Health Care in Qatar

The State of Qatar, an oil and gas rich nation, is a sovereign Arab state situated in the Arabian Gulf Region of the Middle East. The country’s population has grown significantly in the last twenty years, due to the large expatriate influx to the country, with a current estimated population of around 2.8 million, predominantly Arab, Indian, Nepali and Filipino (Forstenlechner & Rutledge, 2011; World Population Review, 2019). Qatar’s economy is claimed to be one of the highest in the world with a gross domestic product per capita of $124,500 (Central Intelligence Agency, 2017). There has been significant investment in the health care system and health care education in Qatar in the last 15 years. Most health care facilities are public, mainly run by expatriate health care professionals who completed their education and training outside Qatar. As an example, Hamad Medical Cooperation (HMC), which is the main

A. El-Awaisi
College of Pharmacy, QU Health, Qatar University, Doha, Qatar
e-mail: elawaisi@qu.edu.qa

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A call to come together and work together with mutual respect and trust to improve the health of the people of Qatar. A call for improved teamwork across the health system and increased collaboration across all sectors including the community. (Ministry of Public Health, 2018, p. 11)

Another principle is focused on patient-centred care and, to achieve this, the strategy advocates for having experienced and expert health care professionals who are working in teams to deliver high quality care for their patients (Ministry of Public Health, 2018). The strategy is based on an integrated system and model of care centred around better health, better care and better value delivered by interprofessional teams working together across different health care settings (Ministry of Public Health, 2018). Developing interprofessional education (IPE) and promoting collaborative practice will help Qatar meet the goals of Pillar 1: promoting human development which focuses on a population that is healthy and an educated workforce that is capable and motivated in a comprehensive world class health care system (General Secretariat for Development Planning, 2008). One proposed initiative for building a skilled national health care workforce, in the Qatar National Development Strategy, is to optimise the skill mix by encouraging the establishment of interprofessional health care teams working towards patient-centred care, recruiting health care professionals with expanded roles, and fostering a collaborative practice environment (Qatar General Secretariat for Development Planning, 2011).
Furthermore, in an effort to establish the educational and research infrastructure and build a high quality health workforce with Qatari nationals who are domestically trained, Qatar currently accommodates branch campuses of some of the leading universities in North America. These include Weill Cornell Medicine—Qatar (based in the United States), the University of Calgary School of Nursing (based in Canada), and the College of the North Atlantic (based in Canada). In 2007, the College of Pharmacy was established in the only national institution in the country: Qatar University. Qatar University College of Pharmacy is the first and only pharmacy degree programme in the State of Qatar. It is accredited by the Canadian Council on Accreditation of Pharmacy Programs (CCAPP) and was the first institution outside Canada to achieve this accreditation. In line with the country’s growing health care sector and increasing need for health care professionals, Qatar University has been playing a key role through the establishment of Colleges of Medicine, Health Sciences and Dental Medicine (Table 7.1). Another notable positive move is that in 2017 Qatar University established a health cluster, referred to as QU Health, that brought the health related colleges of Qatar University under one administrative organisational umbrella to work together and maximise efficiencies with a mission to ‘prepare competent graduates capable of shaping the future of health care in Qatar’ (QU Health, 2019). QU Health focuses on four key areas including research & graduate studies, clinical affairs, interprofessional education and continuous professional development. In addition, QU works closely with the colleges on business operations, engagement and communication.

