Inter-Professional Education: Inter-professional learning experience of Clinical Psychology and Psychiatry Residency students.

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Research Article

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Abstract

Background The basic objective of the study was to explore the inter-professional learning experience of clinical psychology and psychiatry residency students.

Method The researchers used a cross-sectional research design. This study was conducted in Addis Ababa University, at the School of Medicine, in the College of Health Science, Department of Psychiatry where both clinical psychology and Psychiatry Residence programs are provided. Purposefully selected 9 participants; 5 clinical psychology and 4 psychiatry residents' inter-professional learning experiences were explored. A descriptive qualitative study using thematic analysis was conducted. Data was obtained with semi-structured interviews and analyzed thematically. Data collection and analysis were concurrent.

Result The Result of the study indicated three themes and five sub-themes emerged from the data describing the experiences of clinical psychology and psychiatry students. The themes were: (a) IPE experience, (b) Factors affecting active participation, (c) Professional identity and IPE experience.

Conclusion To conclude IPE experiences were various and resulted from an interaction of many factors. Despite the limitations, IPE experience provides many opportunities compared to Uni-professional learning experience. Inequality in professional status between participants negatively affects the IPE experience. Learning experiences require a balanced two-way interactive learning between participants. In the initial phase of IPE, participants need a clear role assignment with a formal objective to avoid confusion and frustration. Participating in IPE is not an easy performance - the experience opens many opportunities as well as has many challenges.

Recommendation Finally, if implemented with a clear role assignment, significant supervision, and for the optimal duration of time IPE experience can help participants to develop their profession and guide them in their future work with other professionals.

Introduction

Approaches to teaching where different professions learn together are increasingly being encouraged. The assumption being that, if undertaken successfully, these instructional methods will lead to desirable outcomes [1]. On the Framework for Action on Inter-Professional Education and Collaborative Practice, the World Health Organization and its partners acknowledge that there is sufficient evidence to indicate that effective interprofessional education enables effective collaborative practice [2]. Inter-professional education (IPE) is a necessary step in preparing a "collaborative, practice-ready" health workforce that is better prepared to respond to local health needs. WHO defines the occurrence of IPE as when students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes [2].

If we compare developed and developing counties spread of inter-professional education (IPE) worldwide which came from an online global scan conducted by WHO regional staff in 2008, nine out of every ten

were from countries with high-income economies, and two thirds from Canada, the UK, and the US, predominantly reporting university-based IPE during undergraduate studies [2]. These indicate that there is a limited experience of IPE in developing countries which results in dependence of its implementation in developing countries on studies and findings of developed countries. Even though it is evidenced that IPE will lead health professionals in developing the skills to collaborate in their realm of practice but in contrary, some findings showed there is a lack of evidence to take it with confidence and implemented without considering what contributes to its success and/or hiders the outcome. Among other ways one of the methods to compare and understand this would be to see students' experience of interprofessional learning in a different cultural context. According to WHO's a framework for action on inter-professional Education and Collaborative Practice ascertained that a range of mechanisms shapes effective inter-professional education and collaborative practice. These include supportive management practices, identifying and supporting champions, the solution to change the culture and attitudes of health workers, a willingness to update, renew and revise existing curricula, and appropriate legislation that eliminates barriers to collaborative practice.

Successful IPE implementation requires using teaching and learning strategies that create an environment for interactive and collaborative learning between students from different health disciplines [3]. IPE requires a "significant layer of coordination" to be developed and implemented. To get the best out of the inter-professional educational experience it is better to be structured, organized, or coordinated within the educational programs. These indicate a need for a systematic act of grounding education for collaboration where it has the greatest likelihood to impact and transform care delivery on the ground in practice settings [2]. In Addis Ababa University, the Department of Psychiatry IPE is not yet part of the formal program but the majority of the time psychiatry residents and clinical psychology students are involved in inter-professional learning. Students of both professions took some courses in one classroom, and observe and learn clinical practice together. Also, the majority of the time faculty of the Psychiatry Residency program gives courses to clinical psychologists and vice versa. There are also times the two professionals work together on a case and present on morning sessions and grand rounds collaboratively. This inter-professional education is not planned, organized, or coordinated, and also not a part of the curriculum of both programs. However, the IPE propositions to learn about, from, and with each other already exist between Clinical Psychology and Psychiatry Residency programs. Despite the presence of IPE features in the learning environment, there is a gap of knowledge in what students are experiencing in the collaborative learning environment.

