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Brief Reports

Considerations for continuing professional development in the post-pandemic era: national experiences from psychiatry

Réflexions sur le développement professionnel continu dans l'ère post-pandémique : Expériences nationales en psychiatrie

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Abstract

Introduction: COVID-19 led to rapid innovations in continuing professional development (CPD). We surveyed Canadian Psychiatry CPD directors to understand the pandemic's impact and to identify effective practices.

Methods: In fall 2021, an online 31-item survey was created iteratively based on discussions among CPD educators and disseminated to CPD program leaders at 17 Canadian medical schools through the Council of Psychiatry Continuing Education (COPCE). We collected information on each CPD program, adaptations associated with pandemic restrictions, and intentions regarding future delivery of CPD.

Results: Nine responses were received. COVID-19 led to a shift to virtual CPD delivery, with creative and transformative strategies to maintain engagement and online security. Virtual CPD was associated with an increase in attendance and decrease in costs. Many respondents anticipated that virtual or hybrid modalities would continue post-COVID-19.

Conclusion: The pandemic led to a pivot to virtual delivery of Psychiatry CPD programming. Hybrid delivery will likely be the prevalent mode of future CPD programming, requiring more technological, financial, and human resources to tackle potential challenges. In times of rapid adaptation, a national network of CPD directors can provide an important venue for knowledge exchange about innovations and effective practices and build capacity of expertise.

Résumé

Introduction : La COVID-19 a entraîné des innovations rapides dans le domaine du développement professionnel continu (DPC). Nous avons mené des entrevues avec les directeurs du DPC en psychiatrie au Canada afin de comprendre l'impact de la pandémie et d'identifier les pratiques efficaces.

Méthodes : À l'automne 2021, un questionnaire de 31 questions accessible en ligne a été créé selon un mode itératif basé sur des discussions entre les éducateurs du DPC et diffusée aux responsables des programmes de DPC de 17 facultés de médecine canadiennes par l'intermédiaire du Conseil de formation continue en psychiatrie (CFCP). Nous avons recueilli des données sur chaque programme de DPC, sur les modifications liées aux restrictions pandémiques et sur les intentions concernant la prestation future d'activités de DPC.

Résultats : Nous avons reçu au total neuf réponses. La COVID-19 a mené à une transition vers la prestation de DPC en mode virtuel, avec des stratégies créatives et novatrices pour maintenir l'engagement et la sécurité en ligne. Le DPC virtuel a été associé à une augmentation de la participation et à une diminution des coûts. De nombreux répondants prévoient que les modalités virtuelles ou hybrides se poursuivront après la COVID-19.

Conclusion : La pandémie a entraîné une transition vers la prestation virtuelle de programmes de DPC en psychiatrie. La prestation hybride sera probablement le mode prédominant des futurs programmes de DPC, ce qui nécessitera davantage de ressources technologiques, financières et humaines pour relever les défis potentiels. En période d'adaptation rapide, un réseau national de directeurs de DPC peut constituer un lieu important d'échange de connaissances sur les innovations et les pratiques efficaces et renforcer la capacité d'expertise.

Introduction

In 2020, the COVID-19 pandemic had a transformative impact on medical education, including continuing professional development (CPD). Academic health centres (AHCs) needed to rapidly innovate to meet the educational needs of both trainees and practicing physicians.[1] Demand for educational content related to COVID-19, combined with physical distancing limits, had a profound impact on CPD.[2]

Beyond intra-institution collaboration, there was a need for communicating experiences in effective CPD practices between AHCs.[3] For psychiatric CPD in Canada, the pre-existing Council of Psychiatric Continuing Education (COPCE) provided a ready means for collaboration. COVID-19's impact led to an increased interest in sharing of expertise on CPD programming in face of the pandemic's challenges. We sought to understand the changes in delivery and programming and to identify recommendations for CPD in the post-pandemic era.

Methods

COPCE members (LH, RR, HM, HMc) organized an environmental scan informed by Kern's six-step approach.[4] We created an online 31-item survey using Opinio (Appendix A), a survey creation software hosted on Dalhousie University servers. We developed questions iteratively over several meetings through discussions, drawing upon professional experience of multiple authors as CPD educators, then edited for relevance, clarity, thematic flow, and survey length. We distributed the survey to COPCE members at the May 2021 biannual meeting. Note that three co-authors (LH, RR, HMc) completed the survey as CPD leads for their respective schools.

