

## Collaborative Role Education in Post Graduate Psychiatric Training: A Narrative Review

Fahad D Alosaimia\*

Department of Psychiatry, King Saud University, Riyadh, Saudi Arabia

### Abstract

**Objective:** To review the literature and trusted scientific websites on studies about Collaborative role education and its application in postgraduate psychiatric training.

**Methods:** Medline literature and scientific websites were searched. The data selected were those discussing collaboration care efficacy, collaborative role competency and the application of adult education theory principles through Interprofessional education (IPE). The results reported are those obtained using appropriate techniques and published in reputable journals or on trusted scientific websites. Information relevant to mental health and postgraduate psychiatric training was selected for inclusion.

**Results:** Collaborative role is one of the seven core roles (CanMEDS) that define essential physician competencies. Collaborative care and IPE were efficacious in improving cost efficiency, patient safety, health professionals' satisfaction and patient outcomes in different populations. According to a 2005 survey, the majority of mental health professionals in Canada support but do not presently offer formal pre-licensure, post-licensure, or continuing IPE involving collaborative mental health care.

**Conclusion:** Despite some challenges, IPE is a very worthy way to build collaborative role competency in postgraduate psychiatry trainees.

**Keywords:** Collaboration; Canmeds; Postgraduate education; Psychiatry training; Interprofessional education

### Introduction

Collaboration competency has been increasingly emphasized and valued in medical curricula because physicians work in multiprofessional health care settings where care is patient-centered and patients have a trajectory of care. Psychiatry is a discipline that has a more intuitive inclination toward the collaboration role than other specialties in medicine. This may, in part, be attributed to the multiprofessional teams typically involved and the use of the bio-psycho-socio-spiritual model in mental health care. This narrative review will examine the present evidence for methods of teaching psychiatry residents the knowledge, skills and attitudes of the collaborative role.

### Methods

Relevant data was obtained from Medline literature and scientific literature from 1980-2015. In this narrative review, the definitions of collaboration were researched in various sources and compared to the current guidelines for training specialists in Canada and worldwide. Adult learning theory was reviewed and interprofessional education (IPE) as one method of teaching collaboration was discussed. A review of the available literature, including published case examples of collaboration curricula, was analyzed in the context of this theory. Adult learning theory was applied to the mental health professional education in the context of the collaborative role. Conclusions for collaboration training in postgraduate psychiatry were outlined.

### Definitions

The Royal College of Physicians and Surgeons of Canada (RCPCSC) have approved seven core roles that characterize essential physician competencies. The Canadian Medical Education Directions for Specialists (CanMEDS) roles include Medical Expert, Communicator, Collaborator, Professional, Leader, Scholar, and Health Advocate. Originally; they were developed in 1996, and the last revision

process was done in 2015 [1]. In 2000, RCPSC defined collaborator as one who consults effectively with other physicians and health care professionals and adds productively to other interdisciplinary team activities. In 2015, the Royal College released 'New Definitions' for the seven roles. In this revision, collaborators were defined as physicians who work effectively with other health care professionals to provide safe, high-quality, patient-centered care [1]. For this role, there are two key competencies and a couple of subdivisions for each competency; all are elaborated in Table 1. Furthermore, the majority of the accreditation councils of physicians and other health professions worldwide are trying to integrate the collaboration concepts into the core competencies of their professionals. For example, in the United States, the Accreditation Council for Graduate Medical Education (ACGME) and the American Board of Medical Specialties (ABMS) defined six core competencies for all physicians, but none explicitly addresses collaboration. The competencies of the ACGME and ABMS that are closest to collaboration are Interpersonal and Communication Skills and Systems-based Practice [2]. Additionally, the European Board of Internal Medicine Core competencies of the internist stressed collaboration in its third and fifth core competencies (Communication and Organizational Planning and Service Management Skills) [3]. Interestingly, one study showed an overlap of the core competencies of the dental and nursing professions (38 percent partial or total overlap).

