Nurse Education Today 75 (2019) 28–34

Contents lists available at ScienceDirect

Nurse Education Today

journal homepage: www.elsevier.com/locate/nedt

Students' experiences and perceptions of interprofessional education during rural placement: A mixed methods study☆,☆☆

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ARTICLE INFO

Keywords:
Interprofessional education
Collaborative practice
Undergraduate health students
Professional roles
Health care
Rural placement
Clinical learning environment
Clinical placement

ABSTRACT

Background: Interprofessional collaboration is key to addressing the complexity of contemporary health care, therefore it is imperative that students from different disciplines have access to interprofessional education to equip them with the requisite skills and attributes. While interprofessional education promotes a person-centred approach and mutual recognition of one another's contributions to health outcomes, interprofessional education in Australian universities is fragmented and presents challenges that can be addressed through clinical placements.

Objectives: This article reports student perceptions and readiness for interprofessional education in the rural clinical learning environment in one region of Australia.

Design: A mixed methods approach.

Settings: Rural clinical learning environments in one geographic area in Victoria, Australia.

Participants: 60 undergraduate healthcare students from allied health, medicine, nursing and midwifery.

Methods: A survey incorporating Readiness for Interprofessional Learning Scale, Interdisciplinary Education Perception Scale and focused interprofessional questions. Qualitative data were collected via survey comments, interviews and focus groups.

Results: Students had numerous opportunities for interprofessional education, to observe role modelling in the workplace and considered that learning with other professions would help them become more effective members of the health care team. Students valued learning about collaborative practice, the roles of other professions and identified activities that enhanced interprofessional engagement.

Conclusions: This study provides important insights regarding students' perceptions and readiness for interprofessional education. These results demonstrate that there are numerous opportunities to embed interprofessional education within the rural clinical learning environment and offer new insights into students' experiences and preferences for potential activities. These findings may resonate with others implementing interprofessional education in the workplace and guide facilitators in planning activities for students. Factors influencing differences in attitudes towards interprofessional education and how students acquire an understanding of their professional or disciplinary role warrant further study.

1. Background

Patient care is inherently interprofessional, therefore effective collaborative teamwork is paramount to achieve a patient-centred approach and best outcomes in complex, rapidly changing environments (Dunston et al., 2017; World Health Organization [WHO], 2010). Interprofessional 'collaborative practice (IPCP) in health-care occurs when multiple health workers from different professional backgrounds provide comprehensive services by working with patients, their families, careers and communities to deliver the highest quality of care across settings.' (WHO, 2010; p. 13). Greater collaboration among health professionals increases the understanding of others' roles, reduces the problems of fragmentation in health care delivery and allows for optimal contributions by all team members (Green and Johnson,

☆ This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.
☆☆ The authors declare there are no conflicts of interest to report.
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https://doi.org/10.1016/j.nedt.2018.12.012
Received 24 June 2018; Received in revised form 1 December 2018; Accepted 27 December 2018

2015; WHO, 2010). Green and Johnson (2015) explain that IPCP allows participants to 'achieve together more than they can individually, serve larger groups of people, and grow on individual and organizational levels.' (p. 1). Notably, the Interprofessional Education Collaboration Expert Panel [IPEC] (2016) identified that IPCP should be standard and embedded in everyday clinical practice.

Interprofessional education (IPE) promotes a person-centred approach in which health care professionals recognise one another's contributions to improve healthcare. Achieving this goal 'requires the continuous development of interprofessional competency by health professions students… as part of the learning process, so that they enter the workforce ready for collaborative practice that helps to ensure health.' (IPEC, 2016; p. 4). The momentum is growing for IPE to be embedded in undergraduate learning to ensure students are equipped with the essential knowledge, skills and attitudes for IPCP (Dunston et al., 2017). Dunston and colleagues are leading a major initiative in Australia to develop a national synchronised approach to undergraduate IPE. One of its key goals is to mandate inclusion of IPE in all accredited health professional curricula to ensure future graduates achieve core IPCP capabilities. 'This focus on IPCP and IPE is predicated on the recognition that discrete profession-specific (uni-professional) skills alone are insufficient to ensure that graduate students are 'work-ready' (Dunston et al., 2017; p. 5).