Also, several studies done in IPE in both developing and developed countries are dominated by studying IPE initiatives or IPE as part of the curriculum. The studies are also more focused on its efficacy or way of implementing it but only a few studies are found on the random incidence of IPE and less focused on the sociological aspect of the environment within collaborative learning. Therefore, this research would fill the gap by investigating the students' experiences in a collaborative inter-professional learning environment. So the purpose of this study is to explore the inter-professional learning experience of Clinical Psychology and Psychiatry Residency students.

The following research questions were explored.

1. What did Clinical Psychology students and Psychiatry Residents experience during their inter-professional learning?
2. What are the motivating factors for the students to actively participate in the inter-professional learning experience?
3. How do students of Clinical Psychology and Psychiatry residency view their professional identity and its relation to the collaborative learning environment?

Materials And Method

Design

A qualitative descriptive research design was chosen for this study. A qualitative descriptive research design because the goal of descriptive research is to describe a phenomenon and its characteristics. This research is more concerned with what and how rather than why something happened. So, a qualitative descriptive research design was chosen as it will help to comprehensive summarization, in everyday terms, of specific events experienced by individuals or groups of individuals [18] but also because it will help to achieve the goal of a better understanding of clinical psychology and psychiatry residence students experience in an unmanufactured manner.

Setting

This study was conducted in Addis Ababa University, at the School of Medicine, in the College of Health Science, Department of Psychiatry where both clinical psychology and Psychiatry Residence programs are provided. The psychiatry residency program is the oldest in the department which started in 2003, whereas the Clinical Psychology program is the youngest with only 4 years old in the department. In the department, there are 35 psychiatry residency and 12 postgraduate clinical psychology students.

Participants

Participants of this study were chosen intentionally (purposefully) because they represent certain characteristics which is the interest of this research study and the participants were selected based on who is most accessible (most convenient) during the time of data collection. For this study based on the exposure of inter-professional experience, 2^{nd}-year clinical psychology students, and 2^{nd} /3^{rd}-year psychiatry residency students were selected. This study sample size was determined based on data saturation which means this study was based on repeated identification of similar major experiential descriptions of participants. The estimated sample size was therefore set at 9-12 with adequate breadth and depth of data in mind; though there was an understanding that informational redundancy or saturation may occur with a smaller number of participants.

Relying on the convenient sampling, participants volunteered based on the information provided by the researcher on the study. Next, the researchers send an information sheet (Appendix A) of the study along with a consent form (Appendix B) for the participants via email. Interest to participate in the study was obtained in the email. The second contact was face to face or by telephone to introduce the study in detail, share details of informed consent, answer questions which are unclear in the information sheet and set up a follow-up contact time. Follow up contact confirmed the participants' interest in the study and schedule an interview. The researcher obtained consent from the entire participant at the time of the scheduled interview.

Data Collection

Measures

Individual in-depth interviews were used to collect the data. The data were collected using semi-structured individual audio recorded interviews and field notes. Because this is a one-to-one interview participant were asked to choose a comfortable place and the possible recommendation was in the researchers' office but to minimize the influence of power dynamics the researcher preferred to conduct the interview and suggested to do it in the clinics where the participants' conduct their clinical work and all participants' agreed. The time of the interview was arranged based on their free time in the clinics and the availability of the space in their clinic.

Before the interview questions, the researcher completed a demographic sheet (Appendix C) with each participant for purposes of sample description. A code was assigned to match the demographic information with the interview data. The researcher kept the code information in a secure place in his office only to be recognized by the researcher.

Interviews were estimated to last approximately forty-five to sixty minutes each and were guided by a semi-structured interview guide that consisted of broad, opened-ended questions to allow the participant to share their experiences in their way (Appendix C). The interview was audio-recorded for transcription, and notes were taken by the researcher. In addition to the transcription of the interview, the researcher also completed field notes following each interview.

