BCMJ
BC Medical Journal

July/August 2020: 62:6
Pages 185–220

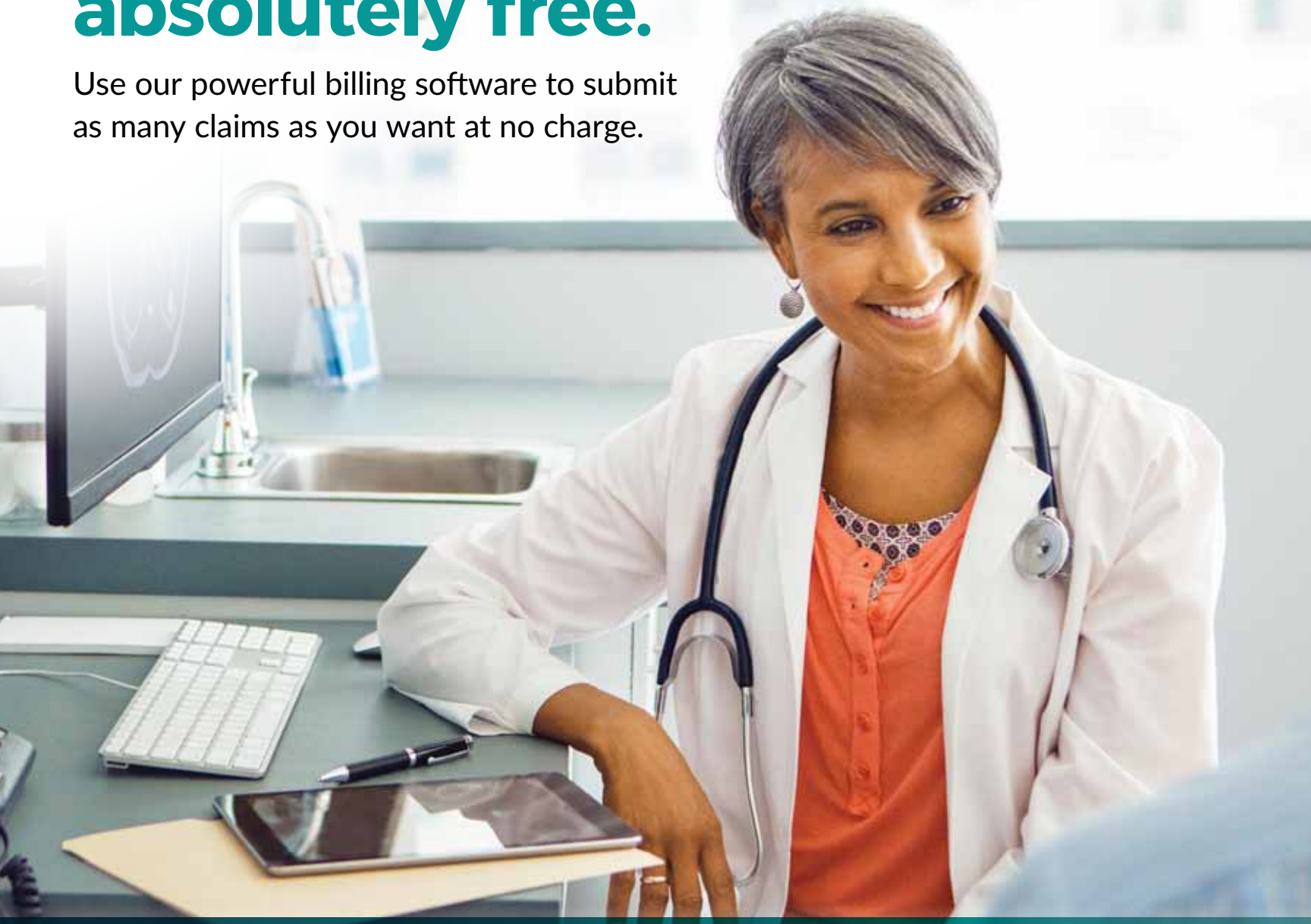
The Live 5-2-1-0 Toolkit for family physicians: Evaluating a health promotion resource for primary care

IN THIS ISSUE

DR.BILL

You can now use Dr. Bill absolutely free.

Use our powerful billing software to submit as many claims as you want at no charge.



Focus on patient care.
Let us handle your billing for you.

Register today for FREE at **dr-bill.ca**

Available on the App Store

GET IT ON Google play

BCMJ
BC Medical Journal
July/August 2020
Volume 62 | No. 6
Pages 185–220

The "1" of the Live 5-2-1-0 recommends that children get at least 1 hour of physical activity per day. Read more about how the program can fit into the primary care setting, beginning on page 196.

Contents continued on page 188

Postage paid at Vancouver, BC. Canadian Publications Mail, Product Sales Agreement #40841036. Return undeliverable copies to *BC Medical Journal,* 115–1665 West Broadway, Vancouver, BC V6J 5A4; tel: 604 638-2815; email: journal@doctorsofbc.ca.

ON THE COVER
The Live 5-2-1-0 Toolkit for family physicians: Evaluating a health promotion resource for primary care
A pilot study in two BC communities found that a toolkit promoting healthy lifestyle behaviors helped FPs initiate discussions about pediatric obesity with patients and develop plans for monitoring. Article begins on page 196.

The *BCMJ* is published by Doctors of BC. The journal provides peer-reviewed clinical and review articles written primarily by BC physicians, for BC physicians, along with debate on medicine and medical politics in editorials, letters, and essays; BC medical news; career and CME listings; physician profiles; and regular columns.

Print: The *BCMJ* is distributed monthly, other than in January and August.

Web: Each issue is available at www.bcmj.org.

Subscribe to print: Email journal@doctorsofbc.ca.
Single issue: $8.00
Canada per year: $60.00
Foreign (surface mail): $75.00

Subscribe to notifications:
To receive the table of contents by email, visit www.bcmj.org and click on "Free e-subscription."

Prospective authors: Consult the "Guidelines for Authors" at www.bcmj.org for submission requirements.

doctors of bc

ISSN: 0007-0556
Established 1959

Once consequence of COVD-19 is a drop in childhood immunizations. See page 209.

Contents continued from page 187

COVID 20/20

4 May 2020

As I craft this editorial in early May, my heartfelt congratulations go out to the people of BC as their sacrifices have flattened the curve of this COVID-19 pandemic. By suffering through financial and social hardship, our province did not experience thousands of ill patients with significant mortality as did so many other places in the world.

I fear the next stage of the pandemic might be the most challenging. So many choices need to be made on how to proceed in reopening businesses, schools, gatherings, etc.

The president of the United States has just suggested ingesting disinfectants and using light therapy. He has blamed China for the pandemic and suggested SARS-CoV-2 leaked from a Wuhan laboratory. He has praised armed protestors rallying against federal safety guidelines for reopening economies while at the same time criticizing governors of other states for not minding these same rules. He has just announced Operation Warp Speed to fast-track a vaccine without any real knowledge of what that entails. He is the gift that keeps on giving.

Despite the death rate in the US ticking along at 2000 per day, many states are reopening their economies. Georgia has recently given the green light to gyms, hair salons, barbershops, and tattoo parlors. I can understand the need to exercise and deal with quarantine shagginess, but why is getting a tattoo a priority? I realize many people are impatient to get back to normal, whatever that will look like, but I would suggest a more careful approach.

I trust that our provincial authorities will proceed with caution using the best information available at each decision point. However, this remains extremely tricky. If opening too soon results in a second wave of cases, harsh judgment will follow. Dragging the process along with no adverse outcomes will likely be equally condemned.

Will areas that reopen quickly end up in a better place in a few months, or will they be mired in a second wave while our steady plodding saves lives?

In the months and years to come, retrospection will show if the approach taken to managing the pandemic in our province was the correct one. Was our initial approach of limiting testing to certain populations the correct path, or should we have mirrored South Korea's massive testing protocol? Were physical distancing and mass closures in our best interest, or should we have followed Sweden's model, which kept businesses open and isolated only the vulnerable in their population? Will areas that reopen quickly end up in a better place in a few months, or will they be mired in a second wave while our steady plodding saves lives? I for one am glad that I do not have to guide the course of our recovery.

By the time this editorial is published this summer, the path of this dangerous virus will likely be clearer. It will be easy to point our collective finger and judge those burdened with this thankless responsibility, but I for one will not be casting any stones. Instead, I would ask for understanding of the difficult decisions made and compassion for those forced to make them along the way. ■

—David R. Richardson, MD

THANK YOU

FOR YOUR SERVICE DURING THESE TIMES

We are here to help support you and your patients

Canadian Mental Health Association
British Columbia
Mental health for all

Stay well in uncertain times with proven information and tools

BounceBack® skill-building program

Living Life to the Full interactive CBT-based online course

Confidential peer support for long-term care and home support workers

Plus strategies and tools to use at home

cmha.bc.ca/covid-19

Expanded COVID-19 supports have been made possible by the generous funding of the Province of BC

Finding kindness and resilience during a pandemic

In the midst of the COVID-19 pandemic, a constant stream of information and news is being shared every day. The sheer amount of information can be overwhelming; every news channel and website is filled with data on the number of cases, number of deaths, number of ICU admissions, and number of government restrictions and guidelines. What the future holds may seem grim.

However, one thing that has struck me during this pandemic is how, through hardship, the positive aspects of human nature—kindness and resilience—shine through. It shows glimpses of hope in this challenging battle with the virus.

In this trying time, it is vital to treat everyone with kindness. We may not know what someone else has experienced during the pandemic. They may have lost their job or have a loved one affected by the illness, fighting for their life in the hospital. We've each had our own experiences, but one thing we can all aim to achieve is to spread kindness. I've learned about medical students whose clerkship experiences have been affected but who have chosen to use their time to help health care workers with groceries and child care. I've learned about restaurants providing and delivering free meals to thank health care workers. There are, of course, the health care workers who are going above and beyond to spread kindness to their patients—nurses setting up FaceTime for their dying patients to see family one last time, or doctors providing reassurance and care to patients who are fighting this illness.

The fact that we find the strength to physically and mentally cope with this crisis speaks to our resilience.

We have learned that we are in this pandemic for the long haul. It has now been months since the first case in BC. However, the fact that we find the strength to physically and mentally cope with this crisis speaks to our resilience.

We have all made changes to our daily lives. Physical distancing and stay-at-home orders can feel isolating and, at times, even overwhelming. Fortunately, an incredible number of resources have been made available to help us stay resilient during this crisis, such as virtual counseling services, free online workouts, ideas for new hobbies to take up, or options for holding virtual gatherings. The current limitations have also given us the opportunity to cherish connections with our family and friends.

I am also immensely proud of my colleagues and other health care workers who exemplify resilience. They go to work, day in and day out, to keep us all safe despite being presented with unknown challenges, especially during the early days of the pandemic.

Not many of us, before now, could have said they lived through a pandemic. It has not been an easy journey, but I think we have all learned and gained a lot from this experience. We have learned things about ourselves. It has given us a chance to reflect on the present and what we often take for granted. I hope it is the acts of kindness and resilience that will be this pandemic's lasting legacy. ■

—Yvonne Sin, MD

Doctors of BC's strategic plan versus the pandemic

"Everything is unprecedented until it happens for the first time."

–Captain Chesley Sullenberger

When I stepped into the role of president-elect for Doctors of BC in 2018, I could not have foreseen that my election would land me as a leader of our profession in the race against time to mitigate a global pandemic. I took up this post as I believed in Doctors of BC's organizational vision (expressed in the Strategic Framework: www.doctorsofbc.ca/sites/default/files/strategicframeworkbooklet2018-2023.pdf) and our purpose statement: "Better Together. Making a Difference for BC Doctors." While these proclamations may at first blush seem to be quite lofty or high-level, the intention behind them colors and drives our organization's work every single day.

These times are truly unprecedented. Who could have predicted how nimble our health care system needed to become to address the SARS-CoV-2 crisis, or just how quickly new models of care would need to evolve to protect patients and front-line providers? I would argue that Doctors of BC was ready, and I recently reflected on our Strategic Framework to try and understand why this was the case.

Over the last decade, Doctors of BC laid the strong foundation we needed to weather this crisis. Our professional organization has invested time and financial resources into building an engaged and connected physician membership that could make the necessary adjustments in a timely fashion.

Mr Allan Seckel, our CEO, envisioned our strategic framework as a set of stairs, beginning with the first step of *understanding* our doctors and the environment in which they work. Establishing divisions of family practice and medical staff associations in conjunction with our government partners, via the joint standing committees, left us uniquely poised to understand where barriers exist to achieving optimal patient care at a grassroots level. These strong, independent, yet closely linked organizations lead the crucial work required across BC's diverse medical communities.

Engaging with our doctors and assisting them in raising concerns with the health care system at large, established the trusted channels of communication needed to fight this pandemic. Physicians' voices were empowered, respected, and heard prior to the onset of this crisis. Our profession was already developing a modern and innovative system, which prioritized the most optimal patient experiences. The development supported timely access to care, patient choice, and longitudinal, relationship-based primary care.

Our doctors and their health care administrator counterparts were already working together, *collaborating* to improve the quality of patient care. We were beginning to hear the voices of our patients and caregivers lead some of these conversations on equal footing with those who treat, and those who support treatment. We were ensuring an effective relationship between Doctors of BC, government, and each of the health authorities, built on mutual understanding between physician leaders and the needs of the health care system at large.

