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RESEARCH ARTICLE

Pharmacy preceptors' knowledge, perceptions, and experiences with interprofessional education and practice

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Abstract

Background: This study explores the knowledge, perceptions, practices, and teaching of interprofessional collaborative practice by pharmacists currently precepting pharmacy students. Information was sought from pharmacist preceptors for Introductory Pharmacy Practice Experiences and Advanced Pharmacy Practice Experiences. **Methods:** Key informant interviews were conducted using a 20-question semi-structured script. The Interprofessional Education Collaborative (IPEC) Core Competencies: 2023 Update was used as a theoretical framework. First and second-level qualitative coding were performed on the key informant interview transcripts. **Results:** Pharmacy preceptors indicate a strong understanding and regular participation in collaborative patient care but are less familiar with the definition of IPE, where students interact with learners of different professions. Time and responsibility burdens were additional barriers impacting their ability to provide interprofessional learning experiences, but their job satisfaction, patient outcomes, and work-life balance were improved by these daily working relationships. **Conclusion:** Pharmacy preceptors in this study strongly support interprofessional education and practice and believe in its importance for patient outcomes and overall provider satisfaction, although not all seem to be applying these practices to their student experiences. The results of this study indicate a need for additional resources to maximise interprofessional student learning opportunities in experiential education.

Introduction

Interprofessional education occurs when students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes (World Health Organisation, 2010). Interprofessional practice and education (IPE) is a redefinition of terms highlighting the interconnectedness of health professions education and collaborative clinical practice (National Center for Interprofessional Practice and Education, 2023). Advancing IPE is believed to be a realistic solution to meeting the quintuple aim of improved patient experience, better health outcomes, lower costs, improved clinician well-being, and, most recently, increased health equity (Itchhaporia, 2021; Pany *et al*., 2021; Reeve *et al*., 2017)). Also, the provision of IPE is required for the accreditation of Doctor of Pharmacy degree programmes (Accreditation Council for Pharmacy Education, 2015). IPE may be embedded in traditional course work, practised through simulation, and highlighted in the clinical practice settings utilised for introductory and advanced pharmacy practice experiences (Accreditation Council for Pharmacy Education, 2015). Similarly, interprofessional collaboration enables pharmacy students to "*actively engage and contribute as a healthcare team member by demonstrating core interprofessional competencies*" and is one of the twelve educational outcomes established by the American Association of Colleges of Pharmacy in the Curricular Outcomes and Entrustable Professional

Activities (COEPA) document in its fifth update in 2022 (American Association of Colleges of Pharmacy, 2023).

The quality of training pharmacy students receive during experiential education relies on the expertise of pharmacist preceptors. A preceptor is "*an expert or specialist who gives practical experience and training to a health profession student*." (The American Heritage Medical Dictionary, 2007). Preceptors typically teach, model, and facilitate student learning of clinical skills in a professional practice environment. Pharmacist preceptors guide students during introductory and advanced pharmacy practice experiences across diverse practice settings. While numerous studies have evaluated faculty knowledge and perceptions of interprofessional education (Lash *et al.,* 2014; Loversidge & Demb, 2015; Hinderer *et al.,* 2016), little has been published describing how the interprofessional collaborative practice (IPCP) experiences of external pharmacy clinicians serving as preceptors for pharmacy students influence their IPE offerings. This gap extends to those supervising pharmacy students throughout their curriculum in the introductory and advanced pharmacy practice experiences (IPPEs and APPEs).

This study aimed to explore the current state of knowledge, perceptions, practice, and teaching of interprofessional collaborative practice by pharmacists currently precepting pharmacy students. Specifically, this information was sought from pharmacists serving as preceptors at a college of pharmacy in the US. The insights gained from these interviews will inform preparatory didactic interprofessional education, curriculum design, and support for experiential IPE.

Methods

Theoretical framework

Early in 2023, the Interprofessional Education Collaborative (IPEC) released its draft of the updated version 3 of the core competencies, and later that same year, the accepted final version was published (Interprofessional Education Collaborative, 2023). The goal of these updates was to ensure that these competencies reflect the best available evidence and are consistent with current healthcare practices, priorities, and policies. While the updated definitions of the four competency domains underwent only minor changes, more significant updates were made to the associated competency statements within each category. The researchers chose the 2023 updated competencies as the framework for analysing the interview data to ensure study results remain consistent, relevant, and applicable going forward.