Interview Guide

Before the use of the interview guide, it was commented and modification was made based on the comments, and then translated into Amharic; the translation was done by the researcher and staff in the department for accuracy. The difference was discussed and finally, a language expert who has experience in qualitative research commented on it. Finally, the Amharic version was used in the interview.

The final question was open-ended, asking for any other information the participant would like to share which were not raised in the discussion. The researcher provided clarification of the questions as well as probes for deeper meaning and detail as necessary.

All interviews were audio-recorded and transcribed verbatim by a transcriptionist with training in the protection of Human Subject confidentiality. For accuracy, the recordings also were compared to the transcriptions by the researcher. Any identifying information (i.e. addresses, names) was removed from the transcription by the researcher. All physical data for this study was secured in a locked file cabinet in one of the researchers' offices and only accessible to him.

Procedures for data collection

The researchers obtained a support letter from Addis Ababa University, College of Health Sciences, and the Department of Psychiatry. Data collection began by establishing contact with clinical psychology and psychiatry residency students with the assistance of the staff in the department of psychiatry. Each participant completed a consent form (Appendix B) designed to explain the rights of the participant as a research subject, to obtain consent for study participation and audio-recording, and for the use of direct quotes. All participants were given a copy of the consent for their records. Each participant was coded with one English word and a number that was used throughout the study to protect the anonymity and confidentiality of the participant. One of the researchers conducted all interviews. As part of the consent process; participants were informed that they have the option of refusing to answer any question or discontinuing the interview at any time without any consequence.

Data Analysis

The study used content analysis as a method of analysis. The analytic procedure included seven phases: organization of the data, the immersion of the data, coding the data, generating themes and categories, offering data interpretations, searching for alternative understandings, and generating the final findings [21]. Data analysis was begun by transcribing the audio-recorded data. After the transcribed data was obtained from the transcriber it was checked against the audio record by the researcher for accuracy. The transcribed data was shared by email to all participants to make sure its accuracy and then translated into English by a translator. The process of inductive qualitative analysis was used. Then researchers were immersed in the data through interviews, checking and reading interview transcripts, coding of data, and ongoing contact with advisors to discuss the data analysis and emerging themes. Finally, the coded data were interpreted and analyzed by relating the data within and across the categories, in a way that it gives meaning and answer the research question.

Results

A descriptive qualitative study using thematic analysis of content was conducted to explore the inter-professional learning experience of Clinical Psychology and Psychiatry Residency students. In-depth interviews were conducted with 9 participants, including 5 clinical psychology students and 4 psychiatry residency students.

Table 1.

Description of demographic characteristics of participants

Participants	Characteristics			
	Gender		Age	Year of education
Clinical psychology students	F	4	23-25	2nd year
	M	1		2nd year
Psychiatry residency students	F	2	31-35	2, 2nd year
	M	2		2, 3rd year

Three themes and five sub-themes emerged from the data describing the inter-professional experience of clinical psychology students and psychiatry residency students. The themes were: (a) Inter-professional experience, (b) Factors affecting active engagement, and (c) Professional identity and Inter-professional experience.

Inter-professional experience (IPE)

Joint learning vs. Uni-professional

Most of the participants expressed their joint learning experience as useful and fruitful. The majority of clinical psychologists and psychiatry residents saw the opportunity they would lose if they took their courses Uni-professionally. They also expressed how the two professions are interrelated and the joint learning experience is more valuable than a course they took in classrooms.

A 23- year-old female clinical psychology student said:

What I have learned in the process is how much of our course content and how their lessons are integrated. What I understand is… if we study clinical psychology alone, things might be different. We may have not got the chance to know the medical terms. They also may not pay close attention to what the psycho-social thing is. So, I think learning together enables us to practice this bio-psychosocial thing.

Another 34- year-old male psychiatry resident added:

The experience was very useful they know about therapy during classes they share that information with us. For example, we didn't take cognitive behavioral focused therapy, so when a patient who needs cognitive behavioral focused therapy came, we learn from them how to manage and what should be our major goal.

