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INTERPROFESSIONAL COLLABORATIVE ATTITUDES: COMPARING SOCIAL WORK LEARNERS TO THEIR MEDICINE AND NURSING PEERS

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When healthcare disciplines unite, an integrative and comprehensive approach to patient care occurs, producing positive changes in the quality of healthcare. Our study explores and identifies the attitudes and perceptions of learners from three distinct disciplines: internal medicine residents, nurse practitioner students, and masters-level social work students on the core competencies of interprofessional collaborative practice (ICP) and Interprofessional education (IPE). A total of 151 learners (49 internal medicine residents: 32 nurse practitioner students and 70 master's-level social work students) completed the questionnaire. The findings reveal that each discipline feels value and is supportive of IPE/ICP in addressing the healthcare crisis. Institutions of higher learning, healthcare systems, and healthcare professionals can benefit from these findings and use them to justify moving toward increased IPE/ICP initiatives.

Background | When healthcare disciplines unite, an integrative and comprehensive approach to patient care occurs. This approach produces positive changes for social and economic conditions, demographics, and disease control, leading to delivering the highest quality of health care (Garth et al., 2017; Gilbert et al., 2010; Rubin et al., 2018; Washington et al., 2017). With the current crisis in our health care access and affordability, it is imperative that we unite, eliminating duplication and fragmentation of services (Abramson & Mizrahi, 1996). To better integrate healthcare professionals' interprofessional practices, it is incumbent upon us to diminish disciplinary silos and increase shared learning opportunities across professions and programs (Archibald & Estreet, 2017; Rubin et al., 2018).

Interprofessional education (IPE) occurs when two or more disciplines learn about, from, and with one another, culminating in effective collaboration (Interprofessional Education Collaborative Expert Panel [IPECEP], 2011, p. 2). When students learn in interprofessional environments, they are better prepared to join a collaborative practice team and strengthen the healthcare system (Archibald & Estreet, 2017; IPECEP, 2011; Warton & Burg, 2017). By assessing the attitudes and perceptions of medical residents, nurse practitioner students, and masters-

level social worker students, we can identify the differences between the disciplines to adjust educational experiences and improve interprofessional education (Archibald & Estreet, 2017).

In 1987, the World Health Organization (WHO) convened experts to review IPE to integrate healthcare (WHO, 1987). The National Academies of Sciences, Engineering, and Health (NASEH), in concert with the WHO, have joined many other organizations in determining the gaps in our healthcare systems to address substandard care (Rubin et al., 2018). In 2011, the IPECEP identified its goal toward building a safer and more efficient patient-centered community/population for the United States (U.S.) healthcare system. This effort was followed in 2016 by the Council on Social Work Education (CSWE) and other professional healthcare-related organizations to support IPECEP's goal of increasing student exposure to collaborative, team-based decision-making processes that improve healthcare (Archibald & Estreet, 2017; Interprofessional Education Collaborative [IPEC], 2016). The mandates to implement IPE have been established.

IPE Purpose, Values & Core Competencies

The IPE initiative strives to build collaboration among healthcare providers through teaching learners the principles, ethics, and values of other professions and identifying the critical skills in developing and maintaining collaborative working relationships (Archibald & Estreet, 2017; Thistlethwaite, 2012). The interprofessional practice core competencies are values and ethics for interprofessional practice, interprofessional communication, roles and responsibilities, and teams and teamwork. These competencies align with the National Association of Social Work (NASW) *Code of Ethics*, the CSWE's Educational Policy and Accreditation Standards (EPAS), and the NASW Standards of Practice in Health Care Settings. Defining and teaching the social work skills of assessment, communication, group facilitation, empathy, engagement, and community building connects directly to aspects of interprofessional collaboration and the IPE initiatives (Jones & Phillips, 2016). Social workers are uniquely aligned in their values and core competencies to lead interprofessional collaborative practice (ICP) efforts. The medical education system has not historically developed curricula to instruct on interprofessional or transdisciplinary teamwork (Cadell et al., 2007; Fineberg et al., 2004). Educating learners of medicine, nursing, social work, and allied health professions during their formative educational years has the potential to instill knowledge, skills, and values needed to establish a robust collaborative practice (Archibald & Estreet, 2017; Cadell et al., 2007; Fineberg et al., 2004; IPECEP, 2011; Jones, 2010). In doing so, social workers and allied healthcare professionals can better unite and build ICP to improve health care systems.