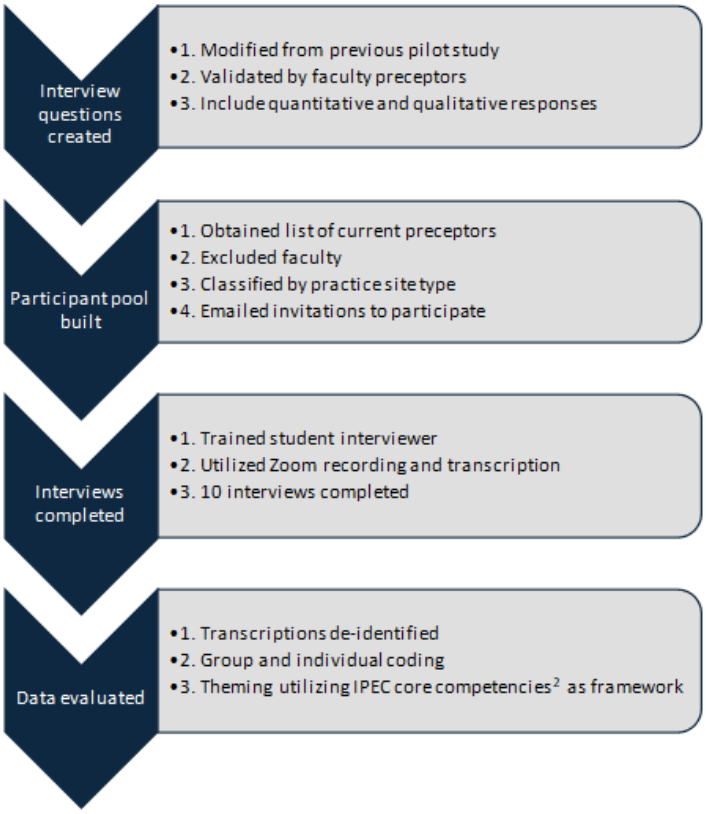

Figure 1: Study method development steps

Project design

This research was designed using qualitative, semi-structured key informant interview methods. The semi-structured format enabled the interviewer to utilise an interview script and add probing questions to explore topics in more depth when needed. Key informant interviews are qualitative interviews where participants have firsthand knowledge of the content topic (UCLA Center for Health Policy Research, 2023).

Figure 2: IPEC core competencies for professional collaborative practice version 3 (2023)

Interview script development

The semi-structured interview script included 20 questions developed by the researchers to gather information about participants' experiences with interprofessional education and practice. Specifically, these interviews were designed to collect participants' knowledge and perceptions of interprofessional practice and teaching pharmacy students in a collaborative, interprofessional environment. The survey consisted of a combination of closed-ended quantitative questions to gather participant demographics and quantitative information on beliefs about the impact of IPEs and open-ended qualitative questions designed to provoke meaningful, personal responses. Examples of questions asked during live interviews were: (1) Students at this site regularly interact with healthcare providers from other disciplines (answering options: strongly agree, agree, undecided, disagree, strongly disagree). (2) How do students at your site engage in interprofessional collaborative practice?

The script questions were developed using a previously completed, unpublished pilot study (with a similar anonymous preceptor population), which resulted in positive responses but without adequate detail.

Study participants

Study participants were licensed pharmacists identified from a list of pharmacist preceptors who indicated availability to accept students on either IPPE or APPE rotations at their practice site during the 2020–2021 academic year. The complete list of 402 individuals, including preceptors' names, practice sites, and email addresses, was obtained from the college's Experiential Services Department. As the study focused on practising pharmacists rather than pharmacy school faculty, preceptors with more than a 50% teaching appointment at the college were excluded. Participants were selected based on their practice site types and offered learning experiences. The goal was to interview at least one individual from each pharmacy setting (independent community pharmacy, chain community pharmacy, hospital pharmacy, ambulatory clinic pharmacy, and speciality clinical practice). Nineteen pharmacist preceptors meeting the inclusion criteria were invited via email to participate in the study. Ten consented and were scheduled to complete the 30-minute interviews. These ten participants represented diverse practice sites and possessed broad experience in pharmacy practice and student precepting.