The participants further elaborated on the many opportunities they get from the inter-professional experience in terms of knowledge and skill than learning with their profession only. They indicated the professional difference has opened the opportunity to learn from one another, skills related to the patient interview, diagnosing a patent, and the like.

A 23-year-old female clinical psychology student said

The important thing is, I think we learned how to clerk at the clinical Interview. One of the first things we learned is about how to do the interview.

A 25-year-old male clinical psychology student added:

Clinical psychology has some relation with medicine so I think we take a lot from them, for example, presenting at the morning session and interviewing patients we learn this and the other thing.

However, for a few in both professions, despite the benefits they gained from the inter-professional learning experience, they report that differences in professional backgrounds have given them a negative experience. Besides, they explained this as a result of the different structural positions of their profession within the department and society.

A 24-year-old clinical psychology student said:

The title they are doctors and we are clinical psychology students; we don't have any title. They specialized in practical as a resident but we practice as training not certified as specialization during practice. It creates a difference.

A 23 years old female clinical psychology student added:

As a clinical psychologist, there is something that affects our confidence. Learning with them creates a feeling of inferiority. Maybe, if we are not leaning with them, I always think about what could we achieve and how we reach our potential. But as I told you it has its good and bad sides.

Mutual vs One-way learning during IPE experience

As noted above, Joint interprofessional education occurs when students from two or more professions learn about, from, and with each other to enable effective collaboration. More specifically, such learning requires the presence of mutual learning experiences. In terms of a learning experience about, from, and with each other, in this study, clinical psychology students and psychiatry residence students reported different experiences. To make the IPE experience fruitful the majority of psychiatry residents and clinical psychology students believe in the importance of mutual learning experience but it was found out that most of the time learning experiences occur from one profession. The majority of clinical psychology students and psychiatry residents indicated majority of the time clinical psychology students observe and learn from psychiatry residents and few times psychiatry resident students learn from clinical psychology students by asking them questions informally.

A 23-year-old female clinical psychology student said:

They didn't observe us but when we do therapy some residents might be in the room. If everyone has an interest and if they can watch us while doing therapy as we do things might be better.

A 33-year-old male psychiatry residence student added:

Maybe it is important to observe therapy given by seniors. I didn't get a chance to see therapy made by a senior clinical psychologist. I saw Videos of psychotherapy on interpersonal psychotherapy but it is only limited. It's important to see another focus on psychotherapy by seniors to understand better about clinical psychology and psychotherapy.

Moreover, few psychiatry residents indicated how IPE could be enhanced by involving both clinical psychology and psychiatry residency program instructors in creating a relationship with students of both fields of study. They reported that they noticed the existence of a strong relationship between Psychiatry instructors with clinical psychology students but a limited relationship exists between clinical psychology instructors and psychiatry residents.

A 34-year-old male psychiatry residence student said:

The senior clinical psychology instructors' relation with us is somehow weak but our seniors have a strong relationship with the clinical psychology students. Maybe it's because our seniors gave them courses. I don't know the exact reason sometimes some people are more eager to know. However, more of the relationship we have with a senior clinical psychologist is somehow challenging, which affects our experience.

Timing of experience

In inter-professional education, the time of encounter and the change in experience through time is important in influencing the collaborative competency of students in their future practice. In terms of inter-professional experience, participants experience it in various ways through time. Clinical psychologists and psychiatry residents reported distinctive experiences through time. In the initial encounter, it was found that for all of the clinical psychology students the IPE experience starts with attending clinics with psychiatry residents in observing them while they clerk patients. In the initial IPE experience, clinical psychology students reported even if observing psychiatry residents is helpful for them, it is a confusing and frustrating experience. They further reported in the initial IPE experience that they are confused about what they are expected to do and view themselves as subordinate to psychiatry residents.

A 24- year-old female clinical psychology student said:

I think there is a difference in the professions because they are doctors for specialization. There is a difference in viewing one another since we are from social science at the initial phase of our training. I

see myself as a student and as a teacher, even if we are both students in the department.

Similarly, the majority of psychiatry residence students believe that the initial IPE experience is confusing and especially challenging to clinical psychology students. They also believe that the problem is because of the professional background and lack of clinical exposure to clinical psychology students.

