Survey results on training in developmental disabilities in Canadian psychiatry residency programs

Sarah O’Flanagan BA1; Rob Nicolson MD1

Abstract

Objective: Mental health problems in children, adolescents, and adults with developmental disabilities (DD) are an underserviced clinical area. Although the Royal College of Physicians and Surgeons of Canada requires that experiences with patients with DD must be included during psychiatry residency training, the type and extent of this experience is not specified. The purpose of this study was to examine the current educational opportunities regarding DD in Canadian psychiatry residency programs. Methods: A survey asking about training in DD was sent to psychiatry residency directors at all 17 medical schools in Canada. The survey consisted of three sections focused on didactic teaching and clinical rotations (required and elective) in DD for residents. Results: Program directors of all psychiatry residency programs noted that their program included didactic teaching specific to DD, although the time dedicated to this differed greatly, ranging from 2 to 20 hours. Although 13 programs offered electives in DD, only five programs required residents to complete a clinical rotation specific to DD. Two programs did not have required or elective rotations in DD. Conclusion: These results suggest that training specific to DD is probably inadequate for most residents. This is likely to result in limitations in knowledge and skills required to assess and treat people with DD, decreased comfort working with them, and ultimately reduced quality and availability of psychiatric care for this underserved population. More specific and comprehensive training requirements and opportunities are needed to ensure that residents receive appropriate training in this area.

Key Words: developmental disabilities, graduate medical education, training, residency, psychiatry

Résumé:

Objectif: Les problèmes de santé mentale chez les enfants, les adolescents et les adultes souffrant de troubles du développement (TD) sont un domaine clinique sous-desservi. Bien que le Collège royal des médecins et chirurgiens du Canada exige que des expériences auprès de patients souffrant de TD doivent être incluses durant la formation de résidence en psychiatrie, le type et la durée de cette expérience ne sont pas spécifiés. La présente étude visait à examiner les possibilités éducatives actuelles en ce qui concerne les TD dans les programmes canadiens de résidence en psychiatrie. Méthodes: Un sondage portant sur la formation en TD a été envoyé aux directeurs de résidence en psychiatrie.
The prevalence of developmental disabilities (DD), defined here as Intellectual Disability and/or Autism Spectrum Disorder, is approximately 2% of the population (1, 2). (Although others have defined DD to also include Attention-Deficit/Hyperactivity Disorder, Learning Disorder, Childhood-Onset Fluency Disorder, Blindness, Hearing Loss, Epilepsy, and Cerebral Palsy (3, 4), we have restricted our focus and definition to Intellectual Disability and Autism Spectrum Disorder.) Compared with the general population, children, adolescents, and adults with DD have elevated rates of medical problems (5, 6), higher health care costs (7, 8), increased rates of premature death, and shorter life expectancies (6, 9). At the same time, paradoxically, people with DD tend to have lower rates of diagnosis and treatment of their medical comorbidities, leading to significant health care disparities and inequities (10-13).

Children, adolescents, and transition age youth with DD have been repeatedly found to have increased rates of psychiatric disorders, with some studies suggesting rates of up to eight times higher than the general population (6, 14, 15). This elevation in the rate of psychiatric disorders in people with DD is associated with high rates of morbidity, service utilization, and hospitalization (7, 14, 16, 17). Unfortunately, as with non-psychiatric medical problems, people with DD have reduced rates of diagnosis and, therefore, appropriate treatment (18-21).

One factor contributing to the difficulties faced by people with DD in accessing appropriate medical and psychiatric services is inadequate preparation of physicians to provide appropriate assessment and treatment of people with DD (21). Physicians have reported feeling inadequately trained and uncomfortable in the assessment and treatment of people with significant cognitive and communication deficits, particularly those with high levels of psychiatric comorbidity (22, 23). These feelings of inadequate preparation and discomfort treating mental health and behavioural problems in people with DD may be related to a lack of adequate formal training in DD and limited experience with this population (18, 21, 23-30).

