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Regular Article

Integrating interprofessional education in health and social care curricula to equip our future workforce – qualitative findings from senior leaders

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ABSTRACT

The increasingly complex health and social care needs of the world's population require interprofessional collaboration. Interprofessional education (IPE) can prepare students for interprofessional collaborative practice. Despite mounting evidence supporting the positive impact of IPE, it is not yet integrated into all curricula. Previous findings from university teachers have highlighted a lack of leadership support. This study investigated the views of nine senior leaders across three universities in Norway and the United Kingdom. Four themes emerged around: system approach; curriculum and learning outcomes; person-centred care; and professional identity. All leaders see the need for integration of IPE into the curricula. The introduction of IPE led to concerns amongst some who worried that students may struggle to develop their professional identity if asked to learn with learners from other professional courses too early. UK leaders highlight the need to focus on person-centred care to deflect challenges linked to engagement but also recognise the existence of well-entrenched hierarchies between professions. Participants agree that executive leadership is needed and emphasise the power of co-creation with all stakeholders. Findings will contribute to a framework, in a future publication, that can help integration of IPE into curricula.

1. Introduction

The world is facing increasingly complex care needs from a growing population that requires the health and social care workforce to be prepared for interprofessional collaborative practice (ICP) to enable the provision of safe and sustainable care (Frenk et al., 2022). According to WHO (2022), interprofessional education (IPE; Barr, 2002) is perceived as one of the most promising educational approaches to enhance health and social care through improved ICP. Global efforts have been made to promote the development of IPE (Frenk et al., 2010; WHO, 2010). Nevertheless, many students continue to graduate with limited engagement in IPE, and without evidence of achieving key ICP competencies (CIHC, 2010; IEC, 2016) or competency-based outcomes that are thought to support the workforce to enable the delivery of service provision that meets future requirements (WHO, 2022).

IPE and ICP are not the panacea to all the challenges we face (WHO, 2010), but teachers involved in preparing health and social care students need to evolve with the current changes toward more integrated services. Equally, workforce planners must engage with educators in tandem with their community (Fraher & Brandt, 2019). Thus, the time has come to prioritize the integration of purposeful IPE into health and social care curricula and for us to more fully understand how this agenda is progressing within the higher education setting. The main aim of this article is to present findings exploring the views on IPE of senior educational leaders with considerable influence of curricula content and delivery, across three universities in Norway and the United Kingdom (UK). Findings presented here will contribute to the development of a framework, presented in a future publication, that can guide the

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integration of IPE into the health and social care curricula.

2. Background

Goodlad (1979) developed a system of supporting educators with the challenges related to the complexity of designing and implementing a curriculum. He argued that the process of developing curricula must embrace three main phenomena: the substantial, the socio-political, and the technical-professional. The 'substantial' refers to the content of the curricula, whereas the 'socio-political' concerns its political and ideological foundation, and the 'technical-professional' relates to the resources available to deliver the content. The technical-professional element includes the role of the teacher, i.e., in this context, whether teachers see the need for IPE and are willing and/or able to support it. Hence, it highlights the importance of teaching staff understanding IPE, its purpose, and their part in it being key to its overall success. A similar sentiment is discussed by Aboramadan and colleagues (2020), emphasising the need for universities to invest in and support their staff to make sure they can engage and commit to organisational priorities.

Gundem (1990) argued that it is the individual teacher's interpretation of the curriculum and duties related to their role that will decide how the curricula will be implemented during their teaching. This emphasises how essential it is that all teachers actively engage and fully commit to supporting the learning outcomes of the curricula, including those linked to IPE. However, according to findings presented by Lindqvist et al. (2018) university, teachers can be skeptical about IPE. Although teachers embraced the concept of ICP and had ideas about how to improve IPE at their institutions, some felt it would be better for students if they learned about ICP after graduation (Lindqvist et al., 2018). The optimal introduction of IPE has been an ongoing discussion within the literature for many years (Barr et al., 2005; Berger-Estilita et al., 2020; Clark, 2009) with the main concern focused on learners' development of their professional identity. According to Lum (1988), being part of an interprofessional group can provide students with standards, comparison points, and offer insight into different patterns of actions that are likely to improve students' understanding of their own profession and form their own professional identity.