A 33-year-old psychiatry residency student said:

It's almost making two different curriculums in one because the history taking experience is completely different. In the morning session when they are presenters it's a different perspective for us and it had gaps. They study psychology, they don't have a clinical background. We see them when they are struggling.

But for the majority of psychiatry residents, it was found out that the initial experience depends on the clinic they are attached to because there are clinics where there is no clinical psychology student. It also depends on the year of education of clinical psychology students. If the student clinical psychologist is in the first year, the first encounter is in the clinic while they observe them. If it is with second-year clinical psychology student when they refer the patient to them and talk about it. They also described the experience in different hospital is different because of the physical setting not be able to accommodate both professional, the service provided in the hospitals related to specialized service requiring special training and involvement of clinical psychology students in the clinics.

A 34-years old psychiatry residency student said:

We started to study together after the second year. We refer patients for therapy to them and the other thing is when we attach at Black Lion Hospital and Yekatit Hospital.

Also, the majority of them stated in either initial or later experience that the IPE experience depended on the individual behavior of the psychiatry resident. If he/she is friendly, he/she can work with clinical psychologist student, and not miss the opportunity. It is also similar to clinical psychologists.

A 30-year-old psychiatry residency student said:

Sometimes it depends on individual interest some students have a good interest to work with clinical psychology students' others not. In clinical psychology this is more open the teachers suggest them to work with us but there is no rule or system to follow that, so it's better to work together and evaluate how joint learning goes with both professionals.

At later experience it was found that both majority of clinical psychology students and psychiatry residence students similarly experience IPE through working together, communicating, patient referral, informal patient case discussion, and joint morning session presentations. Clinical psychology students expressed that through time interpersonal relation is created and the more balanced relationship starts which resulted for them an increase of confidence since they started working independently and seeing

patients. For both the majority of clinical psychology students and psychiatry residents the best later IPE experience is participation in joint morning sessions and patient case presentations because it gives equal opportunity for both of the professionals as reported by clinical psychology students and it is a very good learning opportunity for psychiatry residence students too.

A 35- year- old male psychiatry residency student said:

I remember we had one patient……. At that time, I didn't know about interpersonal psychotherapy then we decided to bring up the case in the morning session. During the morning we discussed interpersonal psychotherapy in detail and I got concrete knowledge from it during that I learned a lot about how to make a connection with them.

Opportunity vs challenges of IPE experience

IPE gives a lot of opportunities for participating students in the learning process. In this study, it was found that the majority of clinical psychology students and psychiatry residence students reported one of the opportunities they get from the experience is the knowledge they gained about the other profession and the other professional. They explained their realization of how the two professionals are interrelated and how they think about the other professional is changed through the IPE.

A 23-year-old female clinical psychology student said:

You can't learn together with them. I think medicine students' attitude is difficult for example when I see it as an outsider. I used to believe that they see themselves as superior to other fields of study and they have a close circle that wouldn't let other professionals enter. Now I understood their burden and changed my thought about it.

Another 28-year-old male psychiatry resident added:

Before the class, I didn't know clinical psychologists are involved in clinics. What I thought was that they are only involved in social aspects. But now I see they know about clinical things and they know basics so we interact with the one who understands. Our relationship with them is different from the interactions we have with other professions.

The second opportunity they get form the IPE as reported by the majority of the participants in the knowledge exchange between the two professions in a formal learning environment, like morning session presentations, and in an informal learning environment, through the interactions they have created through the process of socialization, friendship and sharing of experience.

A 23-year-old female clinical psychology student said:

I think we add psychological thing more to them, as we learn together because we know a lot of psychological things while they tend more of physiological or biological. I think there is something that they can learn from us.

A 28-yer-old male psychiatry residency student added:

When you go from 1st year to 2nd year you start to understand that the biological issues and the psycho-social are related. If you didn't understand it, it becomes difficult to give treatment so they help us to achieve this.

The other opportunity stated by the majority of both psychiatry residence students and clinical psychology students is the belief that this experience will help them in their future practice. Most clinical psychologist and psychiatry residence students believe that the experience would help them to be better collaborators with other professionals in the future and their patients would benefit from it.