Apart from classroom activities, the clinical learning environment provides an ideal setting for promoting IPE and developing essential IPCP skills (Palmer and Stilp, 2017). Given that students are concurrently situated, the clinical setting facilitates opportunities to learn and work collaboratively that are not always available in the university setting. The clinical learning environment provides the framework for 'authentic student learning and an opportunity to contribute to patient care…' (Ash et al., 2012; p. 12). Ideally, during clinical placement students will experience role modelling and the socialisation required for IPCP within an effective interprofessional learning environment (Palmer and Stilp, 2017).

The rural clinical learning environment provides meaningful opportunities for students to be part of a multidisciplinary team and experience IPCP (Spencer et al., 2015; Walker et al., 2018), because smaller healthcare organisations are often more welcoming and supportive and allow more opportunities for practical learning (Smith et al., 2018; Spencer et al., 2015). Khalil et al. (2015) suggest that in rural areas interprofessional learning 'is inevitable', (p. 88) given the scarcity of health professionals and the need for collaborative patient-centred care in these settings. This article reports the student perspective, experience and perception of IPE, a subset of a larger Australian multi-perspectival study conducted to examine the opportunities and application of IPE in rural clinical learning environments.

2. Methods

2.1. Research design

A mixed methods approach was used to collect data from undergraduate healthcare students during their clinical placement to provide a more complex understanding of their IPE experience. Mixed methods allow for a combination of qualitative and quantitative methods, facilitate triangulation and increase the depth and breadth of knowledge to gain 'an understanding about the whole by exploring different dimensions.' (Fetters, 2018; p. 263). Quantitative data were collected via a survey instrument that incorporated student-related questions, opportunities for IPE, and two validated interprofessional scales: The Readiness for Interprofessional Learning Scale [RIPLS] and the Interdisciplinary Education Perception Scale [IEPS]. Demographic questions included course of study, gender, year level and number of placements. The RIPLS, comprising 19 questions, was designed to assess students' individual attitudes towards interprofessional learning (Parsell and Bligh, 1999). It uses a 5-point Likert scale (1 = strongly disagree - 5 = strongly agree). McFadyen et al., 2005) revised the instrument to comprise four subscales: Teamwork and Collaboration, Negative Professional Identity, Positive Professional Identity, and Roles and Responsibilities. The revised version was used in this study.

The IEPS identifies perceived attitudes about collaboration for the student's own profession, using four subscales: Competency and Autonomy, Perceived Need for Cooperation, Perception of Actual Cooperation and Understanding Others' Values (Luecht et al., 1990). Comprising 18 questions, it uses a 6-point Likert scale (1 = strongly disagree - 6 = strongly agree). Alternative versions of the IEPS have been developed (Leitch, 2014; McFadyen et al., 2007; Williams and Webb, 2013), however, all have some limitations (Vaughan et al., 2014). Because the more recent iterations were not considered to offer additional benefits to this study, the original IEPS was used. Quantitative data were analysed using statistical program IBM Statistical package for Social Sciences (SPSS) version 25. Qualitative data were collected via open-ended survey questions, interviews and focus group discussions. Audiotaped data were transcribed and analysed using NVIVO software program version 11.

2.2. Settings and participants

Data collection was undertaken in 2016–2017. Participants comprised a convenience sample of 60 medicine, nursing, midwifery and allied healthcare students undertaking clinical placement at two sites in rural Victoria, Australia. Students were invited to participate in the study via their clinical educators.

2.3. Ethical considerations

Approval for the study was granted by the ethics committees of the university and respective health services. Participants were given a plain language information sheet outlining the study and informed that participation was voluntary.