\*Corresponding author: Fahad D. Alosaimia, King Khalid University Hospital, King Saud University, P.O. Box 7805, Riyadh 11472, Kingdom of Saudi Arabia, Tel: +96614671226; Fax: +966-14672571; E-mail: dr.fahad.alosaimi@gmail.com

Received September 04, 2015; Accepted January 26, 2016; Published January 30, 2016

Citation: Alosaimia FD (2016) Collaborative Role Education in Post Graduate Psychiatric Training: A Narrative Review. J Depress Anxiety 5: 216. doi:10.4172/2167-1044.1000216

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A similar overlap with medicine is also evident, albeit smaller (25.4 percent) and not surprisingly, collaboration as a concept is evident in all these three health professions' competencies [4]. In postgraduate psychiatry training, collaboration competency is a major requirement in almost all programs in Canada [5] and worldwide [6]. For instance, in The Department of Psychiatry, University of Toronto, Canada, one of the largest psychiatry training programs in the world, collaborative competency is expected to be achieved by postgraduate psychiatric trainees in almost all of their rotations during the five year program, but it is stressed the most during the consultation liaison psychiatry (Psychosomatic Medicine) rotation. The education objectives of the collaborator role in this rotation are: "A. Consults effectively with other health care team members, including non-psychiatric MD's, Registered nurses (RN's), Social workers with Masters (MSW's), Psychologists, and Spiritual Care staff, recognizing their roles and responsibilities. B. Can participate effectively in a "shared care" model with Primary Care physicians in the management of a patient's psychiatric or behavioural issues. C. Contributes effectively to the interdisciplinary management of the medical/surgical patient. D. Is able and willing to teach and learn from colleagues/students, within the context of a clinical care team. E. Is able to address interpersonal conflict in patient care, utilizing negotiation skills, to arrive at a workable endpoint" [7].

### Terminology

There is no firm definition of Collaboration in the broader medical education literature. Different names e.g., cooperation, multi-professional education, common learning, shared learning, teamwork, interdisciplinary, and interprofessionality are given to describe collaboration education and practice. Collaboration is occasionally used to describe teamwork in health care, but this is not wholly accurate. Functioning within a team does not necessarily denote positive interactions between team members. A team could be defined as a group of individuals who depend on each other to perform their tasks and who work responsibly toward agreeable outcomes. Team members consider themselves and are considered by others as an intact social unit situated within larger social structures who handle their bonds across organizational borders [8]. It is not always feasible to build well-

defined teams among health professionals so it is preferred to define collaboration as a process that consists of engaging interaction between healthcare professionals regardless of whether they work with or view themselves as a part of a team [9]. Way and his colleagues stressed the seven essential elements of collaboration: cooperation, assertiveness, coordination, communication, responsibility, autonomy, mutual trust and respect [10]. Interprofessional education (IPE) is considered one of the best methods to teach collaboration. IPE refers to the teaching and learning of students from, with and about other professions during all or part of their professional training to promote collaborative working in their professional practice [11].

### Efficacy of Collaborative Practice and IPE

Numerous studies conducted in different professions and settings show the positive outcomes of collaborative practice and IPE. Collaboration practice and IPE studies suggest its efficacy in improving patient outcomes in some populations (Geriatrics, ER care for abused women, sexually transmitted disease screening, adult immunization, fractured hips and neonatal ICU care) [12,13]. Moreover, some studies indicate favorable outcomes of collaborative practice in other important areas (e.g., cost efficiency, patient safety, and health professionals' satisfaction) [14-17]. Looking for solid evidence on IPE, Reeves in his Cochrane study [17] included six studies (four randomized controlled trial (RCT) and two controlled before and after studies) on IPE. IPE was shown to produce a positive outcome in four of these studies in different clinical areas including the competencies of the mental health practitioner related to the delivery of patient care. Three of the studies also reported that the gains attributed to IPE were prolonged over time up to 21 months. However, two of the six studies reported mixed outcomes (positive and neutral) and two studies failed to demonstrate any impact of IPE on either professional practice or patient care [17].

Collaborative care models use non-physician care managers to coordinate the bio-psycho-social care of patients with multiple comorbid complex illnesses, including longitudinal symptom monitoring, treatment interventions, arranging for visits to specialists and supporting the patient in the use of other community resources [18,19]. A multicenter Italian study that evaluated the introduction of "care manager" nurses into the primary health care system for patients with heart failure and diabetes, found this model to be feasible and highly effective in increasing patient health knowledge, self-management skills, and readiness to make changes in health behaviors as well as in promoting confidence and enhancing the safety of chronic patient management at home [19]. In the treatment of psychiatric disorders in medical settings, the care manager carries out further evaluation of positive-screen patients, continues assessment over time using various psychiatric rating scales, coordinates pharmacotherapy recommendations to primary medical providers, and provides support, education, and evidence-based psychotherapy to patients if needed [18]. In a RCT, comparing collaborative mental health care with usual care in a primary care setting, the authors found that collaborative care for patients with common mental disorders seemed to be as effective as the usual practice of referral to mental health services in reducing psychopathology, but it was far more efficient than the usual practice in terms of referral delay, duration of treatment, number of appointments, and related treatment costs [20]. A cluster randomized controlled trial found that collaborative care that incorporates brief low intensity psychological therapy delivered in partnership with practice nurses in primary care can reduce depression and improve self-management of chronic disease in people with mental and physical multimorbidity [21]. Additionally, treatment of common mental disorders in a collaborative