A 23-year-old female clinical psychology student said:

I think it enables us to work collaboratively with another professional. It also enables us to network with people in another profession. And if anyone needs help from them, I'll recommend them. In return, if there's something I can help with. So, I'm creating a network here.

A 32-year-old female psychiatry residency student added:

I think it has a lot of advantages. When I go to the hospital after I finished my class, I will promote clinical psychology. When I treat patients, I know there is a team that can help me in psychosocial management.

Despite the opportunity created through IPE, a lot of challenges are reported both by clinical psychology students and psychiatry students. The majority of clinical psychologists and psychiatry residents identified their educational background (natural and social science) which result in a different orientation. For example, psychiatry residents focus on biology and clinical psychologists focus on the psychosocial aspect of the patient. Specifically, this was explained by the majority of clinical psychology students because their role is to observe psychiatry residents at the initial stage of their IPE experience. It created a challenge to be able to enjoy the IPE experience. The majority of psychiatry residents also agree that it is challenging for them too because the clinical psychologists have no background knowledge about the biological aspect of mental illness.

A 28-year-old psychiatry residency student said:

If you are a doctor you had experience before so you will not fear because the approaches of treatment are almost similar. If severe mentally ill patients come how can they manage unless they have some biological knowledge. I think it's better if they take some medical courses.

Another 23-year-old female clinical psychology student added:

The title they are doctors and we are clinical psychology students we don't have any title. They specialized in practicing medicine as a residence but we practice as training not certified as specialization during practice it creates a difference.

The other challenge is an organizational problem related to the developmental stage of the programs in the department of psychiatry. The majority of clinical psychology students reported, unlike the psychiatry residence students that their program has organizational limitations that hinder equal involvement in the IPE experience.

A 25-year-old clinical psychology student said:

The Teaching-learning system should give a clear role for clinical psychology. This may help us to understand our specific role. Their system is more structured than ours so we want our system to be organized like theirs. I think it is a good thing to wish this.

The majority of clinical psychologists explained that the challenge improved through time but has required a strong effort from them. They also suggest that culture change takes place when they enter the room and should be embraced for the benefit of the IPE experience.

A 23-year-old female clinical psychology student said:

There is a culture change when we come here, we are a social student and I think most of the time, we are not like them in many aspects and I think we have learned the medical world in a hard way which was a challenging experience for us.

Factors affecting active engagement in IPE

Internal vs external motivation

In terms of what motivates professionals to actively participate in IPE experience, the majority of clinical psychology students and psychiatry residency students believe that individual personality (sociability), curiosity, and the value one gives to teamwork are motivating factors. From external motivating factors, the educational system which places them to learn together and the instructors' (the departments) encouragement of the two professionals to work together are the main motivating factors.

A 23-year-old female clinical psychology student said:

Some things motivate us. One of the things is the way we have been learning together by itself is inspiring. The discussion in the morning sessions is also very nice.

In another dimension majority of clinical psychologists and psychiatry residency students believe that their educational background different and creates a problem not to engage actively in the IPE experience.

Professional identity and IPE experience

The majority of clinical psychologists and psychiatry residency students believe that the IPE experience has a positive effect in developing their professional identity. The majority of them described knowing

the other profession let them understand their difference and identify themselves with their profession.

A 24-year-old clinical psychology student said:

The courses are interrelated and sometimes they may overlap. I think it helps me to better identify who I am, and I think learning with them will help us develop better and to identify our focus area well and to identify which belong were, enable us to define and develop our identity better.

However, a few clinical psychology students believe prolonged exposure to IPE would interfere in the development of their professional identity by limiting their focus areas in their profession and recommends a limited exposure is better with a clear objective.

A 24-year-old female clinical psychology student said:

The learning process with them is great but it shouldn't be for a prolonged period... If it is limited to two or one month, then we need to focus more on therapy and talk therapy which would give us our identity.

Also, the majority of clinical psychology students unlike psychiatry residency students believe unclear role assignment and weak supervision in the program affect growth in their professional identity.

A 23-year-old clinical psychology student said:

As a clinical psychologist as I told you during this two year our role was not clear so I couldn't explain my identity because at first, they shape us as a psychiatrist. If you ask me to define, I will give you a psychiatric definition due to we spend a lot of observing them almost for one year.