Considering the above, there is a disconnect between the call to use IPE to equip our future workforce to meet the challenges of our population's increasingly complex needs with some frontline teachers, who are key to the solution moving forward, not being willing or able to do so. According to the study presented by Lindqvist and colleagues (2018), teachers say there is a lack of leadership and priority to make sure this happens. Several studies have been conducted that examine the experiences of patients, students, healthcare professionals and their clinical leaders. The experiences of senior managers at educational institutions who, directly or indirectly, oversee the teachers have been less investigated. This study explores the views of such senior leaders on the integration of IPE into health and social care curricula.

3. Materials and methods

3.1. Study design

A qualitative descriptive methodology was used to emphasise the understanding of the social phenomenon (Polit & Beck, 2017) linked to how senior educational leaders view IPE. Individual interviews were used as a method to collect qualitative data and analysed using a thematic approach, as described by Braun and Clarke (2006).

3.2. Sample

Senior leaders were approached from each of the three the universities where the authors worked. Direct involvement in IPE was not required but participants were sought who had senior educational leadership positions that could directly influence IPE e.g., Head of School, Department Head, and Teaching and Learning Quality Leads. We purposefully did not invite the 'top tier' of the University Executive team as we were seeking views from leaders who had direct influence of important curricula changes. The UK university is larger than the two Norwegian universities, and consequently has a greater number of senior leaders eligible for interview. Each of the three universities has many years of experience of IPE but none have fully integrated IPE throughout health and social care curricula.

Nine senior leaders were interviewed in total, and Table 1 presents the profession and titles across the three universities.

3.3. Data collection

Semi-structured individual interviews were conducted online via Microsoft (MS) Teams in the UK and Zoom in Norway during the COVID-19 pandemic. Participants were interviewed in their native tongue and all interviews were recorded and transcribed verbatim. Each interview lasted between 45 and 60 min. Findings from the original study, referred to as the 'first study' (see Lindqvist et al., 2018) were shared with participants prior to the interviews. The interview guide is outlined in Table 2.

At the two Norwegian universities, two authors (FV and SHA) conducted interviews but not at the institutions where they were employed. Instead, they conducted interviews at each other's universities. Author (SHW), who conducted interviews at the UK university was a researcher not involved in curricula design, or working with the study participants. This approach reduced bias into the study.

Norwegian transcripts were sent via password protected email to the UK and were translated into English, using the 'Google translate' application. One of the authors (SL), who can read and understand Norwegian, compared the translated transcripts to the original Norwegian transcripts for accuracy. All interviewees were asked if they would like to read the transcripts to ensure accuracy and add further details, which further added to the trustworthiness of data.

Interviewers remained reflexive throughout, which enabled them to collect authentic and honest data, hence reducing researcher bias and optimising the credibility of findings that would contribute to the study. Recordings were viewed by authors not directly involved in the interview process to enhance transparency across the team. This also helped to assess whether we had reach data saturation.

3.4. Data analysis

The translated and checked transcripts were uploaded to NVIVO 12 and coded thematically and inductively to create key themes. One author (SHW) initially coded the data from all the interviews and organised the codes into meaningful groups with the aim of creating themes. Author (SL) independently checked the coding and emerging themes. Disparities were discussed to reach consensus around key words, codes and themes. Preliminary findings were presented to the other researchers to refine the main themes and conceptualise the findings derived from the data.

Table 1
Profession and distribution of the nine senior educational leaders in the three universities: Norway University 1 (N1), Norway University 2 (N2) and the University in the UK (UK). Participants all held the role of either Dean, Department Head or Director of Teaching and Learning Quality.

Profession of the senior leaders	N1	N2	UK	Total
Nurse	1	2	3	6
Pharmacist			1	1
Doctor			1	1
Psychologist	1			1

Table 2
The semi-structured interview guide.