Key competencies	Enabling competencies
1. Work effectively with physicians and other colleagues in the health care professions	1.1 Establish and maintain positive relationships with physicians and other colleagues in the health care professions to support relationship-centered collaborative care 1.2 Negotiate overlapping and shared responsibilities with physicians and other colleagues in the health care professions in episodic and ongoing care 1.3 Engage in respectful shared decision-making with physicians and other colleagues in the health care professions
2. Work with physicians and other colleagues in the health care professions to promote understanding, manage differences, and resolve conflicts	2.1 Show respect toward collaborators 2.2 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports a collaborative culture
3. Hand over the care of a patient to another health care professional to facilitate continuity of safe patient care	3.1 Determine when care should be transferred to another physician or health care professional 3.2 Demonstrate safe handover of care, using both verbal and written communication, during a patient transition to a different health care professional, setting, or stage of care.

**Table 1:** Collaborative role core competencies, The Royal College of Physicians and Surgeons of Canada [1].

stepped care model resulted in an earlier treatment response compared with usual care [22].

## Adult Education Theory and the Collaborative Role

The attributes of adult learning have been the focus of academic discussion for the last six decades. In Europe, the European Association for the Education of Adults was founded in 1953 by representatives from a number of European countries [23]. Knowles described the seven elements of adult education, which are: a favorable physical, social and psychological climate of learning; mutual planning; relevance to learners' needs; formulation of own learning objectives; a self-directed plan; the facilitation of learners and the involvement of learners in their evaluations [24]. Tiberius and Tipping [25] described the twelve principles of effective teaching and learning that have substantial empirical support. These principles are: "1. Teachers' knowledge of the subject matter is essential to the implementation of important teaching tasks. 2. Active involvement of the learner enhances learning. 3. Interaction between teachers and students is the most important factor in student motivation and involvement. 4. Students benefit from taking Responsibility for their learning. 5. There are many roads to learning. 6. Expect more and you will achieve more. 7. Learning is enhanced in an atmosphere of cooperation. 8. Material must be meaningful. 9. Both teaching and learning are enhanced by descriptive feedback. 10. Critical feedback is only useful if the learner has alternatives to pursue. 11. Time plus energy equals learning. 12. Experience usually improves teaching."

Previous education methods, primarily those aimed at children (or pedagogy), had assumed a dependent learner, one who passively accepted the teacher's objectives and methods. Motivation and readiness to learn were externally enforced on the learners by authority figures, and the learners were expected to advance through defined levels at the appropriate age. The logic of the curriculum was dictated by the content itself, and the methods of conveying it were determined entirely by the instructor. On the other hand, adult education (andragogy), according to Knowles, postulates a self-directed, independent learner who takes control of their own education process and learns in the context of their previous experience. Their drive to learn is more likely to arise from a recognized deficiency in trying to achieve personal objectives or to advance their career [24].

Collaboration is about the need for physicians, including psychiatric trainees who currently work in multiprofessional health care environments where the care is patient-centered and patients have a trajectory of care, to communicate effectively and work together. As they practice medicine, these trainees will acknowledge this need. The essence of collaboration is related to a trainee's self-concept in relation to other healthcare members, as they start to learn about collaborative practice through their work on a team. Earlier experiences can frequently overshadow system areas that urge the trainee to consider collaboration. Readiness, orientation and motivation to learn all may be influenced to some extent by how much protected time can be granted to these activities, and the extent of role modeling by faculty. Interestingly, Brookfield has also recognized the relevance of the andragogical method for community development, community action and participatory research. He summarizes the four applicable trans-disciplinary principles as: "1. Adults work rightly when they are engaging in collaborative groups. 2. Adults are potentially more successful when being empowered and have satisfactory control over their personal and social environment. 3. Adults work best when the target of their activities is concluded by their own feeling of relevance. 4. Adults study best when given the chance to reflect constantly after any activity. It is these principles, in the larger context of andragogical theory, that have straightforward pertinence to the collaboration role" [26].