In June 2009, the Qatar Interprofessional Health Council (QIHC) was formed to help address health care needs in Qatar. The council was keen to drive IPE forward in Qatar and foster collaborative initiatives locally, regionally and internationally (Johnson et al., 2011). Members of the QIHC included deans of the above four health care educational institutions in Qatar as well as members from HMC and Sidra Medicine (Johnson et al., 2011). One of the council’s main outcomes was securing a three-year National Priorities Research Program (NPRP) project from the Qatar National Research Fund entitled ‘Implementing Interprofessional Undergraduate Health Professional Programs Health Care
| Institution                           | College                        | Date established | Programs offered                                    |
|--------------------------------------|--------------------------------|------------------|----------------------------------------------------|
| Weill Cornell Medicine—Qatar (WCM-Q) |                                | 2001             | • Medicine                                         |
| College of North Atlantic            | School of Health Sciences      | 2002             | • Advanced care paramedicine                        |
|                                      |                                |                  | • Occupational health                              |
|                                      |                                |                  | • Safety and environment                           |
|                                      |                                |                  | • Environmental health                             |
|                                      |                                |                  | • Medical radiography                              |
|                                      |                                |                  | • Pharmacy technician                              |
|                                      |                                |                  | • Respiratory therapy                              |
|                                      |                                |                  | • Health education: diabetes                        |
|                                      |                                |                  | • Dental hygiene                                   |
| Qatar University                     | College of Pharmacy            | 2006             | • Pharmacy                                         |
|                                      | College of Medicine            | 2014             | • Medicine                                         |
|                                      | College of Health Sciences     | 2016             | • Biomedical sciences                              |
|                                      |                                |                  | • Public health                                     |
|                                      |                                |                  | • Human nutrition                                   |
|                                      |                                |                  | • Physical therapy and rehabilitation               |
|                                      | College of Dental Medicine     | 2019             | • Dental Medicine                                  |
| University of Calgary—Qatar          |                                | 2007             | • Nursing                                          |
Education in Qatar’. The project investigated the development of shared competencies to be used by faculty while integrating IPE into the undergraduate curriculum. Unfortunately, the council has been dormant since 2013 due to many of the key personnel in the council relocating to outside Qatar, affecting the sustainability of this IPE initiative. However, the College of Pharmacy took the lead with the establishment of the interprofessional education committee (IPEC), in 2014 as discussed below.

Development and Implementation of IPE in Academic Institutions

Accreditation as a Driver

The main initial drive to integrate IPE was achieving the Canadian accreditation of the pharmacy programme. IPE is an important element in the accreditation standard for pharmacy for CCAPP. Many western accreditation bodies call for incorporation of IPE into the curricula of health care programmes. However, there is lack of collective global IPE standards for the different health care professions and a need for different accrediting bodies to collaborate to have common IPE standards (Zorek & Raehl, 2013). Recognising the importance of incorporating IPE, CCAPP standards, effective from January 2013, have addressed the necessity to provide IPE experiences within the pharmacy curricula (Canadian Council for Accreditation of Pharmacy Programs, 2014). In their latest standards, 3, 4, 6, 11 and 19 explicitly focus on the necessity of incorporating IPE within pharmacy curricula as highlighted in the following (Canadian Council for Accreditation of Pharmacy Programs, 2018, pp. 4–5):

- Standard 3 (curriculum): The professional degree programme in pharmacy has a minimum of four academic years, or the equivalent number of hours or credits, including a series of core courses, practice experiences and interprofessional experiences that support educational outcomes.
Standard 4 (curriculum): The curriculum includes foundational content in: biomedical, pharmaceutical, behavioural, social, and administrative pharmacy sciences; clinical sciences including clinical practice skills; practice experiences; and intra- and interprofessional collaborative practice skills.

Standard 6 (curriculum): The curriculum includes required intra- and interprofessional learning experiences, offered throughout the professional programme, to enable a graduate to provide patient care as a collaborative member of a care team.

Standard 11 (university structure and commitment): The curriculum includes required intra- and interprofessional learning experiences, offered throughout the professional programme, to enable a graduate to provide patient care as a collaborative member of a care team.

Standard 19 (planning and evaluation): Interprofessional education and collaborative practice is embedded in Faculty policy and/or strategic plans.

Establishment of the Interprofessional Education Committee

The College of Pharmacy at Qatar University took the lead to incorporate IPE initiatives formally into the pharmacy curriculum, with other health care students in Qatar aligned to CCAPP accreditation standards, and to fulfil the recommendations set in the World Health Organization (WHO) framework (Canadian Council for Accreditation of Pharmacy Programs, 2018; World Health Organization, 2010). Taking into account recommendations and perspectives from research findings, and support from the college administration, the college led the integration and implementation of IPE through the establishment of IPEC. The aim was to provide guidance and support in implementing IPE within the pharmacy curriculum, as well as in our partner health care training programmes in the country. The committee was dedicated to facilitating awareness and understanding of IPE for interprofessional collaboration (IPC) for students and faculty members. In addition to creating enthusiasm and motivation for planned IPE activities (Acquavita, Lewis,
Aparico, & Pecukonis, 2014), it was imperative to engage stakeholders in IPE planning steering committees. The committee includes representatives from all the health care schools in Qatar as nominated by the respective deans based on their academic portfolio and familiarity with their respective curriculum (Table 7.1).

