn't as effective. You're only using to not get sick. So if you're using fentanyl, it's stronger. The high gets better, and it lasts a little bit longer, but the withdrawals are even worse. But once you use fentanyl for a long period of time, you are just using to not get sick. That's why when people see someone overdose, they want to go buy off that person's dealer because they know they'll get stronger stuff." He added that heroin isn't asked for often now: "Not really these days; it's mostly just fentanyl."

Interactions between mental health and substance use

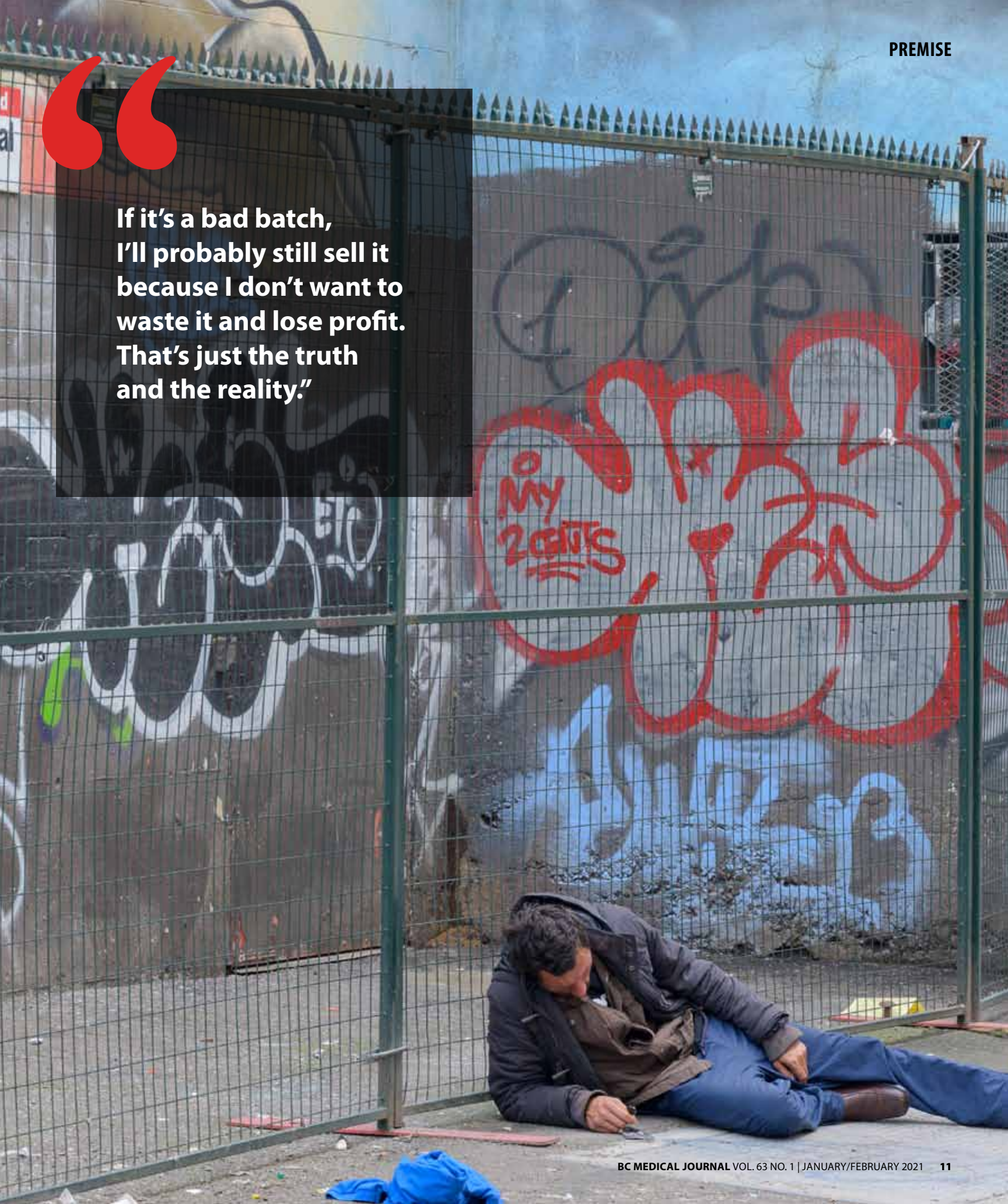
John Doe explained what he observed about the relationship between addiction and mental health: "It's a lot. I had conversations with my customers. One of them was in [postgraduate] school, and his mom passed away, and he got in a car accident and he started using hydromorphone and it went to fentanyl use. A lot of his issues were from mental health challenges. There was no guidance or counseling for him. A lot of my customers have mental health issues, but they are so into their addiction and they don't get help. Some of them are born with mental health issues, but they never got the proper help for it, which contributed more to their addiction."

John Doe named the biggest mental health issues his clients have: "Depression, a lot of them have PTSD, anxiety, a lot of them have trauma. A lot of them were sexually abused when they were younger." He offered some suggestions for how mental health professionals can help them: "Maybe give them more options, like seeing a doctor or a psychiatrist, I guess. Some of their mental problems are very severe."

When asked what he had seen regarding the relationship between drug use and psychosis, John Doe stated, "I see a lot of psychosis with crystal meth use. They call it 'side talk.' If they use meth for a long time, they're paranoid all the time thinking someone's after them. If someone has side talk, it usually occurs in intoxication after the drug has been used. I see them talking to themselves all day. For some people it's very severe. They don't care about their personal hygiene. They don't care about their health or their wealth. I remember one guy that just named cars when he was using; he would use and just say car parts. He thought cops were after him. He was really paranoid. When people use meth, they get that psychosis. I don't have to be a doctor to know it messes up their mind."

On the relationship between psychosis and addiction, he stated, "It makes it really worse. It's like they don't really ask [for help]. It seems like they're untreatable, like there's no way they can get help." When asked about the connection between mental health and addiction treatment, he added, "It would be hard to treat someone with just their addiction and not treat their mental health." Commenting on the relationship between overdose and suicide, John Doe said, "Ten percent of people injecting fentanyl want to die. A lot of people get tired with the lifestyle; a lot of people get tired of finding their next fix."

Continued on page 12



If it's a bad batch, I'll probably still sell it because I don't want to waste it and lose profit. That's just the truth and the reality."

Impact of COVID-19

Since becoming involved with the illicit drug trade in September 2019, John Doe witnessed changes in the trade that began during the pandemic. The pandemic caused drug prices to go up because there was a reduced drug supply. "When they closed the borders, it was harder for people to get drugs," he said, as the price of drugs appeared to follow a supply and demand curve (steady demand and decreased supply). For John Doe, the price of an ounce of opioids went up to $1700 from $1500, and an ounce of crystal methamphetamine went to $650 from $300. The price of small amounts of drugs also increased, with opioids going to $25 from $20 a point. He said that drugs were selling at full per-point prices rather than being discounted for buying larger amounts. In addition, people who sold drugs no longer provided free samples or fronted drugs.

When asked about the attitudes of PWUD toward COVID-19, John Doe stated that some were scared of it: "A lot of them had lung problems because they smoke heavy and had weakened immune systems. I see a lot of addicts get sick, and they get sick and weak for weeks off the common cold." He added, "A lot of them didn't care. They were homeless, what could they do?" He noted some public health interventions: "A lot of people were handing out masks and hand sanitizer. There was way more free food handed out. There were more shelters. Some of it's good and bad. If they knew where their next meal was coming from or they had a place to stay, they would spend more money on drugs." As for physical distancing, he said, "A lot of [PWUD] were encouraged, but no one was really physically distancing, I guess some were, but not that many. . . . It wasn't really considered in the drug community. People didn't take it seriously."

As for other public health measures practised by PWUD, such as self-isolating and hand washing, he said, "A lot of people were in shelters and they were only open for certain hours and they would have to go on the street. . . . They did [wash their hands]; someone put hand sanitizers on the street, but they were quickly destroyed after a week."

In response to why COVID-19 deaths were not worse in the Downtown Eastside since the pandemic, John Doe said he did not know: "With their lifestyle they come into contact a lot. They share tinfoil, they share needles. I was really surprised it didn't have the impact they thought it would." He reported, however, that there were fewer people selling drugs between March and May of 2020 as many were afraid of getting COVID-19 from their customers. But a lot of people selling drugs ". . . didn't care about the customers. They were just money for them. A lot of the dealers were scared of getting infected and they wore gloves and masks. I even saw someone wear that plastic shield on their face."

"The safe injection sites do really work. Maybe more awareness [is needed]—a lot of addicts are already aware—but [for] families and stuff. And I guess Narcan, Narcan is really effective. They need to hand out more Narcan kits for free."

For his own means of protection, he wore gloves and a mask. "I would avoid contact, I would make it minimum. I wouldn't place the drugs in their hand. I would place it on a garbage bin, or the curb on the side of a building. I would have minimum contact with the user." He stated, "I was mostly worried about the distance because I didn't want too many people coming near me. A lot of my friends would wash their money when they got home." Generally, he said, among people who sold drugs, "We were physically distancing; we would just be chilling and talking. Drug dealers, yeah, when they had a chance, more than normal."

Impact of the Canada Emergency Response Benefit

The Canada Emergency Response Benefit (CERB) provides financial support to Canadian workers who experienced reduced earnings due to the COVID-19 pandemic.[2] John Doe said, "The addicts got [CERB] too, and most of the addicts spent it on drugs." He stated that after CERB, "I never made money like on the day CERB came out. The consumers were spending a lot of money. It was way easier for them to access drugs." Before CERB, he was making $400 to $600 a day. The week after CERB came, he made $1000 a day. "There were some addicts who spent their whole cheque all on drugs. As soon as they got their cheque they spent it all on drugs. It was kind of shocking."

John Doe believes that the people who left the drug trade in March to May of 2020 returned to their regular numbers by mid-May 2020 after hearing about the record profits from the diverted CERB. He estimated that by the end of June 2020, there were more people selling drugs than before COVID-19.

He also believes that CERB was the biggest contributor to the record overdoses in May and June: "After welfare day, the overdoses spike and then decrease, and when welfare comes around again it spikes. CERB made it worse! People were getting CERB and their welfare. The overdoses spiked, then it stayed steady; it didn't drop back down like normal. That's how I saw things."

When asked if he saw any benefits of CERB, he said, "[Before CERB], addicts would go to high-end stores like Nordstrom and Holt Renfrew. They would steal nice clothes, watches, or anything that was worth a lot of money—PS4s or cell phones. [They'd] ask drug dealers for dope for it." He believes crime decreased with CERB because, "People were more financially stable." As a result, people who used drugs no longer needed to steal as much to support their habit. He said, "For about a week, there was no fights, no stabbings." Other benefits of CERB were that, "Addicts had a chance to take care of their hygiene; [they were] able to buy food and feed themselves. Some of them could stay in hotels and it opened up shelter spaces, so a lot of them weren't sleeping on the streets." Overall, he said, that for PWUD, CERB was a benefit because, "A lot of them were taking care of themselves. By week two, there was less people panhandling and begging for money." From what he saw, CERB also helped with

physical distancing; the cheques helped people buy tents so they could separate better than in shelters, where people may be more crammed together. "They closed Hyde Park and a lot of them went over to Strathcona, which was a bigger space."

Impact of safe supply

In response to the dual public health emergencies of the overdose crisis and COVID-19, the province announced new clinical guidelines in March 2020 to provide pharmaceutical-grade drugs to PWUD with the aim of reducing their exposure to a toxic drug supply, risk of withdrawal, and exposure to COVID-19.[3] This safe supply of drugs included oral hydromorphone, long-acting morphine (M-Eslon), dextroamphetamine (Dexedrine), and methylphenidate (Ritalin).

From John Doe's point of view, some of his profit was cut into by the safe supply of amphetamines. However, he was not worried about his finances as the majority of his profits came from opioids, not crystal methamphetamine. He felt that this was generalizable to most people who sell drugs; "I don't think it cuts into our profits as drug dealers, because a lot of addicts want that same high they usually get." He did not believe safe supply is saving lives, explaining, "Once you're addicted to fentanyl, it's hard to get off."

John Doe believes that some people who sell drugs dislike safe supply because they sell just enough opioids to prevent their customers from getting withdrawals, so PWUD need to keep going back to them. "Some people use it when they can't get fentanyl so they don't get sick," he said. He believes that safe supply can help with withdrawals when fentanyl is not available for PWUD.

According to John Doe, the street price of 8 mg hydromorphone tablets before safe supply was $5 a tablet. After the initiation of safe supply, it went down to $2 a tablet. He believes that the hydromorphone prescribed in safe supply is not largely used by those who use fentanyl. When asked what he thinks happens to the hydromorphone prescribed in safe supply, he replied, "A lot of people sell it to get fentanyl." When asked who the hydromorphone from safe supply is sold to, he stated, "[To] people [who] only use hydromorphone. They don't use fentanyl."

Prevention of overdose

John Doe believes the most effective interventions against overdose are safe injection sites and naloxone kits: "The safe injection sites do really work. Maybe more awareness [is needed]—a lot of addicts are already aware—but [for] families and stuff. And I guess Narcan, Narcan is really effective. They need to hand out more Narcan kits for free."

Lessons for health care providers

John Doe provided in-depth insights into the BC illicit drug market. This report may have limitations in terms of generalizability as it is based on the subjective experiences of one individual and drug markets may vary across Canada. However, his firsthand account of the illicit drug trade does highlight some critical lessons for health care providers.

The intentional move to more potent opioids

John Doe's account warns us that the production of street opioids is moving intentionally toward carfentanil and away from fentanyl, indicating that the drug supply is becoming even more toxic over time. He was able to articulate why overdose is not a deterrent from opioid use as PWUD have likely become tolerant of the current drug supply and are looking for ever-higher-potency opioids. In the free market of the illicit drug trade, PWUD are specifically asking for higher-potency opioids and suppliers are filling this demand.

The financial burden of drug use

If we assume most people who use opioids will use between 0.1 g and 1.75 g daily, the daily cost is $20 to $175 pre-COVID-19 and $25 to $428 during the pandemic. If we assume most people who use amphetamines will use between 0.1 g and 1 g daily, the daily cost is $10 to $60 pre-COVID-19 and $10 to $100 during the pandemic. This shows how quickly addiction can lead to financial ruin, as well as the level of crime (including theft and drug distribution) and participation in the sex trade that will be required to maintain a certain level of drug use.

Facilitating change in people who use and sell drugs

Although not the case with John Doe, many people who sell opioids and crystal methamphetamine also use these drugs. The drug trade can be lucrative, and John Doe's account can help health care providers and law enforcement understand the opportunity costs to the people who sell drugs when they are asked to change what they do to make money.

Motivational interviewing is an evidence-based therapeutic approach to addiction treatment. During motivational interviewing, the therapist helps the patient develop discrepancy by clarifying their goals and values and revealing how their behavior is in conflict with them. If a motivational interviewing approach is taken toward people who sell drugs as well, the real-world downsides of negative police interactions, knowing that people are dying from the products sold, and the risk of violent encounters can be used to help them develop discrepancy between their current behaviors and their goals.

The risk of laced products

Another downside of the illicit drug trade is the prevalence of laced products. Even John Doe would not buy his cannabis from other illicit drug suppliers. Health care providers can encourage their patients who use cannabis to buy from reputable, legal sources as a harm reduction strategy. In addition, if patients who use drugs intend on using drugs without fentanyl, they should be encouraged to have their drugs tested, and drug-testing sites should be expanded.

The interplay between mental illness and addiction

John Doe witnessed the connection between mental health issues and addiction in his customers. Specifically, he saw the interplay between depression, anxiety, posttraumatic stress disorder, psychosis, and suicide with addiction. When present, these issues should be treated concurrently in line with best evidence.[4]

The need for withdrawal management

John Doe recounted the increased difficulty of procuring illicit drugs during the COVID-19

Continued on page 19

Dr Matthew Chow: Exploring new avenues for effecting change

Dr Chow, a child and adolescent psychiatrist in Vancouver and the new president of Doctors of BC, shares his interests, influences, concerns, and hopes for the year ahead.