Moreover, the majority of clinical psychology and psychiatry residence students believe that there are positively growing towards their ideal clinical psychology and psychiatry residence student identity. The majority also believes that developing a professional identity is a continuous process and realized their change throughout their years of education.

A 34-year-old male psychiatry residency student said:

I put all my effort to achieve but it doesn't mean we will be like our seniors within three years; however, we start to develop that direction. The environment and senior instructor help us shape our self in that direction. I think I am on a good road.

Discussions

This study revealed that students' interprofessional learning experience is various and is the result of the interplay of different factors. It was found out that most participants compared joint learning to Uni-professional learning, and noted that despite its limitations they valued IPE experiences and believed they would lose many opportunities if they did not participate in such learning experiences. They explained that they had come to realize the inter-relatedness of the two professions and have learned a lot of

knowledge and skills from one another. However, despite the favorable experiences few clinical psychology students reported that learning with psychiatry residency students gave them uncomfortable time during the experience. They said the time has challenged their confidence and give them a feeling of inferiority. They explained this resulted from the relative hierarchical position of the professions within the department and society. It esteems from the collective belief that being a doctor is superior among other professions. This result corresponds to another mixed-methods study done in Indonesia, which found out from focus group discussion that several nursing and midwifery students indicated to have experienced an unpleasant situation with medical students during early practice in a hospital, causing them to be unfavorably disposed towards IPE [22]. They explained that during clinical practice, medical students did not want to interact with them, behaved arrogantly, and did not care about other health professions students. Even though the two findings corresponded the explanation given in the study differed from this study. In this study context, the two programs and the students' age difference in the department, clinical psychology program organizational limitation gave to psychiatry residency program students a sense of control leading them to take a lead in the IPE experience or our society comparative privilege given to the profession that "Doctors" rank higher in their status from other professions which is a shared attitude with the clinical psychology students might be the explanations for the participants' uncomfortable experience.

Concerning learning from one another the study found a difference in inexperience. Even though all participants believed that joint learning experience required equal participation and contribution majority of clinical psychology students reported that most of the time they are the ones who learn from psychiatry residency students except a few times psychiatry residents learn informally from clinical psychology students. This indicates that a hierarchical power difference exists between the two professionals. This finding relates with the finding of a study done in Indonesia within inter-professional learning experience between students' of medicine, nursing, midwifery, and dentistry; that nursing and midwifery students observed similar attitudes and significantly hierarchical behavior among the various workers in healthcare teams during their experience in the wards [22]. This study also found out that few psychiatry residency students indicated the importance of the instructor's involvement in enhancing the IPE experience.

Another finding of this study is related to the timing of the experience. The study found that participants' experiences differed through time. The initial experience as reported by all clinical psychologists starts by observing psychiatry residency students while they clerk patients in the clinics. Also, they described despite the advantage they get, it was confusing and frustrating. They explained this resulted from role confusion about what they are expected to do. But for the majority of psychiatry residency students' experience had no different from the latter and the experience depends on the clinics they were attended and the year of education of clinical psychologists. The difference of experience with time relates with the Indonesian study which found out several nursing and midwifery students indicated to have experienced unpleasant situations with medical students during early practice in a hospital, causing them to be unfavorably disposed towards IPE. But the explanations differ from this study. In this study, the explanation for differed experience for clinical psychology students through time is related to the

program's limitation in giving them a clear role assignment in the collaborative learning experience, their limited previous clinical exposures in a clinical setting, and maybe being younger than psychiatry residency students. Also, the majority of participants reported in both early and later experience depended on themselves since it is not a planned and conscious joint learning experience so who want to engage will, who do not want will not and this results in missing the opportunity. This finding is supported by the study done in Iran which found that the mere presence of the learners of various disciplines may not be that effective and without having some specific objective and conscious activities [23]. In the later IPE experience majority of both professionals became comfortable matched with more balanced participation starts as a result of experience, increased interpersonal relationship, and increased confidence from clinical psychology students' side. The best experience in this is a joint morning session and patient case presentation because equal opportunity and increased interaction resulted in the process. This finding is supported by the study done in Iran which found out that the tendency to strengthen the sense of collaboration among different professionals is stronger if there is high interaction between professionals and it acts as a facilitator factor [23].