Another opportunity to improve and ensure that planned IPE initiatives work best in the context of their institutions was to measure stakeholder readiness for IPE (El-Awaisi, El Hajj, Joseph, & Diack, 2018a, 2018b; El-Awaisi, Joseph, El Hajj, & Diack, 2019). Overall, the process provided opportunities for key stakeholders to plan IPE activities that are effective and relevant to our students. The process was used as a catalyst to incorporate more IPE into their curriculum and to better prepare our students to engage with others in a collaborative practice environment. This is evident in that the college has been successful in integrating IPE into their curriculum and these IPE activities have gained positive attention from all the stakeholders with all activities incorporated in the different professional years of pharmacy and sustained for the last five years (El-Awaisi, Wilby, et al., 2017).

**Interprofessional Education Committee Moving Beyond College Level**

Academic institutions need to facilitate and support the integration of IPE into health care programmes and direct resources to IPE for it to thrive. As such, IPEC moved to QU Health level in 2017 to strengthen IPE with a vision ‘to be recognised regionally for excellence in interprofessional health education and interdisciplinary health research; a first choice for students and scholars, and a national catalyst for innovation in the field’ (QU Health, 2019). IPEC deliverables were based on four key pillars including IPE curriculum, faculty development, student led initiatives and research. Therefore, it is planned that QU health will serve as a catalyst for IPE, facilitating and strengthening IPE initiatives suitable for the Qatari and Middle Eastern context and meeting the highest standard of excellence in the field. The IPEC website can be viewed at the following link: [http://www.qu.edu.qa/health/ipe](http://www.qu.edu.qa/health/ipe).
IPE Curriculum

The model adopted as the base for the IPE activities was that of the University of British Columbia (UBC) with its three main levels: exposure, immersion and mastery (Charles, Bainbridge, & Gilbert, 2010; El-Awaisi, Wilby, et al., 2017). All learning outcomes for the IPE activities are based on the interprofessional shared competencies developed for the Qatar context which include: role clarification, interprofessional communication, shared decision making and patient centred care (Johnson et al., 2015). IPE is currently integrated across the professional years of the different curricula. Activities are shown in Table 7.2. Professions participating in the different activities vary across the years but usually include between two and six health care professions. Activities are usually held in different campuses depending on availability (El-Awaisi, Wilby, et al., 2017).

Table 7.2  Examples of IPE activities across the professional years

| Professional Year | Fall semester | Spring semester |
|-------------------|---------------|-----------------|
| **Professional Year 1** | Introducing the concept of IPE I | Introducing the concept of IPE II |
| **Professional Year 2** | Case based interprofessional discussion on chronic obstructive pulmonary disease (COPD) and smoking cessation | Case based interprofessional discussion on being an effective team player |
| **Professional Year 3** | Cased based interprofessional discussion on diabetes | Cased based interprofessional discussion on infection and antibiotic stewardship |
| **Professional Year 4** | Practice based IPE activities | Interprofessional simulation focused on mental health |
Faculty Development

Faculty IPE development and facilitator training with effective preparation and orientation are critical for effective implementation of IPE, especially as many faculty have little or no previous experience of IPE (Ratka, 2013; Reeves, Goldman, & Oandasan, 2007). Faculty development (FD) initiatives are key drivers to overcoming barriers, facilitating a positive culture change in academic institutions, and encouraging short and long term commitment by faculty (Lawlis, Anson, & Greenfield, 2014). FD sessions need to focus on familiarising faculty with the different health care professions’ roles and responsibilities, current challenges to collaboration in the practice setting, the interprofessional learning programme, and the skills needed for effective collaboration (Holland, 2002). FD needs to be ongoing and offered on a regular basis with opportunities for participants to reflect and learn from any IPE experiences they have undertaken. These are also opportunities to promote IPE, recruit faculty members, and network with each other.