Members of Doctors of BC understood that one of our organization's key priorities was *serving* them and assisting them with benefits, services, and personal- and practice-level supports. There has never before been a time when our members have needed more support to change practice models, payment models, IT and security platforms, and business practices as a whole. The Doctor's Technology Office was already a well-known resource, and it was able to step forward and assist physicians in changing quickly. Our joint standing committees quickly developed new fee codes to reflect the new reality of practice. The well-established collaborative channels smoothed the way for the government to adopt these changes to improve patients' access to necessary care.

Finally, Doctors of BC has played a tremendous role in *advocating* for our members to ensure strong public confidence in our medical profession through actions such as promoting public health and safety matters since the very beginning. The public was prepared to look to physicians as the source of truth and understanding in a time of so much misinformation. When our provincial health officers and many of our members told the public to stay home and physically distance themselves, it meant something powerful. Patients looked to us for accurate information to keep them safe and to ensure that they could still access the care they needed when our hospitals stood half empty to prepare for the surge.

So, as I reflect on the strength of our profession through these exceptional times, I must relay tremendous gratitude to every physician, and all Doctors of BC staff who have poured so much of their energy into empowering our organization. We came into this crisis well poised to succeed and I believe we have. Our future will be very different, and physicians are again uniquely poised to lead the evolution of our health care system to better meet the needs of patients, families, caregivers, and physicians. We are no longer shouting into the wind; we are soaring. ■

—Kathleen Ross, MD
Doctors of BC President

www.doctorsofbc.ca/covid-19

Resources for COVID-19

Doctors of BC is actively supporting members during the coronavirus (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

Detailed guidance on expanding in-person care and reopening physician offices—in both written and webinar formats

Our web page has information on:

- 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, PPE)

For questions or concerns about COVID-19, contact us directly at **covid19@doctorsofbc.ca**

doctors of bc

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.

Self-care during the pandemic

BC's physicians have worked tirelessly to combat the COVID-19 pandemic. Research shows that health care professionals working on the frontlines of the pandemic have reported symptoms of mental health conditions.[1] Treating COVID-19 patients comes with heavy emotional demands, but research about the impact of these demands on our health care professionals' physical, mental, and emotional well-being has only just begun.[1] Mental health should become less taboo; the focus should shift and we all need to understand that it is a shared responsibility between individuals and the system. The health and well-being of our physicians is very important by itself; however, it is essential to recognize the downstream impacts of our physicians' health. Specifically, the well-being of our physicians reflects and impacts the care that their patients receive.[2] Hence, ensuring the optimal health and well-being of our physicians is of utmost importance for our society as a whole. One of the opportunities available to support physician health is the practice of self-care.[3]

Doctors of BC has published a COVID-19 resource page that hosts a variety of in-house physician well-being resources that include counseling support, virtual peer support, and a mental health resource for families with children.[4] These resources are certainly necessary and will likely provide immediate mental health support for physicians, as they provide the space for physicians to discuss and/or read about mental health concerns. However, there should also be resources allocated for systemic factors that, in addition to COVID-19, are detrimental to the well-being of physicians.[3] Some of these systemic factors include lack of work-life balance, challenges with electronic health record systems, and work compression.[3] Resources that address systems-level factors that negatively contribute to the health of physicians can provide even more support to help our physicians achieve optimal health and well-being. Teaching individuals resilience is not sufficient, and promoting health and well-being of health care providers should be treated as very important because it will improve the overall efficiency of our health care system.

The Doctors of BC resource page provides a contact email for the physician health steering committee; physicians can use this email to suggest what supports they truly need for their wellness.[4] We commend Doctors of BC's efforts and we believe that by listening to physicians in BC, we open up the floor to hear what our care providers need and thus we can take a multifaceted approach in supporting BC's physicians. It should be noted that 81% of physicians and residents surveyed recently said that they were aware of physician health program services available to them, yet only 15% had accessed them.[5] Therefore, increasing awareness of Doctors of BC's new health and wellness services and making every effort to eliminate cultural and institutional barriers to access these programs is very necessary.

During these challenging times, it is of paramount importance to promote and facilitate hospital environments that enhance physicians' sense of fulfillment and engagement. Promoting values and cultural norms to respect our colleagues' mental health well-being is indeed a shared responsibility, and there is an urgent need to address stigma around physician health and wellness issues within hospital environments. We need to create tools to facilitate help-seeking behavior through promoting positive organization culture. This cannot be achieved unless we are ready to deploy our sincere effort and appropriately reinforce these attitudes with sufficient resources to address the barriers that prevent physicians from seeking help and intervention.

References

1. Lai J, Ma S, Wang Y, et al. Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. JAMA Network Open 2020;3:e203976.
2. Frank E, Segura C, Shen H, Oberg E. Predictors of Canadian physicians' prevention counseling practices. Can J Public Health 2010;101:390-395.
3. Kuhn C, Flanagan E. Self-care as a professional imperative: physician burnout, depression, and suicide. Can J Anesth 2016;64:158-168.
4. Coronavirus (COVID-19) Updates. Doctors of BC. 2020. Accessed 30 May 2020. www.doctorsofbc.ca/working-change/advocating-physicians/corona

virus-covid-19-updates.
5. CMA National Physician Health Survey. Canadian Medical Association. 2018. Accessed 28 May 2020. www.cma.ca/sites/default/files/2018-11/nph-survey-e.pdf

—Nilanga Aki Bandara, BSFN
Vancouver

—Vahid Mehrnoush, MD
Vancouver

—Rickey Jhauj, BKin
Vancouver

Re: Sometimes we need to think of zebras

I would like to respond to the article in the May 2020 issue, "Sometimes we need to think of zebras: An observational study on delays in the identification of bone tumors in children" [BCMJ 2020:62(4):130-133]. Mr Dhinsa and colleagues are to be commended for this informative article highlighting some of the clinical challenges in diagnosing osteosarcoma or Ewing sarcoma in children. However, I take offence with the statement, "increased awareness could reduce delays." Every patient I see as a family physician (not a general practitioner, which is not a term that should be used in a *BCMJ* article in 2020) may harbor a life-threatening illness. Is that chest pain unstable angina or a muscle strain? Is that difficulty swallowing reflux or an early esophageal cancer? Is that knee pain growing pains or cancer?

The patient journey illustrated diagnostic and treatment delays partly due to multiple visits to walk-in clinics, not necessarily a lack of awareness among family physicians. Was the patient's family physician sent a copy of the patient's visit after each walk-in clinic visit? Was it the same walk-in clinic that was visited? Was the patient advised to follow up with his or her family physician?

I, along with my family physician colleagues, fear missing significant diagnoses—especially in children. Awareness is important, but what is more critical is longitudinal care and communication between providers to ensure that each patient journey map brings the patient the care he or she needs in the most expeditious fashion possible.

—Tahmeena Ali, MD, CCFP, FCFP
Surrey

Derin Karacabeyli, MD, Stephanie Shea, MPH, Shelly Keidar, MPH, Susan Pinkney, MA, Katrina Bepple, BSc, Danielle Edwards, MA, Ilona Hale, MD, Selina Suleman, MPH, Shazhan Amed, MD, MScPH

The Live 5-2-1-0 Toolkit for family physicians: Mixed methods evaluation of a resource to facilitate health promotion in a primary care setting

A pilot study in two BC communities found that a toolkit promoting healthy lifestyle behaviors helped FPs initiate discussions about pediatric obesity with patients and develop plans for monitoring.

Dr Karacabeyli is an internal medicine resident at the University of British Columbia. Ms Shea is a current medical student at the University College Cork in Ireland. Ms Keidar is a research coordinator at the BC Children's Hospital Research Institute. Ms Pinkney is a research manager at the BC Children's Hospital Research Institute. Ms Bepple is executive director of the Chilliwack Division of Family Practice. Ms Edwards is a programs lead in the Chilliwack Division of Family Practice. Dr Hale is a clinical assistant professor at the University of British Columbia and a family physician in the East Kootenay Division of Family Practice. Ms Suleman is a research coordinator at the BC Children's Hospital Research Institute. Dr Amed is a clinical associate professor in the Department of Pediatrics at the University of British Columbia and an investigator at the BC Children's Hospital Research Institute.

This article has been peer reviewed.

ABSTRACT

Background: Sustainable Childhood Obesity Prevention Through Community Engagement is an initiative that engages stakeholders across multiple sectors to promote the Live-5-2-1-0 message (5 vegetables and fruits, 2 hours at most of recreational screen time, 1 hour of physical activity, 0 sugar-sweetened beverages each day) and implement action to support healthy behaviors. As part of this initiative, an intervention using the Live 5-2-1-0 Toolkit for family physicians (FPs) was piloted in two communities. This study aimed to identify barriers and aids to toolkit implementation, and to determine whether the toolkit improves physicians' capacity to promote healthy childhood behaviors.

Methods: FPs completed preintervention and postintervention surveys and participated in semi-structured interviews after implementation of the Live 5-2-1-0 Toolkit intervention. Implementation occurred sequentially in two communities and involved a total of 21 FPs in six primary care clinics. Descriptive statistics were used for quantitative data, and content analysis was used for qualitative data.

Results: Of the 21 participating FPs, 14 completed the preintervention and the postintervention surveys (67%) and 7 completed the preintervention survey only (33%). FPs reported increased knowledge of medical evaluation of pediatric patients with obesity (from 14% preintervention to 36% postintervention), behavioral goal setting (from 36% to 93%), and motivational interviewing (from 57% to 79%). FPs' perceived efficacy in addressing the subject of weight improved (from 43% preintervention to 93% postintervention). Increases were also observed in routinely addressing nutrition (from 43% preintervention to 79% postintervention), physical activity (from 50% to 79%), screen time (from 14% to 64%), and sugar-sweetened beverage consumption (from 29% to 71%). As a result of toolkit implementation, 71% of FPs felt their patients were more aware of long-term complications related to lifestyle, 64% felt patients were more willing to set behavioral goals with providers, and 50% felt patients were more able to self-manage issues related to lifestyle. The predominant barrier to implementation was lack of staff/clinic capacity to measure BMI; the most noted aid to implementation was access to ready-to-use Live 5-2-1-0 resources.

Conclusions: The Live 5-2-1-0 Toolkit facilitated health promotion to pediatric patients in the primary care setting. Increasing routine BMI measurement in primary care remains challenging due to clinical capacity issues. Results of this pilot study will be used to refine the toolkit prior to wider dissemination across British Columbia.

Background

The prevalence of childhood obesity continues to increase in Canada and worldwide, posing a major public health challenge.[1,2] Childhood obesity is complex, with several factors contributing to an obesogenic environment (e.g., exposure to energy-dense and nutrient-poor foods, limited physical activity opportunities, and increased screen time/sedentary activity).[3] The 2015 *Lancet* series on obesity described patchy progress in prevention globally.[4] However, whole-of-community, multisetting, multistrategy interventions have shown promise in achieving population-level reductions in childhood overweight and obesity across the globe.[5-9] These interventions engage with the complexity of childhood obesity and address the various components of the obesogenic environment at several levels, thereby facilitating tailored, community-centric local action.[10] Sustainable Childhood Obesity Prevention Through Community Engagement (SCOPE) is a Canadian example of such an intervention. SCOPE partners with communities to empower local stakeholders across multiple sectors (e.g., schools, media, businesses, health services, community/recreation centres, local governments) to share (via social marketing) and support (via policy, practice, and environmental change) the evidence-based Live-5-2-1-0 message:

- 5 vegetables and fruits every day.
- 2 hours at most of recreational screen time a day.
- 1 hour at least of physical activity each day.
- 0 sugar-sweetened beverages each day.[11,12]

Primary care serves as an ideal setting for monitoring children's weight trajectories and addressing health behaviors/habits given the long-standing relationship between family physicians and families.[13] However, primary care physicians have reported barriers to promoting healthy weights, including lack of self-efficacy, capacity, resources (e.g., staffing support and educational materials/counseling tools), and time.[14-17]

The SCOPE team worked with two communities to create, use, adapt, and evaluate the Live 5-2-1-0 Toolkit for family physicians (FPs) to address these barriers and empower primary care providers to promote healthy behaviors and weights. The toolkit, discussed in greater detail under Methods, integrates routine BMI tracking and growth monitoring, training on motivational interviewing, and resources to support assessment and discussion of healthy behaviors and facilitation of community program referrals. The objectives of our pilot study were to:

1. Determine whether the toolkit improved physicians' capacity to promote healthy childhood behaviors.
2. Identify barriers and aids to toolkit implementation.

Methods

The Live 5-2-1-0 Toolkit intervention was implemented in one urban and one rural community, both of which were existing SCOPE partner communities with primary care leadership involvement. Community A, population 80 000, is a city in British Columbia's Fraser Valley, located 105 km east of Vancouver, the province's largest urban centre. Community B, population 6600, is a rural community located in the Kootenay Rockies region of BC.

Participants

Family practice clinics in communities A and B were selected using convenience sampling, and were contacted by a member of the research team to gauge the clinics' collective interest in participating in the study. Individual FPs in clinics that expressed interest were then invited to participate; participating FPs were required to have a current primary care practice in either community A or B, and participation was voluntary. In total, 21 FPs from six primary care clinics participated. A small sample size was accepted because this pilot study's purpose was to evaluate feasibility of toolkit implementation in the clinical setting and inform toolkit refinement prior to larger-scale evaluation.

