

# Interprofessional Education and Collaboration: Strategies for Implementation

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## ABSTRACT

Interprofessional education (IPE) is an integral educational outlook that is necessary to make sure that the graduates of an allied health care education are able to be valuable members or leaders of collaborative healthcare practices. Literature and resources are available about various models that have been used by different institutions to integrate IPE as part of their curriculum. With the growing need for collaborative practice, the curriculum must be designed to foster competencies required for IPE. There are challenges present, but with the concerted effort of the administration, faculty, and students, the benefits of IPE can be enjoyed by the institution and eventually by patients.

Continuous improvement in technology and treatment modalities makes the health care sector a complex environment, and all healthcare professionals need to keep up with new advancements to ensure positive health outcomes for individuals and families. To achieve this objective, all health professionals, regardless of their discipline, need to practice collaboratively. Various models of interprofessional education (IPE) exist, and academics must include these models and frameworks in undergraduate education to prepare students for interprofessional collaborative practice in the health care environment.<sup>1</sup>

IPE involves faculty and students (from two or more health professions and their foundation disciplines) who jointly create and foster a collaborative learning environment.<sup>2</sup> IPE aims to expose students to varying disciplines so that they can understand the importance of collaborative practice within the health environment, and to improve the benefits for patients, health professionals, and health services.<sup>3</sup> Students are educated to collaborate from the beginning of their educational programs to develop plans with the other members of the healthcare team through the synthesis of their observations and field-specific expertise. The decision-making process is done collaboratively, and individual opinions and expertise are valued and respected. Through IPE, healthcare professionals learn to value the skills of each discipline and the

strategies that can be used to optimize its usage to improve clinical care, share case management strategies, and eventually provide better health services to patients and the community.

Different theoretical frameworks guide IPE. These include adult learning theory, Bernstein's sociological theory, and social capital theory. All theories are centered on the needs of patients and help in creating interprofessional learning networks and the content of interprofessional curricula. Using these theories, healthcare practitioners can develop innovative IPE and practice innovations for students that span theoretical and clinical experiences.<sup>4</sup>

The concept of IPE and collaboration are new to the Middle Eastern region. Few publications could be retrieved in this regard.<sup>5-7</sup> One study explored the attitude of faculty members in 89 colleges and schools of pharmacy in 14 Middle Eastern countries towards IPE. The study reported that faculty members had positive attitudes towards IPE and were ready to initiate it.<sup>5</sup> A more recent study also supports these findings.<sup>6</sup> The finding of these two studies is promising, which confirms that the faculty members in the Middle Eastern region are receptive to IPE and ready to implement it.

Currently, various accrediting bodies, standards, and guidelines require health professionals to promote IPE in undergraduate education.<sup>8</sup> IPE is promoted in pharmacy,<sup>9</sup> dentistry,<sup>10</sup> medicine,<sup>11</sup> nursing, and other allied health professions.<sup>12</sup>

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The essentials of baccalaureate education for professional nursing practice emphasize IPE as one of the core competencies for patient-centered care.<sup>13</sup> The principle essentially is that IPE teaches nursing students to develop confidence and competencies to interact interprofessionally. It also improves the standard of nursing practice and effective functioning as a healthcare team. In the College of Nursing at Sultan Qaboos University (SQU), Oman, IPE is embedded in student learning outcomes to ensure that nursing students can collaborate and work effectively as members of a multidisciplinary team. However, the implementation of IPE is still relatively new in Oman. In this article, we discuss IPE based on existing literature, experts' knowledge, and the personal experiences of the authors as educators for nursing students. We provide data on the benefits of IPE, the challenges in implementing IPE, and the strategies to support IPE and its implementation in healthcare education.