Community activity principles also find relevance in the SPICES model for curriculum design [27]. In the six education strategies of the SPICES model that have been recognized to apply to medical school curriculum, collaboration education, including IPE, tends to be more student-centered than teacher-centered, and the content of learning is presented in a problem solving way rather than in collecting and memorizing information. Furthermore, IPE should be studied on a blended basis rather than as an isolated subject, and it is always preferable to teach IPE in the community care setting rather than in a secondary or tertiary hospital care setting. IPE learners will be more receptive to the ideas of IPE if they are allowed to control some of the educational logistics, such as format, timing and instructor. Finally, in view of the sixth education strategy of the SPICES model, IPE needs to follow a more structured and systematic path rather than depending on a scattered apprenticeship way of learning [27].

## Medical Education and the Collaborative Role

"If health care providers are expected to work together and share expertise in a team environment, it makes sense that their education and training should prepare them for this type of working arrangement" (Romanow report) [28]. Health Canada's Collaborator competencies (IEPCP initiative) group summarized the mandatory required elements of the collaborative health professional as being well-informed about the roles of other professionals and having an attitude of mutual appreciation, as well as the inclination to collaborate and the openness to trust the other health professionals. Furthermore, collaboration requires good communication and reflection about the dynamic process of teamwork. Healthcare educators will need to be armed with knowledge, skills, attitudes and behaviors to change health professional curricula and continue advancing education activities to encompass interprofessional education (IPE) competencies. Faculty leaders in IPE are desperately needed. The original CanMEDS report proposed some limited teaching strategies for the Collaborative role. For example, interdisciplinary teaching sessions were advised. Workshop meetings might emphasize effective interventions, or provide support to trainees with different collaboration problems. Nevertheless, the difficulty of developing education and evaluation methods for CanMEDS roles, such as the collaborator, manager and health advocate, has been identified by program directors [29]. In qualitative research examining the perspectives of pediatrics residents and faculty regarding how the Collaborator role is taught and assessed, residents reported learning about collaboration through faculty role modeling but did not perceive that it was part of the formal curriculum. Faculty reported that they were not trained in how to effectively model this role. Both groups reported a need for training in conflict management, particularly as it applies to intraprofessional (physician-to-physician) relationships. Finally, the participants asserted that the current methods to assess residents on their performance as collaborators were suboptimal [30]. Hopefully, the updated CanMEDS 2015 edition will provide more detailed resources for training and assessment of collaborative role [31].

Curriculum development in a novel area such as collaboration can take many approaches. Nevertheless, Interprofessional Education (IPE) is the most applied and studied way to teach collaboration. An attempt to bridge the gap between interprofessional education and interprofessional practice is long overdue. To this end, D'Amour proposed a frame of reference, an interprofessional education for the collaborative patient-centered practice framework. The framework makes connections between the determinants and operations of collaboration at various levels, embracing links between learners, teachers and professionals (micro level), links at the organizational level between teaching and health organizations (meso

level) and links among political, socio-economic and cultural systems (macro level) [32].

## Interprofessional Education

Caipe gave one of the best definitions of IPE as “Occasions when two or more professions learn with, from and about each other to improve collaboration and the quality of care” [11]. According to Reeves S. in his Cochrane review, the studies that investigate IPE were heterogeneous in many aspects. They vary in the duration of the IPE element, the rates of participants involved, the goals and format of the IPE, the clinical zones and setting, and the existence of other types of education in addition to IPE. It has been suggested that the absence of a consistent positive outcome in IPE studies may be attributed to the different nature of clinical care settings. Nevertheless, most of the positive outcome IPE studies have small samples and lack comparison with uniprofessional education. Because of the heterogeneity among these studies and the lack of meticulous methodological design, it is challenging to confirm the true efficacy of IPE or to outline or distinguish crucial elements of successful IPE [16]. For these reasons, in his Cochrane review, Reeves S. finally recommended the need for more randomized controlled studies of IPE with greater sample sizes, better randomization methods and allocation concealment and more appropriate control groups, especially of uniprofessional education models [17].

Collaboration education is becoming increasingly incorporated as a part of medical curricula in undergraduate medical institutions. Faculties play a key role in acting as role models and in creating an environment that assists the goals of IPE [33]. The significance of these changes can be negatively influenced if faculties do not ‘walk the talk’. Medical residents occasionally receive mixed messages from supervisors concerning the worth of an interprofessional approach [34].