We calculated descriptive statistics for Likert-scale question responses and used thematic analysis for the free-text responses. We categorized our findings based on interactions between technology, learners, and teachers, aligning with the Passive-Interactive-Creative-Replace-Amplify-Transform (PICRAT) model.[5]

In the fall of 2021, we emailed all 17 Canadian medical schools through their COPCE representatives, CPD Directors, or Psychiatry Department Heads to complete the survey. We sent three email reminders. This project was reviewed and determined by the University of Toronto research ethics board to be a quality improvement study and thus exempt from ethics review.

Results

Summary of our findings

Nine individuals responded (52.9% response rate) with a wide geographical distribution. Seven respondents were CPD Directors, one was a CPD Coordinator, and one a former Grand Rounds Coordinator. Eight were psychiatrists, one was a PhD. Responsibilities comprised program planning, continuing education for faculty, mentoring, and chairing CPD committees.

Six of nine schools reported having paused CPD offerings for one to three months at the beginning of the pandemic. Six respondents reported they had used grand rounds to present clinical information about COVID-19, including sessions pertaining to physician wellness.

PIC: learners' interaction with technology

As a result of a universal shift to virtual delivery during COVID-19, two schools reported challenges in participant engagement due to a change from Interactive to Passive engagement (Figure 1A), where one respondent commented, "Our small department used to have rich discussion when in person. Now this has reduced." Nonetheless, the Interactive domain was observed in most of the respondents (seven of nine), who felt that audience participation and engagement was effectively maintained (Figure 1A). Although five of nine departments did not provide training in online technology to CPD, presenters were Creative in using online emojis, reaction icons, and polls. Creativity was also seen in the attempts to balance engagement with new security challenges with virtual delivery (e.g., speaker harassment by unexpected attendees). Six of nine institutions reported using prior registrations and screening of attendees, and eight utilized active monitoring of chats. Muting the audience and disabling cameras were strategies for managing larger audiences, while inviting attendees to turn on their cameras in smaller-group sessions, or when asking questions in larger virtual venues was seen as ways to promote engagement.

RAT: technology's impact on teachers

Replacement was seen universally, with Zoom being the most used online platform in place of in-person sessions; while only four departments were using Zoom in some capacity pre-pandemic, eight of nine were using it by fall 2021. Three of nine reported that administrative and technological changes in under- and post-graduate medical education (UGME/PGME), such as conversion to online activities, had also influenced CPD delivery. Amplification

was also observed, with eight respondents perceiving an increase in attendance at virtual CPD events (Figure 1B). Seven reported no new or re-allocated funds received for CPD initiatives; however, eight respondents stated the cost of CPD delivery during COVID-19 had decreased.

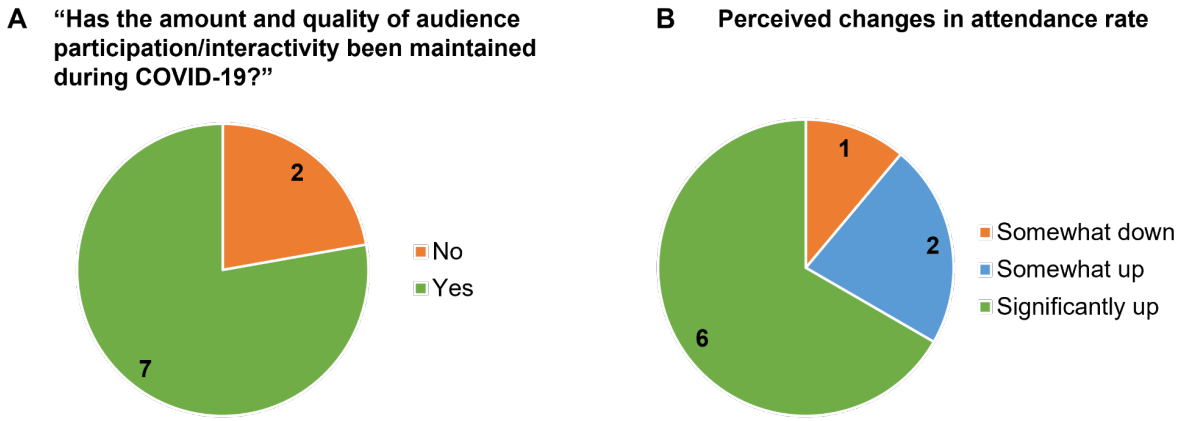

Figure 1. Responses to select questions. Number labels directly on the chart indicate the number of responses (out of a total of nine responses). ***A*** *Responses to "Has the amount and quality of audience participation/interactivity been maintained during COVID-19?";* ***B*** *Responses to perceived changes in attendance rate.*