Interprofessional Terminology

Multiple terms are often interchanged when speaking about IPE. Jones and Phillips (2016) share that defining the different terms may help understand the variations often seen in the literature. Multidisciplinary refers to teams that recognize one another's contributions and expertise, but the members often work independently and in a hierarchical dynamic (Youngwerth & Twaddle, 2011). Multidisciplinary teams are discipline-oriented, and member stewardship involves only those areas related to their discipline. Each works independently with patients and is expected to inform the doctor of their insights (Jones & Phillips, 2016). The interdisciplinary model works much differently; the professionals bring their expertise and talents to the table, and they culminate in the attainment of a specific goal (Parker-Oliver et al., 2005). Crawford and Price (2003) describe this method with a hand analogy. Each finger differs in its ability, function, and dexterity. Still, when they unite, they accomplish more than the individual

sum of the digits. The final model is the transdisciplinary model, where a holistic approach is achieved by merging each discipline's roles and expertise (Kilgore & Lang, 2009). No one expert is expected to work within their field; instead, efforts get woven into the team with boundaries blurred, thus implementing cross-training and more open approaches to job completion (Jones & Phillips, 2016). This study proposes the interdisciplinary model as the preferred model to provide the optimum efficiency and pattern to address healthcare's diverse needs and move toward a more holistic, efficient, and effective system.

Barriers, Biases, and Strengths

One way to move toward the interdisciplinary team-based care model is to begin instructing learners during their educational careers. IPE offers future healthcare professionals a venue to learn important skills of other professional disciplines before entering interprofessional practices. Implementing IPE within the educational curricula is a challenge. Gillette et al. (2019) state that despite the mandate and the importance of improving care through IPE, barriers do exist. Barriers include not sharing information, power dynamics, and not understanding various disciplines' roles (Garth et al., 2017; Gillette et al., 2019). In addition to these barriers are the structures of programs, limited administrative support, lack of perceived value from faculty and learners, physical separation of campuses, student scheduling conflicts, limited resources, rigid or excessive curricula, attitudinal conflicts with some professions wanting to practice in isolation, and turf issues (Jones & Phillips, 2016). Many challenges exist in implementing interprofessional training, particularly in medical residency and health care graduate programs. Despite these challenges, the implementation of ICP offers the best option to improve patient care and result in positive outcomes.

The positive outcomes from IPE initiatives are inclusive of, but not limited to, mutual respect, mutual support, prioritizing multidisciplinary rounds for better communication for staff and patients, increased communication among team members, asking for input, explanations of treatment rationale, and practical joint problem solving (Garth et al., 2017). Overcoming barriers to access gains and improving patient care validate our desire to gain additional insights about health profession learners' attitudes and perceptions. By knowing the learners' attitudes and perceptions, more focus can be placed on addressing those barriers during the formative educational years.

Interprofessional Education and Collaborative Practice Outcomes

Greiner and Knebel (2003) report that significantly improved patient care can be achieved through successful IPC. The improvements they and others note include higher patient satisfaction, decreased length of hospital stays, reduced medical costs, and reduced medical errors (Greiner & Knebel, 2003; Levit et al., 2013). Another study by Sommers et al. (2000) examined how interprofessional collaboration across the life span can enhance patients' care. Their study of chronically ill older adults demonstrated that when ICP with physicians, nurses, and social workers is implemented, patients maintain a significantly more active lifestyle. They also have fewer doctor visits and lower hospital admissions than patients who received care from a physician alone (Sommers et al., 2000). Again, social workers were identified as an essential part of the team in a study done by Kitchen and Brook (2005). A pilot project using social workers to coordinate teams at a teaching hospital, opposed to the typically physician-led teams, increased awareness of medical professionals of the different roles social workers provides in patient care. This study reported increased awareness of the patient and family's psychosocial needs by the other professions, more efficient patient care, and improved physician experiences, including admissions and discharge planning (Kitchen & Brook, 2005). Including social workers on the interdisciplinary team, particularly as team leaders, provided more comprehensive and effective care.