Study design

A preintervention and postintervention observational mixed methods study design was used. Data were collected from participating FPs before and after the intervention (9 months during 2014 in community A, and 12 months during 2015–16 in community B) using a survey adapted from the Maine Youth Overweight Collaborative's "Keep ME Healthy" initiative[18] that could be completed via an online link or on paper. Participants were guaranteed anonymity to reduce social desirability bias. To measure physicians' capacity to promote healthy childhood behaviors, survey questions assessed physicians' knowledge, beliefs, self-efficacy, and practices pertaining to BMI measurement, management of pediatric overweight and obesity, and discussion of healthy lifestyle behaviors. Physician demographic data were also collected. The intervention and surveys were first implemented in community A, and were subsequently modified based on lessons learned prior to implementation in community B.

All participating FPs were invited to complete a postintervention, semi-structured, in-person qualitative interview, approximately 20 to 30 minutes in length and conducted by a SCOPE researcher, to explore barriers and aids to project implementation and to elicit suggestions for improving the toolkit and implementation processes **[Table 1, next page]**. Quantitative data derived from the surveys informed the qualitative interview questions related to changes in FP practice, observed behavior change among patients, barriers and aids to project implementation, project sustainability, toolkit usefulness, and overall project impact.

Intervention

The toolkit intervention was based on recommendations by Barlow,[19] and was consistent with recent recommendations on childhood obesity management and prevention in the primary care setting.[20] Key components of the intervention included the following:

1. Integrating routine BMI tracking and growth monitoring as an obesity prevention strategy. Growth monitoring/BMI tracking has been strongly recommended by the Canadian Task Force on Preventive Health Care given its low cost, feasibility, low probability of harm, and potential value in early identification of weight-related health conditions.[20]

TABLE 1. Qualitative interview questions for pilot study of Live 5-2-1-0 Toolkit intervention.

1. I'm interested to know your perspective on the issue of childhood obesity in the patient population you currently serve. (Probes: What proportion of your patient population are children and youth < 18 years of age? Approximately how many are considered overweight/obese?)
2. What were the main reasons that motivated you to participate in this project?
3. Were you aware of the 5-2-1-0 message prior to this project?
4. Have you made any changes to the way that you practise as a result of this project? a. Do you think this change/these changes will be sustainable in your practice? Why or why not?
5. Have you seen any changes in your patients as a result of this project? a. If yes, what have you noticed? b. If no, what do you see as the main barriers your patients experience to making changes?
6. What aspects of this project were the easiest for you to implement? (Probes: What was the easiest change to make to the way you practise? What was it that made these changes easy?)
7. What aspect(s) of this project do you think was the most valuable? (Probes: To you? To your patient population?)
8. What aspects of this project were the most difficult to implement? (Probes: What was it that made that difficult? What needs to be changed to reduce that difficulty?)
9. Can you comment on how useful each section of the family physician toolkit was in implementing health promotion practices among your pediatric patients? [Interviewer: Have the toolkit present as a reference.] a. How to measure and plot BMI b. Talking with patients and families about healthy eating and active living (and implementing motivational interviewing techniques) c. Physician resources d. Assessment and Management Flow Chart
10. Do you have any suggestions for additional elements or improvements to the family physician toolkit?
11. What else could be done to help you continue or strengthen efforts within your own practice to improve the prevention and management of childhood and youth obesity?
12. What else do you think needs to be done to prevent and manage childhood and youth obesity?

2. Training on motivational interviewing as a patient-centred counseling technique that allows individuals to discover their own reasons for change. A number of randomized control trials on motivational interviewing in the primary care setting have illustrated its promise in eliciting positive behavior change[21,22] and reducing BMI in overweight pediatric patients.[23]
3. Providing tools and resources to support assessment and discussion of daily habits and lifestyle behaviors, and to facilitate community program referral through primary care in order to link affordable and available resources/services to individuals who may need additional support beyond that available through their family physician. Lack of available resources and community supports has frequently been described as a barrier for physicians attempting to address childhood obesity in the primary care setting.[16,24]

The toolkit intervention was implemented through an expert-led group training session for physicians and clinic staff. The training session was 2 hours and consisted of three presentations: (1) how to conduct motivational interviewing, conducted by a child psychologist, (2) how to respectfully discuss weight during patient interactions, conducted by the primary investigator, and (3) how to use the binder of toolkit elements and resources, conducted by the research manager.

The toolkit binder included resources on employing motivational interviewing techniques, a flow chart on managing children with overweight or obesity (i.e., appropriate laboratory investigations and referral to relevant community- or hospital-based programs), and instructions for integrating World Health Organization growth charts and BMI measurements into an electronic medical record. Further, the toolkit binder included additional resources such as the Live 5-2-1-0 Healthy Habits Questionnaire to assess current behaviors, a community-specific Healthy Living Support Booklet that identified local and provincial programs that support healthy behaviors to which patients could be referred, and supplementary Live 5-2-1-0 resources such as prescription pads, fact sheets, posters, magnets, and goal-tracking tools. The elements of the toolkit binder are available online at www.live5210.ca/resources/health.

Data analysis

Ethics approval for the study was obtained from the University of British Columbia Children's and Women's Health Centre of British Columbia Research Ethics Board. Descriptive statistics were used to analyze quantitative data (proportions, means, and frequencies). Semi-structured interviews were audio recorded and transcribed verbatim. Directed content analysis was used to generate preliminary coding categories;[25] a coding guide was generated by two researchers (SS, SP) who then independently reviewed all the transcripts before deliberating and finalizing the coding guide. A third researcher (SA) reviewed the transcripts independently using the finalized coding guide, after which all three researchers worked together to resolve inconsistencies. Key themes and subthemes were then identified.

Results

Of the 21 participating FPs, 14 completed the preintervention and the postintervention surveys (67%) and 7 completed the preintervention survey only (33%). Six FPs from community A also completed postintervention semi-structured interviews (28%). The demographic and practice characteristics of survey respondents indicated that physicians who did not complete the postintervention survey were disproportionately male and younger than those who did **[Table 2]**.

Family physician survey

Improvements were noted postintervention in (1) FPs' self-reported knowledge of medical

TABLE 2. Demographic and practice characteristics of 21 pilot study survey respondents.

Physician characteristics	Pre- & post-intervention survey respondents (n = 14)	Pre-intervention survey respondents (n = 7)
Age category (years)		
30–34	14%	14%
35–39	7%	29%
40–44	14%	43%
45–49	36%	0%
50–54	7%	14%
54–59	7%	0%
60+	14%	0%
Sex		
Male	36%	86%
Female	64%	14%
Mean number of patients seen per year (SD)*	4025 (3686)	3750 (1631)
Mean proportion of pediatric patients (SD)*	13% (10)	8% (4)
Years in their current position		
3–5	14%	14%
5–10	14%	43%
> 10	71%	43%

*SD = standard deviation

evaluation of pediatric patients with obesity, behavioral goal setting, and motivational interviewing **[Figure 1]**; (2) FPs' perceived self-efficacy in addressing topics such as weight, nutrition, screen time, physical activity, and consumption of sugar-sweetened beverages **[Figure 2]**; and (3) FPs' routine promotion of the Live 5-2-1-0 health behaviors **[Figure 3]**. Following the toolkit intervention, 71% of FPs felt their patients were more aware of long-term complications related to lifestyle, 64% felt patients were more willing to set behavioral goals with providers, and 50% felt patients were better able to self-manage issues related to lifestyle. An increase was also observed in routine annual BMI tracking for all pediatric patients (from 7% preintervention to 29% postintervention).

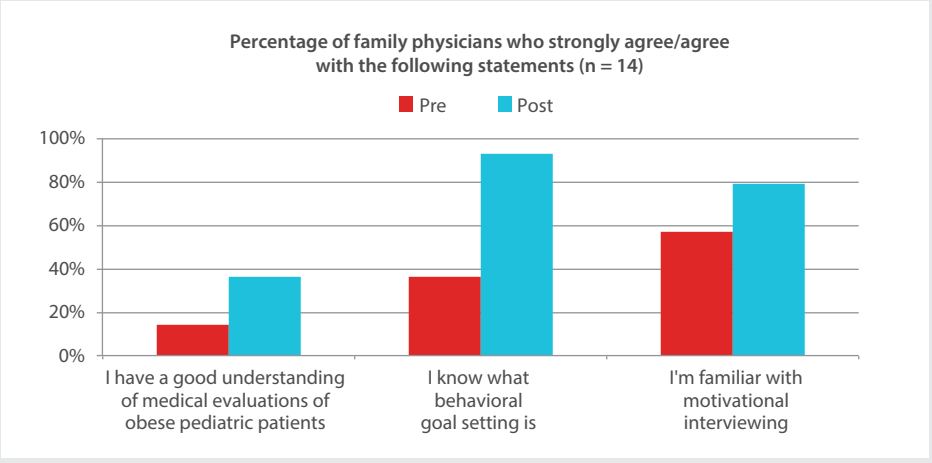


FIGURE 1. Self-reported knowledge of survey respondents before (pre) and after (post) the Live 5-2-1-0 Toolkit intervention.

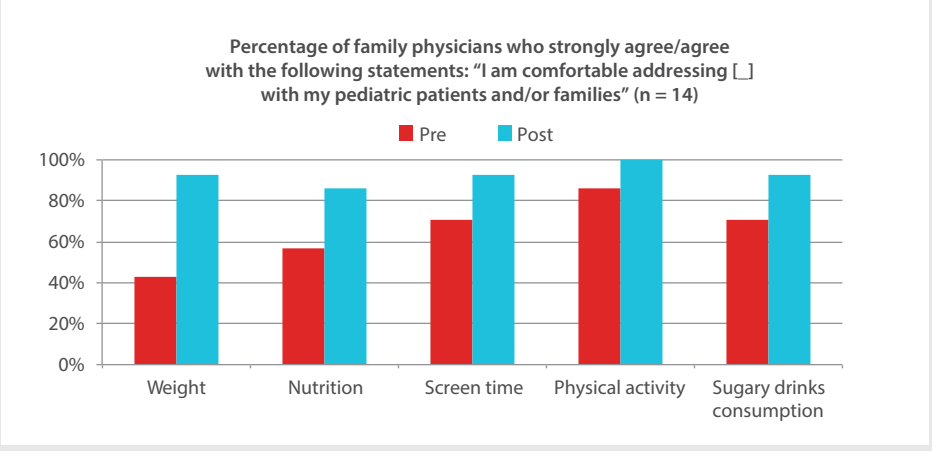


FIGURE 2. Perceived self-efficacy of survey respondents when addressing topics related to weight and health behaviors before (pre) and after (post) the Live 5-2-1-0 Toolkit intervention.

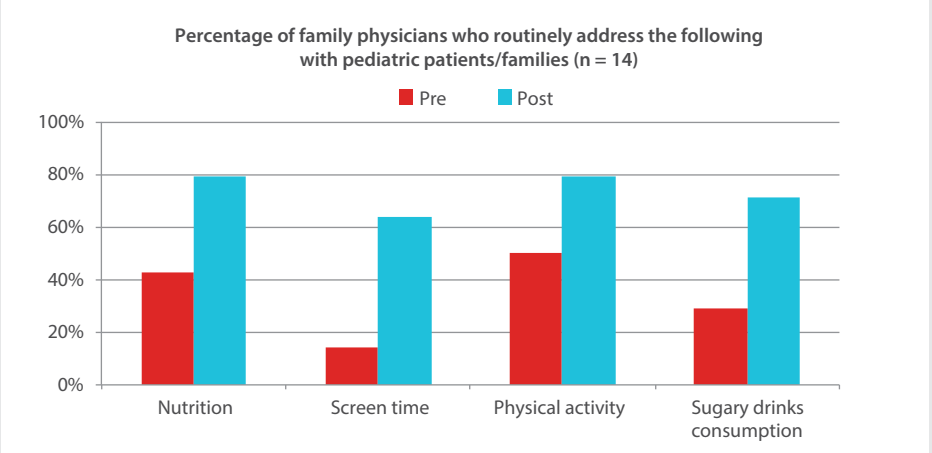


FIGURE 3. Routine health promotion practices of survey respondents before (pre) and after (post) the Live 5-2-1-0 Toolkit intervention.

Qualitative interviews

Three key themes emerged from the qualitative analysis:

1. **The Live 5-2-1-0 message facilitates practice change.**
   FPs found the Live 5-2-1-0 messaging "recognizable," "clean," "easy to remember," "easy to explain," and "a common language and a common ground to go on" (FP1, FP2).

   FPs felt that the Live 5-2-1-0 message helped destigmatize discussions on healthy living and empowered physicians to be proactive with health promotion. The message allowed them to "open the discussion in a nonjudgmental way" (FP1) because it was "standardized" (FP6), and they were "doing this to all kids," which "takes away the stigma associated with obesity" (FP1). Another physician said that the resources "made [them] far more proactive and therefore preventative," and provided them "more leverage as a physician to open that conversation which, otherwise, [they]. . . wouldn't have had" (FP5). One physician said, "I know what to do now when I get people to come back. . . whereas before if I was worried about their weight I'd get them to come back and then I didn't really have a good plan of what to do, what blood work to do, to refer them, not to refer them, all that sort of stuff. Now I know" (FP6).
2. **Front-end office coordination and staff capacity are necessary.**
   FPs found they depended on administrative staff to conduct BMI measurements and administer the Healthy Habits Questionnaire. They reported that sustainability of toolkit implementation was contingent on the capacity of front-end administrative staff and that "secretaries were the main ones involved in starting the process. . . if they weren't involved in this process this would never have happened" (FP1). FPs reported that measuring BMI in all pediatric patients was not sustainable, and that office support staff "were not going to continue doing it" (FP6) because measuring heights and weights in a private space and calculating BMI percentiles could be quite time-consuming.
3. **A collective approach that involves all sectors of a community is necessary.**
   FPs acknowledged the importance of a collective, consistent, community-wide approach to achieving healthy childhood weights: "education needs to not only be done in the doctor's office but in the schools, in public health, in the leisure centres, in the rec centres, in everywhere that kids are going to be, in everywhere that families are going to be" (FP6). According to another physician, "using the same language" across a community "is going to hopefully reinforce the same messages. . . and if we repeat it often enough and people hear it often enough it might then be the key to, to making it happen" (FP2).