There is a dearth of research on training in DD in Canadian psychiatry residency programs. Three studies published in the 1970’s noted limited teaching in DD during residency training. In one study, only five of 74 physicians working directly with adults with DD reported having had residency training specific to the population (24), while in a second, half of psychiatry residency programs in Canada reported that their main teaching about DD occurred through readings and lectures (27). In the latter study, eight of the 16 residency programs at the time also acknowledged a lack of clinicians with expertise to supervise residents in working with people with DD and two programs reported that their residents had no formal clinical experience in DD (27). In a third early paper, Leichner reported in 1977 that among 54 senior psychiatry residents surveyed about their education and training, 39 (72%) felt that psychiatry of DD was inadequately taught (28). In a similar survey ten years later, Leichner reported that senior psychiatry residents described fewer opportunities to work with people with DD than residents had in the 1977 survey (29). Perhaps of greater concern, residents reported inadequate clinical training (89%) and formal teaching (70%) in the area of DD (29).

In 2001, Lunsky and Bradley reported that training in DD for psychiatry residents remained limited (30). While all Canadian psychiatry residency programs reported that they had mandatory lectures in DD, most offered fewer than six hours of lectures and seminars. Similarly, only seven programs required that residents complete at least one rotation in DD. In 2002, a survey of senior psychiatry residents found that while the majority had received some training in psychiatric aspects of DD, the time devoted to this topic was felt by the residents to be inadequate as was the actual teaching on all topic areas related to DD (26).
The Royal College of Physicians and Surgeons of Canada (RCPSC) has set out specific standards, requirements, and objectives for training in psychiatry. Beginning in 2007, the RCPSC required that “Patients with developmental delay across the life span, with or without comorbid psychiatric disorder, must be included” (p 2)(31) in training psychiatry residents during second and third post-graduate years (PGY2 and PGY3). However, the type and extent of this experience were never defined. There were no further requirements for training in DD, although PGY4 and PGY5 residents could complete selectives in this area for up to six months (31).

With the changes to residency curricula based upon the Competency By Design model, the RCPSC has developed new training requirements in Psychiatry which were first implemented in 2020 (32). Residents in their Core of Discipline Stage will require training experiences in the “Care of special populations (integrated into other experiences or as discrete experiences), including patients with … developmental disorders, including intellectual disability and autism spectrum disorder (p 5)(32).” Residents at this stage will also require “Formal instruction in … therapeutic tools and techniques for specific developmental stages, including preschool and those with intellectual developmental disabilities (p6)(32).” As with the earlier requirements for training, there is no further description of the type or length of these required training experiences. Additionally, by the end of their residency, residents will be expected to recognize the symptoms of and treatment options for patients with DD (33).

Developmental Disabilities are not mentioned in the required experiences for Child and Adolescent Psychiatry Fellows other than an indication that optional training experiences can include formal training in the use of the Autism Diagnostic Interview and the Autism Diagnostic Observation Schedule (34). The only required competency involving DD for Child and Adolescent Psychiatry Fellows is knowledge and understanding of the diagnosis and treatment of Intellectual Disability and Autism Spectrum Disorder (35).

The impact of the changes to the RCPSC requirements and competencies on training in DD is unclear. As such, the purpose of this study was to examine the current educational opportunities and requirements regarding DD in Canadian psychiatry residency programs.

**Methods**

**Participants**

Surveys were sent by email directly to the post-graduate training directors of all 17 psychiatry residency programs in Canada. They were informed that the purpose of the study was to examine training in DD in Canadian psychiatry residency programs and to assess similarities and differences in curricula related to DD in Canadian psychiatry residency programs.

This study was approved by the Western University Health Sciences Research Ethics Board. In the description of the study, participants were informed that completion of the survey would indicate their voluntary agreement and consent to participate in the study.

**Measures**

The surveys were completed online using Qualtrics and consisted of two parts. The first section asked the training directors to identify their university affiliation. This information was tracked only to ensure that the program directors from each university had completed the survey. The second part of the survey, the results of which are reported herein, was completed and recorded separately from the first section and without any identifying data. Consequently, the information about training opportunities collected in this section could not be matched with specific programs.