Main area	Prompt/s
What is your role in curricula development? Do you have experience of being involved in IPE at the university? If so, in what capacity? If not, how would you define IPE?	
Please share your views of the findings presented as part of the first study?	What is your main impression?
What do you think about the survey findings [presented to you here]?	What is your main impression?
How do students learn about interprofessional collaborative practice?	On campus? On placement?
How are your students taught about interprofessional collaborative practice?	Can you give some examples? What approaches may be more/less effective and why?
What type of IPE works?	Can you give some examples?
What is needed for IPE to work?	What is your role in this process?
How can IPE impact on interprofessional collaborative practice (IPC)?	Can you give some examples?
How can teachers help students achieve outcomes linked to IPE and IPC?	Will they need support and/or training? If so, what type? What is your role in that as leader?
Is there something else you would like to add or discuss?	

3.5. Ethical considerations

Ethical approval was sought and granted at each university/country (UK Reference: 2019/20–045; Norway reference: project no. 920871). Participants gave their written consent after reading a participant information sheet. They were advised that they could withdraw from the study up to the point where they would validate the script and check their contribution. After this stage, participants were informed that data linked to their contribution would be included and that data used would only be identified by the name of the university where participants worked to protect participants' anonymity.

4. Results

Data collected from nine senior educational leaders across the three universities in Norway and the UK revealed the importance of IPE and suggestions about its development and integration into the curricula. Four main themes were identified:

- Whole systems approach: engaging with stakeholders
- Curricula and learning outcomes: embracing creativity and authentic alignment
- Person-centred care: at the heart of integration
- Professional identity: the power of co-creation

4.1. Whole systems approach: engaging with stakeholders

Education leaders were unanimous that a whole systems approach was needed to effectively integrate IPE. They agreed that it should comprise engagement with stakeholders including students, clinicians, tutors, leaders and professional regulatory bodies. Leaders were very aware of regulations and guidelines provided by professional regulatory bodies and governments. Although this was generally considered important, one participant expressed a sense of feeling 'controlled':

> We now see the guidelines from the ministry regarding the need for close collaboration between the educational institution and working life [regarding IPE]. It's very important. It must be secured through co-operation agreements. So, there are greater and greater demands for this [IPE] from a central level (N1).

> We have laws, guidelines, and regulations, so we must comply with it [integrating IPE], also within each profession. We are controlled a bit by guides from outside (N1).

Participants called for a responsibility by all to engage with the process of embedding IPE into every-day educational practice. The need for a nominated leader for IPE was mentioned:

> Maybe someone must lead it. But it should be part of our every-day practice, and that's how it needs to be, you know, it [IPE] needs to be much more embedded and incorporated completely (UK).

Participants agreed that such a leader should be supported by university systems endorsed by the executive leadership. One highlighted that this was especially important since there was a strong hierarchy across professions, and felt that without support from the top there would be resistance to breaking out from the traditional silos in which most professions are currently educated:

> So, I'm saying hierarchy because you need to get them [executive leaders] on board first. Less silos. I would have liked a much more inclusive kind of system … (UK).

Educational leaders felt that each university should encourage IPE throughout students' education. This was seen as imperative to ensuring a cohesive experience and optimal outcomes. However, they recognised that this required leaders to engage in decision-making processes, coupled with the need to ensure that teachers and students were involved, thus showing true commitment to IPE:

> It's not just about leadership at the top level. It is also about an exercise further down the system (N1).

> Like many other topics that consistently cannot be left to the individual. Then it [IPE] becomes too random. That's where management comes in (N2).

> Everyone needs to know about IPE, be actively committed and work constructively to bring about interprofessional learning (N1).

> … leadership is an interesting one because what do you mean by leadership? It certainly wouldn't happen on its own. It is not the sort of thing that is going to happen by osmosis. … Recently, as the students [are] getting more involved, and I think of it, they're more involved, their leading on things, kind of has more traction potentially (UK).

4.2. Curricula and learning outcomes: embracing creativity and authentic alignment

Leaders agreed that curriculum content linked to IPE required mapping to the necessary competencies and evidenced-based practice to become truly integrated, and not perceived as an extended, optional extra. This required leadership by staff with a knowledge of IPE, who were able to help others develop interventions that allowed meaningful and authentic IPE with the potential to translate into interprofessional collaborative practice (ICP):

> Curricula and learning outcomes – what we need to do to make sure that IPE is integrated. Re-structure, so it's a foundation. It's not an extension. So, it is in the very bones. It is [should be] in the foundation of your curriculum design and in everything you do (UK).