Conclusions

The implementation of whole-community, multisectoral, childhood obesity prevention using the Live 5-2-1-0 Toolkit was found to enhance physicians' knowledge and self-efficacy when managing pediatric patients with obesity, and caused positive changes in physicians' health promotion practices. The predominant aid to implementation for FPs was the simplicity and clarity of the Live 5-2-1-0 message, while a major barrier to implementation was the lack of front-end staff capacity. Finally, the importance of a whole-community approach that mobilized all sectors was identified as an important theme.

Managing obesity

A systematic review of primary care interventions for managing childhood obesity supports our study finding that empowering providers through training (e.g., in motivational interviewing) and education leads to increased knowledge, skills, and confidence in managing pediatric obesity. Empowering providers also increases adherence to expert committee recommendations.[26] Studies of other similar primary care interventions built on the Live 5-2-1-0 guidelines[19] have reported positive changes in physicians' practices related to child and adolescent obesity.[18,27,28] Gibson, for example, noted significant increases in behavioral education/counseling (from 9% to 87%) within two rural health clinics.[27]

Routinely using Live 5-2-1-0 resources to address behaviors was found to empower physicians in our pilot study by destigmatizing weight and standardizing the process of brief counseling sessions for weight- and health-related behavior. This seemed to lessen commonly reported barriers faced by physicians when discussing childhood obesity, which include the sensitive nature of the topic and lack of knowledge, comfort, and self-efficacy.[15-17,29,30] We observed increases in physician-reported knowledge and self-efficacy that translated into practice change, with an increase in the routine promotion of healthy behaviors and the use of behavioral goal setting. Similar improvements in self-efficacy that translated into practice changes were found by Barlow and colleagues after brief training and support for primary care providers.[31] However, only half the participating FPs in our study felt that their patients were better able to self-manage issues of lifestyle as a result of the intervention, which underscores the potential impact that external environmental and systemic barriers can have on individual habits. This in turn reinforces our qualitative finding that physicians feel complementary community-wide health promotion efforts and supports are also necessary, a finding borne out by other studies.[32,33]

Our qualitative findings also showed that the Live 5-2-1-0 message and accompanying resources were major drivers of physician-related changes. Several studies that outline barriers to pediatric obesity prevention and management in primary care report the need for better tools to support counseling and communication with patients and families.[16,17,24] The Live 5-2-1-0 message, tools, and resources may fill this gap by providing primary care physicians with the means to open conversations with families about weight and health behaviors in a simple and nonjudgmental manner.

Study limitations

Our study had several limitations, including the lack of a control group, a small sample size, the lack of completed postintervention surveys from 7 of 21 participating physicians, and a short intervention period that varied between study sites. Self-selection bias may have skewed the sample and led to the recruitment of only those

FPs who are passionate about health promotion. If this were the case, we would expect physicians without a special interest in health promotion to benefit even more from the toolkit than those who participated in our study. The duration of toolkit use in both communities was based on the capacity of the clinics at the time of the pilot study. We would not expect that the variability of the study periods between communities would impact the comparability of the findings between communities. Lastly, social desirability bias may have influenced survey responses. Given the various limitations, results from this pilot study are not easily generalizable.

Summary

Childhood obesity continues to increase in Canada and worldwide, posing a major public health challenge. A pilot study in two BC communities found healthy behaviors that prevent childhood obesity can be achieved in the primary care setting by using a simple Live 5-2-1-0 message: 5 vegetables and fruits, 2 hours at most of recreational screen time, 1 hour of physical activity, 0 sugar-sweetened beverages each day. The Live 5-2-1-0 Toolkit intervention was found to destigmatize discussions about weight and healthy habits and provide a foundation for brief counseling sessions. Further research is needed to explore interventions and strategies that reduce the burden of routine BMI measurement on office staff. ■

Competing interests

None declared.

FPs felt that the Live 5-2-1-0 message helped destigmatize discussions on healthy living and empowered physicians to be proactive with health promotion.

References

1. Lobstein T, Jackson-Leach R, Moodie ML, et al. Child and adolescent obesity: Part of a bigger picture. Lancet 2015;385(9986):2510-2520.
2. Rodd C, Sharma AK. Recent trends in the prevalence of overweight and obesity among Canadian children. CMAJ 2016;188:E313-320.
3. Commission on Ending Childhood Obesity. Report of the Commission on Ending Childhood Obesity. Geneva: World Health Organization; 2016.
4. Roberto CA, Swinburn B, Hawkes C, et al. Patchy progress on obesity prevention: Emerging examples, entrenched barriers, and new thinking. Lancet 2015;385(9985):2400-2409.
5. Ducimetière P, Basdevant A, Tafflet M, et al. Downward trends in the prevalence of childhood overweight in the setting of 12-year school- and community-based programmes. Public Health Nutr 2008;12:1735-1742.
6. Hyatt RR, Nelson ME, Economos CD, et al. Shape Up Somerville two-year results: A community-based environmental change intervention sustains weight reduction in children. Prev Med (Baltim) 2013;57:322-327.
7. Sanigorski AM, Bell AC, Kremer PJ, et al. Reducing unhealthy weight gain in children through community capacity-building: Results of a quasi-experimental intervention program, Be Active Eat Well. Int J Obes 2008;32:1060-1067.
8. Millar L, Kremer P, de Silva-Sanigorski A, et al. Reduction in overweight and obesity from a 3-year community-based intervention in Australia: The "It's Your Move!" project. Obes Rev 2011;12(suppl 2):20-28.
9. de Silva-Sanigorski AM, Bell AC, Kremer P, et al. Reducing obesity in early childhood: Results from Romp & Chomp, an Australian community-wide intervention program. AM J Clin Nutr 2010;91:831-840.
10. Karacabeyli D, Allender S, Pinkney S, Amed S. Evaluation of complex community-based childhood obesity prevention interventions. Obes Rev 2018;19:1080-1092.
11. Amed S, Naylor PJ, Pinkney S, et al. Creating a collective impact on childhood obesity: Lessons from the SCOPE initiative. Can J Public Health 2015;106:e426-433.
12. Amed S, Shea S, Pinkney S, et al. Wayfinding the Live 5-2-1-0 initiative—At the intersection between systems thinking and community-based childhood obesity prevention. Int J Environ Res Public Health 2016;13:1-16.
13. Schwartz RP, Hamre R, Dietz WH, et al. Office-based motivational interviewing to prevent childhood obesity. Arch Pediatr Adolesc Med 2007;161:495-501.
14. Pelletier-Fleury N, Le Vaillant M, Rosman S, et al. French pediatricians' knowledge, attitudes, beliefs towards and practices in the management of weight problems in children. Health Policy (New York) 2009;91:195-203.
15. King LA, Loss JHM, Wilkenfeld RL, et al. Australian GPs' perceptions about child and adolescent overweight and obesity the Weight of Opinion study. Br J Gen Pract 2007;57:124-129.
16. Sesselberg TS, Klein JD, O'Connor KG, Johnson MS. Screening and counseling for childhood obesity: Results from a national survey. J Am Board Fam Med 2010;23:334-342.
17. Perrin EM, Flower KB, Garrett J, Ammerman AS. Preventing and treating obesity: Pediatricians' self-efficacy, barriers, resources, and advocacy. Ambul Pediatr 2005;5:150-156.
18. Polacsek M, Orr J, Letourneau L, et al. Impact of a primary care intervention on physician practice and patient and family behavior: Keep ME Healthy—The Maine Youth Overweight Collaborative. Pediatrics 2009;123(suppl 5):S258-266.
19. Barlow SE. Expert Committee recommendations regarding the prevention, assessment, and treatment of child and adolescent overweight and obesity: Summary report. Pediatrics 2007;120(suppl 4):S164-192.
20. Canadian Task Force on Preventive Health Care. Recommendations for growth monitoring, and prevention and management of overweight and obesity in children and youth in primary care. CMAJ 2015;187:411-421.
21. Taveras EM, Blaine RE, Davison KK, et al. Design of the Massachusetts Childhood Obesity Research Demonstration (MA-CORD) Study. Child Obes 2015;11:11-22.
22. Davoli AM, Broccoli S, Bonvicini L, et al. Pediatrician-led motivational interviewing to treat overweight children: An RCT. Pediatrics 2013;132:e1236-1246.
23. Resnicow K, McMaster F, Bocian A, et al. Motivational interviewing and dietary counseling for obesity in primary care: An RCT. Pediatrics 2015;135:649-657.
24. Tucker C, Shah N, Ukonu N, et al. Views of primary care physicians regarding the promotion of healthy lifestyes and weight management among their patients. J Clin Outcomes Manag 2017;24:259-266.
25. Hsieh H, Shannon S. Three approaches to qualitative content analysis. In: Qualitative Health Research. Thousand Oaks: Sage; 2005. p. 1277–1288.
26. Jacobson DL, Gance-Cleveland B. A systematic review of primary healthcare provider education and training using the Chronic Care Model for childhood obesity. Obes Rev 2011;12:e244-256.
27. Gibson SJ. Translation of clinical practice guidelines for childhood obesity prevention in primary care mobilizes a rural Midwest community. J Am Assoc Nurse Pract 2016;28:130-137.
28. Cygan HR, Baldwin K, Chehab LG, et al. Six to success: Improving primary care management of pediatric overweight and obesity. J Pediatr Health Care 2014;28:429-437.
29. Bourgeois N, Brauer P, Simpson JR, et al. Interventions for prevention of childhood obesity in primary care: A qualitative study. CMAJ Open 2016;4:E194-199.
30. O'Donnell JE, Foskett-Tharby R, Gill PS. General practice views of managing childhood obesity in primary care: A qualitative analysis. JRSM Open 2017;8:1-9.
31. Barlow SE, Salahuddin M, Butte NF, et al. Improvement in primary care provider self-efficacy and use of patient-centered counseling to address child overweight and obesity after practice-based changes: Texas Childhood Obesity Research Demonstration Study. Child Obes 2018;14:518-527.
32. Gortmaker SL, Polacsek M, Letourneau L, et al. Evaluation of a primary care intervention on body mass index: The Maine Youth Overweight Collaborative. Child Obes 2015;11:187-193.
33. Summerbell C, Brown T. Childhood obesity: The guideline for primary care should form part of a whole-system approach. CMAJ 2015;187:389-390.

Club MD

PUT YOURSELF IN THE PICTURE.

Exclusive deals from brands you trust

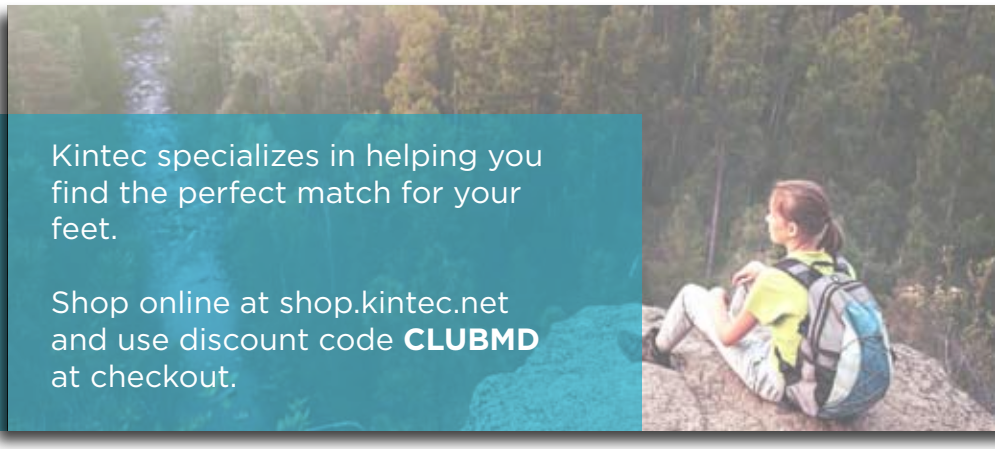
You work hard. Your downtime is important and we want to help you make the most of it to do the things you love. Club MD provides exclusive deals from trusted brands so you can spend your time on what's important.

CAR PURCHASE & LEASE • ENTERTAINMENT • FITNESS & WELLNESS • FOOD & BEVERAGE • HOTELS & TRAVEL

KINTEC FOOTWEAR & ORTHOTICS

20% off regular priced footwear, non-customized braces and orthotics

doctorsof**bc**.ca/kintec



Kintec specializes in helping you find the perfect match for your feet.

Shop online at shop.kintec.net and use discount code **CLUBMD** at checkout.

DILAWRI AUTOMOTIVE GROUP

Preferred pricing on new and used vehicles.

doctorsof**bc**.ca/dilawri

Get the VIP Exclusive Customer Care experience.

Contact Frank Rodriguez at 604 505 9691 or frodriguez@dilawri.ca to set up an appointment. Quote **CLUBMD**.

CHOICE HOTELS

Exclusive rates for essential workers.

doctorsof**bc**.ca/choice

Enjoy a well deserved rest with a special discount on top of the best available rate.