Dr Chow was bestowed the chain of office and became president of Doctors of BC on 11 December 2020. He spoke with *BCMJ* editor Dr David Richardson that same month.

You're kind of a unicorn right now, as a child and adolescent psychiatrist. There aren't many of you.
Sadly, no, there aren't enough of us.

Where did you grow up?
I'm from the Prairies, from Calgary. I went to the University of Calgary for undergrad and for med school.

What did you like to do growing up?
What *wasn't* I interested in? I was definitely a voracious reader. And I grew up at a time when more and more electronic stuff was coming online, so I got into computer programming pretty seriously and video games and things like that. And at one point I had quite an interest in IT, but I ended up liking biology more. I did cellular, molecular, and microbial biology in my undergrad and then ended up going into medicine.

And I hear you're a cyclist? How many bikes do you have?
Hahaha. I have only one, believe it or not.

Do you know the formula for how many bikes you need? It's N plus one, where N is the current number. What bike do you have?
I have a steel-frame Marinoni bike from Quebec. It's a road bike with fenders, because you need fenders to ride in this city all season, and I'm an all-season rider.

Do you also ride on a trainer?
I can't do it. I have to be outside when I ride. It's my quiet time. My alone time. It's thinking and recharging time.

I feel the same way. So, in university, thinking about going into medicine, when did you get interested in psychiatry?
It was last minute and probably caused my dean to have a heart attack. I had no interest in psych, so I made it my last possible rotation. I had my heart set on applying for other things. When I did the rotation it was surprisingly interesting. It gave me time to spend with patients that I didn't have elsewhere during my training. I ended up changing gears and I remember walking into the associate dean's office and saying, "You know what, I've decided that I want to apply to psych now." And he responded, "CARMS is next week. You're supposed to be flying around the country doing interviews right now."

I ended up being on hastily arranged psych electives as I was flying around for CARMS interviews, so I had to explain that to people. But I think people could see I was genuinely interested in it, so it worked out very well. I went to UBC for my general psych training and did some additional work so I also have my subspecialty designation for child and youth.

Why child and youth?
The more I progressed in the arc of my medical career the more I realized that you have to get upstream of a problem before it starts. In general psych I'd see people with substance use, psychosis, really intractable depression, and I'd wonder what things would have looked like if I had met them when they were 15 or 10 or 5 years old. Or if I'd met their parents before they were conceived. I found that for a lot of the problems people experience with ill health, other things are going on in their lives that you can help deal with. So I've gone more and more upstream—from general adult psychiatry to child and youth psychiatry, then from child and youth psychiatry to health systems work with Doctors of BC.

How do we get more specialists with your training? It's such a huge problem; in Langley, there's nobody.
I wish I had a straightforward answer for you, but it's the same as asking, How do you solve the full-service family medicine shortage? The answer is that it's complicated.

On this specific issue I don't think we're ever going to have enough child and adolescent psychiatrists if we keep practising the way that we traditionally do. I can see only so many patients a day. If you do the math we would need to train dozens of new child psychiatrists just to meet demand in BC, and we only train a handful a year. We've also compartmentalized things to such an extent that you have a certain number of eating-disorder specialists, OCD specialists, mood disorder specialists,

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PHOTO: JIMMY JEONG

etc., and that impacts how we deliver general psychiatric care. I think part of the solution is that we have to work differently. There aren't enough of us to go around, so we can't practise and carry individual caseloads like we did in the 1950s. I need the support of social workers and psychologists and dietitians and all sorts of people. Trying to do it all yourself, you just get burned out. I'm speaking to a generalist, so these are not surprising things for me to be telling you, right?

One of our office managers did the psych LPN course, and she loves it, so she spends part of her time talking to our patients—youth and adolescents. It's invaluable what she does. I can't do that. In Langley, we don't have any general psychiatrists in private practice anymore, because, I think, they got paid so poorly. It just makes sense for them to do contract work at mental health or to do a contract here or there.
I'm not surprised at that statistic. When the Joint Collaborative Committees put out the COVID-19 grant to doctors who are responsible for their own office costs, 80-something psychiatrists responded. But there are hundreds of psychiatrists in the province. Very few of them are running their own offices anymore.

It's probably simplistic, but if we came along with bags of money as an incentive for people to be psychiatrists in private practice, that would probably do it. That's not going to happen, but that would probably do it.
We see that problem time and again; we try to fix one problem by adjusting incentives one way, but then we create a new problem. We need more hospitalists; okay, let's pay hospitalists really well. Oh no, now we don't have enough full-service family doctors in the community. Or we pay episodic care so much or emerg care so much, and all of a sudden we don't have enough full-service family doctors. For a while there weren't enough psychiatrists willing to work in hospitals so the fees for hospital-based work were hiked. It caused an exodus from outpatient practice that is still causing problems for us today.

So Matthew, how old are you?
I'm 38.

Okay, I'm 57, and when I started medical school, they were making medical schools smaller to try to save costs, and after a while we were graduating 120 medical students, whereas Alberta had 200. Eventually, what do you know, we don't have enough doctors. It was pretty shortsighted.
It's funny, the skills that you bring to the table as a generalist, as a longitudinal practitioner, we need that skill set in the health care system. When we look at things on a short-term basis—say a 4-year cycle—we inevitably succumb to fads like cutting medical school spots and then have to live with the consequences. Someone who takes a longitudinal approach would look at the whole system, the whole arc of where society is headed, where our demographics are going, how many older and aging people we have. We'd look at the complexity of the situation and think, what we actually need is a more comprehensive generalists.

Having been in general practice for 30 years, I've been through a couple of generations of the same families and seen patterns repeat themselves. I also think to myself, if I could have intervened or something could have happened at an earlier stage, it may have stopped this sort of generational recurrence. Your specialty is so necessary.

I think about the young mother who has to quarantine with her toddler in a tiny apartment after an exposure to COVID, with no family or friends to help, or the child who has to change schools every semester because they keep getting pushed out of their community by rising rents, or the trans individual who tried to kill themselves because their parents won't accept who they are. They come to me with depression, anxiety, PTSD, but it's clear that the problems started long before they met me, and that they weren't mental health problems.

I think that's very true. There are so many situational issues of poverty and housing and substance abuse. Where do you start? And what's the solution?

That problem vexes me as well. It's a wicked, wicked problem—the Downtown Eastside, homelessness, the opiate crisis, these things are linked. Even seemingly unrelated factors such as the obscene escalation of home prices in BC has an impact. A researcher from Portugal was invited to BC to comment on the opiate crisis and he made the link right away between rising housing costs, homelessness, and opiates. I see the connection too. I have patients who are recruited to build multimillion-dollar condos that they will never be able to afford. They feel pressure to work excessive hours, get injured, use opiates to relieve the pain, and end up overdosing alone. This points to solutions that go beyond health care. It has to be a collaborative approach across many sectors.

What drew your interest to medical politics?

The same thing as child psychiatry—the need to get upstream of the problem. I've worked at almost all the health authorities in this province; I've gone through the privileging and credentialing process multiple times, and I saw a lot frustrating things about medicine, about practice, and I wanted them to change.

So the president's job. Why now?

Well, someone asked me to do it. And because I think Doctors of BC means something. It represents, I think, a noble profession. During this pandemic we've learned that the type of leadership doctors provide is needed now more than ever before. I think what's unique about us is that we have science, we have evidence, but we're also experts in humanity. We understand human beings, we understand what drives people's behavior. We have empathy. You need that during a pandemic. I would say that you need that for a lot of the ills that plague society. And, for me, it was an opportunity to get more involved in a meaningful way in our noble profession, and in the association that represents the profession.

How do you think we've done (BC doctors and Doctors of BC) during the pandemic?

I'll start with the doctors, as that's easy: they've acquitted themselves brilliantly. No one saw this coming, and yet people behaved superbly in terms of stepping up to the plate, learning what needed to be learned, doing what needed to be done under extraordinarily difficult conditions.

Doctors of BC has stepped up as well. When this really hit the fan in March, I remember us texting each other, emailing each other, back and forth with the ministry. We wrote submissions that became policy and facilitated changes nearly overnight. Virtual care became a fully billable service within 48 hours of WHO declaring a global pandemic. We had to make sure the health care system did not collapse. Collaborative work with government for the past decade or more paid off in a span of mere days.

As a primary care practitioner, I thank you. Virtual care was huge for us. What do you think about the public health response and collaboration with government?

I think very highly of our public health officials. They are quintessential professionals. They have trained and worked their entire lives for this moment. I have a great deal of respect for them, and I think they've been brilliant. Our politicians in BC have respected the public health advice, science, and evidence, too; it cannot be overstated how important that is. If you look at other jurisdictions where politicians tried to second-guess their public health officials, they got burned.

Thinking about your year as president, what would you like to accomplish and what legacy would you like to leave?

It's important to me that the profession not only survives this pandemic, but thrives. This is a once-in-a-lifetime, maybe once-in-a-century opportunity. We've learned a lot, and we've learned about the gaps that we have in the medical system, in society. We've also seen certain folks take on a disproportionate burden during this pandemic; we need to learn from that; we need to do better. And I think we will. I think society will be along with us for that. I would also like to see doctors see and treat each other as cherished colleagues long after the pandemic is over.

I think you're right. That's gotten lost a little bit, perhaps less so in smaller communities.

I did some of my training in rural communities, I've done outreach and worked in rural communities, and I admire the collegiality between people there. In the city we have a lot more difficulty with that.

Assuming the pandemic dies down, what would you like your legacy project to be?

During the pandemic, doctors' well-being has taken a serious hit. I want to make sure we can support doctors who have experienced physical, psychological, and moral injuries during this pandemic. It's an important part of the pandemic recovery process. We mustn't leave anyone behind.

What do you think the biggest challenge is for Doctors of BC in the years to come?

I think the nature of medicine is changing. Our younger colleagues don't want to work the same way that previous generations have. And

contrary to some folks' opinion, it's not because they are lazy. They're working multiple part-time jobs, they're working in different settings, they're teaching, they're doing research, they're doing advocacy, they're getting involved in politics. They are attacking things like systemic racism, gender inequality, and climate change. They are an incredibly engaged group. Medicine is going to have to change and the association is going to have to change to recognize that.

How about technology? What technological advances are going to affect the doctors of BC?

Virtual care has completely changed the face of medicine during COVID-19, and it's here to stay; patients are saying they want it to stay. That's something we have to adapt to, and Doctors of BC wants to help practices adapt to that virtual care reality.

The vaccine that we're all going to get, wow, that's amazing. We're injecting mRNA into people so they can express a protein so you can raise an immune reaction against this virus, and we did that in a year. And there are all sorts of other things you can do with that technology.

And genomics, that's going to change medicine. It's going to make medicine more precise, but it will also raise some interesting questions—who pays for that, who has custody over that information, do insurance companies get to see it?

Virtual care became a fully billable service within 48 hours of WHO declaring a global pandemic. We had to make sure the health care system did not collapse. Collaborative work with government for the past decade or more paid off in a span of mere days.

We live in interesting times, no question, and as president during this time you will represent a wide range of people—medical students, residents, family doctors, specialists. How will you balance everyone's different interests effectively?

You have to be a good listener in this job. I feel that my job is to be the chief listener, to understand everyone's reality, and to reflect it to our partners, our stakeholders, the government. A lot of listening and a lot of humility are necessary to function in this role.

It's a good thing you're a psychiatrist.

Thinking about the next phase of the pandemic, it's kind of a psychiatry problem now. Now we have a vaccine, but we still have to convince people that it is safe and that they should take it. At the same time we have to convince people that even though we have a vaccine they still need to wear masks and physically distance and follow the other public health measures. It's a behavioral problem that we have to deal with, which is right up my alley.

It's so true. I've noticed in my patient group that "COVID fatigue" is creeping in and people are thinking, well, we've got a vaccine, so we can relax.

That's going to be the story of the first part of my presidency—how do we convince people to hold on for a few more months. If we let up too soon there will be a resurgence.

Are there any experiences you've had with patients that stand out as having a significant influence on your career?

There are so, so many. Some of the most poignant experiences have been when I've been up north, in rural communities. I remember going to an Indigenous village, driving along a single-lane dirt road, with CB radios because we had to listen for logging trucks that we couldn't see coming around the blind corners. Serving the patients in that community and being faced with the reality that so many of our Indigenous brothers and sisters face every day, being struck by the challenges that have to be overcome. The people themselves are resilient, but the system and the things around them, and the history has led to so much of the illness and despair. That was powerful for me.

How about a pivotal moment in your career?

I applied to join a leadership course at one point, and I had no business being with the other people in that course—they were CEOs, past presidents of their provincial medical associations, and even a former special forces solider. My application was rejected, so I emailed Allan Seckel and asked him, "What could I have done differently?" He sent me a very lovely and generous reply and basically said, "There's nothing wrong with your application. It's just that a lot of very qualified people applied."

Later it turned out that someone was not able to go to the course, and I got the call that they had space for me. I met the most amazing people, and it completely changed the trajectory of my career. I realized there was a different avenue to effecting change. It was completely different from anything I'd done in clinical medicine, and I loved it.

Speaking of inspiring people that you meet, what traits do you most admire in a colleague?

Colleagues who have empathy. Colleagues who can walk a mile in another person's shoes. I admire people who can be transparent and give you great feedback, but also be civil and respectful about that—rather than hurting someone they are able to lift them up.

That's definitely a skill, and when you see it in somebody, it's impressive. What's the best advice you were ever given?

One of my preceptors said, "At some point in your life it's going to be up to you to decide how much of what I'm teaching you is worth listening to, and when to go your own way." He told me to follow my heart and trust my decision-making capability and my experience; to let people guide me, but not to let people direct me.

The other piece of advice someone gave me is to remember that you're always replaceable. Doctors have a tendency to put their maximum effort into everything they do because that's the kind of people they are, which is really cool. People come to rely on us. That's why I like being a doctor. That's why I like being with other doctors. But no one is truly irreplaceable.

I think that's true. It's a good thought to keep you humble. What do you hope to take away from being president, personally?
I started my career in medicine in a tiny corner of the huge thing called health care, and I saw only my little corner, and I advocated for only my little corner. As my view got bigger and bigger, and I met more people, I started to appreciate how complicated the system is. What I want to take away from the presidency is a better understanding of how this all works so I can be more effective at whatever role I have next—whether that's to be a better dad, a better colleague or—fate willing—a health system leader.

I think that's admirable. Do you have any concerns for the year ahead?
The health and welfare of my colleagues is top of mind. This pandemic has been a long road. There are a lot of burned-out people. When we overcome this pandemic we need to make sure that no one is left behind.

As doctors we have this invincibility thing—we work when we're sick, we work 80 to 100 hours a week. But we're human, we get tired, we get frustrated, we get angry sometimes, and we despair. That's okay. We don't always have to be strong. We have to help each other—sometimes I'm vulnerable and I need help from a colleague; sometimes I'm the strong one and I can help someone else.

It's a challenge sometimes to figure out who's vulnerable, but a few words here and there to your colleagues can make a huge difference.
That's something else I admire in my colleagues. There are doctors who know the right thing to say to help lift someone up when they need it. That's a pretty cool skill.

I think that's a real gift. Is there anything else you'd like to share?
From the bottom of my heart, I'd like to thank every member of this phenomenal profession right now. You've been giving it your all, month after month. Society owes you a huge debt of gratitude. ■

Continued from page 13

pandemic, which may result in PWUD experiencing increased withdrawal and craving symptoms. Physicians need to be aware of this and provide opioid agonist therapy along with supports, including psychosocial care and appropriate harm reduction practices, to support these vulnerable clients.