Diversity/Minority Health and IPE

By gathering data from different health profession disciplines, learners in urban university settings focus on diverse and minority populations. In 2016, the Office of Minority Health called attention to the need to create IPE for minority groups to address health inequalities and shortages in healthcare workforces (Washington et al., 2017). In speaking to the possible strategies to improve healthcare, they noted the need for a call to action to meet the increasing healthcare demands of growing diverse and minority populations. They supported IPE's ability to provide healthcare professionals the skills to establish more practice-ready, team-oriented workforces resulting in a higher quality of healthcare and better outcomes for patients (Washington et al., 2017). Furthermore, they advocated for IPE in graduate schools and continuing education programs for social workers and other healthcare professionals, as each discipline's training is often done in silos (Sargeant, 2009; Washington et al., 2017). Among the various IPE lessons learned from Washington et al. (2017) were to offer continuing education units (CEUs) as a motivating factor for attendance and recruit diversity in faculty to increase interprofessional diversity. Developing a strategic format and theme and allocating time within the IPE

course for more roundtable discussions, identifying broad topic areas that speak to the healthcare setting, and keeping students engaged in conversations were also among the lessons learned from this study (Washington et al., 2017).

Theoretical Framework

Albert Bandura's social learning theory offers an applicable theoretical framework to explore the Interprofessional Attitudes Scale (IPAS) and gain insight into the differences among medical, nursing, and social work learners. Social learning theory exposes how human experiences are influenced by language, culture, and institutional or a discipline's norms and expectations (Varpio et al., 2017). According to Bandura, there are no autonomous behaviors. Human action is a product of mutual interaction. Individual team members and how they interact creates a system. Interactions result in changed attitudes and perceptions, though each comes to the team with a cultural perspective generated by their discipline (Varpio et al., 2017).

We hypothesize that attitudinal differences exist, within the five subscales of the IPAS, among advanced practice medicine, nursing, and social work learners. By exploring each discipline's attitudes and perceptions of the core competencies of ICP, we hope to understand better the strengths and obstacles needed to create more rigorous educational methods mandated by IPE and to break down the silos, eliminating fragmentation and service duplication.

Study Purpose

In addressing these crucial practices, our study explores and identifies the attitudes and perceptions of learners from three distinct disciplines: internal medicine residents, nurse practitioner students, and masters-level social work students on the core competencies of ICP. Diverse populations exist in urban settings offering a breadth of differing demographics related to age, gender, race/ethnicity, religion, sexual orientation, socio-economic status, and disability status. IPE and ICP are increasingly needed to address diverse urban populations' healthcare demands and improve comprehensive patient care. Lack of IPE and ICP opportunities within health profession curricula, training opportunities, and academic events could result in deficient education and competencies for urban-based university health profession students and medical residents. IPE's expected outcomes should support, empower, and better prepare diverse graduates to expand and lead diverse healthcare workforces (Archibald & Estreet, 2017). Archibald and Estreet (2017) posit that to meet diverse populations' needs, we must move past the

stand-alone education systems of practice and research pedagogy toward IPE. Through developing partnerships that promote eliminating health disparities, implementation occurs by first understanding the core competencies of the IPEC (Archibald & Estreet, 2017).

The assessment of interprofessional attitudes has grown significantly. Studies have assessed interprofessional attitudes at the advanced education level at universities. However, few studies have assessed the interprofessional attitudes through the Interprofessional Attitudes Scale (IPAS) context. The IPAS is unique as it is one of the first scales to focus specifically on the Core Competencies for ICP established by the IPECEP in 2011. To fill this gap in the literature, our study addresses the following questions: (a) What are the attitudinal differences between internal medicine residents, nurse practitioner students, and master's-level social work students based on the five subscales within the IPAS and (b) what predictors impact interprofessional attitudes among internal medicine residents, nurse practitioner students, and master's-level social work students?

Methods |

Design and Procedure

Researchers met with representatives from each discipline's school or department for study approval and coordinated administering the questionnaire. Our study used a cross-sectional design and non-probability convenience sampling. Our questionnaire was group administered to learners from January to February 2020 at two Midwestern urban university settings. Researchers met with participants at the beginning or completion of a course or scheduled lecture, explained the study's purpose, and reviewed informed consent. Learners who agreed to participate were presented with the questionnaire. Researchers were available for consultation during the questionnaire administration. Approval for the study was provided by the Indiana University Institutional Review Board (#1912251737). Participation in this research was voluntary, with assurances that participants' responses would be confidential. Permission to use the Interprofessional Attitudes Scale was also granted by the lead designer.