Facilitation of IP learning is a complex and challenging activity. The IP Facilitator needs to understand the dynamics of IPE [33]; be loyal to IP collaboration [35]; acknowledge the distinctive experience of each profession; understand the hierarchy of the IP team and be able to address any interprofessional conflicts that arise between IPE members; and have the required knowledge, attitude and skill in facilitating small groups and working in an interprofessional model [33].

## Psychiatry and IPE

As mentioned above, psychiatry as a discipline is more innately inclined toward collaboration than other specialties in medicine. This might be attributed, in part, to multiprofessional teams usually participating in mental health care, including non-psychiatric MDs, registered nurses (RNs), social workers with masters (MSWs), psychologists, and spiritual care staff. In terms of the pertinent knowledge support, the bio-psycho-socio-spiritual model has extensive application in the patient formulation; however, there is a disparity between this knowledge base and actual clinical practice. Residents’ ability to participate in a more visionary curricular approach will be conditional on the availability of time and carefully balanced with other clinical demands. Like any educational project, a supervisor would be required that has specific knowledge or curiosity in this area. With flexibility and self-direction, residents could recognize faculty or other community leaders in their area of interest. Likewise, faculty development in this area should be encouraged to enhance supervision in this area. For example, at the University of Toronto in Canada, collaborative competency is expected to be achieved by postgraduate psychiatric trainees in almost all of their rotations during the five year program, but it was emphasized the most during the consultation

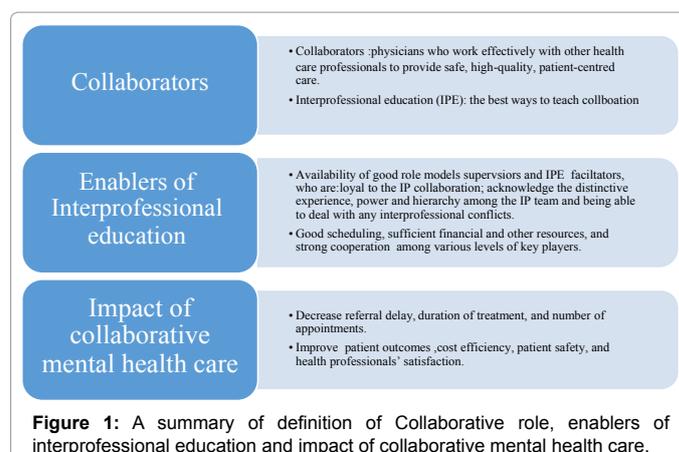


Figure 1: A summary of definition of Collaborative role, enablers of interprofessional education and impact of collaborative mental health care.

liaison (CL) psychiatry rotation. Nevertheless, to date no specific well-designed curriculum has been incorporated to achieve and evaluate this competency.

The Canadian Collaborative Mental Health Initiative (CCMHI) surveyed mental health professionals in Canada in 2005 [36]. They found that most of the respondents did not currently teach formal interprofessional education involving collaborative mental health care in undergraduate or postgraduate training. However, they appreciated the knowledge and expertise that different disciplines provided to mental health care and supported the development of interprofessional education and practice among mental health care professionals. According to the respondents, obstacles to IPT included: Scheduling matters, poor financial supplies, inflexible design and inadequate administrative assistance. Factors that promoted the development of IPE based on the majority of respondents included: good scheduling, and sufficient financial and other resources. Finally, it is imperative to procure the firm commitment of various key players within existing institutions, such as faculty members and higher ranking executives to enthusiastically support the development of IPE and collaborative mental health care [36].

## Conclusion

Collaboration education and practice is fundamental in postgraduate psychiatric training. The collaboration competency is stressed explicitly or implicitly in the majority of post graduate psychiatric training programs; however, very few of these programs incorporated specific curriculum to foster the education of collaboration. Interprofessional education is the most studied method to teach collaborative practice (Figure 1). Currently, we do not have enough studies to address which elements of IPE are more efficacious. Therefore, we need to start at least pilot studies to test IPE efficacy in postgraduate psychiatric training. Notwithstanding the apparent shortage of interprofessional education in collaborative mental health care, there appears to be a willingness among the different professional groups to build interdisciplinary connections and to welcome and value the skills they bring to the practice of mental health care.

## Acknowledgment

The author would like to acknowledge the support of the College of Medicine Research Center, Deanship of Scientific Research, King Saud University in Riyadh.

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