

Medical Professionals Require Curricular Support to Overcome Their Reluctance to Embrace Self-Directed Learning in Response to COVID-19

Carol Nash PhD

Scholar in Residence
History of Medicine Program
Department of Psychiatry
Faculty of Medicine
University of Toronto

Abstract

- 12/03/2020 lockdown of academic institutions in response to COVID-19
 - Overnight, self-directed learning via online platforms became indispensable for medical professionals
- Self-directed learning (SDL) is recommended
 - By curricula of medical professionals
 - Research regarding adult learning
- Yet medical professionals (especially medical students) reluctant to adopt SLD unless they have
 - A passion for learning
 - Higher GPA
- One way to encourage SDL is the multi-disciplinary University of Toronto Health Narratives Research Group
- As limitations to medical learning from COVID-19 continue
 - Curricula of medical programs should support efforts to engage in such multi-disciplinary narrative research groups to promote SDL in medical professionals

Self-Directed Learning

- Most appropriate method of learning for adults [1]
- Demonstrated when learners take responsibility for
 - Organizing and managing their own learning, identifying gaps in their knowledge, critically appraising information they seek out[2]
 - Diagnosing their requirements, identifying their goals, selecting strategies, designing their evaluations for performances and outcomes [3]
 - Maintaining intrinsic motivation, integrity, agency, diligence, perseverance and grit related to their learning [3]
 - Continuously acquiring, applying and creating knowledge and skills in the context of their unique needs [4]
- Adults have a deep need to self-direct their learning [5]
 - Necessary as a result of COVID-19 lockdown [6]
 - Yet medical professionals are reluctant to embrace it [7]
- Why medical professionals should embrace self-directed learning will be addressed

Medical Professionals

- Help identify, prevent or treat illness or disability [8]
- Include physicians, nurses, hospice workers, emergency medical technicians, other trained caregivers [9]
- Historically, medical professional (medical students in particular) have been unwilling or unable to participate in self-directed learning [10]
- Dissatisfaction with learning incompatible with self-directed learning [11]
- Those who do participated in self-directed learning demonstrate
 - a passion for
 - learning and self-direction [12]
 - effective self-management skills [12]
 - higher GPA [13]

Readiness for SDL

- Best associated with developing skills for SDL habits [14]
- Habits unlikely to develop in medical professionals unless learners given specific instructions on what to study [15]
- Four factors of reliability in identifying those able to develop these habits
 - Critical self-evaluation, learning self-efficacy, self-determination, effective organization for learning [16]
- Depending on these factors educational interventions can be planned [17]
- Readiness necessary to develop the habits [18,19]
- Self-direction most effective in medical professionals once they have an understanding of their discipline [20,21] and developed skill in their area of expertise [22,23]
- With COVID-19, medical professionals can no longer rely on being instructor-led and need to take up SDL

Analysis: Medical Professionals Avoid SDL

- In having to learn large amounts of disparate information quickly
 - Medical students' passion may not be in obtaining this information per se
 - There may be no conflict in SDL being both appropriate for medical professionals and not appropriate for medical students as a result
- With SDL, medical students
 - Appreciate being able to select their resources, time, space, methods and how they organize their schedule [24]
 - Feel they waste time in finding sources and mentors, overcoming language barriers, and following poor leads [24]
 - Consider that the disadvantages outweigh the advantages [24]
- Medical professionals need to reduce their personally-imposed barriers to SDL as a result of COVID-19

Importance of Multi-Disciplinary Approaches

- Demand for multi-disciplinary, community-based collaboration and partnerships has developed concurrent with SDL [25]
- Funding for medical programs and research often based on this type of inclusive teamwork because of an ability to produce immediate-use outcomes [25]
- Multi-disciplinary approaches most likely to encourage self-direction in medical professionals [26]
- Little research has been done on the effectiveness of multi-disciplinary approaches in SDL for medical professionals
- The University of Toronto Health Narratives Research Group (HeNReG)—both inter-professional and multi-disciplinary—offers results in this area

HeNReG History and Features

- Co-founded 2012 by the author and Edward Shorter, Jason A. Hannah Professor in the History of Medicine, University of Toronto
- Since 2015, offered in association with the University of Toronto Department of Psychiatry through the Health, Arts and Humanities Program directed by Allan Peterkin M.D.
- Available to researchers across the University from various backgrounds and academic levels
- Requires membership to a private Facebook group overseen by the group's facilitator (the author)
- Post COVID-19, HeNReG meets for two hours weekly online through the hybrid private Facebook group platform [27]