Instrument

We selected the Interprofessional Attitudes Scale (IPAS) as our measure, for it is the first validated measure that assesses all four competency domains created by the IPEC board. The IPAS consists of 27 questions with five interprofessional subsections: (1)

Teamwork, Roles, and Responsibilities, (TRR); (2) Patient-Centeredness, (PC); (3) Interprofessional Biases, (IB); (4) Diversity and Ethics, (DE); and (5) Community-Centeredness, (CC) (Norris et al., 2015).

The use of the IPAS instrument has occurred mainly in pre- and post-surveys when IPE activities have occurred. The IPAS instrument has noted improvements in interprofessional attitudes in various studies (Connaughton et al., 2019; Fusco et al., 2019). However, we administered the IPAS only once to assess participants' attitudes.

All items in the IPAS are assessed using a 5-point Likert scale. For most questions, Likert responses with numerical values were as follows: "strongly disagree" (1), "disagree" (2), "neither agree nor disagree" (3), "agree" (4) and "strongly agree" (5). However, one question was reverse scored; therefore, the five (5) was scored as "strongly disagree," and one (1) was scored as "strongly agree." A higher numerical score will indicate an increased alignment with the core competencies of ICP. Our questionnaire also included a section to collect demographic information, i.e., age, gender, and race/ethnicity.

Participants

The internal medicine residents and social work students were enrolled at a large Midwestern public university that operates in a metropolitan area and identifies as an urban campus. Initially, we desired all participants be enrolled at the same university. However, we encountered challenges that led us to seek a nursing sample at another institution. The sample of nursing learners, nurse practitioner students, were enrolled at a small, private liberal arts university approximately six miles away. Although the nursing sample came from a different institution, its location was within the same metropolitan area and urban setting. No exclusionary criteria existed in the study, as participants were established learners in their programs.

Data Analysis

We conducted three different analyses using Statistical Package for the Social Sciences software version 20 was used for our analysis. First, descriptive statistics were run on the demographic portion of the questionnaire. Next, two one-way omnibus analyses of variance (ANOVAs) were conducted to determine if any differences existed between the disciplines on the IPAS and the participants' age. Last, researchers conducted a Pearson's correlation coefficient analysis

to identify if associations existed among the IPAS subsections.

We conducted a post hoc statistical power analysis based on differences among the disciplines. For the ANOVA, based on 151 participants, significance set at 0.05, and an effect size of 0.25, statistical power equaled 0.78.

Results |

Demographic Characteristics and Background Information

A total of 151 learners (49 internal medicine residents: 32 nurse practitioner students and 70 master's-level social work students) completed the questionnaire. The researchers administered the questionnaire at 12 separate classes or academic lectures. After introducing individuals to the study, approximately 90% agreed to participate. Social workers attested the broadest range in age, 21-57 ($M=27.3$, $SD=9.1$). The smallest range was seen in the medical residents with a range of 22-32 years of age ($M=25.0$, $SD=2.64$). The nursing participants had the oldest mean age ($M=31.5$, $SD=6.5$). We ran an ANOVA to analyze age, and statistical significance was evidenced between groups with a $p<.05$ level for [$F(2, 166) = 6.45$, $p=0.002$].

We conducted a one-way omnibus ANOVA to determine significant differences between the disciplines. Our results indicated that differences did exist between the disciplines within three subsections of the IPAS, Teamwork, Roles, and Responsibilities (TRR), Interprofessional Biases (IB), and Community-Centeredness (CC).

A significant effect for TRR existed between social work learners and both medicine and the nursing learners at the $p<.05$ level for [$F(2, 169) = 7.631$, $p=0.001$]. Post hoc comparisons, using the Tukey HSD, indicated that the mean score for social work participants ($M = 32.53$, $SD = 3.18$) was significantly different from the mean score for medicine participants ($M = 30.24$, $SD = 5.17$) and nursing participants ($M = 28.75$, $SD = 6.93$), indicating social work participants reported more favorable attitudes toward TRR than did the medicine and nursing participants. Significance was also revealed for the nursing and social work learners with IB at the $p<.05$ level for [$F(2, 170) = 3.224$, $p=0.042$]. Post hoc comparisons, using Tukey HSD, for IB indicated that the mean score for nursing was ($M = 6.56$, $SD = 1.80$) and for social work ($M = 7.64$, $SD = 2.11$), evidencing these two disciplines felt more IB than did the medicine discipline. The final significant effect existed for the CC showing medicine participants and social work participants at the $p<.05$ level for [$F(2,$

$170) = 4.164$, $p=0.017$]. The post hoc comparisons, using Tukey's HSD test, indicated that the mean score for medicine participants ($M = 21.17$, $SD = 2.79$) was significantly different from the social work participants ($M = 22.30$, $SD = 2.08$). Thereby, the social work participants reported much more focus on community-centeredness than the medicine participants. We found the internal consistency reliability for the IPAS to range from 0.42 (IB) to 0.93 (PC).