3. Results

3.1. Demographics

Sixty students completed the survey: 10 (17%) male and 50 (83%) female. Allied health professions (18 = 30%), encompassed dentistry, occupational health, physiotherapy and occupational therapy; medicine (18 = 30%); nursing and midwifery (24 = 40%). Three focus group discussions were undertaken with a total of eleven students: four allied health, three medicine and four nursing and midwifery. Though most students were in third or fourth year (41 = 68.4%), they ranged from first to fourth year (Table 1). Almost all (56 = 93%) had undertaken between three to eight placements.

3.2. Opportunities for interprofessional education on rural placement

Most students (50 = 83.3%) reported having opportunities to learn from other health disciplines during placement and over half (35 = 58%) had undertaken IPE activities with students from other professions. At one site, the organisation had a dedicated one-day IPE program that all students were required to attend. The other site offered

Table 1
Student profile.

Profession	Gender		Year 1 (n = 6)	Year 2 (n = 13)	Year 3 (n = 19)	Year 4 (n = 22)
	M	F				
Allied health	3	15	5	2	2	9
Medicine	5	13	0	0	5	13
Nursing & midwifery	2	22	1	11	12	0

Table 2
Interprofessional activities available to students on rural clinical placement.

Opportunities for IPE	IPE sessions	IP team meetings
Rotations with nurses, social workers, OTs, maternal and child health workers, midwives	Practical obstetric multi-professional training with medicine, midwifery and nursing students	Team meetings for rehabilitation patients including physio, dietitians, social work, doctors
Attended homeless shelter and hospital in the home with community nurse	Combined medicine and nursing tutorials	Surgical morbidity and mortality conference with doctors, nurses and executive board members
Assisted physio with patient ambulation and writing case notes	Skills training with a variety of health staff	Combined surgical and radiology team meetings
Participated in paediatric group with speech therapist	Group session on balance and mobility	Grand round presentations attended by medicine, nursing and physio students
Time in radiography learning about x-rays and CAT scans	IPE workshop with other students (compulsory)	Debriefs with all team members after a difficult clinical encounter
Engaged with doctors in ED about patient health and medications	Staff continuing professional education sessions	Diabetes management meetings
Placements with chiropractor, optometrist and podiatrist	Simulated patient interviews with other students	Mental health case presentations
Sessions with drug and alcohol educator, organ donation coordinator	Education sessions for medicine and nursing students with allied health professionals; e.g. physio, OT and pharmacy	Patient case conferences
Shadowing/following a nurse over a shift	Interprofessional student clinic with physio, nursing and podiatry students (compulsory)	Aged care assessment team meetings
Group exercise programs for patients with exercise physiologist and OTs	Interprofessional online training course about cerebral palsy	Multidisciplinary meetings discussing patient's health, well-being and care plans
Learning from nurses at GP clinics	Visited interprofessional clinics	Department meetings Regional video-conferenced allied health meetings
Regional student placement Facebook group	Transition into schools' program with other students	Paediatric assessment group for children with mental delays

ED = Emergency Department; GP = General Practice; OT = Occupational Therapist; Physio = Physiotherapist.

various opportunities for students undertaking a placement although none of these activities were compulsory. Students identified that clinical facilitators encouraged them to engage with other health professionals in activities ranging from discussion about patient care to attending varying interprofessional team meetings and service provider reviews. Nearly two-thirds of students (38 = 63%) attended a variety of interprofessional education sessions. These were often a part of the organisation's continuing education program for staff (Table 2).