Unintended consequences
Since the COVID-19 pandemic began, there has been a spike in opioid overdoses. John Doe highlighted some of the unintended consequences of programs designed to help during the pandemic. With CERB, he saw a reduction in crime; an increase in shelter space; and better hygiene, nutrition, and physical distancing among PWUD. However, CERB also allowed PWUD greater access to drugs, leading to record profits for individuals like John Doe. The impact of the new safe supply clinical guidelines introduced in March 2020 is currently unknown. John Doe does state that some individuals who cannot obtain high-potency opioids such as fentanyl use the hydromorphone prescribed in safe supply to treat or prevent withdrawal. His account of PWUD diverting safe supply medications to obtain high-potency opioids like fentanyl is a concern that has been shared by physicians.[5] Any evaluation of the CERB program and safe prescribing guidelines should specifically measure the unintended consequences of allowing increased access to a toxic drug supply for PWUD. In addition, overdose rates specifically involving hydromorphone should be measured. This evaluation will allow health care providers to optimize these programs to provide the greatest benefit and minimize harm. ■

Competing interests
None declared.

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Daniel Esau, BAppSc, MHSc, MD, Divya Virmani, MD

Multidermatomal varicella zoster with multiple cranial nerve involvement presenting with partial ophthalmoplegia in an immunocompetent woman

The case of an immunocompetent patient who presented with partial ophthalmoplegia, a rare complication of varicella-zoster virus infection, suggests that corticosteroids can be used in conjunction with antiviral medication to treat the condition in select patients.

ABSTRACT: Varicella-zoster virus (VZV) is rarely the cause of multiple cranial nerve palsies. Partial or complete ophthalmoplegia can occur with VZV infection, but the optimal treatment for this condition is unknown. We report the case of a 79-year-old immunocompetent woman who presented with multidermatomal VZV, herpes zoster ophthalmicus, multiple cranial nerve palsies, and partial unilateral ophthalmoplegia. Our report highlights the use of corticosteroids and antivirals to treat her VZV-associated partial ophthalmoplegia.

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This article has been peer reviewed.

Reactivation of varicella-zoster virus (VZV) causes shingles, which most often affects a single cutaneous sensory nerve but can also involve sensory or motor cranial nerves. In rare cases, reactivated VZV can cause multiple cranial nerve palsies and partial or complete ophthalmoplegia. The optimal management of patients with this condition remains unclear.

Case data

A 79-year-old woman presented to the emergency department with left VZV ophthalmicus and partial sixth and third nerve palsies. Four weeks prior to presentation, she had developed a vesicular rash on her left forehead and face, and had begun experiencing nausea, headache, and general malaise. She was prescribed valacyclovir as treatment of herpes zoster ophthalmicus and was referred to ophthalmology.

One week prior to presentation, the patient was seen by ophthalmology and was noted to have herpes zoster–related anterior uveitis with suspected vitreous spillover. Extraocular muscle function showed no abnormalities. Due to the patient's ongoing gastrointestinal intolerance of valacyclovir, her prescription was switched to acyclovir. On follow-up 1 week later, she had developed a 5-day history of horizontal diplopia and photophobia. Her vital signs showed no abnormalities. Periorbital swelling and ptosis were noted in the left eye, along with a partial sixth nerve palsy with severe limitation in eye abduction. Her left eye was midline in the neutral position. The right

Key points

- Varicella zoster can affect both sensory and motor cranial nerves, and is a rare cause of complete or partial ophthalmoplegia in both immunocompromised and immunocompetent patients.
- The underlying mechanism of cranial nerve involvement is unknown but may involve direct viral infection and postinfectious inflammation of the cranial nerves.
- There is little evidence to guide treatment of varicella-zoster virus ophthalmoplegia, but the use of corticosteroids in addition to antivirals may target inflammation involved in the pathogenesis of this condition.

pupil was 3 mm and responsive; the left was 6 mm and had a sluggish and painful response to light. Her corneal reflexes were intact. A crusted macular exanthem was present over the left V1 dermatome and on the right back and breast (T4 dermatome). Cardiopulmonary and abdominal exams revealed no abnormalities. The patient had no meningismus. Anterior uveitis had improved, and visual acuity was 20/20 OU with correction. She was referred to the emergency department for suspected neurologic involvement of VZV.

The patient's medical history included bilateral hip replacements, osteoporosis, pseudophakia OU, glaucoma, anterior ischemic optic neuropathy in the left eye 13 years prior, and remote Graves' disease with radioiodine ablation. A lumbar puncture was performed, and the patient was admitted to hospital for intravenous acyclovir. Varicella zoster, herpes simplex, and enterovirus polymerase chain reaction (PCR) were negative in the cerebrospinal fluid (CSF). Gram stain and culture of the CSF were negative. Cell count of the CSF revealed 3×10^6 RBC per litre and 33×10^6 nucleated cells per litre, 91% of which were lymphocytes. Complete blood count, electrolytes, and creatinine showed no abnormalities. An HIV screen was negative. IgG, IgA, and IgM levels, and CD4, CD8, and complement levels showed no abnormalities. A CT scan of her chest, abdomen, and pelvis did not reveal any malignancy. MRI of her brain showed enhancement of the left cavernous sinus, optic nerve sheath, inferior rectus muscle, and posterior globe. Oral prednisone at a dose of 60 mg daily was initiated. On hospital day 3, fat-saturated MRI showed increased T2 signal and enhancement involving the left medial and inferior rectus muscles, as well as enhancement in the fat surrounding the left optic nerve sheath and extending to the posterior aspect of the globe and the superior orbital fissure **[Figure 1]**.

The patient's cranial nerve palsies improved with therapy throughout her 9-day admission **[Figure 2]**. She was discharged home with a plan to taper off prednisone over 2 months. Intravenous acyclovir was discontinued the day prior to discharge and she was transitioned to oral acyclovir for the remainder of her hospital stay. Antivirals were discontinued completely at discharge.

At 3 weeks postdischarge, the patient was doing well with no residual diplopia but with residual left mydriasis and ptosis.

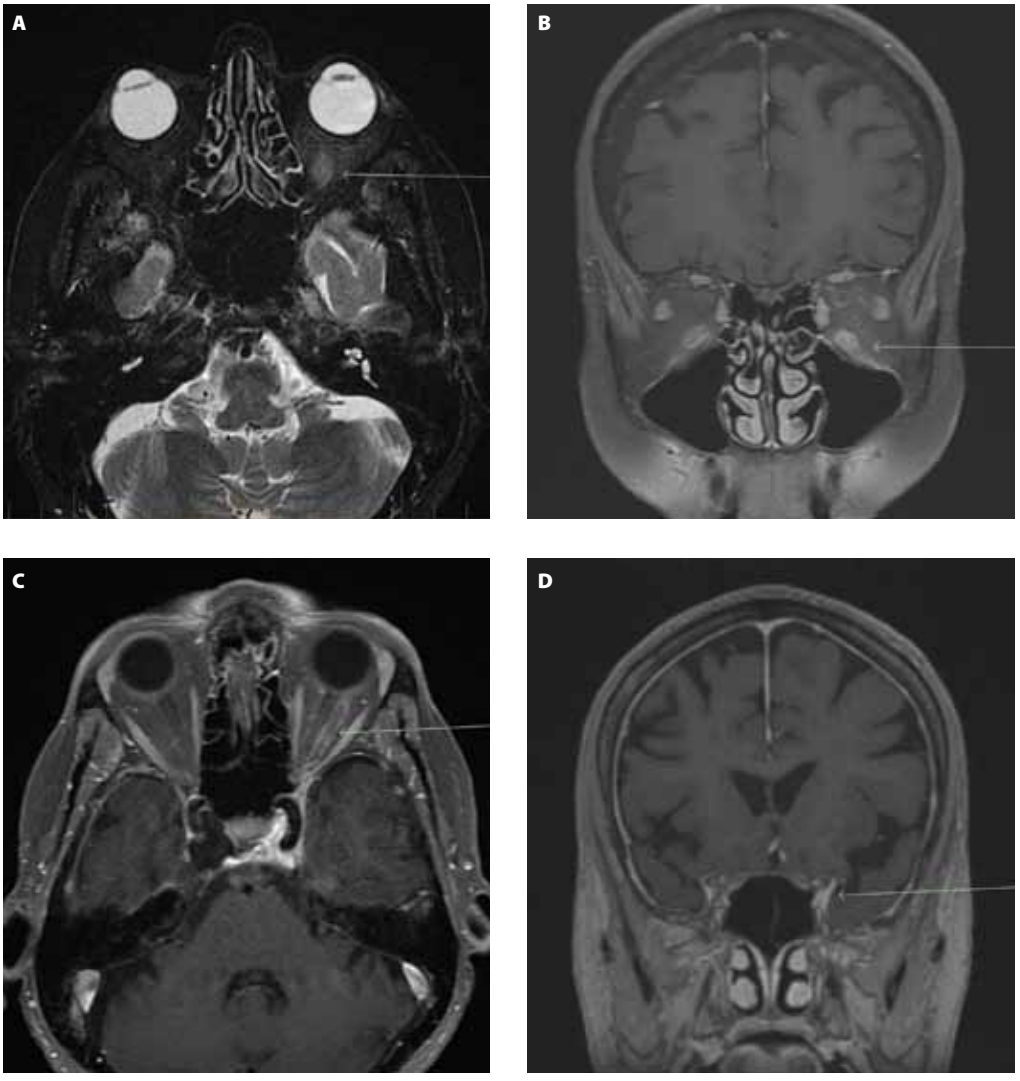

Figure 1. MRI of the orbit, showing left inferior rectus edema (A) and enhancement (B), retrobulbar enhancement (C), and superior orbital fissure enhancement (D).

Discussion

Varicella-zoster virus is the cause of chickenpox during primary infection and shingles during reactivation. Shingles usually affects one or more adjacent spinal or cranial sensory nerves, and typically leads to scattered rose-colored macules and vesicular lesions on the skin or mucous membrane supplied by the affected nerve.[1,2] Occasionally, VZV can reactivate in multiple contiguous sensory nerves, which is termed *multidermatomal zoster*. When noncontiguous dermatomes are involved, this is known as *herpes zoster duplex* (if two noncontiguous dermatomes are involved) or *herpes zoster multiplex* (if more than two noncontiguous dermatomes are involved).[3] Zoster is said to have cutaneous dissemination when more than 20 vesicles are found outside the primary and immediately adjacent dermatomes.[2] The risk of reactivation and dissemination is mediated primarily by a decline in VZV-specific memory T-cell activity, which occurs physiologically with aging or pathologically with immune suppression.[2,4,]

Although uncommon, the involvement of cranial motor nerves is well described—most famously the Ramsay Hunt syndrome, which occurs when VZV affects the geniculate ganglion and causes facial nerve palsy.[5] VZV can also affect the trigeminal nerve, and V1 involvement

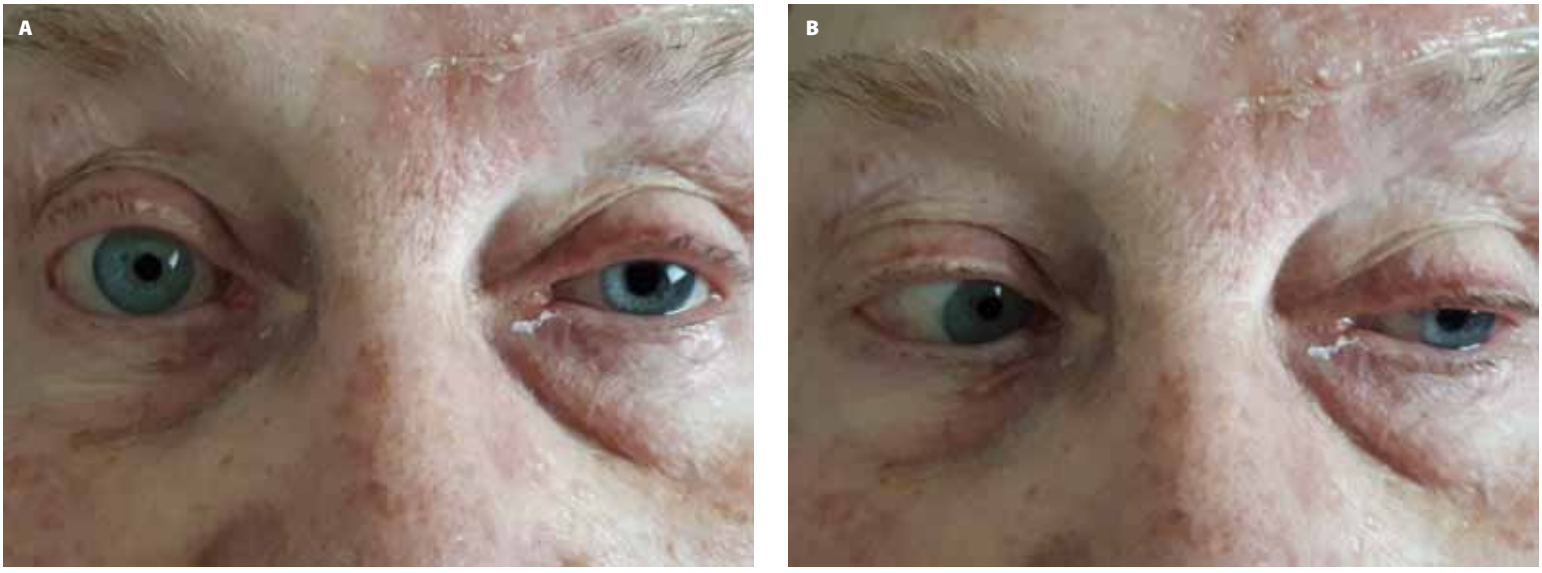

Figure 2. Central (A) and leftward (B) gaze on hospital day 3. Note left ptosis, mydriasis, and lateral rectus palsy, which had improved somewhat from the day of admission.

is known as *herpes zoster ophthalmicus*.[6] It is rare for VZV to affect multiple cranial nerves,[5,7] but when it does occur, it is usually associated with Ramsay Hunt syndrome.[5,8,9] There are only a few reports of VZV affecting multiple cranial nerves in the absence of facial nerve involvement.[6,10-13] In a retrospective analysis of 330 patients with herpes zoster with cranial nerve involvement, the frequency of trigeminal nerve involvement was 57.9%, while the frequency of oculomotor, trochlear, and abducens nerve involvement was 0.3% each.[7] We found no other cause of the patient's presentation other than VZV infection that affected multiple cranial nerves. Although the cerebrospinal fluid VZV polymerase chain reaction test was negative, it was performed after two adequate courses of oral antivirals, which may have reduced the sensitivity of viral PCR. Furthermore, CSF findings were consistent with aseptic meningitis, which is reported in 88% of patients with VZV ophthalmoplegia.[6]

VZV associated with partial or complete ophthalmoplegia generally involves variations of three clinical syndromes: orbital apex syndrome (OAS),[6,11,12] cavernous sinus syndrome (CSS),[14] and superior orbital fissure syndrome (SOFS).[10] OAS involves the oculomotor, trochlear, abducens, and optic nerves as well as the ophthalmic branch of the trigeminal nerve, and generally causes complete ophthalmoplegia and vision loss. CSS includes features of OAS with involvement of the maxillary branch of the trigeminal nerve and oculosympathetic fibres. SOFS is caused by lesions just anterior to the orbital apex and causes multiple cranial nerve palsies in the absence of optic nerve pathology.[15] The abnormal enhancement of the left cavernous sinus and optic nerve on the patient's MRI raised the possibility of CSS or OAS. However, the absence of complete ophthalmoplegia and optic nerve involvement was not in keeping with those diagnoses. It may be that early therapy with antivirals attenuated the disease severity and prevented complete ophthalmoplegia from developing.