Discussion | We measured attitudes by using the IPAS instrument, and significant differences existed between the disciplines. The social work group scored statistically significantly higher in TRR than both the medicine and nursing groups. Social work participants reported valuing shared learning experiences more than their medicine and nursing peers, which is not surprising as they play an essential role as leaders and IPE facilitators (Jones & Phillips, 2016). The literature has noted that physicians and nursing professionals approach patient care from different perspectives, and there is a need for collaboration and clear professional roles (Friman, 2017). Some role conflicts may be associated with separate professional cultures that maintain negative feelings toward other professions (Friman, 2017). However, it should not be assumed the medicine and nursing learners do not value a team approach or are unwilling to change and learn others' roles and responsibilities. Instead, this finding may be more indicative of implementing different learning activities to create new awareness and appreciation of what other professions can offer (Friman, 2017).

Our analysis noted statistical significance occurred with interprofessional biases. The two statistically significant differences here existed between the disciplines of nursing and social work. Our finding indicates that these disciplines do not feel adequately valued or respected as professionals within the healthcare settings or may not equally value their profession. Ultimately, this has the potential to affect the delivery of service to patients. How we value ourselves or feel valued by others speaks to professional identity. Education establishes professional identity and socializes learners into their profession (Wiles, 2013). The beliefs, attitudes, and understandings about one's role and work establish the worker's identity (Adams et al., 2006). When professionals feel respected and valued, they are more apt to possess a more substantial work identity. A stronger work identity could factor into communication among colleagues resulting in a more unified and comprehensive patient care approach. When healthcare professionals do not feel a strong

identity and feel less valued or respected, they are more apt to feel increased vulnerability, less confidence in their work, and self-isolate.

Gender could also play a significant role in this area. Most medicine participants were male, while most nursing and social work participants were female. Females have reported feeling lower levels of ambition and confidence (Eskridge et al., 2019). Many females also balance the demands of home life, children, family, and professional obligations, which may incline them to feel less confident and judge themselves or feel judged by others (Ostrander et al., 2019).

The final area where statistical significance was identified was community-centeredness. We felt this section spoke much more to the macro-focus of health care. Social Work’s *Code of Ethics* and the CSWE (2016) explicitly endorse and mandate that social workers focus on justice, values, and advocacy. This macro-focus concept shows social workers’ connection to this subsection of the IPAS. Medicine and nursing learners emphasize learning individual

patient care, which is more micro-focused. Although there is an increased need for social work development in social advocacy macro-level work (Ritter, 2008), social workers are trained to work through a community-centered lens than medicine and nursing professionals. In assessing the three learner groups’ attitudes, no statistical difference was evidenced in the subsections for patient-centeredness or diversity and ethics.

The internal consistency reliability among four of the IPAS subsections was good, ranging from .79 (DE) to .93 (PC). The IB Cronbach’s alpha was .42 and is unacceptable. Thereby, our reporting on the IB significance with the nurse practitioner and social work students may not be representative within the scope of interprofessional attitudes.

Table 1. *Demographic characteristics of study participants*

Variables	Overall (N = 151)	Medicine (N = 49)	Nursing (N = 32)	Social Work (N = 70)	F or χ^2 values
Age (years) (mean \pm SD)	28.73 \pm 6.49(*)	25.86 \pm 9.15(*)	31.58 \pm 6.55	27.34 \pm 9.13	3.78*
Gender					78.36***
Male	43 (28.7)	37 (75.5)	3 (9.4)	3 (4.3)	
Female	107 (71.3)(**)	12 (24.5)	29 (90.6)	66 (95.7)(**)	
Race/Ethnicity					21.28***
African American/Black	28 (18.7)	6 (12.5)	1 (3.1)	21 (30.0)	
Caucasian/White	103 (68.7)	30 (62.5)	29 (90.6)	44 (62.9)	
Other	19 (12.7)(**)	12 (25.0)(**)	2 (6.3)	5 (7.1)	