There was a high level of student engagement in IPE, although they did not always value the activities or take up the chances provided:

> *[The difficulty is] finding common ground, that is, similar clinical skill sets, in order to achieve a benefit (medicine).*

> *Sometimes on the ward there are physiotherapists or dietitians, or OTs, and students need to be more proactive and introduce themselves to the physio or the OT and promote opportunities (occupational therapy).*

> *In the hospital there is some downtime, but we tend to use it for catching up on study…rather than exploring other people's roles; so, I guess that time could be used a bit better to get a greater understanding of what others do (nursing).*

Over half of the students (53%) had opportunities to socialise with students from other professions, some co-located in adjoining accommodation. Social activities included trivia nights, faculty-run social events and 'informal or unofficial social gatherings we arrange ourselves' (nursing). Additional opportunities included mealtime chats, networking during education sessions and a dedicated regional Facebook site.

Only 14 students (23%) reported having opportunities to debrief together. Debrief was predominantly undertaken in disciplinary groups, although it was considered a valuable tool for developing understanding of others' professional roles:

> *[I have debriefed] with nursing students who I have found often have a very different perspective which widens my own view (medicine)*

> *[Debrief]…gave me insight to how their discipline is run and ways in which as a nurse I can help them (nursing)*

> *[Debrief increases understanding] by listening to other experiences and perceptions of similar issues or clinical issues faced (medicine)*

3.3. Student suggestions for interprofessional education activities

Students suggested IPE activities such as: case studies, simulation, shadowing and interprofessional team meetings. Their support for IPE manifested in different ways:

> *More activities would provide greater understanding of patients' issues and appreciation for holistic health care (nursing)*

> *Providing an understanding of the roles and capabilities in [of] professions outside of medicine would allow for a much higher degree of respect towards these disciplines and enhance the effectiveness of teams, thus improving patient care (allied health)*

> *I think it would be beneficial for us to have some classes with students from these professions as it would introduce learning styles and points of view specific to other professions (medicine)*

> *The best experiences…have been on the ward, hands-on clinical experience. I believe this would…be the best place to experience interprofessional learning…(allied health)*

3.4. Students' readiness for interprofessional learning and perceptions of collaborative practice

The highest scoring items for RIPLS (Table 3) related to the need for trust and respect (M = 4.62, SD = 0.49) and team-working skills (M = 4.60, SD = 0.56). There was limited agreement that the function of nurses and therapists is mainly to provide support for doctors (M = 2.15, SD = 1.18). While most students disagreed that they were 'not sure what my professional role will be' (M = 1.90, SD = 1.00), the standard deviation indicated wide-ranging views. On further examination of their role understanding, 12 students (20%) were uncertain, indicated by neutral, agree or strongly agree responses.

Students rated the need to cooperate with other professions highly in the IEPS scale (M = 5.30, SD = 1.03). Most students considered they were well-trained (M = 5.18, SD = 0.65), willing to share information and resources (M = 5.12, SD = 0.84) and agreed that others sought the advice of their profession (M = 5.13, SD = 0.81). There was little

Table 3
Readiness for Interprofessional Learning Scale mean scores.

Item	M	SD
Learning with other students will help me become a more effective member of a health care team	4.37	0.76
Patients would ultimately benefit if health-care students worked together to solve patient problems	4.25	0.73
Shared learning with other health-care students will increase my ability to understand clinical problems	4.30	0.65
Learning with health-care students before qualification would improve relationships after qualification	4.37	0.66
Communication skills should be learned with other health-care students	4.15	0.84
Shared learning will help me to think positively about other professionals	4.33	0.66
For small group learning to work, students need to trust and respect each other	4.62	0.49
Team-working skills are essential for all health care students to learn	4.60	0.56
Shared learning will help me to understand my own limitations	4.08	0.74
I don't want to waste my time learning with other health-care students	4.43	0.72
It is not necessary for undergraduate health-care students to learn together	4.20	0.80
Clinical problem-solving skills can only be learned with students from my own department	4.18	0.81
Shared learning with other health-care students will help me to communicate better with patients and other professionals	4.25	0.82
I would welcome the opportunity to work on small-group projects with other health-care students	3.90	0.88
Shared learning will help to clarify the nature of patient problems	3.92	0.77
Shared learning before qualification will help me become a better team worker	4.17	0.74
The function of nurses and therapists is mainly to provide support for doctors	2.15	1.12
I'm not sure what my professional role will be	1.90	1.00
I have to acquire much more knowledge and skills than other health-care students	2.85	0.99

(n = 60).