The College of Pharmacy at Qatar University led the first IPE symposium for academic health care faculty in Qatar in February 2015 to equip over 50 faculty members with the knowledge to develop IPE content and with the skills to impart curricular change for IPE implementation (El-Awaisi, El Hajj, Joseph, & Diack, 2016; El-Awaisi, Wilby, et al., 2017). This was followed by the First Middle Eastern Conference on IPE, in December 2015, which attracted more than 300 participants, faculty, and practitioners from 13 countries: Australia, Bahrain, Canada, Egypt, Iraq, Kuwait, Lebanon, Oman, Saudi Arabia, the United Arab Emirates, Turkey, the United Kingdom and the United States. Attendance exceeded the organisers’ expectations and was a strong indicator of the need for such conferences in the region. Some of the attendees were novices in relation to the concept of IPE and hence had the opportunity to learn and explore strategies for how IPE can be integrated into their institutions. For others, it was an opportunity to reflect on how
they may improve the delivery of IPE in their institutions. During the 3-day conference, there were six workshops, 37 oral presentations, and 40 posters displayed (El-Awaisi et al., 2016; El-Awaisi, Wilby, et al., 2017). Further information about the conference can be found at http://www.qu.edu.qa/IPE2015/.

As a result of the conference, the conference advisory committee proposed a set of actions to strengthen and support IPE in the region, emphasising that Qatar can lead the way in creating opportunities for IPE initiatives in the region. These include promoting an interprofessional culture at both educational and health care institutions with the intent of developing new frontiers in health care education, and collaborating and working closely with the World Confederation for Interprofessional Practice and Education (Interprofessional.Global). Additionally, Qatar plans to lead the way in establishing a Middle Eastern network in collaboration with other countries in the Middle East, as there is currently no Middle Eastern representation at Interprofessional.Global (El-Awaisi & Barr, 2017; El-Awaisi et al., 2016). Regional interprofessional networks affiliated with Interprofessional.Global are from the Americas, USA, Canada, UK, Europe, Africa, India, Southeast Asia and the Pacific Rim, Japan and Australasia. Discussion has started about creating an IPE network in this region that works collaboratively to foster partnerships and enable opportunities to share experiences and contribute to the global perspectives on IPE and collaborative practice. The second Middle East Conference is planned to take place in Lebanon. Another important milestone is that Qatar University was successful in its bid to host the tenth event of the All Together Better Health (ATBH) conference in October 2020, taking this biennial event to the Middle East for the first time. However, due to the current COVID-19 pandemic, the conference has been rescheduled to October 25–27, 2021. The theme of the conference will be: ‘Cultivating a collaborative culture: sharing pearls of wisdom’, advocating for people-centered care, health and wellbeing; embracing diversity of stakeholders; informing regional and global interprofessional education and collaborative practice conference (IPECP) policies and standards; promoting safety in and beyond health and social care settings and sharing models of best practice in IPECP. All Together Better Health is the leading global interprofessional education and collaborative practice conference under the direction of Interprofessional.Global.
In addition to faculty development, health care professional training is of paramount importance. Continuing professional development (CPD), participating in interprofessional committees, interprofessional ward rounds, interprofessional meetings, participating in research, and journal clubs are effective strategies for promoting IPC between health care team members (Curran, Sargeant, & Hollett, 2007; Luetsch & Rowett, 2015; Price, Doucet, & Hill, 2014). The College of Pharmacy led the way in establishing an interprofessional CPD programme in 2011, which was expanded to incorporate QU Health in 2017. CPD for health care professionals is regulated by the Qatar Council for Healthcare Practitioners. The programme attracts health care professionals from different fields and it is a requirement when designing these activities to demonstrate the principles of IPE (McMahon et al., 2016). However, many negotiated efforts are still needed to drive the integration and implementation of IPE forward including collaboration with patient and service users who are key stakeholders and central to the development of IPE.