Enter your Special Rate ID# **00222700** online at choicehotels.ca then select "**Essential Workers Only**".

P 604 638 7921
TF 1 800 665 2262 ext 7921
E clubmd@**doctors**of**bc**.ca

doctorsof**bc**.ca/club-md

doctors of bc

Black women's health matters

We don't know much about Black women's health in Canada, largely because we don't collect statistics by race. The data, scant as they are, indicate that addressing systemic racism will lead to better health outcomes for Black women in Canada.

Caitlin Dunne, MD, FRCSC

As I write this, we are more than 3 weeks into worldwide protests following the killing of Mr George Floyd by a police officer in Minnesota on 25 May 2020. Demonstrators and activists have made it clear that they expect people (particularly White people) in positions of leadership and of privilege, who have a voice to use it. As physicians and community leaders, it is incumbent on us to listen, learn, reflect, and act. It is within our collective and individual powers to improve the health care inequity that our Black patients face. The phrase "silence is compliance" has been emblazoned on signs across the globe at #BlackLivesMatter demonstrations. It is no longer satisfactory to be "not racist"—we must be actively "antiracist." Actually, being "not racist" is a misnomer because, as Ibram X. Kendi has pointed out, inaction on racist policies has been a form of racism all along.[1]

Women have historically been vastly underrepresented in clinical trials.[2] Black women even more so. In 2019, Nnorom and colleagues published a scoping review on breast and cervical cancer in Black Canadians (people of African/Caribbean/Black ancestry living in Canada).[3] The study found that only 23 out of a possible 1921 papers they examined included health data specific to Black women. The authors wrote that Black women in Canada faced barriers to health care predominantly related to lower screening rates rather than access to treatment.[3] This is concerning because data from the United States and the United Kingdom indicate that Black women are more likely to die of cancer than their White counterparts.[3,4] For example, the American Cancer Society's 2019 Surveillance Report cited a lower prevalence of breast cancer in non-Hispanic Black women at 126.5 (per 100 000) versus 130 (rate ratio 0.97). Despite this, the mortality rate was markedly higher in Black women at 28.9 (per 100 000) versus 20.6 in White women (rate ratio 1.41).[5] One thing we can derive from these statistics is that Black women might have inadequate access to screening, which results in missed opportunities to detect and treat aggressive cancers at an earlier stage.

Women have historically been vastly underrepresented in clinical trials. Black women even more so.

The Canadian Cancer Society does not report its annual statistics by race.[6] So, if we don't collect data to understand the scope of the problem, how can we expect to solve it? It appears that people have been asking this question for years. A Black Experiences in Health Care Symposium held in Toronto in 2017 suggested that to make the system more equitable, "data quality challenges" should be addressed. For example, they identified an urgent need for data sets that include race and ethnicity.[7] During the second Black Experiences in Health Care Symposium, held in January 2020, race-based data collection remained a key theme. The planning committee's number-one recommendation was for mandated data collection in partnership with Black communities, and including Black leadership, to measure, improve, and publicly report on care and outcomes.[8]

An investigation by the *Globe & Mail* published last year exposed how far Canada lags behind other nations in collecting racial data.[9] In the article, it was postulated that our "Canadian way" of avoiding the unease of difficult subjects (like race) is part of the reason we are less likely to collect racial data than other countries. In pretending we are "color blind," we have actually harmed Black Canadians by failing to study and address our health care disparities.

There are Canadian articles that address racism in medicine and how it affects Black women. A complete literature review is beyond the scope of this essay, but a few titles are included here for inspiration. Researchers from Queen's University and the University of Ottawa recently published a report in the *American Journal of Obstetrics and Gynecology* called "Behind the times: revisiting endometriosis and race." In it, they describe the historical bias of treating endometriosis as a "disease of white women in higher income brackets." This led to years of misdiagnosis for Black women with pelvic pain as pelvic inflammatory disease rather than the complex, chronic disease of endometriosis.[10] The authors explain that these "misdiagnoses stemmed from the still pervasive myth that women of color were somehow immune to endometriosis and the stereotype that African American women were more promiscuous than their white peers."[10,11]

Dr Dunne is a clinical assistant professor at the University of British Columbia and a co-director at the Pacific Centre for Reproductive Medicine in Vancouver. She serves on the BCMJ Editorial Board.
This article has been peer reviewed.

In *Black-White Health Inequalities in Canada*, the researchers analyzed multiple health outcomes such as diabetes, hypertension, heart disease, and mental health.[12] One of their conclusions was that "race-based discrimination, a lifelong stressor, contributes to the development of hypertension . . . and to insulin resistance." The On the Margins project undertaken in rural Nova Scotia concluded that, " any future research [on Canadian Black women] be undertaken with the recognition that race interacts with numerous other variables and experiences [that] determine health."[13] This concept was echoed in a December 2019 publication by Chief Public Health Officer of Canada Dr Theresa Tam, in a report titled, "Addressing stigma: Towards a more inclusive health system."[14] A highlighted excerpt from the report calls on us all to stop the "slow and insidious practice of dehumanizing others."

Systemic racism relates to systems, which we can control and change. This can be differentiated from individual racism, which refers to "assumptions, beliefs, and behaviours," conscious or unconscious that are, arguably, more difficult to change.[15] Recognizing the way our health systems discriminate, and actively working to fix them, will promote change and fairness. The data, scant as they are, indicate that addressing systemic racism will lead to better health outcomes for Black women in Canada. We all have a role to play in this problem and in its solution.

I am pleased to "turn the pages over" to an invited contribution by Dr Marjorie Dixon.

Recognizing the way our health systems discriminate, and actively working to fix them, will promote change and fairness.

References

1. Kendi IX. Ibram X. Kendi says we are either being racist or antiracist, there is no middle ground. CBC Radio. 15 November 2019. Accessed 9 June 2020. www.cbc.ca/radio/outintheopen/ibram-x-kendi-says-we-are-either-being-racist-or-antiracist-there-is-no-middle-ground-1.5350278.
2. Yakerson A. Women in clinical trials: A review of policy development and health equity in the Canadian context. Int J Equity Health. BioMed Central 2019 Apr 15;18:56-58.
3. Nnorom O, Findlay N, Lee-Foon NK, et al. Dying to learn: A scoping review of breast and cervical cancer studies focusing on Black Canadian women. Journal of Health Care for the Poor and Underserved. Johns Hopkins University Press 2019;30:1331-1359.
4. Jemal A, Center MM, DeSantis C, Ward EM. Global patterns of cancer incidence and mortality rates and trends. Cancer Epidemiol Biomarkers Prev 2010;19:1893-1907.
5. American Cancer Society. Cancer Facts & Figures for African Americans 2019-2020. Surveillence Report. Accessed 7 June 2020. www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/cancer-facts-and-figures-for-african-americans/cancer-facts-and-figures-for-african-americans-2019-2021.pdf.
6. Cancer statistics at a glance—Canadian Cancer Society. Accessed 7 June 2020. www.cancer.ca/en/cancer-information/cancer-101/cancer-statistics-at-a-glance/?region=on.
7. Sinai Health System. Black experiences in health care. Sinai Health system. 2017 Accessed 9 June 2020. www.mountsinai.on.caaboutushealth-equitypdfsSHS-BEHC-report-FINAL-aoda-final.pdf.
8. Orridge C, Bernard C, Quaison G, et al. Black Experiences in Health Care Symposium 2020. Accessed 13 June 2020. www.healthcommons.ca/blackhealth.
9. Grant T, Balkissoon D. How Canada's racial data gaps can be hazardous to your health. Globe and Mail. 6 February 2019. Accessed 10 June 2020. www.theglobeandmail.com/canada/article-how-canadas-racial-data-gaps-can-be-hazardous-to-your-health-and/.
10. Bougie O, Healey J, Singh SS. Behind the times: Revisiting endometriosis and race. Am J Obstet Gynecol 2019;221:35.e1–35.e5.
11. Chatman DL. Endometriosis in the black woman. Am J Obstet Gynecol 1976;125:987-989.
12. Veenstra G, Patterson AC. Black-White health inequalities in Canada. J Immigr Minor Health 2016;18:51-57.
13. Etowa J, Wiens J, Bernard WT, Clow B. Determinants of Black women's health in rural and remote communities. Can J Nurs Res. Can J Nurs Res 2007;Sep;39:56-76.
14. Tam T. Addressing stigma: Towards a more inclusive health system. Accessed 13 June 2020. http://nccdh.ca/resources/entry/addressing-stigma-towards-a-more-inclusive-health-system.
15. Alberta Civil Liberties Research Centre. Forms of Racism. Accessed 13 June 2020. www.aclrc.com/forms-of-racism.

Anti-Black racism in medicine and in our glorious and free nation

Dr Dixon details some of the racism she has experienced as a Black physician in Canada.

Marjorie Dixon, MD, FRCSC, FACOG, REI

"Why did you go into medicine?" I find it curious that I still get asked this question, 15 years into practice. "Were your parents doctors?" Or "Was your father a businessman?" It's as if being a young, Black, female doctor and entrepreneur simply doesn't compute in the minds of the average non-Black individual. I went into medicine as a Black woman of Jamaican Canadian heritage, embracing the ideals of non-maleficence and filled with the requisite zeal and optimism expected of a future medical professional.

And let's be honest: I knew about the disparities that existed with access to care and in particular for women who looked like me. It was (and remains) a well-known fact in our community that Black women routinely encounter barriers to care. We have learned that in order to receive equal health care opportunities, we must advocate loudly for ourselves. The system simply doesn't work well for us. I had personally witnessed colleagues dismissing, not validating, minimizing, and exhibiting bias where Black women were concerned as they presented with a host of women's health and fertility issues. I did my best to "be the voice" and speak up, encouraging my compatriots to not be ignored, that their race-specific health issues mattered.

But when it came to me—looking like me and in my role as physician/practice owner—I learned to be quiet about the discrimination that I experienced throughout my training and career. I didn't want to make anyone feel uncomfortable. After all, what purpose would this serve? I didn't quip back when a colleague mused that I likely got into medical school "because I filled a minority quota." I guess it had nothing to do with my 4.0 GPA. Another colleague in recent years was chatting casually with me between surgical cases. She felt at ease with me and thus a bold statement ensued: "The only reason that you are in the position that you are right now is because you are Black, pretty, and well spoken". I had *no words*. And yes folks, this was right here in Canada.

I learned to be quiet about the discrimination that I experienced throughout my training and career. I didn't want to make anyone feel uncomfortable.

So now that we have identified anti-Black racism in medicine and our glorious and free nation, we must continue to name it, speak out about it, and begin to do the hard work involved in changing the systems that have enabled it. And these must be *big* changes. I recently read that there was only one Black medical graduate from the University of Toronto's medical faculty, class of 2020. We can, and must, change the system so that the people treating patients are actually representative of the very population whose lives depend on them. And thus, the specific health issues of our community will be addressed—finally and at long last. May this Black Lives Matter movement be the impetus to that very change. ■

Dr Dixon is an assistant professor at the University of Toronto. She is a subspecialist in gynecologic reproductive endocrinology and infertility and founder of Anova Fertility & Reproductive Health. Dr Dixon is a member of the Black Physicians Association of Ontario and past recipient of the YWCA Women of Distinction Award and RBC Canadian Women Entrepreneur of the Year Award.

COVID-19 and long-term care

Deaths from COVID-19 have disproportionately affected seniors living in long-term care. Only 1% of Canadians reside in long-term care, but these deaths represent 80% of all COVID deaths in Canada.[1] This statistic is a result of issues that have been worsening for years; it is unfortunate that it took a pandemic to unmask the shortcomings of our long-term care facilities.

Three factors have made care facilities particularly vulnerable: the staffing model, aging facilities, and a frail, dependent client population. The problems with staffing are structural. Inadequate pay and part-time hours require care aides to work in more than one facility, allowing infections to spread between care homes. Lack of sick pay and a shortage of staff may have also encouraged some individuals to continue working even after becoming ill. Additionally, low pay has led to high staff turnover and reliance on temp agencies, which reduces staff familiarity with infection control measures.

As for the facilities themselves, many have shared bedrooms and bathrooms as well as crowded public areas, which make physical distancing difficult and negatively affect the organization's ability to meet cleaning standards. Work conditions were made even more challenging by limited access to personal protective equipment (PPE), as well as staffing shortages resulting from sick or quarantined staff. To be clear, individual health care staff are not at fault. Many continue to work despite fears for their own safety and while grieving the loss of residents for whom they have cared.

Prior to the pandemic, the BC Ministry of Health had increased the number of hours at care facilities to 3.36 from 3.14 hours per day, per client. While welcome, this increase is likely still inadequate. In less than 3.5 hours per day, staff are expected to provide each client with medications, personal hygiene, feeding, mobility assistance, and other services. This client population is becoming increasingly dependent and complex. Many live with multiple comorbidities, with an average of 65% of the clients being significantly cognitively impaired and 30% completely dependent on staff for all activities of daily living.[2,3] Those with dementia may wander throughout the facility, unable to practise proper hygiene.

In less than 3.5 hours per day, staff are expected to provide each client with medications, personal hygiene, feeding, mobility assistance, and other services.

During the pandemic, steps have been taken to alleviate these problems. Staff are banned from working in multiple facilities and have been receiving full-time pay. Residents and workers are screened for illness, and PPE supply has increased. A rapid response SWAT team of infection control specialists was created to quickly respond to outbreaks. Care facilities have banned all visitors (excluding compassionate visits), leaving families struggling with their inability to see their loved ones, worrying about their health and well-being, and being unable to supplement care.