Table 4
Interdisciplinary Education Perception Scale mean scores.

Item	M	SD
Individuals in my profession are well-trained.	5.18	0.65
Individuals in my profession are able to work closely with individuals in other professions.	4.88	0.98
Individuals in my profession demonstrate a great deal of autonomy.	4.92	0.81
Individuals in other professions respect the work done by my profession.	4.67	1.00
Individuals in my profession are very positive about their goals and objectives.	4.88	0.72
Individuals in my profession need to cooperate with other professions.	5.30	1.03
Individuals in my profession are very positive about their contributions and accomplishments.	5.08	0.65
Individuals in my profession must depend upon the work of people in other professions.	4.70	1.06
Individuals in other professions think highly of my profession.	4.33	1.12
Individuals in my profession trust each other's professional judgment.	4.72	0.90
Individuals in my profession have a higher status than individuals in other professions.	3.13	1.43
Individuals in my profession make every effort to understand the capabilities and contributions of other professions.	4.50	0.93
Individuals in my profession are extremely competent.	5.03	0.76
Individuals in my profession are willing to share information and resources with other professionals.	5.12	0.85
Individuals in my profession have good relations with people in other professions.	5.00	0.80
Individuals in my profession think highly of other related professions.	4.85	0.78
Individuals in my profession work well with each other.	5.05	0.72
Individuals in other professions often seek the advice of people in my profession.	5.13	0.81

(n = 60).

consensus (60%) about whether their profession had a higher status than others (M = 3.13, SD = 1.43) (Table 4).

The internal consistency of the RIPLS and IEPS were assessed using Cronbach's alpha (α) coefficient. An alpha coefficient > 0.70 demonstrates good internal consistency (Pallant, 2016). Both instruments demonstrated high overall reliability, with the RIPLS achieving 0.82 and the IEPS 0.78. For each discipline, analysis of variance (ANOVA) was used to assess statistical differences between the subscales for the RIPLS and IEPS.

Despite some variation in means there were no statistically significant differences for the RIPLS subscales in any discipline. In contrast, two of the IEPS subscales scores differed significantly between medicine and nursing and allied health (Table 5). The subscale 'Perceived Need for Cooperation' $F(2, 57) = 6.2$, $p < 0.01$ scored higher score for medicine (M = 10.9, SD = 2.09) which differed significantly to other disciplines (AH: M = 9.5, SD = 1.68; N and M: M = 9.6, SD = 1.16). Likewise, the lower score for medicine (M = 23.0, SD = 4.26) in the subscale 'Perception of Actual Cooperation' $F(2, 57) = 5.13$, $p = 0.01$, differed significantly to nursing and allied health (AH: M = 25.6, SD = 3.67; N and M: M = 25.7, SD = 1.84). Post-hoc comparisons were made with both Tukey Honestly Significant Difference and Sheffé tests to confirm the results which were considered significant at $p < 0.05$. No statistically significant difference was found across the year level of students for either scale.

4. Discussion

This article reports the student perspective, experience and perception of IPE and the opportunities and application of IPE in the rural clinical learning environment in one region of Australia. Students were positive about IPE, reported a broad range of opportunities and activities available during placement and suggested various beneficial activities. Like other studies the rural clinical learning environment was collaborative and clinical facilitators encouraged engagement with other students, health professionals and interprofessional meetings (Cragg et al., 2010; Gum et al., 2013). The facilitators organised placements with other health professionals for shadowing opportunities, which gave students a broader view of care and insight into the professional role (Kusnoor and Stelljes, 2016).

Students valued the learning opportunities offered by interprofessional team meetings, education sessions and grand rounds and considered these important. Similarly, the potential of daily rounds as an arena for IPE was highlighted by Aase et al. (2014). Facilitators provided positive role modelling by demonstrating the importance and

Table 5
Means and standard deviations of RIPLS and IEPS subscales scores by profession.

