

Day 3: Futures of Health Professions Education

Friday October 21

9:30-12:00pm

Theme 5: Better

These presentations share an aspiration for ever better health professions education. Highlighting the need to understand learner needs, use innovative design strategies, and create new resources, these intervention-focused presentations showcase leading edge health professions education.

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

Rapid report sessions: Presentation: 3 min; Discussion: 2 min

RAPID REPORT 5.1 – 9:35-9:40am

Primary Care Perspectives on Education Scholarship: A qualitative synthesis

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A significant portion of medical education takes place in primary care settings. Much of the clinical teaching is taken on by primary care physicians with variable teaching backgrounds and training. Ernest Boyer introduced the concept of education scholarship, calling on faculty to systematically study and innovate their teaching practices. This review synthesizes the literature on clinician educators' perspectives, understandings, and experiences of integrating education scholarship in practice. An electronic database search was conducted in MEDLINE, Scopus, Web of Science, and PubMed. Relevant articles included those that studying primary care physician and/or resident clinician teachers, their perspectives of clinical teaching, and reported qualitative results (interviews, focus groups, questionnaires, mixed methods, etc.). In total, 33 articles met the inclusion criteria and were included in the final synthesis. Four main themes emerged capturing the experiences of primary care clinician educators: 1) perceptions of clinical teaching (lack of confidence, presumed competency in teaching, lack of formal recognition); 2) clinical teaching strategies (learner-centred teaching, ad hoc teaching, role modeling, mentorship); 3) benefits of clinical teaching (shared learning experience, networking, personal interest, career satisfaction), and 4) challenges of clinical teaching (inadequate time, compensation, conflicting responsibilities). These clinician educators identified several common factors regarding their scholarly roles but had difficulty describing them in relation to education scholarship. Institutional support, resources, and awareness are therefore needed to support primary care clinician educators in order to further implement Boyer's framework for education scholarship, especially the component calling for the innovation and evaluation of clinical teaching.

RAPID REPORT 5.2 – 9:40-9:45am

REVIEW: Effectiveness of Concussion Curriculum in Postgraduate Medical Education

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Objectives: The aims of this review are to describe and assess Concussion Curriculum (CC) effects on medical learning, as they pertain to future CC development.

Design: All indexed years of MEDLINE/ PUBMED, Embase, ERIC, Cochrane, and CINAHL were searched. Kirkpatrick's model and Miller's pyramid were used to determining the impacts of CC.

Results: Five articles were identified, three cohort studies, and two retrospective studies. Although there were mixed findings overall, the highest positive program evaluation outcome reported was chart review (Kirkpatrick Level 3). Both workplace learning and repetitive learning increased knowledge acquisition. Additionally, learner satisfaction was reported with classroom learning, but an outcome measurement of the application of the knowledge to practice was not collated.

Conclusion: The effectiveness of CC in post-graduate medical education (PGME) in terms of its impact on practice change by the application of newly acquired competencies remains unknown. Furthermore, the impact of said curriculae on patient outcomes is also undetermined.

Successful curriculae employed conceptual frameworks including constructivism, situated learning theory, and social learning theory/community of practice as the underpinning theories. Further prospective concussion educational scholarship, with socio-constructivism framework, evidence-based teaching techniques and mixed-method evaluation, is needed to capture curriculum processes and competency impacts over time in the current paradigm shifts of competency-based medical education.

Key Words: Brain Concussion; Curriculum; Education, Medical; Learning

PODIUM 5.3 – 9:45-10:05 AM

Innovation in occupational therapy clinical fieldwork placements during the COVID-19 pandemic

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Background: Fieldwork placements are foundational within occupational therapy (OT) education,¹ as they provide the link between theory and application.² During the COVID-19 pandemic, many innovative fieldwork opportunities were created to address the shortage of traditional fieldwork placements.

Objectives: This study sought to understand the scope of these innovations and how they impacted learners' competency development. Specifically, this study: 1) identified clinical fieldwork education innovations that occurred because of the COVID-19 pandemic and 2) described how innovations impacted competency development in learners.