Data collection

All interviews were conducted between August and December 2022 via Zoom videoconference technology. Interviews were conducted by a student researcher trained to conduct qualitative interviews. This training included two practice sessions with simulated participants. The student interviewer had no prior relationship with any of the interviewees. A faculty member known to the participants was present during the Zoom sessions to provide technical support. This faculty member did not participate in the discussion unless clarification of a question was needed.

At the beginning of the interview, participants were informed that the session would last approximately 30 minutes, their participation was voluntary, and they were free to end the interview at any time or choose not to answer any question. They were also assured that the transcripts would be de-identified before aggregate analysis. Participants were then asked to provide verbal confirmation of their willingness to

participate. The institutional review board determined that the methods used in this study met the criteria for exempt research.

Data analysis

Interviews were transcribed verbatim using Zoom's transcription feature and aggregated in Microsoft Excel. A designated researcher removed identifiable information, such as participants' names and practice sites, before sharing the data with the research team for analysis. The team collaboratively performed first-level coding together on two transcripts, and the remaining transcripts were coded individually. First-level coding is the process of identifying major concepts or themes in qualitative data analysis (Ulin *et al.,* 2005; Bradley *et al.,* 2007). After completing individual first-level coding, the researchers reconvened to discuss the results. For second-level coding, the team applied the 2023 IPEC core competency framework, merging concepts into themes and subthemes (Interprofessional Education Collaborative, 2023).

After themes were developed, the researchers met to determine whether saturation was achieved. Saturation is the point at which researchers determine that no new information is gathered (Ulin *et al.,* 2005; Bradley *et al.,* 2007). The last two respondents reported similar benefits of interprofessional collaboration for providers and patient outcomes. Respondents described similar barriers to collaborative practice, including time, logistics, and role clarity. The researchers agreed saturation was met as the last few interviews had not generated any new meaningful information.

Quantitative results

When asked to define interprofessional education, seven of the ten participants correctly identified it as involving students from different health professions learning together. However, despite this accurate definition, respondents did not report participating in interactions with learners from different professions, nor did they describe opportunities for pharmacy students to engage with students from other health disciplines.

Interprofessional interactions

Participants were asked to describe which professions they regularly interact with in an IPE setting. Collectively, they reported having regular professional interactions with nurses, medical assistants, chaplains, social workers, physicians, home healthcare providers, other pharmacists, pharmacy technicians, and medical office staff. The term "*providers and staff*" will encompass all these roles for the remainder of the manuscript.

Participants described various interprofessional activities regularly conducted with other provider types during their practice. Collectively, they reported the following types of IPE/IPCP interactions: leading disease education classes for other providers, clarifying medication dosing, participating in patient rounds, collaborating in chronic disease-state management, addressing dosing and titration questions, providing economic consultations on medication formulary use, affordability, and accessibility, and offering general medication-related education to other providers. Regarding communication methods used in IPE, participants cited a range of approaches: telephonic and virtual communication, face-to-face interactions, electronic mail, routine staff meetings, and informal "*hallway*" or "*pop-in*" office conversations.

Participants reflected on barriers encountered when creating and participating in IPE, with the reported obstacles presented in Figure 3. They also detailed the types of actual student IPE engagement activities offered at their respective sites, as shown in Figure 4.

