

Original Research

Research Experience in Psychiatry Residency Programs Across Canada: Current Status

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Objective: To determine the current status of research experience in psychiatry residency programs across Canada.

Method: Coordinators of Psychiatric Education (COPE) resident representatives from all 17 psychiatry residency programs in Canada were asked to complete a survey regarding research training requirements in their programs.

Results: Among the 17 COPE representatives, 15 completed the survey, representing 88% of the Canadian medical schools that have a psychiatry residency program. Among the 15 programs, 11 (73%) require residents to conduct a scholarly activity to complete residency. Some of these programs incorporated such a requirement in the past 5 years. Ten respondents (67%) reported availability of official policy and (or) guidelines on resident research requirements. Among the 11 programs that have a research requirement, 10 (91%) require residents to complete 1 scholarly activity; 1 requires completion of 2 scholarly activities. Eight (53%) residency programs reported having a separate research track. All of the programs have a research coordinator and 14 (93%) programs provide protected time to residents for conducting research. The 3 most common types of scholarly activities that qualify for the mandatory research requirement are a full independent project (10 programs), a quality improvement project (8 programs), and assisting in a faculty project (8 programs). Six programs expect their residents to present their final work in a departmental forum. None of the residency programs require publication of residents' final work.

Conclusions: The current status of the research experience during psychiatry residency in Canada is encouraging but there is heterogeneity across the programs.



L'expérience en recherche dans les programmes de résidence en psychiatrie au Canada : état actuel

Objectif : Déterminer l'état actuel de l'expérience de recherche dans les programmes pancanadiens de résidence en psychiatrie.

Méthode : On a demandé aux résidents représentant les 17 programmes de résidence en psychiatrie du Canada auprès des Coordonnateurs des études postdoctorales en psychiatrie (CEPDP) de répondre à un sondage sur les exigences de formation en recherche de leurs programmes.

Résultats : Sur les 17 représentants des CEPDP, 15 ont répondu au sondage, équivalant à 88 % des facultés de médecine canadiennes qui ont un programme de résidence en psychiatrie. Sur les 15 programmes, 11 (73 %) exigent que les résidents mènent une activité scientifique pour compléter la résidence. Certains de ces programmes ont incorporé cette exigence dans les 5 dernières années. Dix répondants (67 %) ont déclaré la disponibilité d'une politique officielle et (ou) de lignes directrices sur les exigences de recherche pour les résidents. Sur les 11 programmes qui ont une exigence de recherche, 10 (91 %) obligent les résidents à terminer 1 activité scientifique, et 1 exige de terminer 2 activités scientifiques. Huit (53 %) programmes de résidence ont rapporté avoir un volet de

recherche distinct. Tous les programmes ont un coordonnateur de recherche et 14 (93 %) programmes réservent du temps aux résidents pour mener une recherche. Les 3 types d'activité scientifique les plus répandus qui répondent aux exigences de recherche obligatoire sont un projet complet indépendant (10 programmes), un projet d'amélioration de la qualité (8 programmes), et l'assistance à un projet d'un professeur (8 programmes). Six programmes demandent à leurs résidents de présenter leur projet final lors d'un forum du département. Aucun programme n'exige la publication du travail final des résidents.

Conclusions : L'état actuel de l'expérience de recherche durant la résidence en psychiatrie au Canada est encourageant mais il y a une hétérogénéité entre les programmes.

Research experience during residency training is of paramount importance for various reasons. First, it enhances overall medical knowledge and therefore contributes to better patient care by ensuring treatments are evidence-based. Second, it helps develop skills for critical appraisal of research findings, clinical reasoning, and communication skills among future clinicians. Third, it results in promoting respect for the work and contribution of colleagues in addition to career development. Further, it contributes to the continual growth of a discipline and advancement in the field of medicine while increasing the likelihood of attracting desirable trainees.¹⁻⁴

According to the CanMEDS training objectives in psychiatry as outlined by the RCPSC, the Scholar role includes 2 areas of competencies in which all psychiatrists in Canada should be proficient.⁵ First, to

critically evaluate medical information and its sources, and apply this appropriately to practice decisions.^{5, p 14}

This includes being able

to describe the principles of critical appraisal and the ability to critically appraise retrieved evidence needed to address a clinical question and integrate conclusions of this into clinical care.^{5, p 14}

The second objective addresses a psychiatrist's

contribution to the development, dissemination, and translation of new knowledge and practices, which involves developing a good understanding of principles of research and research ethics, being able to postulate a question and conduct the corresponding systematic research for evidence, selecting methods to address the question and disseminating these findings.^{5, p 14}

These are broad recommendations outlined by the RCPSC; however, there are no clear guidelines indicating how psychiatry residency programs in Canada should achieve

Abbreviations

COPE	Coordinators of Psychiatric Education
CPA	Canadian Psychiatric Association
PGY	postgraduate year
RCPSC	Royal College of Physicians and Surgeons of Canada

Clinical Implications

- Research training during residency is important to promote life-long, evidence-based practice for optimum patient care and to provide residents with an opportunity to discover their interest in research.
- Clear national guidelines for research competency are required to ensure that all the psychiatry residency programs in Canada provide comparable research training to their residents.