> … it is very important here to build on and look at what is research-based in the teaching around this. And, to further build up this competence internally. It was probably in this connection that we employed a professor in IPE (N1).

> … I think that teachers' awareness of the topic [IPE] is important. The learning outcomes must be concretised in relation to co-operation, relational competence, and communication … This,

together with facilitating creativity and participation, not everyone is equally good at it (N1).

Leaders agreed that the development of IPE involves a range of skilled staff and recognised the challenges around logistics, cost and time for universities, but emphasised a willingness to overcome such obstacles regardless:

There is a very great desire for us to work interprofessionally … [We] had something called 'experts in teams'. … we have a problem getting it right because there are logistical challenges (N2).

Universities in Norway found that IPE was restricted due to the small number of different professional courses available on campus. Thus, trying to organise meaningful IPE became difficult, with extra resources being spent on what may be perceived as 'limited gain':

We may well have common IPE teaching, but then someone must have to arrange this with logistics. We have experienced that there is a great deal of administrative work to achieve a small task …. This is easier to achieve if everyone is gathered on a common campus (N2).

Left to their own devices, leaders mentioned that educators can slip into silos as they develop their curricula and learning outcomes. Hence, they tend not to include or consider IPE, mainly owing to individual and/or professional drivers and preferences. Furthermore, they mentioned that teachers were often presented with an already developed curriculum. Thus, they highlighted the need for educators to be creative, encourage students from different professional courses to learn together from the outset and by role modelling interprofessional collaboration themselves:

They [educators] are developing a curriculum. You must stick to the course description, but the learning activities will vary depending on who is on the team (N2).

People who are designing the curriculum need to understand the importance and put it [IPE] in there (UK).

Those who stood for it [IPE] have pulled out of this now when we are going to do the practical implementation. We must try to do something new, while retaining what has worked well. … We must work interprofessionally from the start (N2).

4.3. Person-centred care: at the heart of integration

UK participants agreed that focusing on person-centred care could resolve many of the challenges around the integration of IPE into the curriculum and the implementation of ICP:

I've done some research into the history of psychiatry and the history of [the] health service, the way it's constructed, and it's constructed for professionals. It's not constructed for the person, or the patient, and this is where this person-centred care should come in to move the power (UK).

They need to be able to think about how they work with other professionals to make sure they meet the needs of the individuals they're supporting (UK).

Linked to curricula, educational leaders in both countries felt that simulation exercises, involving students from different courses working together to problem solve for the patient's benefit, is a good pedagogical approach in IPE. However, some pointed out the importance of realising that meeting the needs of a patient differs from person-centred care and thus wanted to highlight the benefits of observing and working with professionals during their education. Participants emphasised the benefits of using practice placements as an opportunity for students to learn how teams can provide person-centred care, and how clinical simulated IPE can help students try out different approaches together:

The more time you can spend observing and working with other people and sort of integrating into a team, gives you greater insight into kind of those ways of working. It's very hard to learn, you know, get those great insights in a half-day placement, but it's better than nothing (UK).

I think the type of IPE that could work would be the ones where it's a very interactive and real-life simulation-based activity. So, you could do it if you had a clinical simulation environment where you could show how … to work together to meet the needs of somebody (UK).

Leaders felt it was important to support and guide students as to the different professions involved in patient care, so that it reflected real life. It was felt that it was very beneficial for students to work with simulated patient care around clinical cases and where possible with students from other courses, enabling them to practice teamwork with the patient at the centre of what they do:

It's important to be good at teams … working in different team constellations with the patient. To be clear to the student which professions will be included with different patient groups (N2).

The nurses, pharmacists and medics do an objective structured clinical exam. They have a patient … you need to sort out what their BMI is, their nutrition scores, how to do a manual handling intervention on them and they work as a team to do that. So, clinical scenarios that people must work together to do, and it's been fantastic (UK).