### *IPE and its benefits*

IPE is a teaching philosophy that is now recognized as an effective strategy to improve patient care through professional collaborative practice. The improvement in patient care is demonstrated through teamwork, reduction in error rates, and improvement in competencies.<sup>3</sup> IPE also creates a nourishing environment for students to learn and share their insights, gain insight and respect for individual discipline's knowledge and skills, and facilitate the process of interdisciplinary interactions

between team members. IPE provides students with positive perceptions of different health discipline's knowledge and skills at an early stage of their educational process.<sup>14</sup>

IPE increases students' understanding of the contributions made by different health professional groups to patient care and facilitates effective health care team functioning.<sup>15</sup> Specifically, IPE teaches students when to refer patients to other members of the health care team to ensure the delivery of holistic evidence-based quality care. IPE improves communication between health team members, which benefits patient care. IPE allows students to learn how to critique and reflect upon their practice and learn from their mistakes within a supportive environment and includes simulation experiences.<sup>16,17</sup>

### *Challenges of initiating IPE*

Many challenges exist in implementing IPE.<sup>18</sup> The challenges vary from the governance/administrative level down to the student learning experience.<sup>9</sup> Administratively, logistical concerns are often present if IPE is not part of the mission directive of the institution.<sup>19</sup> Scheduling IPE sessions is another challenge.<sup>5,20</sup> The physical space proximity and limited faculty resources needed to deliver IPE to a large number of students is another challenge.<sup>21</sup> Box 1 details these challenges.

### *Strategies to support IPE and its implementation*

Universities are required to review and assess

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#### **Box 1:** Challenges in implementing interprofessional education (IPE).

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1. Organizational concerns.<sup>19</sup>
2. Arranging the IPE sessions.<sup>5,20</sup>
3. Proximity of physical space.<sup>21</sup>
4. Inadequate resources in terms of faculty.<sup>21</sup>
5. The vision, mission, culture, and program outcomes of institutions vary from each other.<sup>22</sup>
6. Inflexible curriculum.<sup>22</sup>
7. The learning levels of students vary.<sup>22</sup>
8. Lack of attention and interest of Deans of Colleges towards IPE.<sup>23,24</sup>
9. Lack of budget and funds.<sup>25</sup>
10. Faculty perception differ from each other on IPE.<sup>5</sup>
11. Inadequate staff availability.<sup>26</sup>
12. Inadequate preparation of faculty, lack of competency of faculty, and poor supervision by the faculty.<sup>27</sup>
13. Each faculty member tend to over value their own profession.<sup>28</sup>
14. Ineffective evaluation methods.<sup>20</sup>
15. The interests and characteristics differ in each student. This creates imbalance between students.<sup>20,29</sup>

**Box 2: Strategies to support interprofessional education (IPE) and its implementation at the institutional level.****At the institutional level**

1. A strong will and commitment of the university leaders is required.<sup>33,31,32</sup> This will allow the healthcare professionals to adapt to the changes required with resources and support provided during its implementation.
2. The institution should have supportive institutional policies and commitment to supporting IPE.<sup>33</sup> It should be clearly stated and incorporated into the mission or program learning outcomes of an institution.
3. The institution should have a goal for IPE as part of a strategic plan.<sup>34</sup> The clinical affiliations, not just nursing but also other departments, should be trained and informed about IPE and must be involved in the strategic planning process.
4. The curriculum should be designed in such a way that the IPE is embedded and linked with its learning activities, outcomes, and assessment of learning.<sup>25,35</sup>
5. The learning outcomes of the students should include competencies of interprofessional practice such as teamwork, communication, and advocacy.<sup>36</sup>
6. The institution must also consider an office or a champion that will be responsible for coordinating educational activities and identifying barriers to progress.<sup>37</sup>
7. The institution's administration should prepare, and train faculty members towards IPE.<sup>38</sup>
8. The institution's administration should motivate the faculty to use IPE to maximize its implementation.<sup>38</sup>

**At the faculty level**

1. IPE steering committee with a lead person should be appointed to provide directions and monitor IPE implementation.
2. Lecturers from different disciplines need to collaborate before the commencement of classes to ensure the delivery of effective IPE.<sup>39</sup> Faculty members can share their best practices in a forum to inform the public on the implementation of IPE.
3. A regular review or assessment of the implementation of IPE should be conducted. Feedback and results should be given to the stakeholders through scholarly activities such as research and academic conferences. Various tools to evaluate the extent of integrating IPE in the curriculum can be used.<sup>40</sup>

mechanisms that will support IPE's implementation to achieve its benefits.<sup>30</sup> This can be driven by the staff responsible for developing, delivering, funding, and managing IPE, and the curricula that is shared by the members of the healthcare profession. Further, the administration and faculty are the primary driving force for the implementation of IPE.<sup>19</sup> Box 2 details these strategies.