This second part of the survey consisted of three sections focusing on didactic teaching in DD for residents, required clinical rotations in DD, and electives in DD. Within each section, there were similar short answer questions inquiring about the availability of didactic and clinical teaching (yes/no), the amount of teaching or training available, the year in which the teaching and training were offered, and the expertise of the people providing the educational opportunities. The survey is available from the authors upon request.

**Procedures and Analysis**

Surveys were sent to program directors in September of 2017, and all surveys were returned within five months, with several program directors requiring at most two reminder emails. Data from each completed survey were recorded by Qualtrics and analyzed using frequency counts.
Results

Didactic Teaching
All 17 programs reported that they provided formal didactic teaching (lectures or seminars) on DD for their residents. The amount of time dedicated to didactic teaching differed significantly across programs, ranging from 2 to 20 hours over the course of the five years of residency. The mean number of lecture hours was 8, with 9 programs providing 6 or fewer hours of didactic teaching and 4 programs offering more than 10 hours. The timing of the didactic teaching also varied, although most programs offered the majority of lectures in PGY2 or PGY3.

The topics in didactic teaching sessions generally covered at least the diagnosis and treatment of psychiatric disorders in people with DD. However, only three programs specifically reported teaching interviewing skills with people with DD, and all of these focused on interviewing adults with DD.

Mandatory Clinical Rotations in DD
Of the 17 psychiatry residency programs in Canada, only 6 indicated that they required residents to complete a clinical rotation specific to DD. Among the programs with required clinical rotations, the duration of the rotations ranged from one to four weeks: three programs required a one-week rotation, two programs required a two-week rotation, and one program required a four-week rotation.

The required rotations occurred in PGY1 in one program, PGY3 in three programs, and PGY4 in one program. One program required that residents complete a rotation specific to DD in either PGY3 or PGY4. Three of the six programs with required rotations in DD had residents complete these rotations with both children and adults, one program had the required rotation with children and adolescents only, and another program required the rotation with adults only. The remaining program did not require that the rotation be related to a specific time or stage of life.

Elective Rotations in DD
Fourteen of the 17 programs reported that they offered elective clinical rotations in DD. The 14 programs that reported available electives had significant variation in the length of these rotations, ranging from 2 to 12 months. These rotations could occur with adults or children and adolescents, depending upon the preferences and needs of the resident.

Discussion
All Canadian psychiatry residency programs reported that they offered some sort of teaching on DD, although the nature and quantity of time dedicated to teaching on this topic varied greatly across programs. While all programs provided didactic teaching on DD, only six required clinical rotations, with half of those only being for one week. Two programs reported having neither required rotations nor elective opportunities.

While Ash reported in 1974 that residents at two programs did not have any didactic teaching in DD (27), all residency programs now offer didactic teaching. Ash also reported that two residency programs did not offer any clinical opportunities specific to DD (27), while in 2001, Lunskey and Bradley reported that only one residency program did not offer any clinical experiences in DD (30). In the present study, two programs reported having neither mandatory nor elective clinical rotations in DD. Thus, while the number of programs providing didactic teaching in DD has increased since 1974, the number of programs offering clinical opportunities has not. Indeed, since 2001, the number of residency programs requiring at least one clinical rotation in DD has declined from seven to six.

As noted earlier, the prevalence of DD is about 2% of the population and children, adolescents, and transition-age youth with DD are more likely than the general population to have a comorbid psychiatric disorder. Despite that, the mean number of hours of didactic teaching regarding DD across five years of residency was eight hours, with nine programs offering fewer than seven hours. Similarly, only six programs required clinical rotations specific to DD, with five of those rotations being two weeks or less. Further, only one of these programs required a rotation with patients with DD in child psychiatry. Given the fact that most psychiatrists are going to encounter children, adolescents, and transition-age youth with DD in their practice, these findings suggest that the amount of teaching, both didactic and clinical, is unlikely to be sufficient.