Limitations

- This survey was solely administered to the 17 psychiatry residency programs in Canada, and the results reflect only the Canadian system of training.
- The information gathered in the survey is based on the knowledge and perceptions of the COPE resident representatives of each program and not of the program directors or the resident body.

the above research-related competencies, including which scholarly activities qualify. Some programs have independently mandated research as part of their core curriculum, including The University of Western Ontario, which made research mandatory for psychiatry residents in 2011.

The growing interest in promoting research involvement among psychiatry residency programs is not unique to Canada. Several initiatives have been taken in the United States to improve research training opportunities for psychiatry residents. Roane et al⁴ describe the Psychiatrists Acquiring Research Training program at the Beth Israel Medical Center in New York. The American Psychiatric Association runs a yearly colloquium of junior investigators to provide mentoring for trainees interested in research, although the overall impact of this is still under investigation.⁶ Just this past year, the CPA also started an annual CPA Junior Investigator Research Colloquium, with the goal of “providing guidance, mentorship and encouragement”^{7, p 1} to residents early in their residency training who are interested in developing research careers in psychiatry. This colloquium provides feedback on resident projects, plenary sessions about career development, and potential grants.⁷ Similarly, the Training Residents in Psychiatry Scholarship program focuses on mentorship for junior residents to encourage research involvement, postresidency.² Other residency programs in the United

States, including Obstetrics and Gynecology, and Internal Medicine, mandate completion of a research project during residency.^{1,3} In the United Kingdom, the competency-based curriculum for core psychiatry trainees, defined by the Royal College of Psychiatrists, requires that junior psychiatry residents demonstrate the ability to independently perform 2 audit projects during their core training and to apply its findings to their service as well as their own practice.⁸

Most current literature on the status of research training in psychiatry is based on residency programs in the United States, and, to our knowledge, there is no study that specifically examines this issue in the Canadian setting.^{2,4,6,9} Our study presents the results of a survey designed to determine the current status of research experience in psychiatry residency programs across Canada and to clarify which scholarly activities qualify for research experience.

Methods

A survey consisting of a 15-item questionnaire (online eAppendix 1) was developed to obtain information on how psychiatry residency programs have incorporated scholarly activities into their curriculum. The survey inquired about specific components of research training and current supports for resident research. The questions included on the survey were based on discussions between the authors, and guided by how their institution modified their own research curriculum when it was made mandatory in 2011.

This project was approved by the Research Ethics Board of The University of Western Ontario.

An invitation to participate in the survey, and a letter of information about the study, was distributed to the COPE representatives from the 17 psychiatry residency programs in Canada, in the academic year July 2012 to June 2013.

The COPE representatives were selected to complete the questionnaire, as they serve as representatives of their respective programs, with access to information, in collaboration with their program director. This group is often sought for survey administration as they liaise between their programs and larger organizations, such as the COPE Committee and the RCPSC. The COPE representatives also meet twice a year at the national COPE meetings, whereby facilitating information dissemination with accessibility to each of the representatives, and have the most up-to-date knowledge on the academic activities in their program. However, the representatives change every 2 years, making consistency a challenge. Further, some of the more junior representatives may not be as familiar with their programs' core aspects.

All COPE representatives were given advanced notification of our study during the biannual COPE meeting to ensure sufficient response from all participants in a timely manner. The survey was administered using online FluidSurveys,¹⁰ and was distributed to the COPE representatives in May 2013 through an email list obtained by The University of Western Ontario's COPE representative, a coauthor

of our study. Participants were initially given 4 weeks to respond, with an email reminder sent at the 2-week interval. However, owing to limited response, the deadline had to be extended by another 4 weeks, with another email reminder sent 2 weeks before the new deadline.

All questions were close-ended, with most requiring yes, no, or not applicable responses (see online eAppendix 1).

Results

Demographics

Fifteen of seventeen COPE representatives (88%) completed the survey. Eleven (73%) respondents were PGY-3 and -4 residents, 3 (20%) were PGY-5 residents, and 1 (7%) was a PGY-2 resident.

