

Evolution and 15-year effect of a pan-Canadian training program

Transdisciplinary Understanding and Training on Research–Primary Health Care

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And the TUTOR-PHC Program Co-Investigators

Addressing complex primary health care (PHC) questions requires the knowledge, skills, and effective collaboration of interdisciplinary research teams.¹ The Transdisciplinary Understanding and Training on Research–Primary Health Care (TUTOR-PHC) program, which is unique in Canada because of its size and reach across the country, was developed for interdisciplinary PHC research capacity building. As this year marks the program's 15th anniversary, this article will describe this one-of-a-kind training program's evolution and effect.^{2,3}

Background of TUTOR-PHC

The goals of the TUTOR-PHC program are to train a cadre of PHC researchers, clinicians, and decision makers in interdisciplinary research to tackle current and future challenges in PHC, lead collaborative interdisciplinary research teams, and increase the number and quality of interdisciplinary and transdisciplinary research projects and publications at national and international levels.

This 12-month program brings together 12 Canadian and 2 international trainees from various PHC disciplines (including family medicine, nursing, epidemiology, psychology, social work, pharmacy, occupational therapy, sociology, education, and interdisciplinary studies); the group also includes trainees who currently work as decision makers. The trainees participate in a 3-day, face-to-face symposium, followed by online elements that include research-oriented workshops, feedback on the trainee's proposed research by peers, and the development of a mock grant proposal as an interdisciplinary team. While trainees gain research knowledge, the main objective is to help these learners, who come from disparate disciplines, understand the perspectives and skills that they each bring to the research task and learn how to work within an interdisciplinary team. The interdisciplinarity of the TUTOR-PHC program is reflected in its structure; there are currently 27 co-investigators or mentors from a breadth of PHC disciplines, representing 12 universities and 5 provinces across Canada. The trainees have also observed that the "course leaders and mentors were also from a wide range of backgrounds and were really knowledgeable and passionate about interdisciplinary research."⁴

During the initial 10 years, TUTOR-PHC was funded by a Canadian Institutes of Health Research Strategic Training Initiative in Health Research grant. Subsequently, funding to support the program was obtained from national, provincial, and organizational sources.⁵ The success in continuing to secure funding speaks to the important role the program plays in PHC research in Canada.

Evolution of the program

The TUTOR-PHC program delivers a rigorous and relevant curriculum that supplements a trainee's formal education. While our original goals remain, we continuously revise and add new material to the curriculum based on the current research environment and on an annual assessment of trainee needs. Content areas include building partnerships with policy makers, conducting patient-oriented research, inviting patients to lead as teachers, engaging with Indigenous communities, and understanding health system differences as a basis for interjurisdictional research. We have also expanded the pool of disciplines that our trainees represent. Thus, TUTOR-PHC is committed to growing a vibrant and inclusive research community in PHC.

Effect of the program

Since the program's inception in 2003, a total of 189 trainees have participated in the TUTOR-PHC program: 166 were Canadian PHC researchers, practitioners, and policy makers; and 11 were PHC researchers from the United Kingdom, 8 from New Zealand, 2 from Australia, 1 from Belgium, and 1 from France. Trainees have shown and expressed that their experience in the program has been valuable^{6,7}:

Overall, participating in the program allowed us to gain a wider knowledge base in interdisciplinary and PHC research The TUTOR-PHC program also highlighted the interrelationships between interprofessional care, interdisciplinary team learning and interdisciplinary research.⁶

The productivity of TUTOR-PHC alumni from 2003 to 2017 is impressive, with trainees acting as principal investigators or co-investigators (following completion

of the TUTOR-PHC program), obtaining 922 grants worth at least \$310 million, publishing 1546 peer-reviewed papers, and delivering more than 3000 presentations. Much of this work was completed by trainees in collaboration with either a fellow trainee or a mentor. This illustrates the power of TUTOR-PHC to bring together PHC researchers from across Canada, create bridges, and foster research ideas. As one trainee explained: “It gave me an even greater appreciation for the importance of building and maintaining connections in the PHC research community.”⁸

Mentoring and building a PHC community

In an era where research funding is limited and researchers need to work across disciplines and overcome traditional boundaries, the value and effect of TUTOR-PHC is even greater. This has been emphasized by our trainees: “I could not imagine beginning a career in PHC without this intensive and supportive training program It should be a prerequisite for any researcher interested in the field” (TUTOR-PHC trainee, written communication, 2017).

Beginning in 2008, trainees who were well established researchers were invited by the program leaders to become mentors. Currently, alumni comprise half of the mentor team. This “cascade mentoring” demonstrates the success of our graduates, illustrates the program’s effect, and emphasizes the importance that mentors place on TUTOR-PHC training. These alumni, now mentors, are committed to TUTOR-PHC and to guiding the next generation of PHC researchers.

Conclusion

Enhancing capacity for conducting effective interdisciplinary PHC research has become ever more important given the complexity of research questions that need to be answered and the critical role of PHC in Canada’s health care system. The TUTOR-PHC program has responded by addressing current issues and trends in PHC in its curriculum, while retaining its core focus on interdisciplinary research training, thus filling an important niche in developing PHC research capacity in Canada. 

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Competing interests

None declared

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