People with DD, despite their increased rate of mental health problems, tend to have lower rates of diagnosis, treatment, and appropriate psychiatric care (18-21). This is a longstanding problem and one factor contributing to this inequity may be insufficient training in psychiatric aspects of DD (18, 21). Although the RCPSC requires training in DD, the amount of training has never been specified, even in the most recent Psychiatry Training Experiences which are based upon the Competency by Design model (32, 33). However, the findings reported here suggest that most psychiatry residency training programs in Canada may have...
difficulty providing residents with the required experiences necessary to demonstrate competency in the assessment and treatment of people with DD. Further, the training that is presently available is unlikely to provide the education and training necessary for most residents to foster a sense of confidence and competency in treating people with DD. This, in turn, has the potential to lead to reluctance on the part of psychiatrists to provide care to these patients. The lack of psychiatrists skilled in the assessment and treatment of people with DD also likely limits the quantity and quality of training opportunities for future psychiatry residents, thus perpetuating the inequities in health care faced by people with DD.

**Conclusion**

Children, adolescents, and transition-age youth with DD have increased rates of psychiatric disorders and reduced access to care. Research dating back to the mid-1970’s suggests that the training available in the psychiatry of DD is inadequate and, further, is likely related to the reduced access to mental health care and treatment experienced by people with DD (21). Despite this, the amount of didactic and clinical teaching in DD for residents in Canadian psychiatry programs has changed minimally in the last 35 years and it remains inadequate to meet the needs of this population. Unless didactic and clinical training increase and become more available to residents, the number of psychiatrists with expertise with this population is unlikely to increase, and, consequently, people with DD will continue to face inequities in their mental health care. In order to ensure that appropriate psychiatric care and treatment for this population are available, more specific and comprehensive national training requirements regarding those with DD need to be developed and implemented.

**Conflict of Interest**

The authors have no financial relationships or other ties to disclose. This study was supported by the Developmental Disabilities Program in the Department of Psychiatry at Western University. This research received no other specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

**References**

Intellectual and developmental disabilities training in psychiatry residency: the way forward

Anupam Thakur, MBBS, MD,1 Yona Lunskey, PhD2

Early half of adults with intellectual and developmental disabilities (IDD) have a co-occurring psychiatric disorder [1]. Clinical complexity and poorly addressed mental health needs often lead to delayed diagnoses, higher rates of hospital visits and prolonged periods of hospitalization in this population [2]. The importance of appropriate health system infrastructure and resources to support this population cannot be emphasized enough. A Canadian survey of IDD training across psychiatry residency training programs in 2001 reported that at that time, just 31% of 16 programs across the country provided more than six hours of teaching, less than half had mandatory rotations, and 56% offered elective rotations [3]. More than two decades later, the gaps in IDD training still remain to be addressed. O’Flanagan and Nicolson (in this issue) [4] highlight the current status and need for IDD training in their survey conducted in Canadian Psychiatry Residency Programs. The authors report a wide variation in IDD teaching, ranging from 2-20 hours, and only five residency programs had mandatory IDD specific rotations to be completed. Inadequate and fragmented training during residency leaves doctors insufficiently prepared to support the mental health needs of this population. The authors [4] note the likelihood of limitation in knowledge and skills leading to reduced availability of psychiatric care for people with IDD. Lack of competency may lead to reluctance and hesitancy. Furthermore, a lack of emphasis and recognition of the important role of psychiatry with this group (or the omission of teaching), runs the risk of a hidden curricular message that this is not the psychiatrist’s role, or that this group is less important than other more “psychiatric” populations. The shortage of psychiatrists with skills in caring for people with IDD compounds the ever-increasing health disparities faced by this population in an over-stretched health care system.

A recent systematic review on IDD training [5] has stressed the need for IDD specific training opportunities

1Staff Psychiatrist, Azrieli Adult Neurodevelopmental Centre, Centre for Addiction and Mental Health; Assistant Professor, Department of Psychiatry, University of Toronto, Surrey Place, Toronto
2Senior Scientist, Director of the Azrieli Adult Neurodevelopmental Centre; Director of the Health Care Access Research and Developmental Disabilities (H-CARDD) Program; Centre for Addiction and Mental Health; Professor, Department of Psychiatry, University of Toronto
in psychiatry residency programs. The authors emphasize the importance of multi-modal approaches to training, including theoretical pedagogy, interactive structured teaching and experiential learning opportunities. However, curriculum developers and program leaders are faced with the challenges of introducing new curricular content in crowded training programs [6]. There is a need for a systematic approach to address the issue of providing IDD learning opportunities to the resident learners.