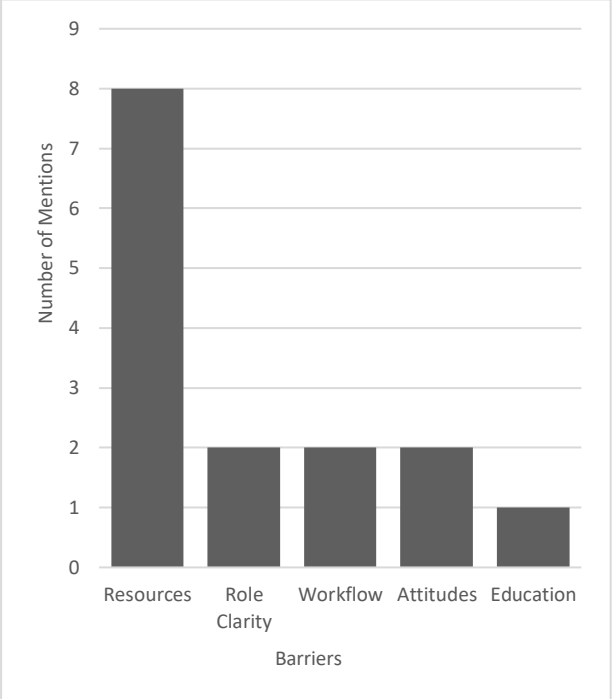

Figure 3: Respondents' reported barriers to interprofessional practice and education

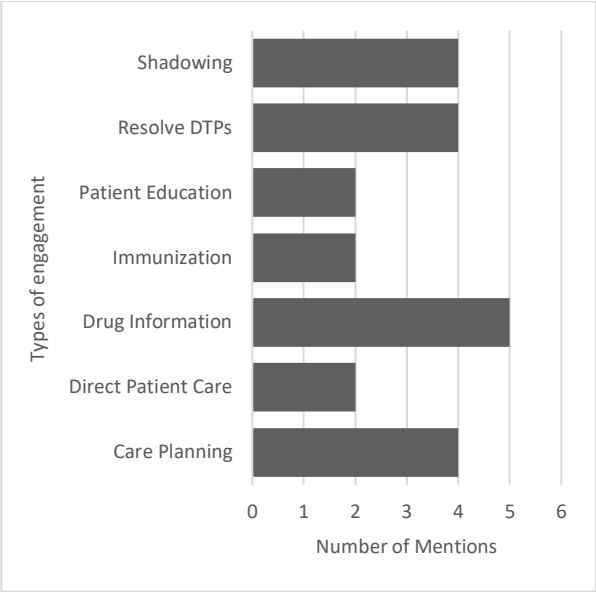

Figure 4: Respondents' reported perceived types of interprofessional student engagement

Qualitative results

The thematic coding elicited the following results, organised by IPEC core competency domains. Quotes from participants are included in Appendix A.

Values and ethics

According to the IPEC Core Competencies for Interprofessional Collaborative Practice Version 3 (Interprofessional Education Collaborative, 2023), the Values and Ethics competency is to "*work with team members to maintain a climate of shared values, ethical conduct, and mutual respect*." Pharmacists interviewed in this study described how interprofessional collaboration improved job satisfaction and patient care but also required mutual respect and competency among practitioners.

• *Improving job satisfaction.* Sub-competency VE11 outlines the development of a supportive workplace where well-being is prioritised and career satisfaction is supported. Participants described interprofessional collaboration as a factor that improves their job satisfaction, particularly enjoying interactions with diverse providers who bring insights from various backgrounds and skill sets to patient care. This perspective aligns with sub-competencies VE1 (promoting values and interests of persons and populations in healthcare delivery) and VE4 (valuing diversity, identities, culture, and differences). Quotes 1 and 2 in Appendix A reflect participants' views on IPE's positive impact on job satisfaction.

• *Upholding the values of IPE.* Participants emphasised the importance of practitioners fulfilling their roles and meeting expectations for themselves and their colleagues. This view aligns with sub-competencies VE5 (expertise of health professionals), VE7 (practising trust, empathy, respect, and compassion with health professionals), and VE9 (maintaining competency in one's own profession to contribute to interprofessional care). Related quotes (Quotes 3 and 4) are shown in Appendix A.

• *Improving patient care.* Participants explained that interprofessional collaboration resulted in a higher quality of patient care than could be provided by individual practitioners working separately or "*in silos*." Sub-competency VE8 describes applying high standards of ethical conduct and quality contributions to care, while VE6 describes striving for health equity and improved patient outcomes. By collaborating to provide interprofessional patient care, respondents believe they are improving patient outcomes and safety while reducing costs (Quotes 5 and 6). They also reported meeting their patient care metrics more easily through teamwork (Quotes 7 and 8).