What can physicians do to help their clients in care? First, we can advocate for adequate funding to provide safer, more effective care. Consider supporting the national call to bring long-term care under the Canada Health Act, which would include targeted federal funding, national standards of care (including an increase to 4.1 hours of care per day), and place limits on private, for-profit care.[1,2,4]

Second, we can discuss goals of care with clients and/or their families. For clients who may not benefit from acute care transfer and hospital admission, it is important to communicate this well in advance. Inform them about the availability of care in facilities, including palliative care options.[5] Many frail, elderly patients at the end of life would prefer to receive care in their facility, which is their home, rather than be transferred to hospital for uncomfortable and ultimately futile care.

Finally, physicians can suggest ways for families and friends to stay in touch with their relatives in care. Options include phone or video calls, or old-fashioned letters and postcards. Families may also drop off familiar objects from home (with permission from the facility to ensure proper hygiene protocols are followed) or arrange visits that respect physical distancing, with the client inside and the family member outside a plate-glass window. ■

—Maria Chung, MDCM

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.*

References

1. Harris K. Demands grow for national, universal long-term care in response to pandemic. CBC News. Accessed 12 May 2020. www.cbc.ca/news/politics/long-term-care-homes-covid19-1.5556041.
2. BC Care Providers Association. Filling the gap: Determining appropriate staffing and care levels for quality in long term care, March 2019. Accessed 12 May 2020. https://bccare.ca/wp-content/uploads/2019/03/Filling-the-Gap-March-2019.pdf.
3. Office of the BC Seniors Advocate. Seniors at home and in long-term care. Accessed 12 May 2020. www.seniorsadvocatebc.ca/app/uploads/sites/4/2018/09/SeniorsatHomeandinLTC-rpt.pdf.
4. Armstrong P, Armstrong H, Choiniere J, et al. Canadian Centre for Policy Alternatives. Re-imagining long-term residential care in the COVID-19 crisis. Accessed 12 May 2020. www.policyalternatives.ca/sites/default/files/uploads/publications/National%20Office/2020/04/Reimagining%20residential%20care%20COVID%20crisis.pdf.
5. Government of BC. End-of-life care. Accessed 12 May 2020. www2.gov.bc.ca/gov/content/health/accessing-health-care/home-community-care/care-options-and-cost/end-of-life-care.

The physician's role in supporting people who use substances in a dual public health emergency

Coronavirus disease 2019 (COVID-19) is taking a devastating toll globally. As of May 2020, there have been 76 000 cases of COVID-19 confirmed in Canada, including 2446 cases and 146 deaths in British Columbia. The emergence of COVID-19 is concerning in BC, where an ongoing public health emergency was declared in April 2016 related to high rates of drug overdose deaths. In the past 4 years, more than 5000 illicit drug toxicity deaths have been reported in BC.[1] COVID-19 disproportionately affects people who use substances, including risk of transmission, severity of outcome of novel coronavirus (SARS-CoV-2) infection, and drug overdose risk.

How are people who use substances impacted by COVID-19?

People who use substances are often socioeconomically marginalized and precariously housed, and may, therefore, be unable to physically distance and maintain hand sanitation. Congregate living environments such as shelters, supportive housing, and single-room occupancy hotels can exacerbate SARS-CoV-2 transmission risk, as has been seen in Toronto where more than 300 cases were identified in shelters.[2] Furthermore, people who use substances are disproportionally affected by chronic conditions that increase susceptibility to severe COVID-19 outcomes, such as chronic pulmonary and coronary heart disease.[3]

Measures to address COVID-19 may place people who use substances at increased risk of drug overdose. Drug markets have become volatile due to border and travel restrictions and limited availability of precursor chemicals, creating a more unpredictable and toxic drug supply. Drug testing services have reduced capacity and are not equitably distributed across the province, thus making it difficult to determine implicated substances and issue meaningful community alerts.

Measures to address COVID-19 may place people who use substances at increased risk of drug overdose.

Overdose deaths increased 61% across BC in March 2020 compared to February 2020.[1] The cause of this resurgence in overdose fatalities and the extent to which COVID-19 is implicated has yet to be fully determined. However, reduced access to harm reduction services, including observed consumption sites, increased drug toxicity, and changes to individual drug use practices and settings are amplifying the already high risk of overdose in BC.

Supporting people who use substances

People who use substances are more likely to die from overdose than COVID-19. Thus, it is imperative to support safer substance use by encouraging use of observed consumption sites, which are designated essential clinical services, and using with others at a safe distance. In addition, individuals should be equipped for overdose response. Online take-home naloxone training is available at www.naloxonetraining.com, and take-home naloxone kits are available from over 1500 sites throughout BC, including 700 community pharmacies. Patients should be counseled to use additional doses of naloxone as required to reduce the need for additional resuscitative procedures. Harm reduction recommendations, like using small test doses of substances and accessing new pipes and needles, will help patients avoid both overdose and SARS-CoV-2 transmission.

Supporting individuals with opioid and other substance use disorders is a priority at this time. Lack of access to substances due to physical distancing and quarantine orders can put individuals at risk of withdrawal. Physicians must recognize clinic and emergency department visits and telemedicine consultations as opportunities to connect patients with counseling, mental health, and social housing options, and to provide safer alternatives to the illicit drug market. This includes offering a range of opioid agonist therapies (for buprenorphine/naloxone, observed or take-home inductions, standard and microdosing options), and safely providing patients with missed opioid agonist therapy doses or prescription refills and referrals to addictions specialists. Additionally, recent BC risk mitigation guidelines recommend that health care providers offer pharmaceutical replacements for illicit substances.[4]

COVID-19 is impacting the mental health and well-being of people who use substances as they navigate increased isolation compounded with ongoing trauma caused by the overdose crisis. Physicians have an important role in supporting people with substance use

This article is the opinion of the BC Centre for Disease Control and has not been peer reviewed by the BCMJ *Editorial Board.*

disorders as they strengthen their resilience and rebuild connections in the next phases of COVID-19. ■

—Jane Buxton, MD
Medical Lead for Harm Reduction, BCCDC

—Jessica Moe, MD
Assistant Professor, Department of Emergency Medicine, UBC

—Kristi Papamihali, MPH
Epidemiologist for Harm Reduction, BCCDC

—Margot Kuo, MPH
Epidemiologist for the Overdose Emergency Response Centre, Ministry of Mental Health and Addictions and BCCDC

References

1. British Columbia Coroners Service. Illicit drug toxicity deaths in BC: January 1, 2010 – March 31, 2020. Accessed 18 May 2020. www2.gov.bc.ca/assets/gov/birth-adoption-death-marriage-and-divorce/deaths/coroners-service/statistical/illicit-drug.pdf.
2. COVID-19: Status of cases in Toronto. Active COVID-19 outbreaks in shelters and respite sites. Accessed 18 May 2020. www.toronto.ca/home/covid-19/covid-19-latest-city-of-toronto-news/covid-19-status-of-cases-in-toronto.
3. Slaunwhite AK, Gan WQ, Xavier C, et al. Overdose and risk factors for severe acute respiratory syndrome. Drug Alcohol Depend 2020:108047.
4. British Columbia Centre on Substance Use. Risk mitigation in the context of dual public health emergencies: Interim clinical guidance. March 2020. Accessed 18 May 2020. www.bccsu.ca/wp-content/uploads/2020/04/Risk-Mitigation-in-the-Context-of-Dual-Public-Health-Emergencies-v1.5.pdf.

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.

2019 J.H. MacDermot writing award winner

Dr Moor-Smith

The 2019 J.H. MacDermot Prize for Excellence in Medical Journalism: Best article or essay was awarded to Dr Moor-Smith for his article, "The world's most poisonous mushroom, *Amanita phalloides,* is growing in BC" [*BCMJ* 2019;61:20-24].

Dr Moor-Smith wrote the article as a medical student (class of 2020) in the University of British Columbia Island Medical Program with coauthors Mr Raymond Li, a drug and poison information pharmacist at the BC Drug and Poison Information Centre, and Dr Omar Ahmad, a physician with Island Health, head of Critical Care and Emergency Medicine, and a clinical associate professor in the Department of Emergency Medicine at the University of British Columbia. Dr Moor-Smith graduated from UBC's Island Medical Program and is starting his residency in emergency medicine at UBC. His professional interests are broad but consistently include medical education and acute care medicine.

BC medical students are encouraged to submit full-length scientific articles and essays for publication consideration. Each year the *BCMJ* awards a prize of $1000 for the best article or essay written by a medical student in the province of BC. For more information about the award, visit www.bcmj.org/submit-article-award.

COVID-19 Research Fund recipients

The Vancouver Coastal Health Research Institute, along with the VGH and UBC Hospital Foundation, is providing funding for innovative research projects aimed at addressing the evolving health care needs and challenges related to the COVID-19 pandemic. The funding will help accelerate research efforts to proactively respond to the virus in BC through prevention, detection, treatment, and management. The COVID-19 Research Fund recipients are listed below. For more information on each recipient visit www.vchri.ca/stories/articles/2020/05/26/cutting-edge-covid-19-research-bc-boosted-research-funding.

- Dr Chris Carlsten, professor and head of the UBC Division of Respiratory Medicine and scientific director of the Legacy for Airway Health.
- Dr Daniel Kim, emergency physician at VGH and clinical assistant professor with the UBC Department of Emergency Medicine.
- Dr James Lan, transplant nephrologist at VGH and assistant professor with the UBC Department of Pathology and Laboratory Medicine.
- Dr Agnes Lee, director of the Hematology Research Program at VCHRI, medical director of the Thrombosis Program at VCH and professor with the UBC Department of Medicine.
- Dr Allison Mah, clinical assistant professor with the UBC Department of Medicine.
- Dr Renelle Myers, thoracic interventional respirologist at VGH and clinical assistant professor with the UBC Department of Medicine.

- Dr Jacqueline Saw, program director of the Interventional Cardiology Fellowship Program at VGH and clinical professor with the UBC Faculty of Medicine.
- Dr Andrew Shih, hematopathologist at VGH, medical director and regional medical leader of Transfusion Medicine at VCH and clinical assistant professor in the UBC Department of Pathology and Laboratory Medicine.
- Dr Isabella Tai, gastroenterologist at VGH and UBC Hospital and assistant professor with the UBC Department of Medicine.
- Dr Teresa Tsang, director of Echo Lab at VGH and UBC Hospital and professor with the UBC Department of Medicine.

FIT now available at labs in BC

Fecal immunochemical testing (FIT), part of the early screening process for colon cancer, has resumed in British Columbia after distribution of FIT kits was temporarily suspended in March 2020 due to the COVID-19 situation.

Eligible patients can pick up FIT kits from any public or private lab across the province with a referral from their health care provider. For patients who had picked up their FIT kit at the time of the testing suspension and have not completed it, now is the time to complete the test and return it to the lab.

Labs in BC have introduced special measures to keep patients and staff safe from COVID-19. It is recommended that patients check with their preferred labs for any COVID-19 related procedures or instructions prior to picking up their FIT kit.

More information about FIT kits is available at www.screeningbc.ca/covid-19.

Breast cancer screening resumes

The BC Cancer Breast Screening Program resumed screening mammography services in select screening centre sites in June. The introduction of screening mammography occurred in a measured, phased approach, with each site working with downstream diagnostic services to ensure there is capacity for follow-up

Childhood immunizations drop during COVID-19

ImmunizeBC is recommending that physicians who provide routine childhood vaccinations contact the parents of their young patients to bring their vaccines up to date. The BCCDC has developed a document for physicians (Continuity, Prioritization and Safe Delivery of Immunization Services During COVID-19 Response) which provides guidance on infant and childhood immunization programs, as well as those for adults. Priority immunizations are the infant series, including the doses beginning at 2 months of age, and the 12-month doses.

Physicians who do not usually provide immunization services directly but have pediatric or high-risk adult patients in their practice can encourage parents and others to continue with immunization services through their local health unit.

procedures, as well as sufficient personal protective equipment on hand before resuming services. It is anticipated that all sites, including three mobile screening units, will be screening again in July. This measured approach is to ensure that patient anxiety due to abnormal screening results is minimized, and to provide a safe environment for cancer screening to occur.

- Hand hygiene: Hand sanitizer and/or hand-washing stations are available at all screening sites to support good hand hygiene.
- Physical distancing: Breast screening centres have rearranged their waiting areas and allow more time between patients to support physical distancing. Unscheduled walk-in appointments will not be accommodated at this time.
- Enhanced cleaning: Mammography equipment and exam rooms are frequently cleaned and sanitized in accordance with provincial guidelines.
- Personal protective equipment: Screening staff wear personal protective equipment including surgical masks, appropriate eye protection, and gloves to protect themselves and others.
- COVID-19 screening: Patients are screened for COVID-19 symptoms at the entrance to the building or facility.

The Breast Screening Program has been contacting patients on existing wait lists and those whose previous appointments were canceled due to COVID-19 to book a new appointment.

Breast screening was temporarily suspended in March to support physical distancing measures and to assist in efforts to minimize COVID-19 transmission in the community. A temporary suspension in screening services allowed hospitals to redeploy and train essential health care workers in the likelihood of a potential surge in COVID-19 patients requiring acute care. For more information, visit www.screeningbc.ca/breast.