***Modes of delivery of IPE***

IPE can be implemented through various strategies based on the nature of the course/subjects, the readiness of students, and the competency of the teacher.<sup>41</sup> Various courses may integrate IPE as part of their learning and teaching strategies.<sup>42</sup> This includes, but is not limited to, bioethics, introduction or foundations of healthcare professional practice, leadership and management, research, quality improvement, communication subjects, critical thinking courses, case management, and deliberation.

IPE can be delivered through debates about a certain health issue. For instance, a simulation of comprehensive emergency management of a patient with diabetes mellitus, a grand round about dealing with a case in which interprofessional patient competencies are required, reflective sessions, case studies, research, community work, service learning, or even through a simple class or online discussion

in which interprofessional expertise is needed to facilitate comprehensive discussion of a particular concept.<sup>43</sup> For example, in Beirut Arab University, an IPE course was offered to senior students of all medical faculties (except the students from the College of Medicine) in the spring semester of their graduation year. The course was offered in four phases: foundational workshops, role clarification, patient care planning, and a project. First, the students worked individually, then as discipline-specific professional teams, and finally as interprofessional teams to complete assignments. The impact was assessed regarding the awareness of students on the roles of other professions, patient care planning, and the readiness for interprofessional collaborative practice. The students achieved higher grades in interprofessional teams than as individual students and intraprofessional teams.<sup>44</sup> Clinically, students can learn through IPE by exposing them to different cases that can be assessed, diagnosed, cared for, and evaluated interprofessionally. Discussion of case vignettes through case conferences can be utilized to make use of interprofessional discussion and reflections. Quality management issues in the hospital can also be discussed and critiqued as a team. Implementation of research through collaborative authorship is also a feasible strategy for healthcare students. Journal clubs and discussion of evidence-

based practice are also learning opportunities that can be used to enhance collaboration among members of the healthcare team. The allied health team can also develop a program to address specific health issues.<sup>45</sup>

IPE provides learners with the training they need to become part of the collaborative practice-ready health workforce.<sup>46</sup> However, it does not start and end in the classroom or until graduation. Additional mechanisms should be in place to help graduates share their practice once they become qualified practitioners. Therefore, health system planners and health educators must engage in discussions about how they can help learners transition from education to the workplace. In-service-learning and continuing education programs should be developed and implemented taking into consideration of the dynamics and complexities of being a member of a healthcare team.<sup>47</sup>

### *Current situation and experience of IPE and collaboration in SQU*

In SQU, essential steps are taken towards implementing IPE and collaboration. SQU has all the facilities available to implement IPE and establish collaborative practice. International benchmarking is done to understand the need for IPE. A course on IPE and collaboration is proposed to begin in the next academic year.

A steering committee comprised of faculty from the College of Medicine and College of Nursing was established to explore the possibilities of commencing IPE and collaboration in SQU. Courses were reviewed to see the possibilities of integrating IPE. However, we faced difficulties in integrating IPE into the curriculum as the curriculum is rigid with course-specific objectives and outcomes. Although we had difficulties, both colleges have chosen two courses with similar objectives to initiate IPE with the courses being offered together to both sets of students in the same classroom at the same time. Several medical case studies were developed by the faculty members of both the colleges and the cases were discussed together. The major challenge identified was the difference in the method of evaluation. The steering committee agreed that formative evaluation would be done in a similar way for the students of both colleges. It was decided to have different methods of summative evaluation for both group of students based on their expected

learning outcome. This initiation of IPE in SQU is still in its infancy. However, the steering committee is evaluating the progress of IPE implementation and working on the ways to enhance the process of implementation of IPE. In the near future, the university will organize IPE with additional courses across various disciplines.

## CONCLUSION

IPE is an integral educational outlook that is necessary to make sure that the graduates of allied health education can be valuable members or leaders of collaborative healthcare practice teams. Literature and resources are available about various models that have been used by different institutions to integrate IPE as part of their curriculum. With the growing need for collaborative practice, the educational curriculum must be ideally designed to foster competencies required for IPE. There are challenges present, but with the rigorous efforts of the administration, faculty, and students, the benefits of IPE can be enjoyed by the institution and eventually by patients.

### *Disclosure*

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