Transformation through technology was identified by many as the next step in post-pandemic CPD. Five responses expressed interests in hybrid models; one respondent expressed a desire to "return to in-person CPD when possible, but hopefully in a hybrid manner where both in person and online can be done simultaneously." Another stated their department will "hopefully transition to hybrid events" and "provide more asynchronous content, since the need is rising among our audience."

Discussion

Our study revealed a shift in the mode of delivery of CPD programs, as was reported in most of the world of medical education. Based on the PICRAT model, as recommended by the AMEE Guide No. 161, considerations must be made when using online learning in place of face-to-face education.[6] Most of the observed changes relate not only to a simple Passive Replacement of conventional in-person sessions, but also at the Interactive, Creative, Amplification, and Transformation levels. We identified that CPD in the post-pandemic era should strive for a balance between an improved virtual attendance with online security and rich communication supported by in-person programming. We summarize our practical recommendations to CPD leaders post-pandemic in Table 1.

Table 1. The PICRAT matrix of our recommendations for CPD post-pandemic.

The PICRAT model considers how students interact with technology and how educators use technology to teach.[5] Using this model, educators could be more deliberate about the purpose of online learning components and how virtual and hybrid CPD can be optimized to achieve a specific purpose.

	Replace	Amplify	Transform
Creative		**Recommendation 2** Planning and implementation of conferences may require more resources, such as technological, financial, and human resources, in the future as hybrid conferences become the gold standard for CPD offerings.	**Recommendation 3** As the landscape of CPD offering changes, a national community of practice of CPD leaders may best enable knowledge exchange about innovations and effective practices, and build capacity of expertise.
Interactive	**Recommendation 1** Post-pandemic, CPD leaders should consider virtual options to meet the changing professional development needs of healthcare professionals, while balancing the advantages of increased attendance and maintaining the rich interactions afforded by in-person programming.		
Passive			

Virtual options will allow for greater participation with lower cost

Our findings of perceived increase in attendance and reduced costs are similar to those at other centres, where there was increased audience participation in regularly scheduled activities, such as grand rounds and conferences.[7-9] The increased accessibility of virtual delivery offers the opportunity for a larger audience both

within and beyond the institution. However, having more participants present may not mean they are fully engaged. While seven respondents reported positive views on engagement, it is notable that two expressed concerns. CPD planners should be mindful of using strategies to maintain the rich interactions typically supported by face-to-face CPD programming while leveraging the increased virtual attendance (Table 1, Rec. 1).

More resources are needed for hybrid conferences

A recent review by Cheng et al. found that the virtual format provides many advantages for continuing medical education, such as convenience, larger collaboration opportunities, and favourable learning formats.[10] However, it is partially inhibited by technological barriers, poor design, cost and time restraints.[10] Many respondents commented that a hybrid model of CPD was likely to be implemented in their departments post-pandemic. Hybrid models have been used successfully in numerous educational settings.[11-14] Future CPD programming will require technological, financial, and human resources, as well as adequate planning, to mitigate the barriers of hybrid delivery.[3] (Table 1, Rec. 2).

A nation-wide community of practice for CPD leaders may be beneficial

While the pause in CPD in several schools suggest there may have been competing priorities, the inclusion of COVID-19-related clinical topics (including wellness) demonstrates the role CPD can play in providing up-to-date information in a rapidly evolving situation. Sklar et al. emphasized the value of CPD in promoting an institution-wide learning culture.[3] In addition to the educational infrastructure provided by departmental CPD programs, it is beneficial to have a national network of CPD directors, such as COPCE for the field of Psychiatry. The CPD directors at COPCE meet twice annually to explore, share, and guide practices. As COVID-19 catalyzed a renewed interest in optimizing CPD programming, this survey was promptly commissioned, designed, and disseminated in a timely manner, and attained a high response rate facilitated by the pre-established network. A national organization can be a platform for sharing lessons learned from individual CPD departments and bringing together faculties to promote innovations and disseminate helpful practices. (Table 1, Rec. 3)

Strengths and limitations

Strengths of this study include the timely collection of data from across Canada facilitated by a national organization with a mandate in psychiatry CPD. While not every medical school responded, and our findings are specific to Psychiatry in Canada, they likely reflect similar barriers and facilitators encountered in other fields in relation to the universal pivot to virtual CPD. Limitations of this study include the small sample size and respondents' perceived attendance rather than empirical data; a follow-up study with more objective data collection may strengthen our conclusions. Moreover, since COPCE is a small network, some of the CPD leaders that designed the study were also participants of the survey.