4.4. Professional identity: the power of co-creation

Senior leaders across the three universities considered it imperative to be mindful of the concept of professional identity during the development and delivery of IPE. They raised the importance of keeping the learning environment safe. This included ensuring students were able to develop their own professional identity at their own pace, whilst also considering how they contribute to the interprofessional collaborative team in a safe learning environment. Although all leaders felt that IPE play a key role, one felt that IPE is better introduced later in the course once the learners felt safe in their in their professional role, and own identity:

… Nurses must [first] become safe professionals; IPE is part of the whole in the wider context (N1).

Another suggested that viewing this transition as part of the process of becoming a professional - working within an interprofessional team and engaging in IPE - helps consolidate individual learners' professional identity:

It is part of a formation process. That's what I think about interprofessionalism. You develop an identity while knowing the others. Then you understand who you are (N1).

Some senior leaders emphasised the importance of educators encouraging co-creation with their learners so that they can together develop the right type of IPE that is presented to learners at the most appropriate time. One described a way of involving students in their university IPE development committee, which involved both students and staff, that they considered had made a significant difference in supporting the development of IPE, as well as students' individual growth and confidence:

And so, we got students involved and got them to Chair and Scribe meetings and that kind of [thing]. We said we'd rotate, so pharmacy [students] did the first year and then they handed it over to one of the other schools [two students from another profession]. And so that kind of got students more engaged and I think they just did a better job than we did (UK).

5. Discussion

According to findings of this study, capturing views from nine senior educational leaders at three universities in Norway and the UK, IPE is important and should be integrated into health and social care curricula. The leaders, most of whom are nurses by background (see Table 1), emphasise the need for top level support at university, but also that leadership needs to transcend to all stakeholders for this to become a meaningful exercise.

Four main themes emerged:

- Whole systems approach: engaging with stakeholders
- Curricula and learning outcomes: embracing creativity and authentic alignment
- Person-centred care: at the heart of integration
- Professional identity: the power of co-creation

5.1. Whole systems approach: engaging with stakeholders

A whole systems approach focusing on inclusion and stakeholder engagement is crucial for the integration of IPE, according to senior leaders in this study. There is a consensus that the involvement of all stakeholders is necessary; however, senior leaders remain uncertain about the path forward, possibly due to unclear strategies at their institutions. While bottom-up engagement from students, people with experience of care and educators is important, institutional support from the very top is essential for embedding IPE in curricula. This echoes guidance from the United States Health Professions Accreditors Collaborative (HPAC; 2019).

Despite regulations requiring collaborative learning in healthcare studies (GMC, 2016; HCPC, 2017; NMC, 2018; White Paper 11.2011–2012) there is often a lack of explicit endorsement of IPE within the educational setting. Some academic leaders may even resist external control, which hinder progress, especially within a competitive academic environment marked by rigid traditions and limited research (Clark, 2021). To address this, there are calls from academic staff for a stronger commitment to IPE and the need for leadership in prioritising this agenda (Ajmal et al., 2024).

Findings presented here indicate that without executive support from the very highest level, and clear recognition of IPE as a priority, progress is unlikely. Senior leaders expressed feeling powerless to provide this guidance, raising questions about the barriers they face in advancing this initiative, despite clear global demand for action (Frenk et al., 2022). Additionally, cultural factors, such as entrenched hierarchies across the professions, further complicate the implementation of IPE.

Resistance to breaking down traditional silos in health and social care education persists. Indeed, it appears that Goodlad's (1979) sentiments remain true in that the substantial part of the curriculum. Local agreements on curriculum content, influenced by socio-political drivers and pedagogical ideologies, may result in graduates lacking essential skills for interprofessional collaborative practice. This study elucidates a considerable barrier, posed by hierarchical structures, and suggests that strong top-down leadership is essential for progress. This perspective is echoed by the experiences of senior leaders involved in this study. Nevertheless, a substantial body of existing literature indicates that bottom-up leadership also plays a vital role in effective change management, thus signifying a whole systems approach. This may partly be due to the complexity of the implementation of IPE, as found and discussed by Wong et al. (2021). One UK participant noted that a more inclusive approach can overcome these hierarchical barriers, by inspiring educators and clinicians to re-envision the curricula with authentic IPE as a central component.