An AI solution to COVID-19

BC-based Patriot One Technologies and its subsidiary, Xtract Technologies, is collaborating with Vancouver General Hospital and the University of British Columbia, among others, to develop an artificial intelligence (AI) solution to help radiologists identify the increased risk of COVID-19. CT and X-ray scans obtained from around the world are being labeled from a group of 14 radiologists into three classes: background, normal lung, and ground glass opacity (GGO). The percentage of lung volume affected by GGO is a leading indicator for COVID-19, and the development of an automated approach to assess this can greatly assist medical practitioners to quickly diagnose early onset of the virus.

Using these labeled images, the Xtract AI team is training 3D residual networks (a style of AI algorithm) to automatically identify GGO volumes in the lungs and compare them with the total volume of the lungs. The ratio of affected lungs in new patients can then be calculated from analyzing CT and X-ray images of their lungs.

The project is being led by Dr Savvas Nicolaou and Dr William Parker and is supported by the UBC Community Health and Wellbeing Cloud Innovation Centre. Additional support for the project is being provided by the Vancouver Coastal Health Research Institute. The team will continue to improve the model as more data become available, with the aim of achieving greater than 90% diagnostic accuracy. The model has been released under an open source licence, to be shared with health care facilities worldwide to help early diagnosis of COVID-19 patients.

Chronic pain: Online patients support groups

Pain BC is providing its free pain support and wellness groups online in order to provide education and peer support to people during

Information for physicians reopening offices

Written by physicians, *The Doctor Is In: Recommendations for Expanding In-person Care in Community-based Physician Practices*, compiles official guidelines for opening community-based physician offices in a one-stop source of information. The document also provides insights and templates to help family physicians and specialists with community practices effectively implement changes resulting from the lifting of COVID-19 restrictions. It covers topics such as:

- What to think about before expanding in-person care.
- Preparing physical office space.
- Developing a safety plan.
- Building physician and staff wellness and resilience.
- Using checklists and a template to develop individualized plans.

The document will be updated as new information becomes available. It is accessible online, along with information on all COVID-19-related supports for physicians, at www.doctorsofbc.ca/working-change/advocating-physicians/coronavirus-covid-19-updates.

physical distancing due to COVID-19. The peer-led groups provide an opportunity for people living with persistent pain to interact and build a community of support while learning about pain, pain management, and coping strategies.

Patients can register for a group in their geographic region. There is also a men's-only group, which is open to men from any area in BC. All groups meet online on the second and fourth Tuesday of the month; those without Internet access can dial in by phone. For more information, visit www.painbca/supportgroups, or call 1 844 880-PAIN (7246).

Back-to-practice resources

The Doctors Technology Office (DTO) has prepared a guide for physicians preparing to reopen clinics and offices, Getting Back to Practice, and has posted a recording of a recent online seminar. The resources provide suggestions on how to rebuild patient volumes for clinics using virtual care, operating in a hybrid virtual/in-person model, and best practices for communicating with patients. For support or information about webinars or resources, contact the DTO at 604 638-5841, dtoinfo@doctorsofbc.ca, or visit www.doctorsofbc.ca/resource-centre/physicians/doctors-technology-office-dto.

Guide for youth living with schizophrenia

The Schizophrenia Society of Canada has developed a guide for both the young people who have been diagnosed with schizophrenia and the health care professionals, families, and others who support them. The guide is a resource with up-to-date and accessible information about living with and beyond schizophrenia, and setting the course toward recovery, offering readers information on the types of health services and support that are available.

The guide, *Hope and Recovery, Your Guide to Living with and Beyond Schizophrenia*, is based on the Canadian Schizophrenia Treatment Guidelines developed in 2017 by a multidisciplinary team of experts, patients, and family members from across Canada. It is available online at https://schizophrenia.ca/wp-content/uploads/2020/05/Hope-and-Recovery-Guide.pdf.

Code green: Building financial independence

Ten investing lessons learned (the hard way).

Lorne Porayko, MD, FRCPC, CIM, David Wingnean, MD, CCFP, MBA

"Only a fool learns from his own mistakes. The wise man learns from the mistakes of others." – Otto von Bismarck

It's late 1999. Technology investors are despondent as they parse their ravaged portfolios. The phone rings. It's my father, a respected neurosurgeon, who has been eagerly anticipating a comfortable retirement. But something has happened. He tells me that he has been wiped out. He wants to know why. After all, he asked his advisor to position him very conservatively.

The average investor's holding period of a stock has dropped from 8 years in the 1960s to only 8 months in 2016!

We found out—far too late—that 90% of his portfolio had been invested by his stockbroker in the infamous company Nortel. Ouch. The result has been very upsetting: despite working hard all his life, my dad has never traveled off this continent and is even reluctant to launder his clothes! This is because he is terrified he will run out of money. This disaster taught my family the first of many lessons.

Over the past 2 decades, David and I have been motivated students of the capital markets. We have been struck by how similar the practices of medicine and investing are, particularly in terms of the burgeoning importance of decision science. We have certainly made our share of mistakes and unforced errors.

We would like to share 10 lessons we have learned (mostly the hard way) in the hope that the reader might not stumble where we have. Don't expect too much, though! It's our consistent experience that most of us have to make our own mistakes: geniuses are truly rare.

1. No one cares about your wealth as much as you do. Like a patient under general anesthesia, your financial position needs careful monitoring.
2. Think about the downside risk first. In other words, before you go down the path of an intervention or investment, try to imagine what could go terribly wrong and how that might play out. Do you have an edge? Is the risk worth the benefit?
3. If it sounds too good to be true, it probably is. In the medical world, single-centre RCTs have often yielded impressive results that entice early adopters, only to be overturned by subsequent research. Financial opportunities are no different: the devil is in the fine print. Delve deep.
4. Is there a margin of safety? Remember the idea of a therapeutic window in pharmacology? The larger the therapeutic window, the safer the drug. The margin of safety in finance is analogous: it's a financial backstop of sorts.
5. The tougher things get, the calmer you should be. The best investment opportunities occur during market panic. Similarly, the best clinicians are kind and empathetic, yet cool as a cucumber under pressure.
6. The tougher things get, the more patient you should be. William Osler famously said, "What is patience but an equanimity which enables you to rise superior to the trials of life."[1] In markets, having a long-term focus is an enormous competitive advantage. The average investor's holding period of a stock has dropped from 8 years in the 1960s to only 8 months in 2016!
7. Simple is better than complicated. If you don't understand it well enough to explain it to an 8-year-old, don't do it.
8. "You can't make a good deal with a bad person." A quote from Warren Buffett that applies to all avenues in life: integrity matters. A lot.
9. Recognize your limitations.
10. It's actually true: money isn't everything! Your most precious assets are your family, your health, and your time. Guard them, invest in them, and cherish them.

We think these lessons have made us much better doctors and investors. ■

Dr Porayko is a consultant anesthesiologist and critical care physician practising in Victoria. Dr Wingnean is a family physician practising in Edmonton, Alberta. He is also a co-founder of The Osler Fund and was a senior biotechnology analyst with TD Securities.

This article has been peer reviewed.

Competing interests

Drs Porayko and Wingnean are founders of 3P Financial, a pension advisory company for professionals. They are also registered dealing agents for McElvaine Investment Management Ltd., a portfolio manager.

Reference

1. Silverman ME, Murray TJ, Bryan CS, editors. The quotable Osler. American College of Physicians, Philadelphia; 2003.

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 drop-in peer support sessions, established 7 April, are now permanently scheduled for Wednesdays at 12 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. E-mail peersupport@physicianhealth.com for the link to join by phone or video.

FOUNDATION COURSE IN OCCUPATIONAL MEDICINE

Online, 7 Sep 2020–12 Jun 2021

The Foundation Course in Occupational Medicine, developed by the University of Alberta's Division of Preventive Medicine, is a distance learning course designed to provide knowledge and skills in areas of occupational medicine encountered in family medicine and other community-based practice. Visit our website to register your interest for 2020 - 21: www.ualberta.ca/department-of-medicine/divisions/preventive-medicine/foundation-course-in-occupational-medicine, contact the course coordinator at omcourse@ualberta.ca, or call 780 492-4006 for more information.

GP IN ONCOLOGY TRAINING

Vancouver, 14–25 Sep and 8–19 Feb 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 that 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 FOR PHYSICIANS AND THEIR PARTNERS

Tofino, 25–28 Sep (Fri–Mon)

Physician heal thyself. Join Dr Mark Sherman and your community of colleagues for a transformative workshop, 25–28 Sep, at Long Beach Lodge Resort, Tofino. The workshops focus on the theory and practice of mindfulness and meditation—reviewing definitions, clinical evidence, and neuroscience, and introducing key practices of self-compassion, breath work, and sitting meditation to nurture resilience and healing. This annual meditation retreat is an opportunity to delve deeply into meditation practice in order to recharge, heal, and build a practice for life. Each workshop is accredited for 16 Mainpro+ group learning credits and has a 30-person limit, so please register today! Contact us at hello@livingthismoment.ca, or check out www.livingthismoment.ca/event for more information.

Classifieds

Advertisements are limited to 700 characters. Rates: Doctors of BC members: $50 + GST per month for each insertion of up to 350 characters. $75 + GST for insertions of 351 to 700 characters. Nonmembers: $60 + GST per month for each insertion of up to 350 characters. $90 + GST for insertions of 351 to 700 characters. **Deadlines:** Ads must be submitted or canceled by the first of the month preceding the month of publication, e.g., by 1 November for December publication. Visit www.bcmj.org/classified-advertising for more information. **Ordering:** Place your classified ad online at www.bcmj.org/classified-advertising. Payment is required at the time that you place the ad.

EMPLOYMENT

BC—PSYCHIATRIST/RESPIROLOGIST WITH INTEREST IN SLEEP MED

Tranq Sleep Care is a patient-centred clinic based in Kelowna that operates five MSP-approved level-1 sleep labs across BC. We are recruiting a psychiatrist or respirologist who has interests in sleep medicine. No prior sleep medicine training is necessary as training can be provided. Interested physician would work as an independent contractor with a reasonable fee-for-service split. We primarily provide telehealth consultation from Kelowna with appropriate set up at each remote location but consultation can also be conducted from anywhere in BC. Education as well as clinical trial research opportunities are available. If you are interested, please contact wayne.lai@tranqsleep.com or 250 869-6181.

BURNABY/METROTOWN—SPECIALISTS TO JOIN OUR FAST-GROWING TEAM

Join our eight GPs and two Internists at Imperial Medical Clinic. Flexible F/T or P/T schedules to suit your needs, with in-person or virtual consults. Patient base of over 10 000 and growing. Young, progressive, and collegial team. Brand-new clinic. Great place to start practice without the cost of opening your own office. Rheu/GI/Neur/Resp/Neph. Call Pav at 778 822-1981.

CANADA—PHYSICIANS LOOKING FOR A NEW ROLE

Physicians for You—leaders in physician recruitment in Canada. Our strong reputation is built on exceptional service and results. Locum, contract, long-term, city, rural, we have it all. Whether you're a physician looking for work across Canada, or a medical facility requiring physicians, we can help. Your needs are our focus. Save time and effort; let us do all the legwork. Let our 10 years of experience in Canada, extensive knowledge of the processes for licensure, and our personalized, friendly service work for you. Check out our current job postings online and contact us today. Website: www.physiciansforyou.com. Email: info@physiciansforyou.com. Office: 1 778 475-7995.

EDMONTON, AB—FAMILY PRACTICE PHYSICIAN REQUIRED

Callingwood Crossing Medical Clinic is vibrant and growing! West Edmonton location. Newly renovated dynamic office operating for over 28 years with an extremely loyal patient base. We use Med Access EMR, have an attached pharmacy, and are one of the largest clinic members of Edmonton West Primary Care Network. We have immediate openings for a physician with enough patient volume where your panel could be filled in 3 to 6 months. You would work as an independent contractor with a fee-for-service split. We also offer an attractive signing bonus and look forward to hearing from you soon! Please email Amy Markovitz, Amy.ccmc@hotmail.com, or Nanci Harper, nanci_anne@hotmail.com.

NANAIMO—GP

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.

NORTH VAN—FP LOCUM

Physician required for the busiest clinic/family practice on the North Shore! Our MOAs are known to be the best, helping your day run smoothly. Lucrative 6-hour shifts and no headaches! For more information, or to book shifts online, please contact Kim Graffi at kimgraffi@hotmail.com or by phone at 604 987-0918.

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.

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 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.

SURREY/DELTA/ABBOTSFORD—GPS/SPECIALISTS

Considering a change of practice style or location? Or selling your practice? Group of seven locations has opportunities for family, walk-in, or specialists.

Full-time, part-time, or locum doctors guaranteed to be busy. We provide administrative support. Paul Foster, 604 572-4558 or pfoster@denninghealth.ca.

VANCOUVER ISLAND—PSYCHIATRISTS
Island Health welcomes psychiatrists to apply for full-time or part-time positions that span the continuum of care from child and youth, to adult, to addictions, to geriatric. Whether you prefer oceanfront living or sweeping mountain vistas, Vancouver Island provides an affordable lifestyle in family friendly communities, exceptional outdoor year-round recreation, and a healthy work-life balance. Sponsored site visits/interviews available as well as relocation assistance to successful candidates. Recruitment incentives may be available as per the MoH Rural Recruitment Contingency Fund. Contact us today at physicians@viha.ca or view opportunities at medicalstaff.islandhealth.ca/careers.

VICTORIA—FULL- OR PART-TIME FP
Option to bring your own practice, or long-term locum. Our office is bright, friendly, and well-run with low shared expenses. We value work-life balance. Contact Narissa Arter, office manager, at 250 478-2133, or e-mail naarter@gmail.com.