Conclusion

The pandemic has substantially affected the mode of delivery, content, program continuity, attendance, and costs of CPD programming in Psychiatry. This study has shown that despite an improved attendance, a virtual CPD offering should also consider online security and rich interactions that were upheld in in-person events. A hybrid model may best leverage the advantages of both virtual and in-person modalities. As the landscape of CPD has changed post-pandemic, sharing of information through a national community of practice has the potential to support CPD in Canada.

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Appendix A. COPCE survey

About COPCE

As an affiliate committee of the Canadian Psychiatric Association comprising CPD Directors from academic psychiatry departments across Canada, COPCE mandates to promote excellence in the design and implementation of continuing education in psychiatry, and to serve as a body to bring about standards of practice in continuing education in psychiatry.

Section 1: Program Description

Q1: What is the name of the medical school in which your academic Dept of Psychiatry is situated?

- Dalhousie University Faculty of Medicine
- McGill University Faculty of Medicine
- McMaster University Michael G. DeGroote School of Medicine
- Memorial University of Newfoundland Faculty of Medicine
- Queen's University School of Medicine
- Université de Montréal Faculté de Médecine
- Université de Sherbrooke Faculté de Médecine et des Sciences de la Santé
- Université Laval Faculté de Médecine
- University of Alberta Faculty of Medicine and Dentistry
- University of British Columbia Faculty of Medicine
- University of Calgary Cumming School of Medicine
- University of Manitoba Max Rady College of Medicine
- University of Ottawa Faculty of Medicine
- University of Saskatchewan College of Medicine
- University of Toronto Faculty of Medicine
- Western University Schulich School of Medicine and Dentistry
- Other
- Prefer not to disclose

If you have chosen “other,” please specify:

Q2: What is your academic role title? e.g.: Director of CPD

Q3: Are you a psychiatrist? If No, what is your professional designation?

Q4: How long have you been in your current CPD leadership position?

- Less than 2 years
- 2 - 5 years
- 5 - 10 years
- Greater than 10 years

Q5: Describe the responsibilities associated with your role. (Check all that apply)

- Continuing medical education for faculty
- Faculty development (i.e. teaching and academic role)
- Programming planning (e.g. Grand Rounds, Annual Conferences etc.)
- Needs assessments
- Strategic planning
- Research or scholarly activities
- Program evaluation
- Chairing CPD committee
- Serving on university committees
- Mentoring
- National liaisons (e.g. RCPSC)
- Quality Improvement programming
- Oversight and support of programs at satellite campuses
- Other (please specify)

Q6: Who do you report to in your CPD role?

- Chair of academic department
- Associate Chair or Director of education
- Health authority position
- Administrative director
- Other (please specify)

Q7: Who do you consider to be the primary audience(s) for your CPD programs? (check all that apply)

- Psychiatrists (faculty)
- Other faculty members
- Psychiatrists (non-faculty)
- Other physicians
- Residents
- Other trainees/ students
- Hospital staff
- Other health professionals
- Patients and family members
- Other (please specify)

Q8: Do you feel you have adequate support in the following areas in relation to your CPD role?

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
Admin Support					
Technological Support					
Protected time					
Budget/funding					
Sponsorship and mentorship by senior leadership					

Q9: I have a good working relationship with:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
Local hospitals and health authorities					
Medical school CPD office					
Undergraduate (medical student) and postgraduate (resident) education leaders in your department					

Q10: Do you receive funding from pharmaceutical companies?

- o Yes, regular sponsorship in place through unrestricted educational grants
- o Yes, occasional/some sponsorship
- o No

Q11: Do you have policies regarding advertising CPD from external sponsoring organizations or other schools?

