Day 2: Systems, Structures, and Change

Thursday October 20

9:30-12:00pm

Theme 3: Systems and Structures

How do we navigate the systems and structures that shape health professions education? How do we participate in creating them? And how might we change them?

Podium sessions: Presentation: 12 min; Discussion: 6 min; Transition to next presentation: 2 min

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PODIUM 3.1 – 9:35-9:55am

Examining Network Weaving as a Knowledge Mobilization Strategy in Medical Education Using System Evaluation Theory and Network Analysis

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Our research examines structural network weaving, or how people are interconnected across organizations, as an organizational-level strategy for knowledge mobilization (KMb). We specifically examine structural network weaving realized through longer-term formal appointments.

We engage systems evaluation theory (SET) as an underlying methodology for scrutinizing KMb within TAHSN (Toronto Academic Health Sciences Network). We use a multi-case study design, and rely on diverse data sources (institutional records, informant interviews) and analytical approaches (network analysis, document analysis, and matrix analysis) to study the quantity, nature, and quality of the networks formed by researchers, clinicians, educators, and staff.

To quantify and visualize structural network weaving, we use network analysis to generate network graphs, which illustrate how individuals in diverse roles are connected across designated KMb organizations, university departments, and hospitals. The analysis provided statistics on the centrality, or level of inter-connectivity, of each KMb organizations within the system.

Overall, our results show that some KMb organizations have strong and elaborate ties with multiple other entities across the entire system. Conversely, others KMb organizations have weaker ties to a small number of entities. Implications of the diverse centrality of connections across department and hospitals are discussed. Our qualitative findings explore the efficacy of and challenges inherent in working across KMb organizations.

Ultimately, we discuss barriers and facilitators of sustainable KMb across organizations and present suggestions on how institutions can improve the quality and equity of KMb practices in medical education system through longer-term formal appointments.

PODIUM 3.2 – 9:55-10:15am

Discourses of Equity, Diversity, and Inclusion in Undergraduate Medical Education

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Increasingly, discourses of equity, diversity, and inclusion (EDI) have garnered traction in undergraduate medical education literature. This project offers a critical analysis of these discourses, as well as a description of their chronological development. Relevant undergraduate medical education literature in Canada, the United States, the United Kingdom, Australia, and New Zealand was identified using in the Ovid Medline database with relevant key words (e.g. 'equity,' 'diversity,' etc.). This literature was iteratively coded with particular attention to 1) mapping terms' historical emergence and conceptual relations, 2) identifying what forms of social difference 'count' in discourses on EDI, 3) classifying dominant arguments 'for' and 'against' EDI, and 4) characterizing national contours of such discourses. Conceptually, these discourses largely operate in the literature with respect to four domains: social description of groups or individuals (e.g. 'diversity,' 'minority'); student skills or attitudes (e.g. 'cultural competence'); ethics responding to social difference (e.g. 'equity,' 'inclusion') and notions of harm (e.g. 'discrimination,' 'microaggression'). The triad of race, ethnicity, and culture often represented the form of social difference to which EDI responded to, though these terms were often undertheorized or erroneously conflated. Other forms of social difference, for example, disability, were largely absent in this literature, or if present only referred to the attributes of patients, not students or providers. Myriad arguments existed for and against EDI, but largely represented either ethical or instrumental justifications for and against EDI. Finally, related national discourses (e.g. 'affirmative action,' 'widening participation') structured much of this EDI literature.

PODIUM 3.3 – 10:15-10:35am

#Team Vaccine: Exploring the History of Toronto's COVID-19 Vaccination Initiative through Social Media

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To vaccinate North America's fourth-largest city against COVID-19, unprecedented collaborations galvanized rapidly among previously-siloed community and academic healthcare institutions toward a common goal. Social media platforms such as Twitter played a central role throughout the pandemic in the spread of critical public health information among health professionals and the public at large. The influence of social media extended as an important digital space that documented vaccination initiatives from their start in the winter of 2020. One of the most common thematic metadata tags (hashtags) utilized on social media globally during the early months of COVID vaccinations was "#TeamVaccine". This work aimed to characterize the use of #TeamVaccine on Twitter, as a key source to tell the story of Toronto's mass vaccination initiative. Analyzing ≈15,400 posts collected from Twitter's Application Programming Interface (API), this work focused on describing the emergence, geographic spread and institutional engagement with #TeamVaccine, as well as identification of key local "influencers". Initial sentiment analysis and content analysis of posts was conducted. This work acts as a pilot step toward a broader historical assessment of what "Team Vaccine" may have produced as a health system concept, and its existence as a real-life collaborative entity in Toronto. Future "Team Vaccine" research may focus on the porosity between health disciplines and institutions, discursive analysis related to novel institutional collaborations, the possible emergence of pan-professional competencies amid vaccine clinic re-deployment and an expanded social network analysis of Twitter data.