5.2. Curricula and learning outcomes: embracing creativity and authentic alignment

Senior leaders in this study say it is important for IPE to be embedded in the curricula, rather than being an optional, extended extra. This argument is helpfully supported through case studies presented by Tomblin Murphy et al., (2019) that provide context around how integration of IPE and ICP can strengthen health and social care. Study participants recognised the importance of mapping learning outcomes to ICP competencies; the need for teachers to fully understand IPE and what it aims to achieve; and the importance of building on existing evidence that can support viable interventions within the local context. However, they also implied there is a lack of leadership for teachers to take this significant mission forward. This highlights not only the need for faculty development around IPE (Anderson, 2009; Anderson et al., 2025) but also how to drive change and develop their leadership, as discussed by Brewer and colleagues (2017). Hence, the need for ongoing support so that teachers can keep hold of some of their desired freedom by being creative and developing meaningful and authentic IPE for their learners.

Indeed, the senior leaders in our study call for more creativity and authentic alignment, and a plea to look to the evidence base as they develop their competence internally. Levett-Jones and colleagues (2018) presented different case studies that were tested out in different countries with the aim of overcoming reported challenges to IPE. The authors reiterated that there is no perfect approach, but that it is key to build authentic opportunities around the local context. Our study confirms the willingness of educational leaders to develop IPE at their respective institutions despite the logistical challenges involved, but stresses that without clear guidance and institutional direction, teachers are likely to fall back to silo working. Bogossian et al. (2023) presented evidence to guide implementation of IPE and divide factors into micro-, meso-, and macro-levels. The micro level includes faculty development, whereas the meso-level mentions leadership, and macro-level refers to evidence around regulation and guidance. In relation to the latter, the lack of alignment across the different professions' regulations hinders the integration of IPE but is something that can be overcome, as shown by HPAC (2019). Working with different stakeholders at the system level can prevent educators from falling into professional silos and universities working in isolation, thus drifting away from the purpose of IPE and how it can positively impact on people.

5.3. Person-centred care: at the heart of integration

Person-centredness features in existing capability and competency frameworks aimed at helping to prepare our future workforce (e.g., CIHC, 2010; IEC, 2016; Walsh et al., 2005; WHO, 2022). Once the organisational commitment to IPE at executive level is clear, senior leaders based at the UK university who participated in this study want to capitalise on the bottom-up strategies used in the workplace where the person's needs are used as a starting point and appropriate next steps for ICP then considered. Buck Jensen et al, (2023) help us understand how students' learning about patient-centredness can be applied in this context during supervised interprofessional clinical placements. Some leaders in their study pointed out that the patient's clinical needs are not quite the same as person-centred care. These echo findings presented by Davison et al. (2021) where first-year medical students work briefly as healthcare assistants and by doing so, learn to see the person in the patient, and how different members of the interprofessional team contribute to care.

In their study exploring clinical teachers' experiences of embedding practice-based IPE in the curriculum, O'Leary et al. (2020) came across challenges linked to the 'why and how' of implementing IPE, its positioning in the curriculum, and the varying levels of engagement from different professions. They outlined several recommendations to help move this complex, yet important, work forward. Significantly, they

showed how demonstrating the direct links between IPE and patient care helped students and clinical teachers understand the 'why', which in turn helped overcome the 'how' and thus IPE's perceived value. Keeping the person at the heart of integration is likely to be easier in practice. However, both UK and Norwegian study participants agree that simulated practice was a good pedagogical approach to IPE that could also be successfully used to obtain this focus.

Simulated IPE activities are promoted at each of the universities involved in this study as a secure space to consider the person perspective, especially when combining it with meaningful reflection (Husebø et al., 2015) and debrief (Nagraj et al., 2018; Webb et al., 2018). Managers advocated for clinical cases to be presented to learners by people with lived experience, either in person or virtually. Some also mentioned the benefit of engaging 'simulated patients' i.e., role players with whom students can practice teamwork. At the UK university, many students engage in IPE using an objective structured clinical exam (OSCE) format as vehicle for learning (Nagraj et al., 2018; Webb et al., 2018). One UK leader described this approach to IPE as 'fantastic', and there was an overall sense amongst the educational leaders that simulation opens exciting opportunities for innovation.