Roles and responsibilities

In the IPEC Core Competencies for Interprofessional Collaborative Practice Version 3 (Interprofessional Education Collaborative, 2023), the Roles and Responsibilities competency is to "*use the knowledge of one's own role and team members' expertise to address individual and population health outcomes*." Participants described the importance of sharing their viewpoints and hearing other practitioners' perspectives. They also reported appreciating the skills other practitioners could bring to the team.

• *Team dynamics: sharing viewpoints.* Participants explained they were able to provide better patient care through shared viewpoints and skills. As described in sub-competencies RR1 (using the full scope of knowledge, skills, and attitudes of team members to provide care), RR3 (incorporating complementary expertise to meet health needs), and RR4 (differentiating each team member's role, scope, and responsibility), working together can lead to patient care where the whole is more than the sum of its parts (Quotes 9 through 12).

• *Team dynamics: communication and humility.* Effective communication and humility were also traits identified by participants as critical components of interprofessional care. Sub-competencies RR2 (collaborating to improve health outcomes) and RR5 (practising cultural humility in an interprofessional workplace) align with the opinions of the pharmacists

regarding the importance of team communication and supportive dynamics (Quotes 13 and 14).

Communication

The IPEC Competencies for Interprofessional Collaborative Practice Version 3 (Interprofessional Education Collaborative, 2023) stipulates that health professionals should "*communicate in a responsive, responsible, respectful, and compassionate manner with team members*." Participants identified crucial elements of communication for interprofessional practice, including creating a culture of communication through listening to others and knowing when to speak up. They also highlighted the value of conducting rounds as a team rather than individually, promoting a collaborative environment.

• *Creating a culture of communication.* Participants described the importance of listening to each other and sharing information necessary for patient care. This communication involves both being open to hearing what others have to say and self-identifying whether the information they have to share is valuable or not. They described "*knowing when to speak up*" as a cornerstone of collaboration. Developing a workplace where healthcare team members appreciate what others have to say aligns with sub-competencies C1 (communicating one's roles and responsibilities clearly), C4 (promoting understanding of shared goals), and C5 (practising active listening that encourages ideas and opinions of other team members) (Quotes 15 through 18).

• *Rounding together.* Participants also emphasised the value of interprofessional rounding for patient care. Describing how seeing the patient as a team rather than individually improved efficiency by addressing conflicting viewpoints and sharing information more swiftly. These concepts are supported by sub-competencies C2 (using communication tools, techniques, and technologies to enhance team function, well-being, and health outcomes) and C7 (examining one's position, power, role, unique experience, expertise, and culture towards improving communication and managing conflicts) (Quotes 19 and 20).

Teams and teamwork

The IPEC Core Competencies for Interprofessional Collaborative Practice: Version 3 (Interprofessional Education Collaborative, 2023) defines Teams and Teamwork as the ability to "*apply values and principles of the science of teamwork to adapt one's own role in a variety of team settings*." Participants reported that understanding their roles in the team and those of others led to improved patient care. They described increased efficacy and higher-quality care by working together. Additionally, teamwork was noted to reduce individual stress by creating a supportive environment where practitioners shared the workload.

• *Working together to see the whole patient.* Participants described how interprofessional collaboration fostered a collaborative workplace culture where viewpoints were shared and appreciated to improve patient care. They also reported that team members from different disciplines all contributed valuable information, aligning with sub-competency TT2 (appreciating team members' diverse experiences, expertise, cultures, positions, power, and roles toward improving team function) (Quotes 21 and 22).

• *Improving patient access through efficiency.* Participants mentioned that working together saved time, reduced costs, and decreased adverse events, as described in sub-competencies TT3 (practising team reasoning, problem-solving, and decision-making), TT6 (improving team effectiveness through self and team reflection), and TT8 (facilitating team coordination to achieve safe, effective care and outcomes) (Quotes 23 through 26).