Although immunocompromised patients are at higher risk of disseminated and visceral VZV,[2,16] a review of VZV-associated complete ophthalmoplegia found that immunocompetent and immunocompromised individuals were equally affected.[6] There is a lack of evidence to support or refute physicians searching for evidence of immunocompromise in patients with cranial nerve involvement of VZV, and the decision to pursue further testing of immune function is currently left to personal practice and individual patient risk.

Whether imaging findings can be used to dictate corticosteroid therapy is unclear.

The role of active VZV replication in CNS disease remains unclear. Some histopathologic studies of varicella encephalitis have suggested a postinfectious demyelinating process, whereas others have been consistent with direct viral pathology.[16] Similarly, both direct viral effect and postinfectious immunologic or inflammatory changes have been proposed as mechanisms for ophthalmoplegia in VZV infection.[6] In one report of orbital myositis associated with VZV, improvement was observed when the dose of prednisone was reduced and the dose of acyclovir was increased, which may be a sign that the presentation was caused by direct viral effect.[17] However, there are several reports of patient improvement after treatment with corticosteroids in conjunction with antivirals for VZV-associated ophthalmoplegia,[6,13,18] and there is a long history of corticosteroid use in cutaneous herpes zoster, with several reports of accelerated healing and reduced pain.[2]

Whether imaging findings can be used to dictate corticosteroid therapy is unclear. Perineuritis, demyelination, contiguous orbital inflammation, cranial vasculitis, myositis, encephalitis, and meningitis have been reported to be in keeping with an underlying immune

mechanism,[6] and these findings on neuroimaging might sway a physician toward treatment with prednisone. Optic perineuritis and orbital inflammation were present on neuroimaging of our patient. This report highlights the use of corticosteroids to good effect in an immunocompetent woman with VZV-associated partial ophthalmoplegia and lends more support to the use of corticosteroids (in conjunction with antivirals) in select patients. Clinicians should be aware of this rare complication of VZV infection and should consider the use of corticosteroids once other infectious causes have been ruled out.

Summary

Varicella zoster can affect both sensory and motor cranial nerves, and is a rare cause of complete or partial ophthalmoplegia in both immunocompromised and immunocompetent patients. The underlying mechanism of cranial nerve involvement is unknown but may involve direct viral infection and postinfectious inflammation of the cranial nerves. There is little evidence to guide treatment of varicella-zoster virus ophthalmoplegia, but the use of corticosteroids in addition to antivirals may target inflammation involved in the pathogenesis of this condition. ■

Acknowledgments

The authors kindly thank Dr Melina Warren for her expert interpretation of the imaging studies and her help in selecting images for this report.

Competing interests

None declared.

There is little evidence to guide treatment of varicella-zoster virus ophthalmoplegia, but the use of corticosteroids in addition to antivirals may target inflammation involved in the pathogenesis of this condition.

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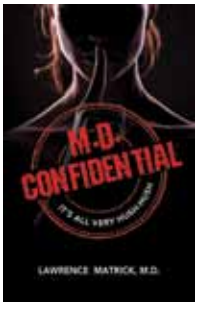
News

We welcome news items of less than 300 words; we may edit them for clarity and length. News items should be emailed to journal@doctorsofbc.ca and must include your mailing address, telephone number, and email address. All writers should disclose any competing interests.

Book available: *M.D. Confidential: It's All Very Hush-Hush*



By Lawrence Matrick, MD. Bellevue Publishing, 2020. 978-1773740577. Paperback, 242 pages. $22.28.

In this collection of short stories, Dr Lawrence Matrick explores the topic of mental illness and how it is perceived in society. Our mental health is just as important as our physical well-being, so why is it kept so very "hush-hush"? Dr Matrick's stories examine this phenomenon and how it affects those whose mental health is in jeopardy.

The book features a series of stories about mental illness that are designed to both illustrate and educate: the uncertainty of a family facing their father's progression into Alzheimer disease, the terror of a young man combating PTSD, and the redemption of a young woman given the care and resources she needs to overcome a substance use disorder.

Readers will learn the medical/psychiatric facts of each condition, the challenges faced by loved ones in each circumstance, and the resources available to them from professionals in the psychiatric industry.

COVID-19 vaccine toolkit for doctors' offices

To support doctors since the announcement of the COVID-19 vaccine, Doctors of BC and a group of family doctors have created a COVID-19 vaccine roll-out toolkit. The toolkit includes a draft voicemail script, messaging for doctors' websites (or patient email), and an FAQ for patients. It will be updated regularly as more information becomes available.

The toolkit is available at www.doctorsofbc.ca/sites/default/files/vaccine_toolkit_dec14_id_392322.pdf.

Comments and feedback can be sent to covid19@doctorsofbc.ca. All suggestions will be considered as the toolkit is updated.

New DocTalks episode: Putting Indigenous cultural safety into practice

A new episode of DocTalks, a Doctors of BC podcast, is now available on the Doctors of BC website and all podcast platforms. In this episode, Indigenous family physician Dr Terri Aldred and Indigenous cultural safety coordinator and consultant Mr Len Pierre discuss how we define and understand cultural safety and what the complexities are in addressing systemic racism. What steps can doctors and health care workers take to begin or continue the journey to addressing racism, both on an individual level and at the system-wide level? How can we measure our progress? www.doctorsofbc.ca/news/doctalks-podcast-putting-indigenous-cultural-safety-practice.

Dr Ramneek Dosanjh, president-elect for 2021

Doctors of BC elections

The Doctors of BC Board comprises the president and president-elect, along with seven directors-at-large. Dr Ramneek Dosanjh has been elected president-elect for 2021 (president in 2022). Dr Dosanjh joins Drs Kevin Martin and Jeff Dresselhuis, who were elected to 2-year terms as family practice members of the Board, and Dr Sophia Wong who was elected to a 2-year term as a specialist member of the Board. Dr Lawrence Welsh was elected to a 1-year term on the Board. The Board in 2021 will be made up of:

1. Dr Matthew Chow, president
2. Dr Ramneek Dosanjh, president-elect
3. Dr Jeff Dresselhuis, chair
4. Dr Adam Thompson, director-at-large, family medicine
5. Dr Kevin Martin, director-at-large, family medicine
6. Dr Barbara Blumenauer, director-at-large, specialist
7. Dr Sophia Wong, director-at-large, specialist
8. Dr Lloyd Oppel, director-at-large, specialist
9. Dr Lawrence Welsh, director-at-large, family medicine

Doctors of BC scholarship winners

Doctors of BC has awarded its two annual $1000 scholarships to Mr Danial Ressl of Burnaby and Ms Gabrielle Wong of Langley. The commendable recipients were chosen from an abundance of highly impressive applicants.

Mr Danial Ressl

Mr Ressl graduated from Burnaby Central Secondary School in 2020. During high school he led Scouting expeditions, earned a Duke of Edinburgh's Award, led a section in the award-winning Burnaby Central Chamber A Choir, and was selected in his final year to be a member of Burnaby Central's student council. While most of his time is now spent immersed in the microbiology and biochemistry program at Simon Fraser University, in his spare time he volunteers at the Greater Vancouver Food Bank and works part-time in a frontline position at Save-On-Foods. He is an avid hiker, soccer player, and amateur musician. One day he hopes to join the Doctors of BC community as a physician, to follow in the footsteps of his mother, Dr Vicky Ressl, and to continue to give back and help those most in need.

Ms Gabrielle Wong

Ms Wong graduated with an IB Diploma from R.E. Mountain Secondary School. She is currently attending Simon Fraser University (majoring in human geography, with a minor in social data analytics). Outside of school, she spends her time debating competitively, coaching younger students in debate, playing piano, and crocheting.

Although her heart isn't set on a career yet, Gabrielle is interested in equitable community building and civic technology. This year, she was appointed as a youth representative on her township's Seniors Advisory Committee, which she anticipates will give her more insight into change at the municipal level. Gabrielle hopes to continue to use her creative skills for social good, whether that be through performing music for seniors, crocheting octopuses for premature babies, or mentorship work with Big Brothers, Big Sisters. She is deeply appreciative of Doctors of BC for their support of her future pursuits.

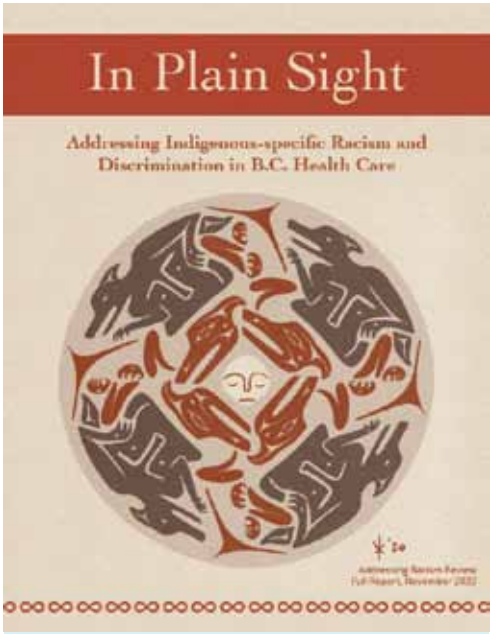
For more than 15 years, Doctors of BC has presented two $1000 scholarship awards to children of members in good standing who are completing high school and planning to continue studies at a recognized postsecondary institution. For more information about the award, visit www.doctorsofbc.ca/about-us/awards-scholarships/doctors-bc-scholarship-awards.

Guidance for Primary Care Management of Adult Patients with Suspected or Confirmed COVID-19

This document from the BCCDC and the BC Ministry of Health provides recommendations for primary care practitioners (family physicians and nurse practitioners) for the assessment and management of adult patients with symptoms suggestive of COVID-19, suspected COVID-19, or confirmed diagnosis of COVID-19. Topics addressed include symptoms, testing, criteria for outpatient management, clinical management, self-isolation, indications for referral to hospital, care of discharged patients, remote and rural considerations, long-term complications, mental well-being of patients and providers, and practitioner resources. The document is available at www.bccdc.ca/Health-Professionals-Site/Documents/BC_COVID_primarycare_outpatient_mgmt.pdf.

COVID-19 health policy study: Seeking input

The Vaccine Evaluation Center (VEC) at BC Children's Hospital is seeking health care workers' experiences and perspectives on the impact of COVID-19 public health policies on individuals and communities. VEC is particularly interested in hearing from health care workers in acute care and long-term care facilities as well as policy makers and implementers. Researchers at the VEC are doing this study in collaboration with researchers across Canada, China, and Bangladesh. The study will consist of a 45- to 60-minute interview to be completed by phone or Zoom. For more information or to sign up, call VEC at 604 875-2187 or email VECstudies@bcchr.ubc.ca. Provide your name, phone number, and a good time to call, and mention the COVID-19 health policy study.



Addressing racism in the BC health care system: Investigation findings

On 30 November 2020, Professor Mary Ellen Turpel-Lafond released her report, *In Plain Sight*. Turpel-Lafond was appointed by the Minister of Health to lead an investigation into alleged incidents of Indigenous-specific racism in emergency departments in BC, and in the provincial health care system. The report is the result of the investigation and is available at https://engage.gov.bc.ca/addressingracism. Turpel-Lafond is senior associate counsel at Woodward and Company, and a professor of law at Peter Allard Hall Law School at the University of British Columbia.

Virtual health communities for Canadians

Researchers with the UBC Centre for Chronic Disease Prevention and Management (CCDPM) have teamed up with digital health company Curatio to provide Canadians with virtual health support during the COVID-19 pandemic. Stronger Together is a project that uses a social networking health app to connect patients with free online evidence-based health resources, in-app coaching, peer-to-peer support, and private social health communities designed for patients who are managing a health condition during COVID-19, along with caretakers and parents who may be feeling a lack of support during the pandemic.

In addition to contributing expert content, CCDPM researchers will assist with program evaluation for the platform's nine different public communities (cardiovascular health and well-being, disability and physical activity, stroke recovery, keeping mentally strong with multiple myeloma, respiratory health and well-being, prostate cancer, 4+2 diabetes reversal, plan to move your kids, and parenting during COVID-19). Patients may access the health communities to connect with others on a private secure network to reduce feelings of isolation and vulnerability during the pandemic.

Individuals may register for free at www.curatio.me/strongertogether. By joining the platform, participants will assist researchers in learning how to best offer virtual health support and contribute to Curatio's program development.

Stronger Together is supported by an investment from the Digital Technology Supercluster, which brings together private and public sector organizations to address challenges facing Canada's economic sectors including health care, natural resources, manufacturing, and transportation.

Pathways public directory of family doctors

A new one-stop online directory of family doctors (www.pathwaysmedicalcare.ca) has been created for British Columbians to find up-to-date information on how their doctor is providing virtual and in-person care, how to make an appointment, and what other services their doctor may provide. Approximately 70% of BC family doctors who provide longitudinal care to their patients are listed in the directory, with more continuing to be added. Doctors are asked to check their listings for accuracy and to use the link at the bottom of their profile page to make necessary changes, including adding requested patient forms (e.g., COVID-19 screening questionnaire). Doctors who are not yet listed may create a listing at www.surveymonkey.com/r/FPvirtualcare.

Pathways is a not-for-profit organization supported by Doctors of BC and the British Columbia Ministry of Health through the General Practice Services Committee.

Health authorities accepting expressions of interest for COVID-19 service contracts

Effective 14 December 2020, health authorities are accepting expressions of interest for the simplified COVID-19 service contract. The contract was developed to support physicians paid under fee-for-service (FFS) whose practices have experienced ongoing reductions in volume due to the pandemic. The contract supports physicians on a short-term basis by compensating them on an hourly basis when providing services, including activities necessary for clinical service redesign of their practice/clinic in order to address the impacts of COVID-19 on service delivery, clinical processes, and patient flow. Physicians are required to continue to provide in-person patient care as needed; this contract cannot be used for virtual care only.

To be eligible for the contract, physicians must be currently paid exclusively by FFS and have experienced an ongoing reduction in the volume of the usual services they deliver during the COVID-19 pandemic that has resulted in a 20% or greater reduction of FFS income. Determination of the reduction in FFS income will be based on the physician's FFS billings since 1 April 2020 compared to the same period in the previous year. The contract is not available to anesthesiologists and emergency medicine physicians, who have access to other contract options.

Physicians who are interested in potentially transitioning to the contract should contact their health authority's Medical Affairs Department to discuss next steps. The health authority will notify the Ministry of Health of the physician's interest in the service contract and the ministry will assess the physician's historical FFS billings. Physicians who have not experienced a decrease in their FFS billings of at least 20% compared to the corresponding period in the previous year will not be eligible for the contract. The ministry will consider eligibility exceptions on a case-by-case basis.

BC guidelines published late 2019 and 2020

In 2019 and 2020, the Guidelines and Protocols Advisory Committee, a joint collaboration between Doctors of BC and the BC Ministry of Health, published and revised several BC Guidelines.

New guidelines:

- Appropriate Imaging for Common Situations in Primary and Emergency Care
- Prostate Cancer Part 1: Diagnosis and Referral in Primary Care
- Prostate Cancer Part 2: Follow-up in Primary Care
- CT Prioritization
- MRI Prioritization

Revised guidelines:

- Hypertension – Diagnosis and Management
- Workup of Microscopic Hematuria
- Urinary Tract Infections in the Primary Care Setting – Investigation

Visit www.bcguidelines.ca for further information about each guideline.

Measuring the societal impacts of the COVID-19 response in BC

During the first wave of the COVID-19 pandemic, sweeping measures were implemented in BC, such as closing nonessential services and reducing in-classroom learning and child care.[1] These measures were effective in helping slow transmission and preserve hospital resources. However, these measures have also impacted population health and wellness, the health care system, the environment, the economy, and society in general. Recognizing the broad range of effects stemming from the response measures, BC public health leaders established the Unintended Consequences (UniCon) Working Group in April 2020 to measure and monitor the effects in order to guide decision making on how to reduce morbidity and mortality from COVID-19 while minimizing societal disruption (e.g., keeping schools open). The working group is made up of representatives from the Office of the Provincial Health Officer, the Ministry of Health, the Ministry of Mental Health and Addictions, the BCCDC, the regional health authorities, and the First Nations Health Authority.