PODIUM 3.4 – 10:35-10:55am

Dying to Stay Alive in Residency and Beyond: A Critical Discourse Analysis of 'Burnout'

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In 1974, Dr. Herbert Freudenberger 'coined' the term 'burnout'. With the creation of the Maslach Burnout Inventory in 1984, 'burnout' went from a term used in pop psychology to a highly studied phenomenon of academic interest in the helping professions, including medicine. Exponential growth in the study of 'burnout', culminated in its adoption into the International Classification of Diseases (ICD)- 11 in 2022. Yet, despite awareness of this issue, and the many efforts aimed at addressing 'burnout' in physicians, the rates of 'burnout' continue to rise.

Why does 'burnout' persist in medicine despite efforts to ameliorate it? In this study, a Foucauldian discourse analysis was used to investigate this question, specifically examining the socializing period of post-graduate medical education (PGME) in a North American context.

The purpose of this study was to identify different discourses that legitimate or function to mobilize the use of the word 'burnout' in PGME. The archive from which the discourses were constructed included 10 review articles, over 500 academic articles, numerous policy documents, autobiographies, videos, documentaries, materials from conferences and discussions in forums including Reddit.

This study identified three discourses of 'burnout': illness, occupational stress and existentialism. Each discourse was associated with statements of truth, signs and signifiers, roles that individuals play within the discourse and different institutions that gained visibility as a result of differing discourses.

Finally, the analysis of these discourses revealed socio-historical dimensions of their occurrence, including undefined medicalization, neo-liberal capitalism and existentialism.

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Theme 4: Here Comes Change: It Isn't (Always) About Technology

These presentations all share an interest in exploring recent changes in the development and delivery of both care and education. Many of these changes were inspired or necessitated by the COVID-19 pandemic and associated public health interventions. Not entirely about the pandemic, these presentations bring forward long-standing education questions: experiences of faculty members, professional identity, and evaluation of interventions, particularly in intersections with technologies such as virtual care and digital learning environments.

Podium sessions: Presentation: 12 min; Discussion: 6 min; Transition to next presentation: 2 min
Rapid report sessions: Presentation: 3 min; Discussion: 2 min

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Rapid Report 4.1 – 11:05-11:10am

Educating Together While Apart: Investigating the experiences of post-graduate clinician-teachers in the Women's College Academic Family Health Team during the COVID-19 pandemic

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Background: The Coronavirus Disease 2019 (COVID-19) global pandemic is having profound and rapidly evolving impacts on health care and medical education systems. It poses unique challenges for family practitioners in academic health centers as they work in multidisciplinary teams responsible for both clinical care and residency education.

Methods: To understand the educational experiences of clinician-teachers (CTs) in the Women's College Academic Family Health Team as they adapted to the pandemic and faced barriers to innovation during this crisis, we conducted and analyzed semi-structured interviews in the grounded theory tradition.

Results: Seven of 32 CTs were interviewed and data saturation achieved. Four themes were identified: 1) Challenges (multitasking and fatigue, change in practice, change in teaching/learning, system challenges); 2) Strategies and opportunities (teaching strategies, leveraging opportunities); 3) Supports (collaboration with learners, interpersonal support, systemic support), and 4) Recommendations (personal and organizational).

Discussion/Conclusion: The experiences, knowledge, and expectations of these CTs influenced their teaching and experiences during COVID. Similarly, the institutional context (the established roles, norms and practices of the medical school), and the broader socio-cultural contexts (political, social, economic) in which the education was embedded also strongly shaped clinical and teaching processes Study results and recommendations are helping our education leaders improve the design of educational strategies, virtual learning, and teaching tools during the pandemic. We anticipate that they are generalizable to other contexts and will lead to improved trainee education, faculty development, and potentially patient care in current and future pandemics, as well as in other situations requiring crisis management.