HeNReG Focus, Method and Goal

- Participants often join identifying as “burned out” with respect to their research
- Aided and mentored in becoming self-reflective and reinvigorated about their professional pursuits in relation to a method developed by the facilitator [28]
- Five minute writing prompts created and provided by the facilitator over Messenger a day before the online meeting
- Participants respond to the prompts and return them to the facilitator who shares them with they group online during the weekly two-hour meeting
- Sharing includes incorporating the comments of the others in developing their insights
- Goal—in line with Wittgenstein’s later philosophy [29]—is to promote an interpretation of reality dependent on adding together many different perspectives
- Differs from other narrative researchers who purport there are many truths rather than a single one constructed from various points of view [30,31,32,33]

Successful HeNReG Participation

- Participation in a diverse, multidisciplinary group enhances the ability of members to clarify what they personal value of their learning [20]
- However, participation requires effective self-management skills [8]
 - Maturity has been found to develop these skills [13]
 - Nevertheless, limited self-management skills were also seen with seasoned medical professions keeping them from participation even if indicating this was their desire
 - Senior medial professionals with time conflicts were unable to think of ways to participate although they were aware the group met through a private Facebook group
- HeNReG is a co-regulation program [34] with a solutions-focused approach and mentorship in promoting the addition of different points of view in a broader post-secondary environment
- Successful participation depends on listening carefully to the views of all members to co-construct truth

Results for Medical Professionals

- Table 1. Medical professionals who indicated interest to join the HeNReG in the 2020/21 year

1st contact	Position, Medical specialty	Result in relation to the HeNReG
• 20/09/20	General practitioner	Joined, participated regularly
• 26/09/20	Retired Department head	Joined, never participated
• 29/09/20	Psychiatric Resident, PGY2	Couldn't commit to fully engage
• 29/09/20	Palliative medicine physician	Considered group an inappropriate fit personally
• 29/09/20	Medical student (second year)	Clinical schedule up in the air
• 30/09/20	Pediatric Resident (first year)	Joined, participated irregularly
• 22/10/20	Medical student (second year)	Joined, participated most weeks

- During COVID-19, 2020/21 academic year, nineteen members of HeNReG in total
- Four of nineteen were medical professionals out of seven who initially wanted to join
- Half of those medical professionals who joined were anxious and overwhelmed
- Those medical professionals who engaged
 - had participated in narrative research in the past
 - Increased their ability to self-direct their learning by improving their understanding of what they valued

Discussion

- For medical students
 - Providing additional opportunities for self-directed learning may continue to present a challenge—even with the need for adopting self-directed learning imposed by COVID-19—because they lack experience and time
 - Drive to meet standards of their professional often supersedes being a self-directed learner
 - When they do engage in self-directed learning they become anxious and overwhelmed
 - Unless they have a strong knowledge based they prefer to avoid self-directed programs
- For medical professionals in general
 - Only those who are already familiar with narrative research are able to sustain their commitment to determining their values and not become anxious and overwhelmed
 - Yet few opportunities exist for narrative research—the method developed for the HeNReG remains unique
- Lack of narrative research opportunities may play a significant role regarding why medical professionals (especially medical students) are reluctant to engage in self-directed learning

Conclusion

- Continuing social-distancing limitations resulting from COVID-19 [35] mean medical professionals must become increasingly self-directed to complete their required professional learning
- In-person instructors are no longer available [36]
- Participating in co-regulated, solution-focused and mentored online groups similar to the HeNReG holds promise for encouraging self-direction
- Medical professionals must resolve they are willing to commit and engage with them
- Familiarity with narrative research supports self-directed learning so the curricula of medical programs would do well to promote the effectiveness of multidisciplinary narrative research
- Improving the ability and likelihood of medical professionals (especially medical students) to participate in such groups during lockdown increases their ability to self-direct their learning, an aim for learning during COVID-19

Funding, Acknowledgements, Declaration

Funding:

- This research received no external funding

Acknowledgments:

- Supporters of the Health Narratives Research Group
 - Edward Shorter, Jason A. Hannah Professor in the History of Medicine, University of Toronto
 - Allan Peterkin, Professor of Psychiatry and Family Medicine at the University of Toronto and director of the Health, Arts and Humanities Program

Conflict of Interest:

- Author declares no conflict of interest

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