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.

PRACTICES AVAILABLE

VERNON—GREAT PRACTICE OPPORTUNITY
Well-established practice with excellent reputation available in the beautiful Okanagan. Located in downtown Vernon. Wonderful patient base and hard-working staff. Excellent remuneration for one to two practitioners. Privileges at Vernon Jubilee Hospital available/optional. Golf, wineries, lakes, and skiing at your doorstep. Contact Fred Dyck at freddyck91@icloud.com.

MEDICAL OFFICE SPACE

VANCOUVER (BROADWAY CORRIDOR)—OFFICE FOR SALE
Broadway Medical (943 W. Broadway). Spectacular North Shore view, turnkey, 650 sq. ft. seventh-floor office with three exam rooms and one office (one exam room and office with mountain view), waiting area, and reception area with two built-in desks. Lots of storage space. Office designed by Richard Salter. Ideal for two physicians: pediatrician, family physician, or specialist. Contact gaildodekwenner@gmail.com.

VANCOUVER (BROADWAY CORRIDOR)—OFFICE FOR RENT
Office space available for rent in the prestigious Fairmont Medical Building (750 West Broadway) not far from VGH. No extra overhead expenses; one

of three offices most suitable for psychiatrist or psychologist. Contact: alevin@drlevin.ca.

MISCELLANEOUS

CANADA-WIDE—MED TRANSCRIPTION

Medical transcription specialists since 2002, Canada wide. Excellent quality and turn-around. All specialties, family practice, and IME reports. Telephone or digital recorder. Fully confidential, PIPEDA compliant. Dictation tips at www.2ascribe.com/tips. Contact us at www.2ascribe.com, info@2ascribe.com, or toll free at 1 866 503-4003.

FREE MEDICAL RECORD STORAGE

Retiring, moving, or closing your family practice? RSRS is Canada's #1 and only physician-managed paper and EMR medical records storage company. Since 1997. No hidden costs. Call for your free practice closure package: everything you need to plan your practice closure. Phone 1 866 348-8308 (ext. 2), email info@rsrs.com, or visit www.RSRS.com.

PATIENT RECORD STORAGE—FREE

Retiring, moving, or closing your family or general practice, physician's estate? DOCUdavit Medical Solutions provides free storage for your active paper or electronic patient records with no hidden costs, including a patient mailing and doctor's web page. Contact Sid Soil at DOCUdavit Solutions today at 1 888 781-9083, ext. 105, or email ssoil@docudavit.com. We also provide great rates for closing specialists.

VANCOUVER TAX & ACCOUNTING SERVICES

Rod McNeil, CPA, CGA: Tax, accounting, and business solutions for medical and health professionals (corporate and personal). Specializing in health professionals for the past 11 years, and the tax and financial issues facing them at various career and professional stages. The tax area is complex, and practitioners are often not aware of solutions available to them and which avenues to take. My goal is to help you navigate and keep more of what you earn by minimizing overall tax burdens where possible, while at the same time providing you with personalized service.
Website: www.rwmcga.com, email: rodney@rwmcga.com, phone: 778 552-0229.

Guidelines for authors (short form)

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.

Authorship, copyright, disclosure, and consent form

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.

2. Copyright. All authors must sign and return an "Assignment of copyright" prior to publication. Published manuscripts become the property of the BC Medical Association and may not be published elsewhere without permission.

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.

4. Consent. If the article is a case report or if an individual patient is described, written consent from the patient (or his or her legal guardian or substitute decision maker) is required.

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.
3. O'Reilly RA. Vitamin K antagonists. In: Colman RW, Hirsh J, Marder VJ, et al. (eds). Hemostasis and Thrombosis. Philadelphia, PA: JB Lippincott Co; 2005:1367-1372.
4. Health Canada. Canadian STD Guidelines, 2007. www.hc-sc.gc.ca/hpb/lcdc/publicat/std98/index.html (accessed 15 July 2018).

(NB: The access date is the date the author consulted the source.)

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.

Permissions

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.
- Number tables consecutively in the order of their first citation in the text and supply a brief title for each.
- Place explanatory matter in footnotes, not in the heading.
- Explain all nonstandard abbreviations in footnotes.
- Ensure each table is cited in the text.

Figures (illustrations). Please adhere to the following guidelines:

- Send scans of 300 dpi or higher.
- Number figures consecutively in the order of their first citation in the text and supply a brief title for each.
- 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.

Quarantine, tuberculosis, and the curtailment of freedom

My experience with curtailment of freedom as a quarantined tuberculosis patient in the 1950s is interesting to reflect upon at this time of COVID-19.

Abe Zacharias, MD, FRCPC

A newly minted physician, Dr Zacharias returns to visit his father at the Ninette Sanatorium in southwestern Manitoba.

The summer of 1956 began like any other. I had graduated from high school and was eager to face the world, focused on the promised land of a career in medicine. I began my summer vacation as an orderly at the King George Hospital in Winnipeg. The first week was spent getting acquainted with the hospital routine. I looked forward to going home to Winkler on the weekend.

Just as I arrived home, our family doctor called, wanting to see me. His first remark, "You have been burning the candle at both ends," was a prelude to the reason for my visit home. A pre-employment chest X-ray had shown a shadow the size of a dime in the apex of my right lung. He suggested that I see a Dr Scott at the Central Tuberculosis Clinic (CTC) in Winnipeg on the following Monday morning, where my immediate future would be decided.

Disrupted plans

I arrived at the CTC on 15 July 1956 and had my first glimpse of the small X-ray shadow that was about to disrupt my previous plans. After brief deliberation, I was directed to spend 6 months in a TB sanatorium, under quarantine. I felt both surprise and disbelief. "You must be kidding! I feel perfectly well, and besides, I'm starting college in 2 months. You can't do this to me!" I quickly learned that he could, and he would. By that evening, I had taken up residence at my new hospital address, the CTC in Winnipeg for 3 weeks, before moving on to the Ninette Sanatorium in southwestern Manitoba.

My roommates proved to be a pleasant group, but they were not very encouraging. The standard question around the place was, "How long did the doc say that you would be here?" My 6-month sentence drew laughter. One patient said, "Six months, eh. Don't bet on it. You'll be here for 2 years at least. I'm in for the third time. My last session lasted 5 years!" The next 3 weeks were the longest of my life. Imagine spending 23 hours a day in bed, even though you feel perfectly well. To make matters worse, the nurses' tennis court was directly across the street! Never had I wanted to play tennis as much as I did during those 3 weeks spent in what I called "Cell 41."

Families divided

The sanatorium at Ninette, the *San* for short, is located on a beautiful hillside overlooking Pelican Lake, 200 km west of Winnipeg. I joined my father there, as he had already been there 6 years. Father and son, together again, but in isolation! He had been forced, by contracting TB himself, to leave our family farm in 1950, at the age of 33, leaving behind a wife and five children, ranging in age from 1 to 12. I was the oldest. During those 6 years in hospital, he had undergone extensive "lung collapse therapy." This included repeated pneumothoraces, plombage (Ping-Pong balls), wax packs, and at least three separate thoracoplasties, which involved the removal of multiple ribs. The end result was a loss of two-thirds of his lung capacity and severe shortness of breath at rest. All of these procedures were performed under local anesthetic.

My father's departure from the farm had a major impact on my family. How was my mother to provide an income sufficient to raise five children? There was no social security income. The only answer was to continue farming. My younger brother and I worked on the farm until high school graduation, with the help of an uncle. This meant dawn-till-dusk days of physical work and included driving the tractor for planting, hoeing, and harvesting. We always needed time off school in spring and fall.

Tragedy again struck with the death of my mother. She died from an aggressive form of ovarian cancer when she was only 46. This was during my second year at the San, and my dad's seventh year there. We were both given compassionate leave to return home for a brief time, but with strict precautions. Following this, we returned to Ninette and stayed there until the health authorities would declare us "safe to resume public life." My cure, via triple therapy, would eventually take 2 years. My father, who was gaunt and quite underweight in 1950, missed out on triple therapy. He was hospitalized for 11 years in total. Sadly, he eventually died from TB and its complications. My dad had two brothers who developed TB, and they were both quarantined, far from home. Just like ours was, their families were greatly disrupted by their illnesses.

Dr Zacharias is a retired radiologist living in Victoria. He is married to the "lady who was dressed in a colorful, striped Hudson Bay coat" whom he first met at the Ninette Sanatorium.

This article has been peer reviewed.

Chasing the cure

I became acquainted with the phrase, "to chase the cure." This described the adjustment we all had to make. A brief idea of a day in the life of a TB crock: breakfast was served at 7:30. Dessert consisted of a handful of pills, para-aminosalicylic acid and isoniazid, nine at each meal. As a rookie I had some difficulty swallowing them one at a time, but after several weeks this became a one-shot affair. Streptomycin was given by injection twice per week, in the strep room. We queued up, and when we reached the front of the long line, we quickly bared our bottoms. This was before the days of disposable needles. The most important point was to learn to relax the gluteus maximus! Much of the day was spent in bed, and ingestion of the pills was strictly monitored.

After my first 3-week interval of triple therapy at Ninette, various tests and X-rays were taken in anticipation of conference day, or "judgment day." The San medical staff presided. Upon entering the conference room, I was met by a long row of X-rays, the length depending on whether you were a veteran or a freshman. I was seated in a chair in the centre of the room, surrounded by the medical staff. My history was reviewed and discussed, and my X-rays were examined. While the men in the long white coats conversed in a language foreign to me, I'm sure my pulse rate hit 150 and I noticed that my hands were cold and clammy. Finally, my judgment was delivered. "Eighteen months if all goes well, and surgery may have to be considered."

Increasing freedoms

As soon as my length of stay was determined, the capable rehabilitation division of the San moved in. I quickly realized that I might go mad if I had nothing to do. The University of Manitoba initially turned me down in my application to study first-year arts courses by correspondence, but they eventually let me in. I was their first student-patient studying by correspondence. My classes included English (studying Milton, Donne, and Chaucer), the history of Tudor England, economics, psychology, and sociology. There are many challenges when you are trying to learn without a teacher, this being long before the Internet. Through hard work and a fair measure of luck, I was able to get the Winnipeg professors to give me the nod, and I completed my first year of undergraduate study at the San.

After several months in the infirmary, one was gradually allowed certain freedoms and life became less dull. Male and female patients were housed in separate pavilions, but this did not stop secret communication between the sexes. I was particularly attracted to a lovely young lady who was dressed in a colorful, striped Hudson Bay coat. Christmas was celebrated with a large banquet held on Christmas Eve. The healthier crocks, now noninfectious, formed a choir, and in this way brought favorite carols to the less fortunate brothers and sisters who were confined to bed. The highlight of the festivities was a concert held a short time after Christmas. The staff and patients worked together to produce skits and musical numbers. The orchestra consisted of guitars and drums played by Indigenous patients, who were primarily Métis and Inuit. The program included their favorite western songs. Of interest was the absence of musical stands. The musicians preferred to have their sheet music spread out on the floor. I had the opportunity to direct a mixed Inuit choir, composed of 17 singers, who performed carols in Inuktut. A few dances added excitement to the program.

My roommates were pleasant but unencouraging. "You'll be here for 2 years at least," I was told.

My roommates (up to 10 per room, coughing at night) and friends were a diverse group of World War II veterans, Indigenous people, and patients who had survived the brutal Hong Kong prison camps. The months progressed. Old friends were discharged and new ones arrived. Many of the chronic patients died from their disease. I became aware of the many social problems that came out of San life. Long periods of spousal separation often led to divorce, for example. An occasional friend, son, daughter, mom, or dad would not return from the OR. Moms and dads were helpless and suffered the anguish of their isolation from their loved ones back at home. The younger patients faced a future of uncertainty, while their friends were pursuing their dreams and goals in life.

Free at last

Twenty-three months after my arrival, the news of my discharge came, yet it caused little excitement. The San had become home to me, and friends outside its walls were almost strangers. I had some-deep seated fears: for my future health, of facing the outside world again, and that my friends would no longer understand or accept me.

Finally, on emancipation day, and carrying a tennis ball can full of pills (to be taken after discharge), sporting a clear chest X-ray, I departed from Ninette. I was grateful that the University of Manitoba awarded me an annual bursary of $700, which was contingent on my being accepted into, and surviving, medical school. After this eventful medical detour, my goal—to enter the promised land of medicine—would indeed come true.

Public health principles stand the test of time

During this COVID-19 pandemic, it is interesting to reflect that the key to controlling tuberculosis was free health care for those affected, contact tracing, and enforced isolation, all of which reduced the death rate in North America by 80% before the advent of streptomycin. Application of public health principles is just as critical today. Canada and the United States have used strikingly different approaches to COVID-19 containment and management. In some US states, individual rights and freedoms are trumping any enforcement for the public good, despite the soaring death rate resulting from those freedoms. There is a high price to be paid for allowing individual freedom to have priority over protecting the public. In Canada, the acceptance of isolation and social distancing is much greater, for the sake of protecting everyone. ■

Acknowledgments

Dr Zacharias thanks Drs Murray Woods and Giles Stevenson for their assistance with the preparation of this article.

Are you getting the right advice?

Are you confident the financial advice you're receiving is truly physician-focused?

Over the last few months, we've helped thousands of physicians and their families across Canada manage the impact of the pandemic on their finances and start planning for the "new normal."

Join more than 39,000* Canadian physicians and discover the difference it makes to get the right advice.

Visit md.ca/rightadvice

MD Financial Management

*As of May 13, 2020.