**Student Leadership**

It is important to engage students in IPE initiatives and, consequently, members selected a student representative from a group of interested students to serve on the IPEC. The students were tasked to form an IPE student society and assume, with a student executive committee, leadership roles in promoting IPE amongst students from the different health care disciplines. The society executive committee includes student representatives from all health care programmes in Qatar. Two of their major events include the annual IPE student forum and organising interprofessional outreach events focused on chronic conditions such as hypertension and smoking cessation. In addition, they host an annual research day for health care students. Further information about the society can be accessed at: [http://ipestudent-qatar.weebly.com](http://ipestudent-qatar.weebly.com).
Research

Since the establishment of IPE, research in this area has started to emerge. This varies from projects focused on the perspective of various key stakeholders to IPE (El-Awaisi, Diack, Joseph, & El Hajj, 2016; El-Awaisi et al., 2016; El-Awaisi, El Hajj, et al., 2018a, 2018b; Wilbur & Kelly, 2015; Zolezzi et al., 2017) to others focused on the actual experiences of IPE (El-Awaisi, Awaisu, et al., 2017; Wilby, Al-Abdi, El-Awaisi, & Diab, 2016; Wilby et al., 2015). There are also reviews (El-Awaisi, Joseph, El Hajj, & Diack, 2017; El-Awaisi, Wilby, et al., 2017; Johnson & Carragher, 2018) and a description of the steps to follow in introducing IPE into health care curricula (El-Awaisi et al., 2016).

With the integration of IPE into the health care curricula in Qatar, it is important to evaluate the longitudinal impact of IPE on collaboration and quality of care delivered to patients. The hierarchical culture prominent in this region reinforces the idea that the physician is always at the top of the organisational structure, and this is usually instilled in the mind-set of health care students. It would be useful to investigate how this mind-set is instilled, how it affects interprofessional working, and how to manage the behavioural change needed to change the culture. In this region, patient perception towards health care professionals in general, and interprofessional teams in particular, also needs to be explored further, in the context of continuously working toward patient-centred care.

Promotion and Implementation of IPC in Practice Settings

Although the focus in Qatar has been on integrating IPE within the curriculum, there are many challenges and barriers in the practice settings that need to be explored and addressed. Aligning the efforts of academic institutions with practice is of crucial importance and has the potential to enhance the value and quality of experience for patients, their families, communities, and learners (Earnest & Brandt, 2014; Institute of
The transformation to an environment where interprofessional working and collaborative practice are fostered and promoted will be challenging and disrupt the longstanding hierarchical structure within the team by levelling status among the members (Ginsburg & Tregunno, 2005; Solimeo, Ono, Lampman, Paez, & Stewart, 2015). The process will be facilitated if organisational leaders dedicate resources, advocate for this change, and raise awareness and understanding about the contributions of every member of the health care team and the importance of interprofessional working (Solimeo et al., 2015). These measures, combined with evaluation and feedback, are important to convey the importance of IPC, assist health care professionals toward achieving IPC in their settings, motivate changes toward successful implementation, and increase sustainability (Ginsburg & Tregunno, 2005).

There is a need to build on the established success to date. Students have to be provided with learning opportunities to implement what they are taught. Practice settings should be collaborative environments with positive role models where students are educated and trained (Thibault, 2013). Institutional support, working culture, and environment are all important factors contributing to the effectiveness of collaborative practice in health care settings (World Health Organization, 2010). Careful ‘needs assessment’ to improve IPC in the practice setting is required to identify the facilitators and challenges from multiple perspectives to create an action plan for implementation. It is important to note that changing the existing culture will be a complex and lengthy process and many unidentified barriers might appear in the process. However, instead of emphasising hidden curriculum messages, the focus should be on reinforcing skills needed to overcome and deal with challenges (Hafferty & O’Donnell, 2015).

Hospitals, primary care centres and even the Ministry of Public Health need to raise awareness and send positive messages that convey respect and trust to health care providers about the importance of collaboration, its link to better patient outcomes and the unique contribution each brings to the health care team. Creating a positive collaborative environment will help negate stereotypes and barriers that may arise from the lack of understanding of the contribution each health care professional makes to the interprofessional team (Price et al., 2014).
Policies and Governmental Vision