- o No
- o Yes (please describe)

Q12: Do you have a departmental CPD committee? If yes, how often do you meet?

o Yes, annually	o Yes, bi-annually	o Yes, quarterly	o Yes, monthly
o Yes, weekly	o No	o Other	

If you have chosen "other," please specify:

Section 2: Use of technology: Pre-COVID and Post-COVID

Q13: For each of the following activities, please indicate what modalities you were using for CPD programming pre-pandemic (face-to-face OR online) and during the past 18 months (face-to-face OR online).

	Pre-pandemic	Past 18 months
Grand rounds	o Face-to-face o Online o On and offline	o Face-to-face o Online o On and offline
Conferences	o Face-to-face o Online o On and offline	o Face-to-face o Online o On and offline
Workshops	o Face-to-face o Online o On and offline	o Face-to-face o Online o On and offline
Short Courses	o Face-to-face o Online o On and offline	o Face-to-face o Online o On and offline

Q14: Which platform(s) for online delivery were you using prior to the pandemic? (check all that apply)

○ Zoom	○ Teams	○ Adobe
○ Skype	○ Webex	○ Other (please specify)

If you have chosen "other," please specify:

Q15: Which platform(s) for online delivery are you using now? (check all that apply)

○ Zoom	○ Teams	○ Adobe
○ Skype	○ Webex	○ Other (please specify)

If you have chosen "other," please specify:

Q16: Do you offer asynchronous online learning?

- ○ Prefer not to answer
- ○ No
- ○ Yes. What percentage of online learning is asynchronous?

Q17: Was there a pause/gap in CPD offerings in 2020?

- ○ Prefer not to answer
- ○ No
- ○ Yes. Please describe.

Q18: Was there new or reallocation of funding for COVID related CPD initiatives within your academic department?

- ○ Prefer not to answer
- ○ Other
- ○ No
- ○ Yes. How much?

If you have chosen "other," please specify:

Q19: Did changes taking place in UGME and PGME as a result of COVID affect CPD programming in your department?

- ○ Prefer not to answer
- ○ No
- ○ Yes (please describe)

If you have chosen "other," please specify:

Q20: How are you handling online security concerns (e.g. with respect to the chat, 'zoom bombing', handling 'outside' or public participants, use of waiting rooms, etc.)

- Actively monitoring chat
- Removing audience members who violate Zoom etiquette
- Requiring registration/ Screening participants
- Keeping participants muted
- Other (please specify)

If you have chosen "other," please specify:

Q21: Do you provide training in online technology for your CPD presenters (e.g. practice sessions)?

- Yes
- No

Q22: How did presenters of your CPD offerings interact with the virtual audience? (check all that apply)

- Reactions / Emojis
- Online Polls
- Annotations / Online Sticky Notes
- Real-time content creation on a shared document (e.g., Google docs)
- Other (please specify)

If you have chosen "other," please specify:

Q23: How are comments and questions in the chat handled?

- Presenters read them as written
- Moderators read them as written
- Moderators summarize or select certain ones
- We do not enable the chat
- Other (please specify)

If you have chosen "other," please specify:

Q24: Has the amount and quality of audience participation/interactivity been maintained during COVID?

- Yes
- No (please explain)

If you have chosen "other," please specify:

Q25: Did you use your grand rounds to present clinical information about COVID service delivery (e.g. protocols, training for redeployment, use of PPE)

- Yes
- No

Q26: In the past 18 months, have you organized CPD on COVID-related topics? (check all that apply)

- Physician wellness
- Virtual teaching
- Psychiatric effects of COVID
- Other (please specify)

If you have chosen "other," please specify:

Section 3: Changes in CPD offerings attendance post pandemic

Q27: Rates of attendance

- Significantly up
- Somewhat up
- No change
- Somewhat down
- Significantly down

Q28: Types of attendees (check all that apply)

○ More physician faculty	○ More non-physician faculty	○ More residents/learners
○ More hospital staff	○ More community members	○ No change
○ Fewer physician faculty	○ Fewer non-physician faculty	○ Fewer residents/learners
○ Fewer hospital staff	○ Fewer community members	○

Q29: Cost of delivery

- Gone up
- No change
- Gone down

Q30: Do you ask participants to keep cameras on?

- Yes, always
- Never
- For some events (please describe)

Section 4: Going Forward

Q31: What are your plans for CPD at your academic department after COVID? Please describe.