• *Supporting each other and reducing burnout.* Participants highlighted the added value of interprofessional collaboration in improving workplace culture to support practitioners. These comments align with sub-competencies TT9 (working together to support resilience, well-being, and efficacy) and TT1 (evidence-informed team development and practices). By sharing the workload among a team, building team relationships, and supporting each other, participants believed that working collaboratively reduces burnout (Quotes 27 through 30).

Discussion

This study aimed to understand the knowledge, perceptions, practice, and teaching of IPE by pharmacists serving as preceptors, given that experiential education can comprise nearly one-third of the total curriculum of a pharmacy programme. The interviews conducted for this study provided valuable insights into the realities of interprofessional practice and how it informs student involvement. Expectedly, the experiences offered to pharmacy students were primarily influenced by the pharmacy preceptor's IPCP exposure opportunities versus a structured or intentional IPE curriculum.

Participants demonstrated a solid understanding of the accepted definitions of IPCP and IPE and shared a belief

in their importance for patient outcomes and professional satisfaction. However, none of the participants reported applying the IPE definition, as students did not have opportunities to learn directly about, with, and from peers in other health professions training programmes. Instead, students engaged in traditional training, involving teacher-to-student interactions rather than participating in peer-to-peer learning. Additionally, pharmacist preceptors rarely described situations where pharmacy students interacted with interprofessional teams of learners. Actual student engagement in IPE was described in IPCP terms, such as "*shadowing*" or "*modelling*" interactions with teams of already licensed care providers (Figure 2). Participants described student interprofessional engagement as "*watching*" exchanges of two or more professions as they shared information or participated in treatment plans, followed by the students applying these witnessed behaviours or educating patients based on a predetermined plan. On a positive note, participants highlighted a wide range of clinical interactions that could provide meaningful interprofessional collaboration opportunities for students across different settings and with various health professions and care providers.

Participants provided further understanding of interprofessional interactions by sharing examples from their practice settings. The reported collaborative practice activities and types of communication varied widely, ranging from telephonic clarification of medication dosing to comprehensive patient disease state management. This broad spectrum of functions seemed to determine the extent and frequency of interactions with other professionals. Regardless of the type of activity, participants felt their contributions were valued, and they respected the interprofessional contributions of other care team members, as outlined in the IPEC core competency framework. A common theme emerged throughout these descriptions: the necessity for pharmacists to develop solid, professional relationships with other providers, thereby building trust in their knowledge, skills, and abilities over time. This trust enhanced the ability of pharmacists to participate and engage interprofessionally within their respective practice sites.

Participants described barriers to IPCP and IPE that were consistent with those identified in other studies, with the primary concerns being a lack of time and resources in the form of human capital (Thomson *et al.,* 2015; Schot *et al.,* 2020; Rawlinson *et al.,* 2021; Perron *et al.,* 2022). Interestingly, beyond these fundamental needs, participants described role clarity and accepting attitudes towards interprofessional practice by peers and administration as critical for robust IPCP/IPE implementation. The researchers initially sought to identify barriers that could be addressed through academic institutional support, more focused pharmacist preceptor training, and a structured IPE curriculum. However, some of these barriers, including financial and hiring practices, might be more systemic and require long-term advocacy and efforts to change.

Key informant interviews with pharmacy preceptors teaching in diverse settings provided valuable insights into pharmacy students' actual practices and education in the experiential portions of their curriculum. Student learning, patient outcomes, and provider satisfaction are directly affected by the implementation of IPE and will need to be deliberately supported to thrive in healthcare delivery (Lee *et al*., 2021; Rawlinson *et al.,* 2021). This study represents a first step in identifying the successes and challenges of current IPE offerings. It aims to better address the pedagogical accreditation requirements associated with IPE through preceptor training, support, and advocacy.

Limitations

Limitations of this study include the evaluation of the opinions of only pharmacist preceptors. Since IPE practices involve collaboration with other disciplines, the opinions shared by informants in this study may not represent those of practitioners from other fields. Additionally, this research was conducted in one geographic area, which may limit its generalisability to a larger population or other regions. Although the researchers believe saturation was achieved, this study had a relatively small sample size. To mitigate this limitation, researchers deliberately invited pharmacists from various practice types to ensure diverse responses.