Study findings highlight the value of shadowing different teams and professions and how they interact with each other and their patients, something that has been reported previously (Wright et al., 2012). However, without consistent and positive role models in practice, learning in the classroom may be short-lived (Fraher & Brandt, 2019; Lindqvist et al., 2018; Vasset et al., 2023), emphasising the power of co-creation so that partners across the wider system are working towards the same outcomes (Ødegård et al., 2025).

5.4. Professional identity: the power of co-creation

Senior leaders in this study stress the need to ensure students are provided with a safe learning environment while they develop their professional identity. They highlight the importance of co-creation in delivering the appropriate IPE at the right developmental stage. All, but one leader, align with evidence presented in the existing literature, indicating that IPE should be incorporated from the beginning and throughout student training (Fraher & Brandt, 2019). Concerns were raised by one leader who feel that nursing students need to develop their own professional identity first so that they become 'safe professionals' but recognise the importance of IPE in developing their understanding of their role as part of the interprofessional team. As our learners observe ICP during their clinical placements, they are likely to observe a range of practices. With this in mind, and according to Wenger (1998), professional identity is shaped by observational learning whilst Goodlad (1979) reminds us that negative examples of ICP can adversely affect this development. Again, this emphasises to develop meaningful IPE together and making sure IPL opportunities are facilitated by trained facilitators (Anderson et al., 2025) and provides students with opportunities to reflect, with peers from their own and other professions.

The socio-political influences remain significant, as regulatory bodies still focus narrowly on their own profession(s), neglecting the broader team dynamics - necessary for effective patient care (Fraher & Brandt, 2019). Additionally, students' professional identity is further shaped by their interactions with peers and educators (Lum, 1988). Some leaders suggested that IPE fosters a sense of professionalism that promotes teamwork, coining this as the development of students' 'interprofessionalism'.

Engaging with other professions during IPE enables students to assess their own and others' professional identities (Lum, 1988). This critical awareness, however, must be managed carefully to ensure students feel supported and safe to ask questions and discuss their own and others' role. Literature indicates that such comparisons with other groups are vital for identity development (Tajfel, 1981), hence, creating a safe environment is paramount for IPE facilitators (Anderson et al., 2009; Baker et al., 2018; Freeman et al., 2010). Rather than isolating students, early integration with potential future colleagues should be encouraged, although carefully designed. This resonates with Almås (2007, 2018) who argues that interacting with students with contrasting identities is essential for insightful understanding of professional capabilities.

Wackerhausen (2002) underlines that professional identity is formed though practice, thus placement can offer valuable insights into the learner's own and others' professional capabilities. This relates to the findings of O'Leary et al. (2020) and emphasises the need to embed practice-based IPE into the curriculum. The leaders who participated in this study did not mention their own roles in this process but indicated that, with organisational commitment, this was something they would support. This links back to our key finding that leadership needs to transcend to all stakeholders for the integration of IPE into curricula to become a meaningful exercise. In fact, transcendental leadership (Ajmal et al., 2024), is likely to be something to consider further as we engage with this endeavor of integrating IPE into curricula. According to Barr and Nathenson (2022) this leadership approach requires a true focus on the broader vision and purpose, which is particularly relevant to IPE and ICP. Importantly, these authors also suggest that this approach to leadership enhances innovation and creativity, which resonates with findings presented here.

5.4. A holistic approach encompassing the four themes within a framework

A holistic approach that emphasises inclusion and engagement from all stakeholders is essential for the integration of IPE in health and social care curricula that help meet the desired outcomes for students and the people they will care for. Central to this discussion is the notion of person-centred care, which lies at the heart of effective integration. Although IPE strives to support individuals to learn and work together in interprofessional teams, ultimately it evolves around people's ability to continue to learn with, from and about each other, without their own professional identity being compromised.