	Allied health (n = 18)	Medicine (n = 18)	Nursing and midwifery (n = 24)
RIPLS subscales			
Teamwork and collaboration	38.2 (4.19)	39.6 (3.72)	39.2 (4.26)
Negative professional identity	4.8 (2.12)	5.5 (1.72)	5.0 (1.69)
Positive professional identity	16.7 (2.27)	16.1 (2.20)	15.9 (2.97)
Roles and responsibilities	6.8 (1.90)	7.7 (1.84)	6.2 (2.83)
IEPS subscales			
Competency and autonomy	28.5 (3.98)	30.1 (2.59)	30 (2.28)
Perceived need for cooperation	9.5 (1.68)	10.9 (1.25)	9.6 (1.17)
Perception of actual cooperation	25.6 (3.67)	23 (3.49)	25.7 (1.84)
Understanding others' values	12.6 (2.25)	13 (1.79)	12.6 (2.09)

value of IPE in the clinical setting (Flood, 2017; Gilligan et al., 2014). This interprofessional socialisation allows learners to 'observe, interact and reflect on their learning to gain a full understanding of what constitutes interprofessional collaborative practice among practitioners in a variety of professional roles' (Khalili et al., 2013; p. 452).

Students identified a range of opportunities for social interaction within the clinical environment and through informal activities which they considered valuable for breaking down silos and developing interprofessional understanding. Gilligan et al. (2014) reported similar outcomes where socialising afforded opportunities to change 'preconceptions and stereotypes and provide some degree of preparation before clinical teamwork' (p. 5). Students' informal social engagement in the regional Facebook group reflects the contemporary use of technology reported by others (Brault et al., 2015).

Students identified debrief as a valuable IPE opportunity. Debriefs in health care promote a sense of team-belonging and optimise team performance (Allen et al., 2018) thus providing a simple, powerful instrument to improve the understanding and efficiency of individuals and teams. Debriefs '…encourage reflection and self-discovery, target potential opportunities for improvement, and thus improve the quality and rate of experiential learning' (Tannenbaum and Cerasoli, 2013 p. 233). While debriefs are a valuable learning and reflective tool, they should have a uniform structure to maximise efficiency (Tannenbaum and Cerasoli, 2013).

Many students were keen to learn about other professions and their roles, however, only some were given opportunities to engage with different professions and discuss their work. Some of the student comments and ideas for IPE activities, such as role dialogue and interprofessional case presentations, reflects their interest in learning about others' professions. Some students nominated simulation activities, such as emergency case scenarios, as authentic IPE opportunities. The review by Labrague et al. (2018) found that simulation facilitated interprofessional communication, appreciation of others' roles, collaborative practice, readiness for IPE and professional self-confidence.

Thistlethwaite (2012) asserts that merely having different disciplines and students together to learn in the same location is inadequate as the learning needs to be interactive (with, from and about), whatever the setting. There is evidence that some health professionals may fear 'looking stupid' to others (Flood, 2017; p. 169), therefore, a lack of opportunities to see others' perspectives and interrelate in a safe and positive environment may perpetuate this anxiety and impact on collaborative practice. To facilitate effective IPE, opportunities should be incorporated into clinical placement and each professional group should learn about other professions' roles and expertise (Gilligan et al., 2014), factoring in student attitudes and readiness.

Students' attitudes about interprofessional learning were assessed using the RIPLS and revealed high mean scores, indicating positive attitudes towards IPE. However, other studies report mixed results: medicine scored higher on roles and responsibilities (Rose et al., 2009) and negative professional identity (Maharajan et al., 2017), but lower on teamwork and collaboration (Aziz et al., 2011). Wong et al. (2016) reported nursing generally scored higher on all subscales, in contrast to Lestari et al. (2016) who found medicine scored higher on all subscales.