This study is being expanded to gather information on knowledge, perceptions, and experiences of IPE from preceptors in other healthcare professions at their practice sites. The research team is also developing education and tools to aid pharmacist preceptors in creating IPE learning experiences beyond shadowing or role modelling and to encourage increased interactions between interprofessional healthcare students at practice sites.

Conclusion

This study provided insights into the state of interprofessional practice among preceptors in a Doctor of Pharmacy programme. Pharmacist preceptors demonstrated an understanding of interprofessional practice but mischaracterised these experiences as IPE for their students. While participants

routinely collaborated and partnered with various healthcare professionals, student IPE engagement was often limited to shadowing. Respondents believed that IPE and IPCP benefit patients through improved care outcomes and enhance the healthcare system by improving provider satisfaction and well-being. The most relevant conclusion of these interviews is that colleges of pharmacy have an opportunity to support preceptors through pedagogical development and the curricular implementation of intentional IPE learning experiences. Additionally, creating a culture of IPE learning and development that intentionally brings students from different health profession training programmes together to learn about, with, and from one another in the clinical learning environment would better represent the true definition of IPE.

Conflict of interest

The authors declare no conflict of interest.

Source of funding

The authors did not receive any funding.

Ethics approval and informed consent

Based on the evaluation of the application and materials submitted for the study titled "*Pharmacy preceptors' knowledge, perceptions, and experiences with interprofessional education and practice*" (IRB #16779-005, November 24, 2020), the WSU Human Research Protection Programme (HRPP) has decided that the study satisfies the criteria for exempt research.

Participants gave informed consent before taking part in this study.

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Appendix A: Pharmacist participant quotes organised by IPEC core competency domain

IPEC core competency	Pharmacist key informant quote
Values and ethics	Quote 1: "I would say [working collaboratively] makes for a more satisfactory work environment." – Pharmacist 10 Quote 2: "It gives me more job satisfaction, knowing that I get to work with a lot of different individuals from different backgrounds and skill sets." – Pharmacist 9 Quote 3: "It's a big positive in terms of job satisfaction that you get to work with all these great people. They fulfil their roles and meet your expectations, and that you fulfil your role and meet their expectations of what a pharmacist should do for the patient." - Pharmacist 6 Quote 4: "In that sense it also encourages learning, because anytime you're partnering with somebody who has a different perspective than you, you get the privilege of learning what life looks like through their eyes, and how you can be a better partner to them as well, and how you can assist them as in your current role, to be a better partner to them as well." – Pharmacist 10 Quote 5: "I think [interprofessional practice] greatly affects patient outcomes for the better. I have seen where many different healthcare professionals have worked to get patients their medications, or get them off certain medications, that's always a benefit." – Pharmacist 11 Quote 6: "I was contributing to patient outcomes, like the patient plans, and contributing to my hospital as well." – Pharmacist 10 Quote 7: "Safety and cost are the two most common reasons we have these interactions."- Pharmacist 8 Quote 8: "The government has a lot of metrics … we cannot achieve a lot of these metrics in a silo. Quality improvement in general is a team game, and patient care is no different." – Pharmacist 7
Roles and responsibilities	Quote 9: "You can account for those things with all these different viewpoints… we're all trained differently … you can bring those things together and create the whole that is much more than the sum of its parts. – pharmacist 2 Quote 10: "Nobody has all the information; nobody has all the knowledge." – Pharmacist 5 Quote 11: "[Interprofessional practice] helps you to be able to treat symptoms; things like anxiety that might be spiritual or emotional or maybe part of the disease process." - Pharmacist 4 Quote 12: "…in mental health, many times patients will present one way when they're in an environment with a provider they perceive is an authority figure, and they'll conduct themselves very differently when they're in a different environment where they perceive someone more as a peer." - Pharmacist 3 Quote 13: "I've always tried to be really respectful to others, and also be very competent and making sure I don't give recommendations that I haven't put some thought into. And that builds a rapport that people know when you're saying something you've thought about it and that carries forward to kind of a mutual respect." - Pharmacist 2 Quote 14: "Being equitable is probably the most key important thing that, there isn't someone that overrides what someone else is saying." - Pharmacist 2
Communication	Quote 15: "Pharmacists, nurses, physicians, social workers, oftentimes will have a piece of crucial information that is relevant to the patient's care that day. The other team members might not necessarily be informed, so being able to get together, we share our important pieces of information and make relevant recommendations." - Pharmacist 9