Because the effects of COVID-19 response measures are not uniform across the population, it's necessary to apply an equity lens when measuring them. COVID-19 response measures are likely to disproportionately impact people with fewer resources, poorer health, and those already experiencing discrimination, marginalization, and social exclusion. Racialized groups, households with lower incomes, and women, for example, are more likely to face financial difficulties, unemployment, food insecurity, increased violence, and discrimination.[2,3] These harms can accrue over time, particularly for younger populations.[4]

People who use drugs are a subpopulation acutely affected by COVID-19 response measures. Disruptions to the drug supply chain due to the pandemic response have resulted in growing toxicity and unpredictability of street drugs. As well, recommendations for physical distancing have reduced access to overdose prevention sites and increased the use of drugs without others around. From March to October 2020, there were 1232 illicit overdose deaths in BC compared to 263 deaths due to COVID-19.[5,6] Resources were developed to mitigate these unintended harms and better support people who use drugs during the pandemic.[7]

Not all COVID-19 response measures have resulted in unintended harms. Virtual health visits were scaled up quickly due to concerns of COVID-19 transmission; anecdotally, this improved access to health care services for people living in rural and remote settings. Evaluation of health outcomes will help inform how to optimize virtual delivery of health care services.

It is important to uphold the rights of Indigenous peoples in BC during the COVID-19 response, and the UniCon Working Group is engaging with urban Indigenous communities and organizations in meaningful partnership, including through formal Indigenous data governance. The goal is to highlight the differential impacts of response measures on Indigenous peoples and help create Indigenous-specific materials, including research, reports, and public-facing information that can point the way forward.

The breadth and inequitable burden of COVID-19 response measures necessitate a multisectoral approach to address. Highlighting the societal impact of COVID-19 response measures can help identify opportunities for greater collaboration to build a stronger and healthier society. ■

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Expanding telehealth at WorkSafeBC

Over the past 5 years, WorkSafeBC has increasingly used telehealth modalities to address barriers to health care delivery. This has required clinical champions, innovation, and collaboration across clinical and corporate departments (including IT security, privacy, legal, and procurement). This organizational effort has allowed WorkSafeBC to meet the priority operational and contractual requirements for telehealth implementation—including developing user guidelines and evaluation measures and selecting technology platforms—while ensuring the continued delivery of high-quality care to injured workers.

This foundation enabled WorkSafeBC to rapidly adapt and expand telehealth services across programs at the onset of the COVID-19 pandemic. The following are examples of telehealth adoption.

Telepsychiatry

When injured workers with accepted psychological conditions are unable to gain timely access to a local psychiatrist, a WorkSafeBC medical advisor can facilitate a referral (in consultation with the family physician) to one of the 25 community-based psychiatrists in the WorkSafeBC external psychiatric provider network. Injured workers in rural or remote communities, however, are still frequently required to travel to access care. A small pilot telepsychiatry initiative was in place before the COVID-19 pandemic to address this. The pandemic rapidly accelerated the expansion of the telepsychiatry service, and almost all consultations since have used videoconferencing technology. Telehealth guidelines, fee codes, and evaluation measures developed during the pilot have been successfully adapted for different clinical groups and programs across WorkSafeBC.

Disability benefits medical examinations

Historically, injured workers with accepted permanent conditions required detailed in-person impairment rating examinations by physicians internal or external to WorkSafeBC to determine long-term disability benefits. To reduce risk, these assessments, when possible, are now taking place virtually or by documentary review. With the consent of the injured worker, virtual training of physicians in impairment rating examination has also been adopted, where feasible. Learner feedback is provided by an entrustability scale as endorsed by the Royal College, demonstrating that these scales can be successfully adapted to the virtual observation of learners in practice.

Telehealth will continue to play a critical role in the delivery of health care services and educational activities.

Visiting Specialist Clinic

WorkSafeBC's Visiting Specialist Clinic in Richmond has provided uninterrupted support to injured workers throughout the pandemic by providing virtual care visits with its fellowship-trained specialists. Initially reliant on virtual visits, service has evolved into a blended model of virtual and in-clinic appointments for over 7000 expedited clinical interactions since March 2020. The clinic is now operating at 50% in-person exam capacity with strong COVID safety plans in place.

Educational activities

In addition to the clinical telehealth applications, WorkSafeBC has employed new IT solutions to support educational activities. These include the virtual training/mentorship of new WorkSafeBC physicians; adapting resident training programs (family practice and public health and preventive medicine) to include online learning experiences; delivering virtual "Not just a prescription pad" workshops to physicians throughout BC to assist in the management of patients with noncancer pain; and the recent successful WorkSafeBC and Northwest Association of Occupational and Environmental Medicine joint conference for community physicians that was conducted virtually and attracted just under 200 attendees.

WorkSafeBC has also moved its accredited academic detailing program, Patient Care, Physicians and WorkSafeBC, to a virtual format. For more information, call 1 855 476-3049 or email clinicalservicesevents@worksafebc.com.

WorkSafeBC anticipates that during the pandemic and beyond, telehealth will continue to play a critical role in the delivery of health care services and educational activities. WorkSafeBC will need to continually evaluate and adapt its models to determine the optimal blend of virtual and in-person care delivery in the future. The telehealth approaches implemented will aim to improve quality of care and recovery for injured workers, improve access to specialized care where there are barriers (e.g., travel, safety during COVID-19), realize cost savings, and reduce WorkSafeBC's environmental footprint. ■

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Dying for love: Disconnection in the time of COVID-19

On 11 July 2020, Andre Picard, *Globe and Mail* health journalist, tweeted:

> Jérôme (Jerry) Lalonde: Dec 25, 1931–July 10, 2020. My father-in-law. Another victim of #COVID19. . . But isolation and loneliness were a large contributing factor. Before the pandemic, my 89-year-old father-in-law still played tennis, volunteered daily at his church, played bridge, was a voracious reader. . . (Now) he missed his family horribly. . . my active, healthy father-in-law became de-conditioned, depressed, lonely. His life ceased to have meaning and purpose. He knew he was dying even before he contracted the coronavirus. Dying of loneliness, isolation and neglect. The rigid lockdown of nursing homes and long-term care homes must end. #COVID19 is not the only health threat to seniors in institutional care. They need their families, they need human contact as much as they need protection from the coronavirus.

When the pandemic started, stopping infection in long-term care homes was paramount. Now, many visitor restrictions seem excessive, harmful, and often irrational. Interpreted arbitrarily by individual care facilities, they are applied according to their understanding or their current resources. Families don't understand: "The care aides have a social bubble outside of the care home but they are caring for my mom in her room. I don't understand why I can't also be with my mom, caring for her emotional needs in her room."[1]

Care workers must now do the care formerly done by families—essential partners in care—or ignore it, suffering moral distress. Only 3.36 care hours per client per day are funded in long-term care. Care workers have additional tasks for infection control. Yet, increasingly, residents are frailer, older, and need more care. Families often help with meals and grooming. It satisfies their need to make their love palpable by caring for the physical needs of their loved one: "I was not allowed to go and do her hair or cut her toenails, even though I have done that for her the past 2 decades, yet a stranger was allowed to come and do those services."[1]

Strict restrictions condemn our loved ones to a lonely and agonizing experience in their last months of life.

Family members feel tormented by guilt and shame for "abandoning" their loved one, though not by choice: "She believes she is in an actual prison and that she has done something wrong to be there, but can't remember what."[1]

Seeing nobody they recognize, residents start to lose sight of who they are: "Going from visiting every other day to an occasional video call to now distanced visits has resulted in him no longer recognizing family."[1]

Eighteen months is the average time residents live in long-term care in BC. Strict restrictions condemn our loved ones to a lonely and agonizing experience in their last months of life, abandoned by those they love and unable to understand why. If we want a medical diagnosis, there is "geriatric failure to thrive." Weight loss, decreased appetite, poor nutrition, inactivity, often accompanied by dehydration, depression, and impaired immune function are symptoms. We know that institutionalized children whose emotional needs are not met "fail to thrive." Do we take this less seriously because it is happening at the other end of the lifespan? Or is it because we can test and count coronavirus deaths but not deaths from loneliness or giving up?

The BC Seniors Advocate's recent report on the effects of strict visiting restrictions emphasizes that residents and families must have a strong voice in the decision-making process for long-term care, recommending "a provincial association of long-term care and assisted living resident and family councils."[1] Managers of care homes have associations and care workers have unions to lobby government, but there is no stakeholder association for those with the biggest stake of all—the residents and their families. Recently the BC government had to replace management in several care homes where families had long been identifying dangerous practices to management without success.

Let Andre Picard have the last word: "Let the caregivers in. Teach them infection-control procedures—which they can learn as easily as any staff member. Let them bear witness. Let them lovingly care for their loved ones. In these pandemic times, vigilance is essential. But cruelty is still unacceptable."[2] ■

—Johanna Trimble
Patient Voices Network Representative

This article is the opinion of the Geriatrics and Palliative Care Committee, a subcommittee of Doctors of BC's Council on Health Promotion, and is not necessarily the opinion of Doctors of BC. This article has not been peer reviewed by the BCMJ *Editorial Board.*

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BC anesthesiologists reduce carbon footprint by choosing wisely

Trends of volatile anesthetic use in three health authorities across BC.

Maya de Vos, BSc, Richard Alexander, MD, FRCPC

ABSTRACT: Anesthesiologists are well positioned to reduce the anesthetic-related carbon footprint by reconsidering their use of volatile anesthetics. Across BC, the environmental impact of these medically necessary greenhouse gases is not well documented. In this study, we identify the trends of volatile anesthetic use and the associated annual carbon footprints in three health authorities across BC from 2013 to 2019. Each health authority has reduced desflurane use, resulting in a 61%, 53%, and 63% reduction in the carbon footprint per operation performed in the Vancouver Island Health Authority, Interior Health Authority, and Northern Health Authority, respectively. Across the province, this equates to a difference of 8.8 million kg of CO_2 released into the atmosphere in 2013 compared to 2019. By increasing awareness about how individual practice patterns can affect greenhouse gas emissions, we hope to influence more sustainable practices across BC.

Introduction

Climate change is a considerable threat to human health on a global scale.[1] The medical community has an obligation to advocate for change and to reduce its environmental impact, while simultaneously maintaining the current standard of patient care. Volatile anesthetics are documented to contribute 5% of the carbon footprint in the acute medical setting.[2] Consequently, anesthesiologists have the opportunity and responsibility to contribute to a more sustainable future by evaluating the environmental impact of their clinical practice.

Volatile anesthetics are classified as halogenated fluorocarbons and are known to be potent greenhouse gases. However, not all greenhouse gases are equal. Their potency depends on the atmospheric lifetime, total radiation absorbed, and concentration of compounds in the atmosphere that absorb the same wavelength of radiation.[3] The impact that an individual gas will have on global warming over a specific time frame can be quantified by its global warming potential (GWP). The GWP is a weight-based equivalency measure used to compare a compound's environmental impact to that of carbon dioxide (CO_2).[3] The greenhouse gas emissions or carbon footprint of each volatile anesthetic can be quantified from the GWP and volume of gas used and expressed as the carbon dioxide equivalent (CDE).[4]

Volatile anesthetics are classified as halogenated fluorocarbons and are known to be potent greenhouse gases.

In 2014, the American Society of Anesthesiologists Environment Sustainability Task Force published actions that anesthesiologists can take to reduce their carbon footprint in the operating room.[5] These include choosing a volatile anesthetic with a lower GWP and minimizing fresh gas flow.[5] The GWPs over 20 years (GWP_{20}) for commonly used volatile anesthetic agents are 6810, 1800, and 440 for desflurane, sevoflurane, and isoflurane, respectively.[6] When accounting for anesthetic potency and flow rates, desflurane has a twenty-six-fold and thirteenfold larger environmental impact than sevoflurane and isoflurane if used in large quantities.[7]

In the Vancouver Island Health Authority, joint efforts between the Department of Anesthesiology and the Sustainability Office resulted in the purchase of low-flow anesthetic machines in 2015 and changes to practice patterns to preferentially use sevoflurane over desflurane. Previous work has investigated the impact of similar sustainability measures in Vancouver hospitals[8] and compared greenhouse gas emissions from Vancouver General Hospital to two international facilities.[9] However, trends of anesthetic-related emission rates in the Vancouver Island Health Authority and British Columbia as a whole remain undocumented in the literature. We know that the collection of data to inform the environmental impact of clinical practice and the success of sustainability measures is essential for continued quality improvement.[7] Therefore, we initiated a project to update our understanding of anesthetic-related greenhouse gas emissions in the Vancouver Island Health Authority and across comparable health authorities in British Columbia.

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This article has been peer reviewed.

Methods

This project was identified as a quality assurance project and did not require research ethics board review (Tri-Council Policy Statement 2 Article 2.5). Environmental and sustainability offices in each participating health authority were contacted to obtain consent and access to anesthetic gas–purchasing data from 2013 to 2019. Participating health authorities were the Vancouver Island Health Authority (VIHA), the Interior Health Authority (IHA), and the Northern Health Authority (NHA).

Volumes of volatile anesthetic agents were provided by pharmacy services for 9 VIHA hospitals, 13 IHA hospitals, and 10 NHA hospitals. The annual carbon dioxide equivalent over 20 years (CDE_{20}) for each health authority was calculated using purchasing data and GWP_{20} values previously reported by Anderson and colleagues.[6] To allow for direct comparison between the participating health authorities, the calculated CDE_{20} was then standardized by the number of operations performed in each health authority using data from the BC Surgical Patient Registry.

Results

Data from the three participating health authorities demonstrate that anesthesiologists are reducing their use of desflurane and subsequently reducing their carbon footprint over time. In the VIHA, there was a 60% decrease in desflurane use to 234 L per year in 2019 from 583 L per year in 2013 **[Table 1]**. This was associated with a 3% increase in sevoflurane use to 446 L from 433 L per year over the same time period, resulting in sevoflurane surpassing desflurane volumes in 2015 **[Figure 1A]**. Similar results were obtained from the IHA during this period, with a 53% reduction in desflurane use to 418 L from 881 L per year. This was associated with a 33% increase in sevoflurane use to 493 L from 371 L per year, with desflurane use remaining higher than sevoflurane until 2018 **[Figure 1B]**. In comparison, the NHA anesthesiology departments have consistently used sevoflurane in higher quantities than desflurane since 2013. Also, in the NHA, desflurane and sevoflurane use has decreased by 53% (to 55 L from 118 L per year) and 46% (to 225 L from 414 L per year), respectively **[Figure 1C]**. Across the

TABLE 1. Volumes of volatile anesthetics purchased by participating health authorities between 2013 and 2019.