Curriculum

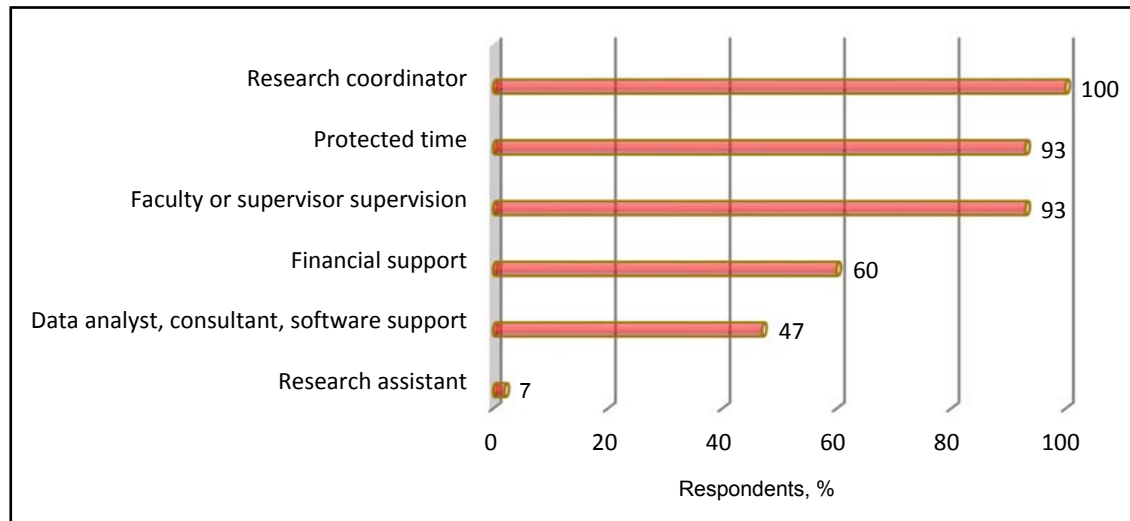
According to the responses received, 11 (73%) Canadian psychiatry residencies require residents to conduct scholarly activities to graduate. Some of these programs have incorporated this into their curriculum in recent years, specifically between 2008 and 2011. Ten of the 15 (67%) respondents reported having official policy and (or) guidelines on resident research requirements, whereas 3 (20%) reported having no official policy and (or) guideline, and 2 (13%) reported that this was not applicable.

Among the 11 programs that have a research requirement, 10 require residents to complete 1 scholarly activity; 1 requires completion of 2 scholarly activities. Initially, 10 (67%) programs answered that they had a research track on the survey; however, on further clarification made by the COPE representative (coauthor) at a following COPE biannual meeting, it was confirmed that 8 (53%) of the respondents had a separate research track, while the other 2 had interpreted this as the Clinician-Investigator Program.

Scholarly Activities That Qualify for Mandatory Research Experience

Most research curricula included multiple project options to fulfill the mandatory research requirement. The most common included conducting a full independent project (reported by 10 programs), which could be clinical or nonclinical; a quality improvement research project (reported by 8 programs), and (or) assisting in a faculty project (reported by 8 programs), including data collection and chart reviews. Other scholarly activities included literature reviews and case reports, reported by 6 and 3 programs, respectively.

Seven psychiatry residency programs expected residents to obtain Research Ethics Board approval for their project. Six of the programs expected their residents to present their work in a departmental forum, such as research day or grand rounds. None of the residency programs required mandatory publication of residents' final work.

Figure 1 Supports available to residents

Available Supports

The survey queried about the type of support available to residents for their scholarly activities. All programs had a research coordinator to provide guidance. Within each program, there is considerable variability in the supports available for residents involved in research (Figure 1). This included faculty supervision, data analyst or software support, financial support, and protected research time.

Discussion

This is the first study that surveyed residents to investigate the current status of research experience in psychiatry residency programs in Canada. Previously, similar studies have been conducted in North America. Balon and Singh⁹ conducted a study where psychiatry department chairs across North America were surveyed regarding research training. At that time, one-third of the programs offered a research track, and fewer than one-half of the programs required their trainees to participate in research activity.⁹

Our survey indicated that more than two-thirds of the psychiatry residencies in Canada require completion of a research project and about one-half offer a separate research track. This is consistent with the expectation that hands-on experience provides residents with a better understanding of research methodology, and provides opportunities for residents to develop an interest in research and possibly influencing future career choices.

Note, from our survey, that most psychiatry programs in Canada have a research coordinator for residents, and provide protected time for conducting research. However, there is heterogeneity in the type of scholarly activities that qualify for mandatory research experience and available supports and (or) resources. The definition of research track itself appears to be variable among different programs.

For consistency of research training across the psychiatry programs in Canada, it is important that the RCPSC sets clear guidelines regarding research curriculum. There have been relatively low levels of involvement by Canadian psychiatrists in research.^{11,12} It is hoped that mandatory and consistent research training during residency may overcome some of the barriers in generating clinician- and physician-scientists in Canada.

It is important to recognize, one limitation of this study is that the information gathered in the survey is based on the knowledge and perceptions of the COPE resident representatives of each program and not the program directors or the resident body. Therefore, the accuracy of the information may be limited to their own experience in their respective program.

Conclusion

The current status of research experience during psychiatry residency in Canada is encouraging; however, there is heterogeneity in the scholarly activities that qualify for mandatory research experience and the available resources for residents. There is a need to set clear national guidelines for research experience to ensure that all psychiatry residency programs in Canada provide comparable research training for their residents. It is recommended that the RCPSC and the CPA work together to prescribe clear accreditation standards for research to enhance the concept of the clinician-scientist in Canadian psychiatry.

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