RAPID REPORT 4.2 – 11:10-11:15am

Professional Identity: Understanding Perceptions Entering a Virtual Education Scholarship Course

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Introduction: Essence is a longitudinal interprofessional one year course that supports and mentors a small group of clinical faculty to complete an education scholarship project of their choosing. The course outline contains a series of expert-run seminars, structured homework assignments, mentorship, and consultations with clinician educators. Due to the COVID19 Pandemic, the course transitioned to virtual delivery through Zoom.

Objective: We investigated the impact of a virtually delivered course on education scholarship on professional identity formation and development of a community of practice.

Methods: This was a qualitative study using semi-structured interviews. Seven participants were recruited after informed consent. Interviews were recorded, transcribed, and analyzed using inductive thematic analysis. Member checking was performed with participants to ensure accuracy.

Results: Our qualitative analysis demonstrated four primary themes with regards to the impact of a virtually run faculty development course on education scholarship including: 1) professional identity formation 2) uncertainty around education scholarship 3) structural supports and barriers 4) pandemic effects. At baseline, most participants ranked professional identity components in the following order of importance: clinician, teacher, scholar, and researcher, respectively.

Conclusions: Entering the course, many participants expressed uncertainty around their competency with education scholarship. Participants expressed interest in a hybrid model, involving a mix of in-person and virtual sessions for future iterations. Participants emphasized that faculty resources and protected time were key supports at the beginning of their education scholarship career. Semi-structured interviews will be repeated in two years to assess professional identity development and rankings of components over time.

PODIUM 4.3 – 11:15-11:35am

A multi-institutional evaluation of virtual care practices among different specialties: Does one size fit all?

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Background/Purpose: The COVID-19 pandemic was the catalyst for a rapid transition into virtual care practices to ensure continuity of care throughout the pandemic. The fast pace of the initial transition and adoption, combined with the current pressures to identify the ideal balance between in-person and virtual care offerings, highlighted the literature gaps around virtual care best practices, educational affordances, and perceived quality from different stakeholder groups. To study this phenomenon, we conducted a multi-institutional, participatory, value-based evaluation to gain a more holistic understanding of virtual care and its impact.

Methods: Using a value-based, participatory evaluation framework, we followed a mix-methods approach to collecting data via surveys and semi-structured interviews. We collected data within SickKids Hospital and University Health Network from the following medical specialties: Medical Genetics, Adolescents Medicine, Cancer, and Rehabilitation sciences. We obtained 90 surveys and conducted 20 interviews with patients (n=9), trainees (n=6), and physicians (n=5) around the transition to Virtual Care. We used an inductive thematic analysis to analyze interview data, while surveys were analyzed descriptively.

Results: Evaluation results show misalignment between the stakeholders' perceptions of the effectiveness of virtual care. While the patient population appears grateful for the continuity of care (i.e., access), physicians worry about the changes to the care process, including implications to the professional identity. Furthermore, trainees consider that although virtual care might limit the breadth of cases they have access to, it offers a less invasive environment for bedside teaching. Unfortunately, patient's perception of the quality of virtual care focuses mainly on access, which prevents a deeper dive into areas like communication and rapport.

Conclusion: The practice of virtual care is very complex due to the multiple factors that influence its experience. Rather than being a one size fit all type of solution, our study has shown that virtual care practices need to be tailored to the characteristics of the different specialties. Further work is required to understand virtual care best practices, their impact, and potential unintended consequences.

PODIUM 4.4 – 11:35-11:55am

COVID-19 and the Shift to Virtual Care: Implications HPE in a "post" COVID-19 world

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The Covid-19 pandemic triggered a rapid massive adoption of virtual technologies (video, telephone, email, text, messaging etc..) by clinicians, clinics and hospitals. As a result, virtual care became "the" care modality when in-person care was simply not possible. Two years later, as virtual care is becoming broadly accepted by clinicians, hospitals and patients, the impacts, the unintended consequences of this adoption of a new technology, are only beginning to emerge.

This presentation will present the emergent findings of the critical discourse analysis arm of the *DECISION Study*, a project looking at the adoption of virtual technologies in two clinical sites in SickKids (Adolescent Medicine, Medical Genetics) and two hospitals in UHN (Toronto Rehab and Princess Margaret Hospitals).

Preliminary findings suggest that the adoption of virtual technologies is effecting far ranging changes at the levels of institution identity, professional identity, professional development, communication, and governance - all of these changes having material implications for health professions education.