Methods: Yin's case study method was employed to identify the multiple "cases" of innovation and their impact on competency development. Twenty-eight semi-structured interviews with OT learners and preceptors were conducted and data was analyzed thematically.

Findings: Fieldwork placement innovations were identified as cases described as administrative, virtual care, and intrapreneurship. Competencies developed across all cases are OT expertise, excellence in practice, and communication/collaboration. Administrative cases identified engagement with the profession as a uniquely developed competency, whereas administrative and virtual cases also identified professional responsibility. Intrapreneurship and virtual cases uniquely addressed culture, diversity and justice competencies.

Implications: This study informs clinical practice education and policy to advance OT fieldwork education addressing the rapidly changing healthcare context. These findings suggest that fieldwork innovations can support the development of generalized and unique OT competencies.

PODIUM 5.4 – 10:05-10:25am

Filling the Gap: Using postgraduate serious-illness-communication needs to improve goals of care conversations

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Background: Goals of Care (GOC) conversations are essential to meet the needs of an aging population and to deliver high-quality care. Most clinicians do not receive training on this important skill and no national standard exists to teach these skills.

Purpose: We explored the current state of GOC teaching at the Department of Family & Community Medicine (DFCM) to assess resident preferences for teaching and feedback methods and faculty experience in teaching GOC.

Methods: An online survey was sent to all graduating DFCM residents. Focus groups were then conducted using purposeful sampling of DFCM residents and faculty to further explore survey results and gain a deeper understanding of preferences for teaching.

Results: Survey completion rate was 60% (93/155) across 14 training sites. Most residents prefer direct observation and feedback and using a structured approach to learn how to lead conversations. However, most were not taught such an approach or observed and given feedback. Most favoured learning communication skills on their Palliative Care (PC) rotation and 1/3rd took a PC elective to improve skill. 4 focus groups and 4 one-on-one interviews were conducted with faculty and residents. Thematic analysis is underway.

Conclusions: Residents and faculty value using a standardized, evidence-informed and longitudinal approach to teach and practice GOC-related communication skills. To begin filling this educational gap, we created two asynchronous e-learning modules introducing residents to core evidence-based conversation tools that can be incorporated into curriculum in the DFCM and beyond with a goal to improve high-quality care for an aging population.

PODIUM 5.5 – 10:25-10:45am

Two for One: Merging Continuing Professional Development and Faculty Development in the CATE curriculum for Pharmacy Preceptors

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Introduction: Continuing professional development (CPD) and Faculty development (FD) are seldom combined, though there is evidence that integrating them enhances knowledge acquisition. This study explored preceptor perceptions and the effectiveness of CATE (Clinical and Teaching Education), a synchronous, on-line workshop that blended clinical content with the application of that knowledge utilizing a teaching technique.

Methods: Thirty-five pharmacy preceptors participated in a 2-hour workshop integrating clinical content on depression with the One-Minute Preceptor (OMP) teaching skill. Qualitative and quantitative data were collected longitudinally using surveys and semi-structured interviews. Participant and process outcomes were explored through descriptive and thematic analysis using a modified Kirkpatrick's framework.

Results: Participants valued the incorporation of educational theory and opportunities to practice the OMP using scripted role-plays based on the depression content. The combination of FD and CPD was appealing, though participants wanted more clarity about the integration. CATE positively influenced their approaches to precepting and using the OMP helped uncover learner knowledge gaps. There was a desire to share the teaching techniques with colleagues to provide more cohesive approaches to teaching.

Discussion: Integrating CPD and FD in a synchronous, on-line environment was feasible, well-received, and helped solidify preceptors' roles as educators. Combining CPD and FD represents an effective strategy to build clinical and educational expertise of preceptors that, in turn, has the potential to impact the quality of experiential learning for pharmacy students. This novel method of fostering the pedagogical growth of preceptors can be a model for other health professions.