Going forward, more research is needed to explore the relationships between students, teachers and leaders at different levels; to understand how leadership practiced by all can be encouraged and supported so that existing hierarchies do not inhibit learning, growth and innovation; and to ensure that the integration of IPE into curricula is viewed as a priority. As stated at the outset of this paper, findings presented here will contribute to the development of a framework that can guide the integration of IPE into the health and social care curricula and will be presented separately.

5.5. Limitations of this study

The sample of senior leaders was small (n = 9), particularly in Norway where universities are smaller and with fewer senior leaders at the level we were aiming for (see sample section and Table 1). Recruitment was reliant on finding participants who would fit the criteria, i.e., hold a role as a senior educational leader at their respective university with influence on strategic development of the curricula. Six out of nine participants were from a nursing background, which may impact on overall findings.

As mentioned earlier, we did not approach members of the 'top tier' of the University Executive team. In hindsight, this would have provided interesting data, since findings presented here highlight the importance of these leaders to provide direction and articulate the priorities of approaches to education, such as IPE. Despite the relatively small sample size, due to limited number of senior leaders available for interview across the Schools and their Departments, interviewers felt confident after these nine interviews that data saturation was achieved.

The Norwegian transcripts were translated into English. Some of the nuances and important detail of leaders' views and feelings may have been lost in translation. It was considered important for all participants

to be interviewed in their first language, but this resulted in different researchers conducting interviews in each country. This may have slightly changed the way questions were asked, and prompts made, despite using a template that was followed by researchers.

6. Conclusion

Nine senior educational leaders based in Norway and the UK across three universities communicated a coherent message that supports the integration of interprofessional education (IPE) into health and social care curricula. There are more similarities than differences in how senior leaders perceive the benefits and challenges. This suggests that the findings may also be relevant to other universities, indicating a degree of transferability to other higher education institutions.

Person-centred care was seen as the key to providing successful IPE in universities for interprofessional collaborative practice to positively impact on clinicians and patients. However, to achieve this, strategic support is required to adopt a whole systems approach, with fully integrated IPE, while recognising the need to develop professional identities.

These findings will contribute to a framework aimed at facilitating this process and that will be shared with the wider audience in due course. Meantime, a next step may involve communicating with members of the executive team and together agreeing a best way forward to pursuing the co-creation of an inclusive strategy that leads to the integration of sustainable and meaningful IPE into the curricula.

CRediT authorship contribution statement

Susanne Lindqvist: Writing – review & editing, Project administration, Data curation, Writing – original draft, Methodology, Conceptualization, Supervision, Formal analysis. **Stephanie Howard Wilsher:** Methodology, Formal analysis, Writing – original draft, Data curation. **Frøydis Vasset:** Writing – original draft, Data curation, Methodology, Conceptualization, Writing – review & editing, Formal analysis. **Synnøve Hofseth Almås:** Writing – original draft, Data curation, Methodology, Conceptualization, Writing – review & editing, Formal analysis. **Elisabeth Willumsen:** Writing – review & editing, Formal analysis, Writing – original draft, Conceptualization, Methodology. **Hans Petter Iversen:** Methodology, Formal analysis, Writing – original draft, Conceptualization. **Atle Ødegård:** Writing – review & editing, Methodology, Data curation, Writing – original draft, Investigation, Conceptualization, Project administration, Formal analysis.

Data availability statement

Data can be made available on request to the corresponding author.

Ethical statement

On behalf of the authors of this paper, I confirm that ethical approval was sought and granted at each university/country (UK Reference: 2019/20–045; Norway reference: project no. 920871). Participants each gave their written consent and advised that they could withdraw from the study up to the point where they would validate the script and check their contribution. Participants were informed that data linked to their contribution would be included and that data used would only be identified by the university where participants worked to protect leaders' anonymity. Throughout the study, ethical principles were adhered to.

Declaration of the use of AI

AI tools was not used in the preparation of this manuscript.

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Declaration of competing interest

On behalf of the authors of this paper, I confirm that neither of us has any conflict of interest to declare in relation to this publication.

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