Reforming health care curricula to lead to better health care outcomes and improve quality of care for the patient will require a cultural change at all stages with an emphasis on linking IPE experiences with practice (Thibault, 2013). In addition to this, institutional and public policies need to promote and support reform in both health care curricula and the health care delivery system (Thibault, 2013). Governments and health care institutions play a critical role in initiating and sustaining IPE and IPC initiatives (Lawlis et al., 2014). Regulatory bodies have been identified as having an important impact on facilitating collaboration between health care professionals (Bourgeault & Grignon, 2013). The Qatari Ministry of Public Health can play a key role but needs to accelerate the promotion and implementation of IPE and collaborative practice. As an example, the Qatar Council for Healthcare Practitioners, the regulatory body for all health care practitioners working in both governmental and private health care sectors in Qatar (McMahon et al., 2016), could play a key role by mandating and promoting IPE and collaborative practice as part of its accreditation standards to create a culture that promotes interprofessional collaboration. Additionally, national and internal funding agencies such as NPRP need to fund development and provide opportunities for IPE and collaborative practice to be researched and included within their priorities. This would be an excellent strategy to recruit and engage faculty and practitioners into such initiatives to provide a sustainable programme from IPE to IPC (Brashers, Owen, & Haizlip, 2015).

Identified Challenges

Though the implementation and integration of IPE has been a success in the last five years, there have been many challenges and obstacles to overcome. Some of the key challenges encountered during the implementation process of the IPE programme in Qatar include (El-Awaisi, Wilby, et al., 2017):
Curriculum alignment with partnering institutions
Current status of collaboration in practice
Workload and faculty recognition
Logistical difficulties in terms of coordinating scheduling and finding a suitable space to conduct the activity
Geographical location of the partnering institutions
Lack of a structured IPE assessment plan
Lack of adequate IPE training and sufficient IPE experiences.

However, the existence of highly motivated facilitators eager to integrate IPE into health care curricula has leveraged many of the difficulties faced (El-Awaisi et al., 2019; El-Awaisi, Wilby, et al., 2017). During the integration of IPE, political considerations may surface in different ways and need to be dealt with cautiously and diplomatically (Interprofessional Education Consortium, 2002). Tension and competition for prestige, resources and influence are present when IPE is implemented across institutions and has been observed in Qatar. As an example, IPE activities are usually advertised through a press release to promote an interprofessional culture. Initially these press releases were sent through Qatar University, as IPEC is part of this institution. However, to acknowledge all efforts and avoid any unnecessary tension, it was decided that press releases should be sent from the institution that hosts the event with full recognition of all participating institutions.

Recommendations for Sustainability

Though IPE implementation has been achieved and IPE is now part of the QU health strategy, the lack of a dedicated unit for IPE and the lack of dedicated IPE personnel are key challenges we face to ensure the sustainability of IPE. Sustainability planning needs to be considered right from the beginning (Interprofessional Education Consortium, 2002). Sustainability should be a long-term strategy to work toward though it is not always easy to achieve. To ensure the sustainability of IPE programmes, a proposal is currently under discussion to establish a dedicated academic office to be called the Office of IPE at a QU health level that will replace the currently operating QU Health IPEC. The IPE
office at QU health level will build on the success of the IPEC, which was able to develop a leadership role in IPE in Qatar within a short period since its establishment. The creation of QU Health provides a unique opportunity for Qatar University to further develop and become a leader of IPE in the region. The formation of a dedicated office will help towards expanding IPEC initiatives, and planning activities according to evidence, best practice and contemporary models of health care is consistent with the QU Health vision.

Another proposal to ensure sustainability is to have a dedicated IPE credit-bearing course formally embedded into the different health care curricula at Qatar University. The course will be compulsory for all QU health students in their third or fourth year of study. This will ensure all health care students receive the same IPE exposure and experiences and will perceive it as a key part of their programme.

Conclusion

Readiness assessment conducted prior to the implementation of IPE was important to formulate and inform strategies for implementation and enhancement of IPE and IPC. The findings have had significant implications already on the development of IPE in Qatar and the region with the establishment of the interprofessional education committee with its focus on IPE curriculum integration into the health care programmes in Qatar. Faculty development, hosting the first Middle East conference on interprofessional education in the region, research and student led initiatives through the IPE student society have also contributed to the development of IPE. However, aligning efforts of academic institutions with practice is of crucial importance. While a tremendous amount of work has occurred already with many positive changes, it is important to capitalize on these opportunities and establish sustainable mechanisms to pave the way for meaningful integration of interprofessional learning and practice both in educational and practice settings with a commitment for continuous improvement through innovation and creativity.
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