Notes: *=four (4) missing; **=one (1) missing
* $p < .05$; *** $p < .001$

Table 2. *Participant Education and Post-Program/Residency Descriptives*

Internal Medicine Residents (N=49)	<i>N (%)</i>
Medical School Type ^a	
Allopathic (M.D.)	42(88)
Osteopathic (D.O.)	6(12)
Medical School Location ^a	
Within the U.S.	40(83)
Outside the U.S.	8(17)
Year in Residency	
First	19(39)
Second	20(41)
Third	9(18)
Fourth	1 (2)
Post-Residency Plan ^a	
General Practice/Office-based/Primary Care	4 (8)
Hospitalist	6(13)
Fellowship	32(67)
Chief Residency	3 (6)
Undecided	3 (6)
Nurse Practitioner Students (N=32)	<i>N (%)</i>
Master of Science in Nursing (MSN) Tract	
Adult/Gerontological Nurse Practitioner	4(12)
Family Nurse Practitioner	28(88)
Post-Program Plan ^b	
General practice/Office-based/Primary Care	20(67)
Hospital-based	2 (7)
Urgent Care	3(10)
Other	5(16)
Masters-Level Social Work Students (N=70)	<i>N (%)</i>
Master of Social Work (MSW) Focus Area	
Health	31(44)
Mental Health & Addictions	27(38)
Children, Youth, & Families; Schools	6 (9)
Other	6 (9)
Post-Program Plan ^c	
Healthcare-based	30(45)
Mental Health & Addictions-based	24(36)
School-based	6 (9)
Other	7(10)

Note. ^aN=48; ^bN=30; ^cN=67

Table 3. IPAS Subsection Correlations

		TRR ^a	PC ^b	IB ^c	DE ^d	CC ^e
TRR	Pearson Correlation	1	.612**	.077	.343**	.384**
	Sig. (2-tailed)		.000	.350	.000	.000
	N		150	150	150	150
PC	Pearson Correlation		1	.031	.420**	.194*
	Sig. (2-tailed)			.707	.000	.017
	N			151	151	151
IB	Pearson Correlation			1	-.054	.074
	Sig. (2-tailed)				.508	.366
	N				151	151
DE	Pearson Correlation				1	.486**
	Sig. (2-tailed)					.000
	N					151

Note. ^aTeamwork, Roles and Responsibilities; ^bPatient-Centeredness; ^cInterprofessional Biases; ^dDiversity & Ethics; ^eCommunity-Centeredness

* $p < .05$; ** $p < .001$

Limitations | We acknowledge the following limitations to our study. First, our study was limited to a Midwestern urban geographical location and may not be generalizable to rural or other geographical areas in the U.S. or internationally. Second, the questionnaires were administered at locations where faculty and staff were present within the buildings, which may have influenced responses more than if questionnaires had been administered electronically. All study participants had previously earned undergraduate degrees and medical residents, both undergraduate and graduate degrees. The previously earned degrees could have contributed to the participants' attitudes and affected generalizability. Finally, all attitudes assessed for this study were from learners from the three distinct disciplines and did not include established professionals. To gain a more comprehensive view of interprofessional attitudes, further studies could explore established professionals within each discipline.

Implications | The study results show a clear need and desire for increased IPE and ICP activities in U.S. colleges and universities. Healthcare learners are in crucial years as they build their discipline's foundational identities and knowledge of healthcare. Health profession learners who expand beyond their discipline's foundation, and embrace ICP, will allow for significant improvements in the U.S. healthcare system, thus improving patient health outcomes. Higher learning institutions that employ IPE and IPC activities would decrease the dysfunction in U.S. healthcare. The call must be to further this inquiry toward the health professional attitudes and identify specific ways to foster and build IPC. Further research must be done to avoid service duplication and

fragmentation, lower healthcare costs, and excel in service delivery.

Conclusion | Our study highlighted differences between the three disciplines with the specific IPAS subsections of teamwork, roles, and responsibilities, interprofessional biases, and community-centeredness indicating attitude and perception variance. Overall, each discipline feels value and is supportive of IPE/ICP in addressing the healthcare crisis. Interprofessional collaborative practice can improve healthcare affordability, duplication and fragmentation of services and create a more efficient and effective healthcare system. Institutions of higher learning, healthcare systems, and healthcare professionals can benefit from these findings and use them to justify moving toward increased IPE/ICP initiatives.

Declaration of Interest | The authors report no conflicts of interest. The authors alone are responsible for the writing and content of this article.

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