What does it take to develop an IDD curriculum?

1. **Competency-based focus:** The recent focus on competency-based medical education, entrustable professional activities and milestones in training, further underscores the need to integrate learning experiences for trainees [7]. The competency-based IDD curriculum of the Royal College of Psychiatrists, UK [8], is a good resource for program leaders and curriculum developers. Psychiatry programs can learn from IDD curriculum development experience of family medicine programs in Canada too [9, 10]. Child psychiatry, general psychiatry and emergency department rotations are more likely to support such learning experiences, in addition to the few existing ‘dual-diagnosis’ programs in psychiatry training centres. Competencies can include those related to intellectual disability and autism assessment for children and adults, mental health comorbidity, behaviours that challenge, care complexity, risk assessment and management, emergency care, and medico-legal issues in IDD. Interdisciplinary care is key to supporting people with IDD. Interprofessional team competencies can and should be integrated within the IDD curriculum.

2. **Curriculum development framework:** A structured approach to competency focused IDD curriculum e.g., Kern’s 6-step curriculum helps in iterative curriculum development [11]. Like other frameworks, there is a strong emphasis on evaluation. Program evaluation should be an integral part of curriculum development to assess curricular impact, whether the goals and objectives of the curriculum were met. Measurement of educational outcomes in IDD curriculum can inform further changes.

3. **Integrated IDD curriculum:** Core psychiatry rotations can be a good opportunity for residents to learn and demonstrate competencies in IDD. Embedding specialized IDD training opportunities within existing clinical rotations is a potential solution. For example, competencies in assessment and management of behaviours that challenge in IDD can be achieved in an emergency department or adult psychiatry inpatient rotation. Troller et al. [12] have emphasized the importance of clinical skills learnt in IDD training such as alternative communication methods and involving family members and carers, to psychiatric care more broadly (which can improve clinical practice.) IDD competency based education in Canadian family residency programs illustrates how this can be done here [13].

4. **Innovation in teaching:** Clinical experience supplemented by theoretical pedagogy can help broaden knowledge and understanding about IDD and mental health issues. Virtual learning opportunities such as the ECHO framework [14] and simulation strategies with actors with IDD [15] should be encouraged. The guiding principles of ECHO are use of technology to leverage scarce resources, case-based learning, best practice, and monitoring outcomes to increase impact [16]. ECHO follows an “all teach, all learn” concept, which can be a valuable learning tool. Various studies demonstrate the educational role of this interprofessional framework in caring for people with IDD during COVID-19 pandemic [17,18]. Virtual case-based education can be an important tool in delivery of IDD curriculum across sites or even across residency programs.

5. **Faculty development:** Effective implementation of IDD curriculum needs faculty members who are able to support learner’s needs. IDD champions to support faculty development with content expertise and mentorship, and IDD education leads to coordinate training opportunities for residents are needed. Mentorship from IDD champions and experiential learning can go a long way in addressing the hidden curriculum. Advocacy in post-graduate medical education committees should be encouraged. Family members and people with IDD should be
actively involved in curriculum development and delivery initiatives. Inclusive teaching that involves persons with IDD shapes attitudes and competencies in caring for this population [12,19].

It is terribly concerning that more than 20 years after the Lunsky & Bradley paper [3], this population continues to be under-emphasized in the residency curricula. There is ample evidence about the need for training in IDD to better prepare trainees to work with this population. IDD education will help in building a knowledgeable and confident workforce to meet the complex healthcare needs in IDD and improve healthcare outcomes. It is time to move forward, and do something!

References


Importance of early training experience with persons with intellectual and developmental disabilities.