Concerning opportunities and challenges that occur during the IPE experience. The study found that knowledge gained about the other profession, knowledge exchange in the formal and informal learning environment, and the positive effect of the experience for future collaborative practice is the opportunities identified. The professional difference at the initial experience and structural and organizational problems were the challenges reported by students. This result agrees similarly with the systematic review done by Sunguya, B.F. et al., which found that the curriculum, leadership, resources, stereotypes and attitudes, variety of students, IPE concept, teaching, enthusiasm, professional jargons, and accreditation are challenges in developed countries and curriculum structure and complexity, resource limitations, and stereotypes in developing countries [12].

About factors affecting student's active engagement in the IPE experience, it was found out that participants' characteristics like sociability, curiosity, and values they give for teamwork are a positive internal motivating factor. An educational system that brings the two professionals to learn together and the instructor's encouragement are external positive motivating factors for students to actively engage themselves in the IPE experience. In other terms, students reported their coming from different educational background clinical psychology students from social sciences and psychiatry residency students from natural sciences is a negative factor affecting active engagement, especially at their initial experience.

Finally, about answering the research question related to students' view of their professional identity and IPE experience a few clinical psychologists reported prolonged exposure interferes in their professional identity development, but the majority believing the need for clear role assignment and strong supervision in developing their professional identity compared to psychiatry residency. Majoriprofessionalihelpsnts believed that the IPE experience has a positive effect in developing their professional identity. They explained that knowing the other profession helps to understand one's own professional identity. The conflict-induced from the finding in the study by McNeil et al., which describes how professional identity

fault lines have the potential to be activated and conflict-induced when there are inequities in how the different professions are treated within the team and demonstrate that a key cause of failure in inter-professional education can be attributed to inter-professional conflicts based on threats to professional identity [15]. A study done in the USA found out that participation in an inter-professional education course yielded deteriorating attitudes towards students' own and other professions and attitudes towards interprofessional education [5]. The difference from the above study might be different from the attributes of participants. In this study, the status and power difference are an accepted attribute to both professionals even though it created an uncomfortable feeling for one of them they will not engage in conflict as a result. It is related to societal views on the status of different professions compared to others. But the study corresponds with the study was done in Indonesia which reported that students felt the need to clarify and understand each other's profession and the boundaries of one's profession students from all programs concurred that IPE would encourage them to better understand each other's professional roles and responsibilities as well as the boundaries of their roles [22].

Conclusion

This study revealed that IPE experiences were various and resulted from an interaction of many factors. The result showed that despite its limitations IPE experience provides many opportunities compared to Uni-professional learning experience. Inter-professional education between participants with unequal professional status affects negatively participants' IPE experience. To achieve the objectives of IPE, the learning experience require a balanced two-way interactive learning between participants. In the initial phase of IPE, participants need a clear role assignment with a formal objective to avoid confusion and role conflict among participants. Participating in IPE is not an easy performance, and the experience opens many opportunities as well as has many challenges. Finally, if implemented with a clear role assignment, significant supervision, and for the optimal duration of time, the IPE experience can help participants develop their professional identity within the inter-professional learning environment.

List Of Abbreviations

IPE Inter-professional Education

USA United States of America

WHO World Health Organization

Declarations

Ethics approval and consent to participate

Ethical clearance to conduct the study was obtained from the research review board of Addis Ababa University, College of Health Sciences. Informed written and oral consent was obtained from all the participants before data collection. (All the participants were above the age of 18 years).

Consent for publication

Not applicable

Availability of data and materials

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Competing interests

The authors declare that they have no competing interests

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Authors' contributions

GT has conceived the study, carried out the overall design and execution of the study, design the questionnaire, performed the data collection, performed the statistical analysis, and served as the lead author of the manuscript.

MD analyzed and interpreted the data and was a major contributor in writing the manuscript. All authors read and approved the final manuscript

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Appendices

Appendices A, B, and C were not provided with this version of the manuscript.