Some students, predominantly final year medicine, revealed uncertainty about their professional roles. Robertson and Griffiths (2009) report similar findings in nursing, leading to fear and insecurity about role and transition. While probing role understanding was beyond the scope of this study, anticipation of the 'steep learning curve' to role transition in medicine (Sturman et al., 2017; p. 3) or the 'imposter phenomenon' where students lack confidence about their capabilities (Christensen et al., 2016) may have some bearing on this finding. Medical students' uncertainty may be influenced by the diversity of roles available within medicine and indecision about their future direction.

Applying the IEPS to assess students' perceptions about IPE shed light on their preparedness for IPCP. Whereas students' ratings were similar for competence and autonomy regardless of discipline, others report higher scores for medicine than nursing (Aase et al., 2014; Maharajan et al., 2017; Woermann et al., 2016). In this study perceived need for cooperation was rated higher by medicine. This finding is similar to that reported by Rose et al. (2009), but contrasts with some other studies where no difference was found between groups (Maharajan et al., 2017; Woermann et al., 2016). Medicine students rated perception of actual cooperation lower than nursing and allied health, similar to Woermann et al. (2016), Wong et al. (2016) and Rose et al. (2009). This finding implies a need for approaches that allow medicine students to explore opportunities for shared experiences and to reflect on medical role modelling.

In this study, aside from minor uncertainty about professional roles in the RIPLS, there were no differences between year levels in either scale. In contrast, studies from Keshtkaran et al. (2014), McFadyen et al. (2010) and Williams and Webb (2013) found that students in later years of their course achieved higher scores on both scales. Keshtkaran et al. (2014) attributed the higher scores to increased clinical experience and exposure to other professions having a positive effect on students' attitudes and perceptions towards IPE.

While not every student held positive attitudes or had opportunities for IPE, multiple factors need to be considered. Results for those who did or did not participate in IPE were not compared as the sample sizes in each group were small. Also, responses indicated that the limited time students had on placement meant that there was a focus on assessment tasks which reduced students' ability to access and subsequent intent to participate in IPE activities (Gilligan et al., 2014; Wilkes and Kennedy, 2017). As noted by Siarova et al. (2017), assessment can influence learning, with clinical assessment invariably prioritising individual professional skill acquisition; perhaps resulting in diminished consideration of interprofessional activities where these are not specified as part of the student's formal assessment. Some students acknowledged they may not have recognised the value of IPE or seized the opportunities presented. Thistlethwaite (2015) maintains that feasibility for IPE is dependent on student numbers, placement opportunities, the receptivity of students and healthcare organisations and

activity length and timing. According to Thistlethwaite, what is imperative is that all students have equivalent opportunity to achieve requisite learning outcomes and capabilities for their program.

4.1. Limitations

Adopting a mixed methods approach enabled more detailed exploration of students' experiences and perceptions of IPE. This study is limited in size and scope. The local focus and convenience sample of students on clinical placement in one rural geographic area render the results specific and therefore may not be generalizable. In the evolving IPE space, the instruments used for data collection are recognised to have limitations, therefore those results should be interpreted judiciously.

5. Conclusions

Educating healthcare students for interprofessional collaborative practice is essential to address contemporary healthcare needs. This study demonstrates that there are numerous opportunities to embed IPE within the rural clinical learning environment and for students to observe role modelling in the workplace. Most students were receptive to IPE and demonstrated positive attitudes to learning with, from and about other professions in the practice setting and considered this would help them become more effective members of the health care team. This study contributes to the growing body of knowledge about IPE and offers new insights into students' experiences and preferences for potential activities. These understandings can guide facilitators in planning activities for students to enhance their participation in and experience of IPE. Factors influencing differences in attitudes towards IPE and how students acquire an understanding of their professional or disciplinary role warrant further study.

Acknowledgements

Thanks to Dr. Liesl Heinrich Monash University for statistical advice and support.

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