Natasha Fernandes, MD, FRCPC, MSc1

1Assistant Professor, University of Toronto; Staff Psychiatrist, Centre for Addiction and Mental Health (CAMH)
across residency programs in Canada (1). Their conclusion highlighted a lack of consistency across programs. It was noteworthy that only 6 out of 17 residency programs had a required clinical rotation specific to the care of the IDD population. This conclusion is not surprising and provides a lot of insight into why existing literature often describes a general unease among practicing psychiatrists who do not feel adequately trained to work with this population (2). Promoting experiential training through mandatory rotations would seem to be a relatively feasible answer to this problem.

My own residency training is not too far behind me. I graduated from the University of Toronto Psychiatry residency program in 2021. From the very beginning, I was interested in working with adults with IDD. Whereas O’Flanagan and Nicolson’s article focused on residency training, based on my own experience, I believe exposure needs to start in medical school. My passion for this population was developed through a series of random but serendipitous encounters with patients with IDD across clerkship clinical rotations. I am often told that this population is very lucky to have me work with them. My answer is always the same-- I am the one who is truly fortunate. I feel so privileged that very early on in my training we found each other. My encounters with those with an IDD became shining moments, in what at times could be a stark medical reality, that I will always treasure.

One such moment was caring for a baby on my pediatrics rotation with a rare congenital syndrome. Medicine taught me she should not be expected to survive. She was determined to teach me otherwise. Not only did she survive but she thrived. Subsequently I had one of the most satisfying encounters in the Emergency Department with a young lady with an intellectual disability presenting with behaviors that were challenging to manage at home. I encouraged her mother to hold her in a sort of hug to allow for an easier examination of her ears. Before my eyes her agitation melted away and it seemed what she needed at that moment was a simple embrace. It may have been the first time I truly appreciated that medications cannot cure all that ails us.

As a result, I already had a keen desire to work with this population at the start of residency. I had a laser focused approach and hunger for knowledge. We did have didactic training and a single one-half day mandatory clinic dedicated to this population. I knew this would not be enough to answer all my questions. I subsequently sought out additional opportunities in almost every year of my residency training. In my first year I was fortunate enough to be connected to a world-renowned researcher who has dedicated her career to advancing our understanding of this population. Under her guidance I was able to engage in research and get connected to other experts in the field. I also did a one-month elective working with a psychiatrist doing both inpatient and outpatient work with persons with IDD. I then spent one-half day a week during my child and adolescent rotation working with a child psychiatrist specialized in IDD. I was also given the option to spend my entire six-month chronic care rotation at an in-patient unit dedicated to this population. It was really through this last experience that I had my first encounter with longitudinal care by a comprehensive allied health care team. It formed my expectation for the standard of care I believe this population deserves. Medical care, not in isolation but in collaboration with other disciplines. My training concluded with me spending two days a week in my fifth year working at an adult IDD outpatient clinic where I eventually secured my staff position upon graduation.

O’Flanagan and Nicolson have made me reflect on how fortunate I was to have these opportunities available to me. I took it for granted that I had so many expert and gracious supervisors at my fingertips. In hindsight I recognize this for the luxury it was and hope future initiatives can expand such learning opportunities. We need supervisors in every school who not only feel comfortable working with individuals with an IDD but who cultivate an environment of excitement to care for a complex but highly satisfying population to work with.

As a staff psychiatrist, I spend the majority of my time working with adults with IDD in an out-patient setting.
In addition, I lead a consult-liaison service at our mental health hospital aimed at supporting other psychiatrists as they care for this population on the in-patient unit and emergency department settings. A significant part of my work involves educating other psychiatrists about this population and trying to fill those gaps in our medical training. I have also come to realize that part of the fatigue that may arise from working with this population is when inappropriate demands are placed on medicine when social supports are what is required. My hope for my career is using my voice to advocate for improved community supports. We need to prevent inappropriate institutionalization of individuals with IDD in hospital settings. My wish is that they live full and rich lives entitled to every human being. I feel this is an appropriate thank you for their contribution to how full and rich they have made my own life and career.

References