PODIUM 5.6 – 10:55-11:15am

Life goal framing: A design strategy for supporting medical students' motivation and engagement in training activities

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Background: The *life goals* that medical students pursue through a career in medicine (e.g., to help others) are amongst the most important and self-defining goals that they possess. Training activities could be designed to emphasize how they can prepare students to attain their life goals via skillful clinical practice. Such a design may enhance the quality of students' motivation and engagement.

Methods: Medical students ($n = 128$) were sent an online module on 'The Physiology of Weight Loss'. Students were randomized to receive a version of the module with an introductory slide prompting them to link the presented concepts with their life goals, or a version without this slide. Autonomous motivation and perceived competence for learning were assessed after the introductory section of the module. The module was programmed to collect data on students' engagement with embedded experiments, questions, and hyperlinks. Students were also sent a notebook to take notes in, which were subsequently analyzed for the presence of different learning strategies.

Results: The intervention had an effect on autonomous motivation, moderated by perceived competence. At high levels of perceived competence, the intervention had a strong, positive effect, whereas at low levels it had a negative effect. Intervention group students clicked on more hyperlinks but had lower odds of recording any notes.

Discussion: Our results demonstrate that a single slide can have a significant impact on medical students' motivation and engagement, although students' perceived competence for learning should be considered when trying to link activities to students' most self-defining goals.

PODIUM 5.7 – 11:15-11:35am

Peer-assisted Learning (PAL): Democratizing Knowledge and Resources

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Peer-assisted learning (PAL) has proven effective in medical school education, but few studies seek to understand its mechanisms, and none have examined those mechanisms through the construct of knowledge building (KB). KB says that knowledge is not merely consumed or contained, but collectively created. It is built on twelve principles, one of which is democratization of knowledge: every participant is a legitimate contributor to the knowledge of the group and their diversity and differences help — not hinder — the group's advancement. Our study used this tenet to identify learning modalities in first and second year medical school students (M1s and M2s) at the CUNY School of Medicine (CUNY SoM) participating in a PAL initiative. This initiative democratized knowledge by grouping students with peers who use different resources from them. Using surveys and interviews, we gauged student perception of the PAL program and found mechanisms of learning employed during these sessions. These means can be deliberately fostered in future iterations of PAL at CUNY SoM and other medical schools, implemented into medical school curriculum, and honed to develop clinicians who are adaptive experts: able to apply known skills to novel areas by integrating knowledge.

Keywords: Peer-assisted learning (PAL), knowledge building, democratization of knowledge, adaptive expertise, communities of practice (CoP)

PODIUM 5.8 – 11:35-11:55 AM

Promoting resilience and protecting wellbeing in undergraduate medical learners: Identifying faculty development needs

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Background: Resilience curricula can promote wellness, self-care, and health in trainees, but it can be challenging for teachers to support this curriculum, as it departs from traditional medical professional culture and knowledge. The purpose of this study is to examine faculty development (FD) needs of teachers, to promote learner resilience and protect wellbeing.

Summary of work: Semi-structured interviews were conducted with 10 experienced faculty to explore their experience with engaging with learners to promote learner resilience. Framework analysis using an established instructional design approach was applied to identify key concepts and themes and their relationships that describe potential core tasks faculty can engage in to promote resilience and protect wellness which then will be used to inform the development of a FD strategy.

Summary of results: Eight key related concepts were identified that describe tasks faculty can engage in to promote learner resilience: (1) Preparedness and Readiness; (2) Proactive Watchfulness; (3) Listening and Validating; (4) Probing Introspection; (5) Recommending Resources and Support; (6) Facilitating Peer Discussions; (7) Role Modeling; and (8) Influence of Context/Culture. These concepts will be described along with how they can inform the development of FD strategy and resources.

Discussion and conclusion: Our study characterizes specific aspects to be considered when designing future FD that promote learner resilience and in turn their wellness. In developing faculty members skills set in this area, faculty themselves may benefit in enhancing their own resilience and wellness.