	Volume of sevoflurane (L/year)			Volume of desflurane (L/year)		
Year	VIHA	IHA	NHA	VIHA	IHA	NHA
2013	433	371	414	583	881	118
2014	455	307	349	513	647	130
2015	415	436	306	322	784	114
2016	402	446	335	318	675	89
2017	401	451	263	287	560	114
2018	450	470	239	264	489	55
2019	446	493	225	234	418	55

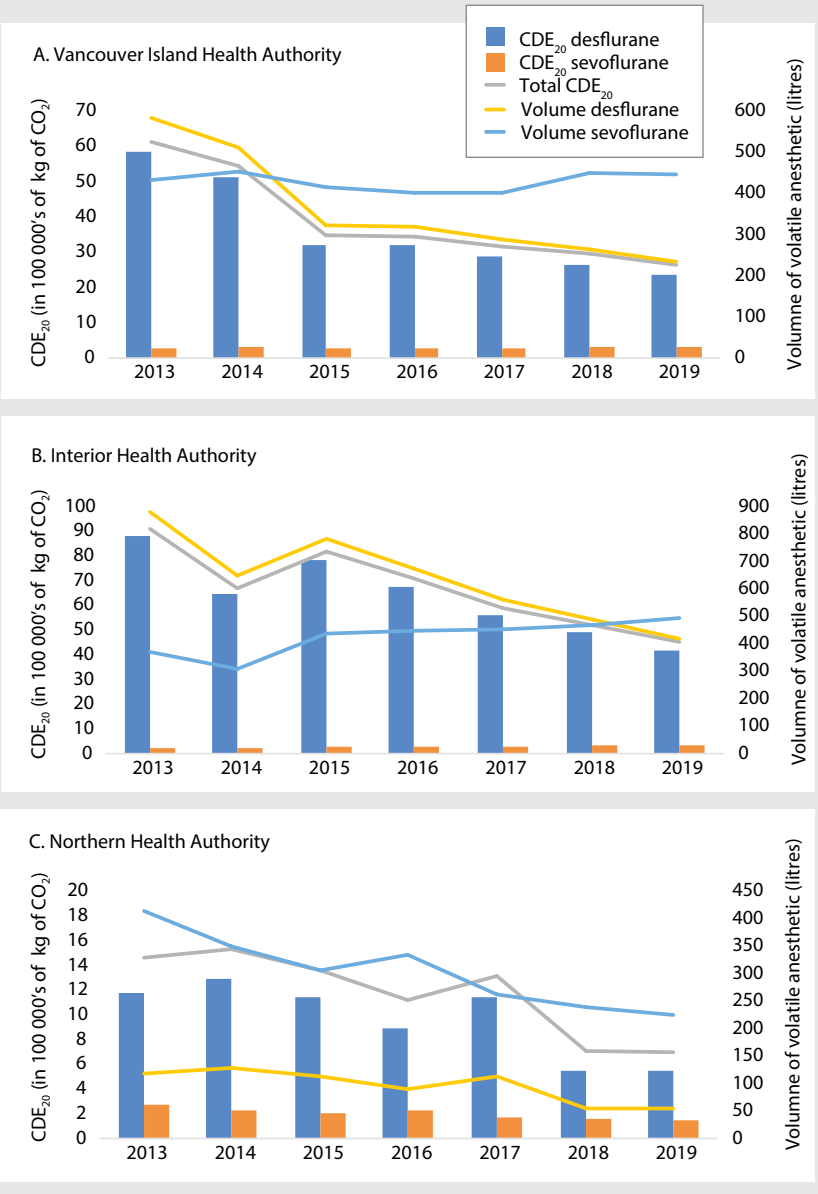

FIGURE 1. Trends of volatile anesthetic use for VIHA (A), IHA (B), and NHA (C), and corresponding carbon footprint or CDE_{20} expressed in 100 000's of kg of CO_2.

three health authorities, these changes resulted in a decrease of 8 807 573 kg of CO_2 produced between 2013 and 2019.

To effectively compare the three health authorities, the calculated CDE_{20} values were standardized by the number of operations performed in each **[Figure 2]**. With the reduction in desflurane use, the VIHA saw a 61% drop in its carbon footprint to 40 kg of CO_2 from 102 kg per operation between 2013 and 2019. In comparison, the CDE_{20} per operation for the IHA decreased to 75 kg of CO_2 in 2019 from 161 kg of CO_2 in 2013, a 53% change. In the NHA, there was an overall reduction in the carbon footprint per operation of 63%, to 34 kg of CO_2 in 2019 from 93 kg of CO_2 in 2013. Across the province, these efforts resulted in the cumulative carbon footprint decreasing by 58%, which is equivalent to 208 kg of CO_2 per operation **[Table 2]**.

Discussion

Anesthesiology departments have been called on to reduce their anesthetic-related greenhouse gas emissions.[8] Monitoring and understanding emission rates and trends in local health authorities is essential to recognize success in environmental initiatives and identify areas for improvement.[7] Two studies have examined the environmental impact of surgical suite operations in Vancouver, providing valuable insight into the benefits of preferentially using volatile anesthetics with a lower GWP_{20} over desflurane, and the use of low-flow anesthetic machines.[8,9] In response to these environmental initiatives, Alexander and colleagues reported a 66% reduction in the carbon footprint of volatile anesthetics in eight Vancouver hospitals between 2012 and 2016.[8] Additionally, desflurane use at Vancouver General Hospital has been found to increase emissions rates tenfold when compared to a British facility that eliminated the use of desflurane.[9] However, this is the first study to quantify the anesthetic-related environmental impact outside the Greater Vancouver area.

Our data show that anesthesiologists across BC are reducing the use of desflurane. In response, IHA and to a lesser extent VIHA are increasing the use of sevoflurane, while the NHA has seen a concurrent reduction of sevoflurane use. Due to the disproportionate environmental impact of desflurane compared to sevoflurane, these changes have resulted in a reduction in each health authority's carbon footprint of more than 50%. Additionally, the installation of low-flow anesthetic machines in the VIHA was associated with a 36% reduction in CDE_{20} in 2015, the largest annual reduction across the province. Across the province, these sustainability measures have resulted in a cumulative reduction of the anesthetic-related carbon footprint over 7 years, equivalent to removing 7476 vehicles from use.[10]

These results support existing literature, which states that judicious use of desflurane in anesthetic practice[4,5] and encouraging the use of low-flow anesthetic techniques[11,12] are effective for reducing the anesthesia-related carbon footprint. However, various other avenues for minimizing the impact of anesthetic gases have been proposed. At the bedside, the use of properly sized equipment for mask ventilation, laryngeal mask airways, and endotracheal tubes, as well as managing leaks in the system, can reduce excessive use of volatile anesthetics.[13] Additionally, the movement toward environmentally inert gases offers a solution to the dichotomy between health necessity and the adverse environmental impact of anesthetic gases. Xenon, a noble gas found to be an effective anesthetic,[14] has shown promise, but its use is not currently economically feasible.[3,12] System-wide, the installation of volatile anesthetic recovery systems could reduce emission rates.[15] Typically, less than 5% of the volatile anesthetics used are metabolized by the patient, with the remainder released into the atmosphere. Scavenging systems that collect waste gases have been used to minimize health care practitioners' exposure to anesthetic agents in the operating room, but they do not reduce environmental emisions.[7] However,

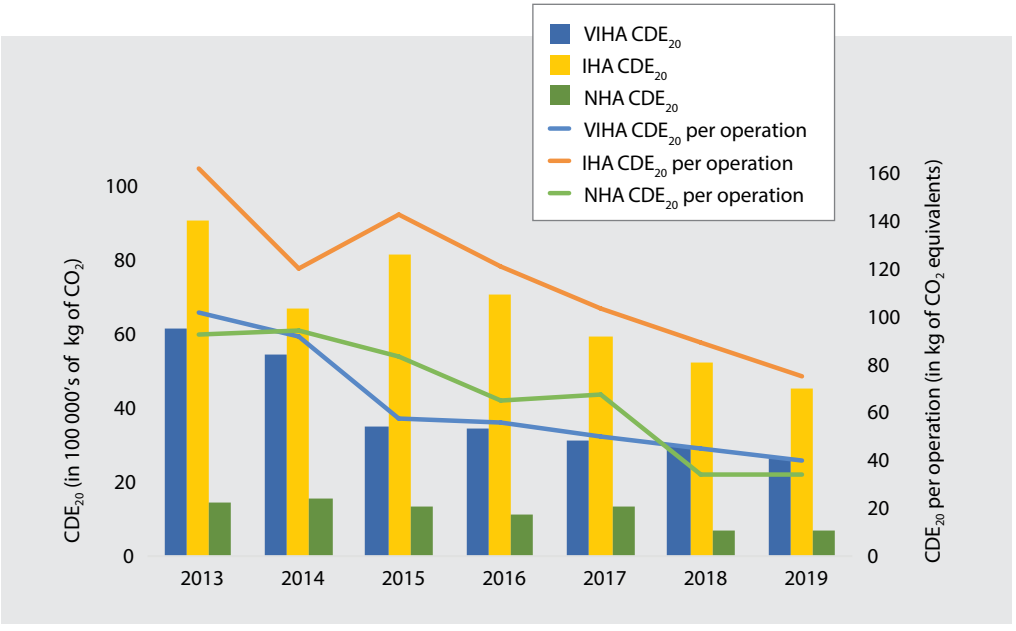

FIGURE 2. Standardized CDE_{20} per operation in each health authority from 2013-2019.

TABLE 2. Change in CDE_{20} (expressed as kg of CO_2 per operation) between 2013 and 2019.

	VIHA	IHA	NHA	Total
CDE_{20} per operation, 2013	102 kg CO_2	161 kg CO_2	93 kg CO_2	356 kg CO_2
CDE_{20} per operation, 2019	40 kg CO_2	75 kg CO_2	34 kg CO_2	148 kg CO_2
Absolute reduction	62 kg CO_2	86 kg CO_2	59 kg CO_2	208 kg CO_2
Relative difference	61%	53%	63%	58%

technologies that process waste gases into inert compounds or recycle gases for reuse provide an avenue for greening anesthetic operations.[15] In Canada, the Deltasorb and Centralsorb systems developed by Blue-Zone Technologies Ltd. are silica zeolite absorption systems that capture waste gases.[15,16] In contrast to other recovery systems, Blue-Zone facilities have the manufacturing technology available and approval from Health Canada to recycle captured gases for reuse.[16,17]

A lack of awareness about anesthetic-related greenhouse gas emissions and the available environmental measures are significant barriers to building sustainable practices.[7,18] By improving the understanding of anesthetic-related greenhouse gas emissions across BC, it is our hope to influence change across health authorities and individual practising anesthesiologists. ■

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Due to the disproportionate environmental impact of desflurane compared to sevoflurane, these changes have resulted in a reduction in each health authority's carbon footprint of more than 50%.

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The importance of ophthalmology teaching

A discussion of the barriers to teaching ophthalmology in medical school and its value to future physicians.

John Liu, MD

Each year, as incoming first-year UBC medical students excitedly open an email with information that will prepare them for medical school, they are greeted with an orientation manual prepared by the class ahead of them, affectionately known as the *Purple Book*. In the chapter about medical equipment, a direct ophthalmoscope is included at the bottom of the list of instruments they will need (it is listed as an optional purchase).

This is completely reasonable. Direct ophthalmoscopes are expensive, and for the most part unnecessary for a medical student to purchase. They are often available in clinics for medical students to borrow on the off chance they are asked to perform a fundoscopic exam. However, the scarcity of students who own a direct ophthalmoscope reflects the difficulty faced when teaching medical students about ophthalmology and visual health. The specific nature of ophthalmology as a niche specialty makes learning about visual health daunting, and comes with some perceived barriers.

From the student's perspective, a large investment of time (or money, in the case of purchasing a direct ophthalmoscope) may not yield much return in knowledge that is examinable or brought up by clinical preceptors as expected. From the educator's perspective, visual health is difficult to integrate into other topics in medicine and may appear technically challenging to teach. Learning about the heart, lungs, or kidney does not usually result in much discussion about the eyes, and medical school educators may find it intimidating to teach fundoscopy, given the limited opportunities for students to practise the skill. Over time, students may neglect the visual system, forgo learning the fundoscopic examination, and cast the topic aside. These barriers, however, should be examined more carefully.

Barrier 1: Ophthalmology is "low yield" in medical school

To medical students, ophthalmology is underrepresented as examinable material, but perhaps inappropriately so. Medical education should strive to reflect the evolving needs of the population that physicians are meant to serve. The reality is that 5.5 million Canadians are currently living with a vision-threatening eye condition, and with Canada's aging population, this number is expected to increase by 29% over the next decade.[1] In fact, more Canadians have age-related macular degeneration than breast cancer, prostate cancer, Alzheimer disease, and Parkinson disease combined.[1] It would, therefore, be prudent to train physicians who are entering primary care to be equipped not just to evaluate, manage, and appropriately refer eye conditions, but to develop a basic appreciation of their importance and prevalence, and the tools to educate patients on ways to maintain visual health. Although 59% of Canadians experience symptoms of potential eye disease, only half (54%) of these people reach out to a health care professional about their symptoms.[2] Encouraging more family physicians to develop the skills needed to discuss eye health and integrate it into a routine visit could reduce this impending burden of eye disease among Canadians and provide necessary and accessible eye care.

A common thought among family physicians is that other health care professionals, such as optometrists, are better suited to be on the front line to detect and prevent eye disease. Although optometrists play a vital role in eye health care, optometry visits are not consistently covered by Canadian health insurance plans, which may pose an accessibility issue. In BC, annual eye exams are covered by MSP only for children 0 to 18 years and seniors 65 years or older.[3] As family physicians are among the most accessible gatekeepers to the overall health care system, their vital role in visual health should not be overlooked. Studies have shown that family physicians can detect diabetic retinopathy and other ocular pathology fairly well.[4,5] Moreover, training family physicians to be comfortable with eye health can prove valuable in rural or remote settings, where access to optometrists and ophthalmologists is limited. This is especially relevant in BC, where roughly 40% of UBC Medicine's 2020 graduating class pursued family medicine, and many of the graduates are in rural programs around the province.[6]

Barrier 2: Ophthalmology is difficult to teach in medical school

Another concern is that the ophthalmological exam is a rather specific skill that is difficult

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This article has been peer reviewed.

to teach (particularly direct fundoscopy). "Do you see the optic disc?" is a nerve-wracking question for medical students, many of whom sheepishly answer "yes" when they really aren't sure. Given the few opportunities to practise direct fundoscopy, it can be difficult to ever truly learn what a normal, healthy fundus looks like, and medical educators may start to lose patience attempting to teach medical students basic ophthalmological concepts.

However, teaching ophthalmological skills can be modified to be more learner friendly. Studies about medical students' preferences have demonstrated fundus photography to be a more effective teaching tool for medical students, and it may be more relevant with the increasing availability of nonmydriatic ocular fundus photographs.[7] A study at Queen's University in Kingston, Ontario, demonstrated that the use of an online peer fundus photograph matching exercise increased medical students' skill level and confidence with direct ophthalmoscopy.[8] Therefore, although the ophthalmological exam may appear technically more difficult, use of fundus photos and increased exposure to these images can be implemented to better engage medical students and improve fundoscopic examination skills.

This is not a new idea—as technology advances, so too should medical education teaching methods. With the increasing digitization of learning, sharing photos has never been more commonplace. Additionally, with aids such as virtual and augmented reality beginning to assist in teaching gross anatomy, the same can and should be applied to ophthalmology, where it is especially relevant. The visual nature and clinical diagnoses of eye conditions is vital to ophthalmology. Ultimately, there is a multitude of ways for students to obtain a better understanding of eye conditions using the mediums that exist today.

Ophthalmoscope usage in family practice

Family physicians should be alerted to a few key conditions that can be diagnosed with direct ophthalmoscopy in their practice. Firstly, cataracts are detectable with a handheld ophthalmoscope. On examination, in a patient with cataracts, the red reflex will appear dull, extinct, or shady.[9] If patients present with these findings and report glare sensitivity or difficulty with nighttime vision with an otherwise unremarkable fundoscopic exam, a diagnosis of cataracts should be considered.[9] If a family physician is comfortable with their fundoscopic skills, they may also screen for age-related macular degeneration (AMD) on direct ophthalmoscopy. This would involve examining the fundus to note the presence of yellowish-colored subretinal deposits, called "drusen," in the macula.[10] AMD is especially relevant for family physicians given that its development is associated with lifestyle choices or conditions that they would be apt at monitoring: obesity, cigarette smoking, a diet high in saturated fats, heart disease, high cholesterol levels, and hypertension.[11] Family physicians can also employ Amsler grid testing in their offices, as this simply requires the use of a printable (or digital) grid.[10] If patients report any Amsler gridlines missing or distorted, this could support a diagnosis of AMD. Finally, it has been demonstrated that family physicians are able to diagnose and monitor diabetic retinopathy fairly well.[4] To help with this, a panoptic ophthalmoscope can be used, which allows a view of the retina that is 3 to 5 times the area of a standard direct ophthalmoscope, without the need to dilate the patient's eyes. The findings of hard exudates, hemorrhages, microaneurysms, or neovascularization in a diabetic patient supports the diagnosis of diabetic retinopathy.[9]

Although referral to an ophthalmologist may be required in the final diagnostic evaluation and treatment of these conditions, family physicians should become familiar with the use of the tools at their disposal to evaluate these conditions and refer appropriately. These skills would prove especially useful in rural communities where access to an eye care professional is limited.