IPEC core competency	Pharmacist key informant quote
	Quote 16: "[Other providers] highly respect the pharmacists. We do a good job of not bothering and annoying them. They know that when we do speak up, it's usually something worthwhile. I think its important to keep it relevant and respectful of their time...when we say something or contribute, it's taken at face value." – Pharmacist 9
	Quote 17: "[Choosing to speak up] depends greatly on how much we believe or support the decision being suggested. Our seriousness can determine the seriousness of the response." - Pharmacist 8
	Quote 18: "Pick your battles, and only [communicate] the critical things that need to be addressed." – Pharmacist 9
	Quote 19: "Multidisciplinary rounding is critical and really does improve outcomes. It's the most efficient interprofessional collaboration and is by far the most efficient way to get your concerns heard. Everybody gets on the same page and makes changes for the patient. It's so slow if people are just charting their recommendations and then waiting for someone read it." – Pharmacist 6
	Quote 20: "[Rounding together] is a positive for time management, because it's your chance to get all of your all of your concerns and recommendations aired straight to the provider who's in charge in a systematic fashion." - Pharmacist 6
Teams and teamwork	Quote 21: "Different viewpoints [are] always going to be a strength because you miss things if everyone's got the same training...[working in an interprofessional team] you can begin seeing the whole patient. I think it's important that we see all of our patient, and not just that siloed part that we're most trained in." - Pharmacist 2
	Quote 22: "We had all of our different professional viewpoints that we would put together, and we would create a more complete and comprehensive antibiotic focus. Usually, with treatment plan for our patients, the outcomes improve…[the patient] no longer experiences an adverse drug reaction, for example, or they would experience less adverse drug reactions, as a result of my recommendations to the physicians." - Pharmacist 10
	Quote 23: "It's a huge time saver. It's a huge money saver, because you can get changes implemented faster." - Pharmacist 6
	Quote 24: "I like to think that I'm helping patients in a very timely manner. Hospice patients get their medications quicker than they would through any other means because we're able to listen to the nurses assessment of what's going on. We help them with symptom management really quickly if they need a prescription, within a half hour an hour, because it's a crisis we're able to do that for them… we're speeding up the stop their symptoms." - Pharmacist 4
	Quote 25: "It obviously helps our patients get a higher level of care when everybody has the full story, and is able to maximise the care plan by being all on the same page. Facility-wise, I think it just gives us a higher level of care and reputation That, I think is important, because people know when they come to our facility." - Pharmacist 9
	Quote 26: "The facility that I work for has a very big homeless population, and so we have case coordinators, and we have different people involved in the process. If somebody either can't wait for the medications or can't come to get their medications we have people who can take them to do them which is a really big thing and is very, very beneficial." - Pharmacist 11
	Quote 27: "There is a team supporting you when you might feel burnt out. When you're just alone and stuck, and trying to figure out how to go about navigating a situation, knowing that you have an interdisciplinary team to support you and fall back on is helpful." - Pharmacist 9
	Quote 28: "If [my team] can help take some of the burden off me by answering some questions, or providing some insight, or do a task that I might need them to do, that's a huge help. There is not a lot of time in the day, and if we can do it really efficiently…that's very, very important. - Pharmacist 3
	Quote 29: "The interprofessional side of it… decreases burnout. It shares the load. It helps us working with someone else, like maybe that social worker, who knows some behavioral skills to manage stuff that I wouldn't know." - Pharmacist 2
	Quote 30: "Without that interprofessional relationship that we have, I don't think pharmacy could function the way it does… That starts with the relationship we have with our fellow medical staff members." - Pharmacist 5

IPEC=Interprofessional Education Collaborative