Looking forward

Exposure to ophthalmology in medical school has been minimal. Many Canadian medical schools do not have formal ophthalmology teaching in their clerkship years, and less than 20% of medical schools in the United States require ophthalmology in clerkship.[12] At UBC, there was a concerted effort by the MD Undergraduate Program's (MDUP) leadership team to include more ophthalmology content after the MDUP's spiral curriculum was developed a few years ago. This led to the inclusion of vision science as a theme that was meant to spiral through the curriculum. As a result, UBC medical students are now fortunate to be provided didactic ophthalmology teaching in various relevant points in their curriculum—in the context of head trauma, multiple sclerosis, systemic associations with rheumatological diseases, etc.

In addition, all medical students must complete a dedicated ophthalmology clinical skills session. However, unlike dermatology, urology, orthopedic surgery, or other niche specialties, there is no dedicated preclerkship week for ophthalmology in their spiral curriculum, which means there is no case-based learning topic on ophthalmology. Additionally, while students in some parts of the province have a 1-week mandatory ophthalmology clerkship, some sites in the province have opted for as little as 2 days.[6]

Ultimately, there needs to be a change in awareness. As a niche specialty, ophthalmology may suffer from a lack of representation at the table, or simply a lack of advocacy. Even if every first-year UBC medical student received a direct ophthalmoscope for free, the perceived barriers listed above and a relative lack of appreciation for visual health remain. However, medical education planning is not an exact science, and ophthalmology is likely not alone in its underrepresentation in the medical school curriculum. When deciding what to teach medical students, there are no easy answers; as one topic is added, another must be removed. In an era when medicine is constantly changing to meet the population's health care needs, it may be difficult to determine which medical specialties deserve greater attention. The lack of exposure to ophthalmology represents a need for greater vigilance about all topics in medical education that may be overlooked. In 2021 and beyond, continuing to identify overlooked topics in medical education will require more than 20/20 vision. ■

Competing interests
None declared.

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Obituaries

We welcome original tributes of less than 300 words; we may edit them for clarity and length. Obituaries may be emailed to journal@doctorsofbc.ca. Include birth and death dates, full name and name deceased was best known by, key hospital and professional affiliations, relevant biographical data, and a high-resolution head-and-shoulders photo.

Dr Chi Nan Chen

1922–2020

At 19 years of age, while attempting to escape before the Japanese army occupied Singapore during the Second World War, Dr Chi Nan Chen was shipwrecked and almost drowned after the ship he was on was bombed by Japanese planes. After being carried away by the currents and adrift in the water for 30 hours, exhausted, he spotted an island to swim to in the early morning light. He was later rescued by local inhabitants who generously gave him refuge in their homes. Chi Nan eventually returned to Singapore, survived the years of the Japanese occupation, and resumed his medical studies after the war ended.

Chi Nan graduated from medicine in Singapore in 1951 and was a general practitioner there until he moved to Canada in 1975. He entered the UBC psychiatric residency program when he was 56 years old, after completing a rotating internship in Saskatchewan (which in contrast to balmy Singapore was considered to be Siberia).

By 1983, he completed his FRCP requirements and embarked on a second career as a psychiatrist at Royal Columbian Hospital. He was an essential part of a busy psychiatry department treating in-patients while sharing in the coverage of emergency psychiatry and providing in-hospital consultations. His equanimity was particularly useful in the care of patients with borderline personality disorder, and his years of experience in hospital politics was appreciated by the department members. He served in unpaid administrative posts and provided some afternoons to the New Westminster Mental Health Centre. He retired from hospital practice at age 75 but continued to provide psychiatric care in Vancouver mental health clinics until his late 80s.

He was a most congenial and kind colleague who was also able to speak Cantonese and Mandarin, which was useful as the number of Chinese-speaking immigrants surged in BC. His personal vision and efforts led to the creation (in 2005) of the chair in medical ethics at the National University of Singapore, which was named in honor of his physician father, Chen Su Lan.

In his later years, he was engaged in perfecting his writing skills while maintaining a keen interest in medical topics. Just before he turned 90, he fired off a letter to the BC Therapeutics Initiative on the harms of statins after becoming aware of a biochemical pathway impacted by statins parallel to the downstream reduction of cholesterol levels, and after consulting with colleagues in Singapore and the UK.

At the time of his death (28 September 2020), he had been happily married to his wife, Seok Im, for 67 years, with whom he brought up one son and four daughters.

—B. De Freitas, MDCM, FRCP (C)
Coquitlam

Dr David Nigel Harries James

1957–2020

Dr Dave James died peacefully in the ICU of Victoria General Hospital on 2 August 2020. He never regained consciousness after a tragic accident 1 week prior. He had retired a matter of months beforehand, having just completed 25 years as a general surgeon in Campbell River, and was in the process of moving to his dream retirement home on the coast of Quadra Island, a new chapter in his life about to begin.

Dave was born in Winchester, England, and spent a happy childhood as the third of six children of John and Jennifer. His education started at his maternal grandfather's school at Aysgarth, Yorkshire, then progressed to Harrow School, where he was introduced to the Queen as part of the school's 400th anniversary celebrations in 1971. His family emigrated to Vancouver in 1973 as his father, John, had joined a family practice at Oakridge, but Dave stayed behind to attend his father's alma mater, St. Mary's Hospital Medical School in London (where

Recently deceased physicians

If a BC physician you knew well is recently deceased, please consider submitting an obituary. Include the deceased's dates of birth and death, full name and the name the deceased was best known by, key hospital and professional affiliations, relevant biographical data, and a high-resolution photo. Please limit your submission to a maximum of 500 words. Send the content and photo by e-mail to journal@doctorsofbc.ca.

his mother and later sister, Angela, nursed). After qualification, he worked in house-officer and senior house–officer jobs in Winchester, Reading, Anglesey, and Lincoln, among others, before applying and being accepted to the UBC surgical residency program, which enabled him to fulfill his lifelong dream of becoming a surgeon. This also enabled him to rejoin his immediate family in BC.

Dave worked hard and played hard during his residency years but couldn't wait to branch out into the real world. After doing locums on Vancouver Island, he had the opportunity to work in South Africa, which he jumped at. There he gained valuable experience in hospitals large and small, enabling him to have the confidence of managing any surgical challenge.

While in Cape Town, he became aware of a general surgery vacancy in Campbell River. Having fallen in love with the island lifestyle during an earlier locum at Port McNeil, it was not a difficult decision to apply for the job, and thankfully his application was successful. He started work there in 1995, built many great relationships with colleagues and patients, and became a highly respected member of the community. He traveled to the north island for surgical consultations monthly and participated in a busy call schedule at Campbell River Hospital. He was renowned for his compassion, great bedside manner, and surgical expertise. There was still time for him to participate in volunteer work in Guatemala, where he performed surgery on the disadvantaged as part of a medical team. This reminded him of his time in South Africa; he was always aware of how privileged we are in the developed world.

Dave was a gentle soul with a wicked sense of humor—from a young age he was a great practitioner of practical jokes and latterly became a master of the pun. He enjoyed entertaining family and friends at his beautiful home overlooking the Campbell River harbor, where he had his boat docked. He was extremely proud of his English and Welsh heritage and was a great collector of antiques, books, and paintings, especially maritime themed. He also loved listening to music, gardening, and traveling to all four corners of the world. He had so many plans for his retirement, which makes his early demise especially cruel. Although he never had children of his own, he was a great family man and much loved.

Dave was predeceased by his mother, Jennifer, in 2011, but is survived by his father, John (Anne), now age 92 in White Rock; brother, Richard (Joanna) in Ladner; sister, Angela, in Vancouver; sister, Catherine (Gary) in Manitoba; sister, Jackie (John) in Revelstoke; and brother, Ed (Nicole) in Alert Bay; as well as 11 nieces and nephews, many relatives in the UK, and countless friends all over the world.

A celebration of life will be planned post-pandemic.

—Richard James, MD
Ladner

CME calendar

Rates: $75 for up to 1000 characters (maximum) plus GST per month; there is no partial rate. If the course or event is over before an issue of the *BCMJ* comes out, there is no discount. **Deadlines:** ONLINE: Every Thursday (listings are posted every Friday). PRINT: The first of the month 1 month prior to the issue in which you want your notice to appear; e.g., 1 February for the March issue. The *BCMJ* is distributed by second-class mail in the second week of each month except January and August. **Planning your CME listing:** Advertising your CME event several months in advance can help improve attendance; we suggest that your ad be posted 2 to 4 months prior to the event. **Ordering:** Place your ad at www.bcmj.org/cme-advertising. You will be invoiced upon publication. Payment is accepted by Visa or MasterCard on our secure online payment site.

PSYCHOLOGICAL PPE, PEER SUPPORT BEYOND COVID-19

Online (Wednesdays)

In response to physician feedback, the Physician Health Program's online drop-in peer support sessions, established 7 April, are now permanently scheduled for Wednesdays at noon. The weekly sessions are cofacilitated by psychiatrist Dr Jennifer Russel and manager of clinical services Roxanne Joyce, and are drop-in with no commitment required. The focus is peer support, not psychiatric care. All participants have the option to join anonymously. To learn more about the sessions and the program, visit www.bcmj.org/news-covid-19/psychological-ppe-peer-support-beyond-covid-19. Email peersupport@physicianhealth.com for the link to join by phone or video.

GP IN ONCOLOGY EDUCATION

Vancouver, 1–12 February and 13–24 September 2021 (Mon–Fri)

BC Cancer's Family Practice Oncology Network offers an 8-week General Practitioner in Oncology education program beginning with a 2-week introductory session every spring and fall at BC Cancer–Vancouver. This program provides an opportunity for rural family physicians, with the support of their community, to strengthen their oncology skills so they can provide enhanced care for local cancer patients and their families. Following the introductory session, participants complete a further 30 days of clinic experience at the cancer centre where their patients are referred. These are scheduled flexibly over 6 months. Participants who complete the program are eligible for credits from the College of Family Physicians of Canada. Those who are REAP-eligible receive a stipend and expense coverage through UBC's Enhanced Skills Program. For more information or to apply, visit www.fpon.ca, or contact Jennifer Wolfe at 604 219-9579.

MINDFULNESS IN MEDICINE, WORKSHOPS AND RETREAT

Various locations, 12–14 March, 23–26 April, 21–26 May 2021

Please join us for a workshop or retreat focusing on the theory and practice of mindfulness-based stress management for physicians and other health professionals. These powerful and popular programs offer practical skills to navigate the stress and challenges of our work in order to prevent burnout and build resilience and wellness into our personal and professional lives. All of the programs will take place in person with protocols respecting current public health recommendations. Mindfulness in Health Care, for health professionals and partners, will be held at the Kingfisher Resort in Courtney, BC, from 12–14 March 2021. Mindfulness in Medicine, foundations of theory and practice for physicians and partners, will be held at the Long Beach Resort in Tofino from 23–26 April. Mindfulness in Medicine, a meditation retreat for physicians, will be held at Hollyhock on Cortes Island from 21–26 May. To find out more and to register, please contact Dr Mark Sherman at mark@livingthismoment.ca or go to www.livingthismoment.ca/events.

CME ON THE RUN

Online, 2 October 2020–4 June 2021 (Fridays)

The CME on the Run sessions are offered online. Registrants will receive links to go online before each session. Each program runs on Friday afternoons from 1–5 p.m. and includes great speakers and learning materials. Topics and dates: 5 March 2021 (Ophthalmology/ENT). Topics include Tinnitus: When the Ringing Never Ends, When to Call 911—Eye Emergencies in the Office, When the Sniffles Do Not Stop—Chronic Sinusitis Management, Not Your Average Cancer Sore—Diagnosis and Management of Oral Lesions, Ocular Findings of Common Systemic Conditions, When You Can't Sing Anymore—Management of Hoarse Voice, Common Eye Surgeries: What the GP Needs to Know, The Aging Eye: It Is More Than Just Getting New Glasses. The next sessions are 7 May (Geriatrics) and 4 June (Internal Medicine). To register and for more information visit https://ubccpd.ca/course/cme-on-the-run-2020-2021 or email cpd.info@ubc.ca.

INTERNAL MEDICINE IN PRIMARY CARE, THE PEARLS

Online, 6 March 2021

A virtual event on 6 March 2021 from 8:50 a.m. to 4:25 p.m. for family physicians, internists, subspecialists, hospitalists and emergency room physicians, pharmacists, nurse practitioners, and nurses. We are very pleased to present our 18th annual and first virtual Internal Medicine in Primary Care, The Pearls conference. We will be covering many clinically relevant topics that you face every day in your practice both in hospital and office. Accreditation statement: This group learning program has been certified by the College of Family Physicians of Canada and the British Columbia chapter for up to 6.50 Mainpro+ credits. Registration fees: by 12 February, 2021, $170; after 12 February,

Continued on page 40

Support from the Library

College registrants planning to catch up on reading or working on projects can look to the College Library for support. The Library participates in several sharing networks with both larger and smaller institutions throughout North America to provide registrants with access to as many evidence-based resources as possible.

Locally, the eHLbc (Electronic Health Library of BC) consortium provides many health libraries access to databases, e-books, and journal packages that, individually, many libraries could not afford. Consortia are essential to allow libraries to maximize the impact of often limited budgets and to act as a negotiating bloc with publishers.

The College Library provides access to over 6000 journal titles, but we are not able to subscribe to everything. Through consortia membership and membership in larger lending networks such as Docline (through the US National Library of Medicine), the College Library can access specialty journals, historical materials, books, and other resources from other participating libraries throughout North America on registrants' behalf.

If we don't have an article, journal, or book, just ask! In most cases requested articles can be obtained within a day or two. Due to the COVID-19 pandemic, there is limited access to many print collections, both locally and further afield. Most newer journal articles and online book titles are easily accessed, but print-only materials may still take a bit longer to source for digitized copies or may not be available at all right now. Please contact the College Library at medlib@cpsbc.ca for assistance. If requested materials are not available, we are always happy to help find alternatives. ■

—Paula Osachoff
Librarian

This article is the opinion of the Library of the College of Physicians and Surgeons of BC and has not been peer reviewed by the BCMJ *Editorial Board.*

CALENDAR

Continued from page 39

$195. Student rate: $100. This program will be recorded, so if you are unable to attend the live event you can attend at a later date. To register, visit www.novaclinical.com or email info@novaclinical.com.

6th ANNUAL BC INFECTIOUS DISEASES SYMPOSIUM

Online, 30 April 2021–1 May 2021

Join us for this 6th annual conference, brought to you by Fraser Health, UBC, Surrey Memorial Hospital, and Vancouver Fraser Medical Program. Sessions start at 8 a.m. on 30 April. Day 1 topics include H. pylori: Who We Should Treat and Who We Shouldn't; Pitfalls in Ordering Microbiology Tests; Updates in the Management of Community-Acquired Pneumonia in the Time of COVID; Updates on COVID-19; Update on HIV and Prep and PEP; Non-Pulmonary Tuberculosis; COVID-19 in Children. Day 2 runs from 8:00 a.m. to 12:30 p.m. and topics include in-depth case discussions of the topics presented on Day 1. Accredited by UBC CPD. To register and for more information visit: https://ubccpd.ca/idupdate2021 or email cpd.info@ubc.ca.

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The *British Columbia Medical Journal* welcomes letters, articles, and essays. Manuscripts should not have been submitted to any other publication. Articles are subject to copyediting and editorial revisions, but authors remain responsible for statements in the work, including editorial changes; for accuracy of references; and for obtaining permissions. Send submissions to: The Editor, *BC Medical Journal*, journal@doctorsofbc.ca.

For all submissions

- Avoid unnecessary formatting.
- Double-space all parts of all submissions.
- Include your name, relevant degrees, e-mail address, and phone number.
- Number all pages consecutively.

Clinical articles/case reports

Manuscripts of scientific/clinical articles and case reports should be 2000 to 4000 words in length, including tables and references. Email to journal@doctorsofbc.ca. The first page of the manuscript should carry the following:

- Title, and subtitle, if any.
- Preferred given name or initials and last name for each author, with relevant academic degrees.
- All authors' professional/institutional affiliations, sufficient to provide the basis for an author note such as: "Dr Smith is an associate professor in the Department of Obstetrics and Gynecology at the University of British Columbia and a staff gynecologist at Vancouver Hospital."
- A structured or unstructured abstract of no more than 150 words. If structured, the preferred headings are "Background," "Methods," "Results," and "Conclusions."
- Three key words or short phrases to assist in indexing.
- Name, address, telephone number, and e-mail address of corresponding author.

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When submitting a clinical/scientific/review paper, all authors must complete the *BCMJ*'s four-part "Authorship, copyright, disclosure, and consent form."

1. Authorship. All authors must certify in writing that they qualify as an author of the paper.

Order of authorship is decided by the co-authors.

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3. Disclosure. All authors must sign a "Disclosure of financial interests" statement and provide it to the *BCMJ*. This helps reviewers determine whether the paper will be accepted for publication, and may be used for a note to accompany the text.

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Papers will not be reviewed without this document, which is available at www.bcmj.org.

References to published material

Try to keep references to fewer than 30. Authors are responsible for reference accuracy. References must be numbered consecutively in the order in which they appear in the text. Avoid using auto-numbering as this can cause problems during production.

Include all relevant details regarding publication, including correct abbreviation of journal titles, as in Index Medicus; year, volume number, and inclusive page numbers; full names and locations of book publishers; inclusive page numbers of relevant source material; full web address of the document, not just to host page, and date the page was accessed. Examples:

1. Gilsanz V, Gibbons DT, Roe TF, et al. Vertebral bone density in children: Effect of puberty. Radiology 2007;166:847-850.

(NB: For more than three authors, list first three, followed by "et al.")

2. Mollison PL. Blood Transfusion in Clinical Medicine. Oxford, UK: Blackwell Scientific Publications; 2004:178-180.
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References to unpublished material

These may include articles that have been read at a meeting or symposium but have not been published, or material accepted for publication but not yet published (in press). Examples:

1. Maurice WL, Sheps SB, Schechter MT. Sexual activity with patients: A survey of BC physicians. Presented at the 52nd Annual Meeting of the Canadian Psychiatric Association, Winnipeg, MB, 5 October 2008.
2. Kim-Sing C, Kutynec C, Harris S, et al. Breast cancer and risk reduction: Diet, physical activity, and chemoprevention. CMAJ. In press.

Personal communications are not included in the reference list, but may be cited in the text, with type of communication (oral or written) communicant's full name, affiliation, and date (e.g., oral communication with H.E. Marmon, director, BC Centre for Disease Control, 12 November 2017).

Material submitted for publication but not accepted should not be included.

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It is the author's responsibility to obtain written permission from both author and publisher for material, including figures and tables, taken or adapted from other sources. Permissions should accompany the article when submitted.

Tables and figures

Tables and figures should supplement the text, not duplicate it. Keep length and number of tables and figures to a minimum. Include a descriptive title and units of measure for each table and figure. Obtain permission and acknowledge the source fully if you use data or figures from another published or unpublished source.

Tables. Please adhere to the following guidelines:

- Submit tables electronically so that they may be formatted for style.
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- Place explanatory matter in footnotes, not in the heading.
- Explain all nonstandard abbreviations in footnotes.
- Ensure each table is cited in the text.

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- Place titles and explanations in legends, not on the illustrations themselves.
- Provide internal scale markers for photomicrographs.
- Ensure each figure is cited in the text.
- Color is not normally available, but if it is necessary, an exception may be considered.

Units

Report measurements of length, height, weight, and volume in metric units. Give temperatures in degrees Celsius and blood pressures in millimetres of mercury. Report hematologic and clinical chemistry measurements in the metric system according to the International System of Units (SI).

Abbreviations

Except for units of measure, we discourage abbreviations. However, if a small number are necessary, use standard abbreviations only, preceded by the full name at first mention, e.g., in vitro fertilization (IVF). Avoid abbreviations in the title and abstract.

Drug names

Use generic drug names. Use lowercase for generic names, uppercase for brand names, e.g., venlafaxine hydrochloride (Effexor).

Full guidelines

Please see www.bcmj.org/submit-article for the full Guidelines for Authors.

www.doctorsofbc.ca/covid-19

Resources for COVID-19

Doctors of BC is actively supporting members during the COVID-19 pandemic in a variety of ways. Work includes advocacy on behalf of physicians with government, the provincial health officer, and health authorities, as well as ensuring members have access to appropriate tools, benefits, and insurance.

NEW

For up-to-date information and FAQs on the BC vaccine roll-out, visit www .doctorsofbc.ca

Our web page has information on:

- Personal protective equipment
- Clinical and practice supports
- Billing and fee code changes
- Virtual care
- Insurance, benefits, and income supports
- Physician health and wellness
- FAQs (e.g., prescribing, financial supports, IMG, resident, and retired doctor recruitment)

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General practitioner required for locum or permanent positions. The Caledonian Clinic is located in Nanaimo on beautiful Vancouver Island. Well-established, very busy clinic with 26 general practitioners and two specialists. Two locations in Nanaimo; after-hours walk-in clinic in the evening and on weekends. Computerized medical records, lab, and pharmacy on site. Contact Lisa Wall at 250 390-5228 or email lisa.wall@caledonianclinic.ca. Visit our website at www.caledonianclinic.ca.

NISGA'A VALLEY—FAMILY MEDICINE

Family physicians needed to provide primary and urgent care for a population of 3500 in four communities across the traditional Nisga'a Territory. A team of three physicians works together to provide full-scope services (excluding obstetrics) in concert with other services such as home care, public health, and mental wellness and addictions. The health and wellness centres are staffed with full-time RNs who take first call after hours. Soaring mountains, picturesque fjords, dramatic lava beds, natural hot springs, and thriving rivers offer outstanding recreation year round. Excellent remuneration. Contact Jeremy Penner at md@nisgaahealth.bc.ca.

NORTH VAN—FP LOCUM

Busy, established physicians with stellar support staff seek part-time or full-time associates. Doctors currently needed to fill very busy telemedicine and in-office shifts. Oscar EMR with technical support. Part-time associates will be on a 70/30 split for weekend and evening shifts. Option of working from home. For further information contact Kim at 604 987-0918 or kimgraffi@hotmail.com.

PORT COQUITLAM—WALK-IN CLINIC AND FAMILY PRACTICE

An opportunity exists at a retail-level walk-in clinic in Port Coquitlam. Clinic is turnkey, uses OSCAR EMR, has experienced staff, and is currently seeking regular walk-in physicians to cover weekday shifts. Competitive overhead and guaranteed minimums exist. For more information, please contact Richard at rw@bcdrug.com.

POWELL RIVER—LOCUM

The Medical Clinic Associates is looking for short- and long-term locums. The medical community offers excellent specialist backup and has a well-equipped 33-bed hospital. This beautiful community offers outstanding outdoor recreation. For more information, contact Laurie Fuller: 604 485-3927, email: clinic@tmca-pr.ca, website: powellrivermedicalclinic.ca.

RICHMOND—PRACTICE OPPORTUNITY

Practice opportunity available at busy, well-established two-physician family practice office in Richmond, BC. Fluency in Cantonese and/or Mandarin is an asset. EMR, flexible scheduling, and negotiable terms. Please reply to allantsang999@gmail.com.

SOUTH SURREY/WHITE ROCK—FP

Busy family/walk-in practice in South Surrey requires GP to build family practice. The community is growing rapidly and there is a great need for family physicians. Close to beaches and recreational areas of Metro Vancouver. OSCAR EMR, nurses/MOAs on all shifts. CDM support available. Competitive split. Please contact Carol at Peninsulamedical@live.com or 604 916-2050.

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VICTORIA—GP/WALK-IN

Shifts available at three beautiful, busy clinics: Burnside (www.burnsideclinic.ca), Tillicum (www.tillicummedicalclinic.ca), and Uptown (www.uptownmedicalclinic.ca). Regular and occasional walk-in shifts available. FT/PT GP post also available. Contact drianbridger@gmail.com.

VICTORIA—FP/WALK-IN

Well-established fee-for-service walk-in practice in the centre of James Bay, Victoria. Varied demographics and many long-term patients as we have been part of this community for 30 years. Looking to transfer ownership before retirement in April 2021; able to stay on longer for smooth transition. Office uses OSCAR EMR, has two exam rooms, and is equipped for minor procedures. Contact Dr Michael Greenwood at 250 388-9934 or jbcentre@telus.net.

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Continued from page 46

kindest public health nurse in the world, rocking her PPE. We stayed in the car with the windows open while she chatted with us briefly. The little fellow was belted into his car seat (no escape route!) and I sat beside him holding his head and arms still as the nasal swab was inserted. His face registered real discomfort at the end of the swab, and afterward his eyes watered and his nose ran. He looked peeved and requested Kleenex. I had promised him freshly baked chocolate cupcakes if he could get through that swab without moving his head. The lovely nurse sent us on our way with a number to call 24 hours later to get the result. In the meantime, we would stay at home so as not to potentially expose anybody else.

At home, my little son was greeted as a hero. "I'm the first person in the family to get swabbed!" he announced proudly. But he also told everyone the hard truth: "It hurt a lot." And I began to wonder if my children would report invisible symptoms next time, now that they knew a test might be required. Would they tell me about a sore throat? Or muscle aches and pains? I decided they needed some small motivation to report symptoms—something to help them get through the test if it was needed. I told the kids that each of them could expect to get tested two or three times over the next 6 months. This is life in a pandemic.

A new house rule was created: Every time someone gets a COVID-19 test, chocolate cupcakes will be baked. And only the swabee gets to lick the batter bowl. A chorus of approval greeted this suggestion. Clearly, I don't bake enough.

My little son's swab was negative and we were relieved.

I took the opportunity to thoroughly understand what would happen if a family member became COVID-19-positive. I communicated directly with our hardworking North Vancouver Island public health officer and was surprised to learn that if one of my children tested positive for COVID-19, I would have to stay home for 24 days—not 14 days.

Let me explain.

For the first 10 days, I would stay home with my COVID-19-positive child during his infectious period. My own 14-day quarantine would begin after the last day of possible exposure from my child (his day 10 would be the last day of causing infection in others). If you are able to isolate away from your family, then your quarantine time would be 14 days rather than 24. This rule applies across Canada.

My eyebrows went up when I realized the implications of 24 days at home—no direct contact with patients for me, no school for the kids—perhaps more than once over the coming months.

After I had numerous conversation with others, I was amazed how few people are aware of this number, including doctors. I suspect that if the second wave pummels British Columbia, this 24-day stay-at-home order may need to be reviewed for health care professionals if there is a struggle to find coverage for hospitals and clinics. For now, an isolation period of 10 days for COVID-positive cases and an incubation period of 14 days for close contacts are the numbers that apply to all citizens across Canada. ■

The first swab

A primer on what needs to happen if a family member tests positive for COVID-19.

13 November 2020

Mandy Ruthnum, MD, FCFP

Did you know that you may have to stay home for 24 days if one of your children tests positive for COVID-19 and you can't isolate yourself from your family?

One morning in August, I was snoozing in bed when my youngest son woke up with abdominal cramps. Small muscular feet pounded down the hallway, the toilet lid slammed against the tank, and a rapid-fire machine-gun type of bowel movement ensued.

Gone are the days when I would blame the activity on an excess of cherries and pull the comforter over my head. In COVID-19 times, new dramatic physical symptoms put me on high alert.

The pestilential child in question is typically kissed and hugged many times each day. Much to his chagrin, everyone in the family began keeping their distance. He insisted that it was safe to hug my knees, so I let him. Last I checked, knees don't have mucous membranes.

The familiar fragrance of Lysol rose through the air as I disinfected every surface. And I whipped out the thermometer to confirm he didn't have a fever.

He ate breakfast with no further gastrointestinal distress. I started to relax.

Then he sneezed. Not once or twice, but 10 times in a row, burying his face in the crook of his tiny elbow every time.

In COVID-19 times, new dramatic physical symptoms [in my children] put me on high alert.

Doctor-moms tend to be either underreactive or overreactive when it comes to any symptoms their children exhibit. I am the underreactive type. I never think my kids are sick. This time I decided to behave like a patient and I tapped on my BC COVID-19 app to complete the self-assessment tool on behalf of my son. It became clear he would need the dreaded nasal swab to rule out COVID-19. This story unfolded before the lovely gargle test was an option for my son.

I called the COVID-19 line to book a swab for him, dialing five times only to hear, "The line is very busy, you will be disconnected now, but try your call again later." Over the past weeks, the number of calls and requests for swabs has increased dramatically. Since our experience, the Vancouver Island Health Authority doubled the number of staff managing the phone line, and a separate line was created for health care professionals. This has shortened wait times significantly.

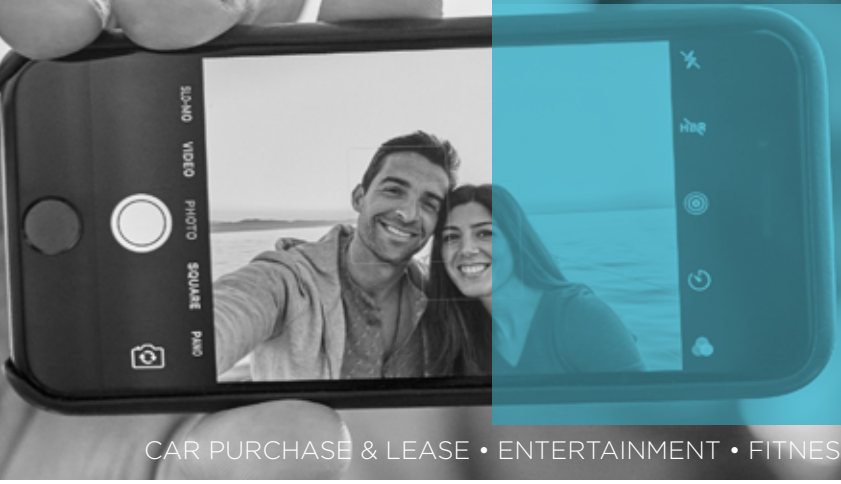
On my sixth attempt, I got through. I often wonder what sadistic creature chooses the music for the waiting-on-the-phone nightmare intervals. Imagine a loose-lipped flautist struggling to play while a hamster screams inside the barrel of the instrument and you'll have an idea of the auditory assault I endured for 2 hours and 15 minutes. During that time, I spoke with three different people. I was booked in by a clerk, who requested my son's personal details. I was interviewed by a nurse, who confirmed that he needed a swab. Finally, I spoke with another clerk, who provided him with an appointment time.

At last, we drove to the white tent at our local hospital where we were greeted by the

Continued on page 45

Dr Ruthnum is a care of the elderly family physician in Comox, BC. She does both inpatient and outpatient geriatric medicine consultation.

This article has been peer reviewed.



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