

Pharmacy practice in Qatar: challenges and opportunities

Nadir Kheir¹, Michael Fahey²

¹College of Pharmacy, Qatar University, Doha, Qatar

²Operation Department, Hamad Medical Corporation, Doha, Qatar

Address for Correspondence: Nadir Kheir, College of Pharmacy, Qatar University, Doha, Qatar. Email: nadirk@qu.edu.qa

Citation: Kheir N, Fahey M. Pharmacy Practice in Qatar: challenges and opportunities. *Southern Med Review* (2011) 4;2:92-96
doi:10.5655/smr.v4i2.1007

Abstract

The State of Qatar is a small oil and gas-rich Gulf country that is experiencing rapid development in health care services, including pharmaceutical services. To date, there is no autonomous professional pharmacy association or society that regulates or promotes the practice of pharmacy in Qatar, and the challenges that face the profession of pharmacy in Qatar mirror the challenges facing the profession in all other Middle Eastern countries. However, a set of initiatives and projects that include pioneering educational initiatives, close alignment of practice with the educational providers, stronger leadership from a National Health Strategy, and the development of pharmacy leadership groups at the practice level all contribute in the fast development of the practice of pharmacy in this country. In this commentary, we provide a snapshot of the pharmaceutical scene in Qatar, and in doing so, we shall discuss the challenges that face the practice, and the main landmarks and initiatives that are destined to move pharmacy forward in Qatar.

Keywords: Qatar, Pharmaceutical Situation, Pharmacy Practice.

Qatar's pharmaceutical scene: a practice on the move

The practice of pharmacy in the region known as the Middle East has been in a state of evolution throughout the last five to ten years due to multiple reasons that include international as well as regional influences¹. Internationally, cultural, economic, technological, and social globalization has unified the world's orders thus integrating regional economies, societies, and cultures through communication, transportation, and trade². Within the region, calls for democratization and regime change swept North Africa to the heart of the Arabian Peninsula, triggering unprecedented reactions, reviews, and social media activity³.

The Middle East is demographically young, with many countries having over 30% of the population aged under 15 years, the age group defined as "youth"⁴. It is no surprise that these calls for changes, sometimes leading to popular revolutions, were often led by young Arab men and women aspiring for change. That same youthful energy could shortly be helping to sustain a revolution in the pharmacy practice field in the region. The idea and ideals of pharmaceutical care, and its related practices and activities such as medication therapy management, are very familiar to Arab Pharmacists through seminars, talks, conferences and undergraduate courses taught in some schools of pharmacy¹. All this is inspiring young pharmacists and pharmacy students who are looking to take on new roles in

their practice of pharmacy and abandon old models of practice that dominated pharmacy in the region⁵.

The aim of this commentary is to provide a description of the practice of pharmacy in Qatar, with emphasis on the challenges facing it and the opportunities that will inevitably shape its future.

The State of Qatar (Qatar), an Arab Emirate that lies on the northeasterly coast of the Arabian Peninsula, has a population of approximately 1.7 million people, of which approximately 80% are expatriates⁶. Gas and oil produced and exported from this small country gives it one of the highest gross domestic product (GDP) per capita in the world. However, the dynamic leadership in Qatar is revolutionary in its vision and ambition to switch Qatar from a carbon-based economy to Knowledge based economy⁷.

One sector that is already witnessing tremendous change in Qatar is the health care sector, which has traditionally been dominated by expatriate professionals⁸. To support the development and growth in the health care sector, policy-makers in Qatar started programs that aim at training domestic graduates through hosting satellite campuses of the Weill Cornell Medical College (US based) and the Qatar branch of the University of Calgary nursing school⁸. Most recently, the College of Pharmacy was established at Qatar University, as shall be discussed below in more detail.

The pharmacy practice scene

To date, there is no autonomous professional pharmacy association or society that regulates, represents or promotes the practice of pharmacy in Qatar⁹. As a result, there is no code of ethics that binds pharmacy practitioners with a code of conduct, and (until recently) no set of competency standards to act as a bench mark to all pharmacists. The current pharmacy law places a great deal of emphasis on the pharmacy and pharmacist registration process, the structure of the pharmacy premises, and controlled drug regulations, but provides little guidance on practice issues¹.

Non-practice issues relating to pharmacy are reasonably well established in this country. Pharmacist registration comes under the jurisdiction of the Supreme Council of Health (SCH, Medical Licensing Department). The SCH also has a Department of Pharmacy and Drug Control, which controls pharmacy premises (registration and inspection) including community pharmacies, private hospitals, and drug stores (wholesale). This department also enforces the controlled drug regulations regarding import, export and distribution (Qatar is a signatory to International Conventions for Narcotics and Psychotropics) and for all medicines they control the registration, pricing, import and distribution for Qatar. Supported by a Drug Quality Control Laboratory, they also monitor herbal products and many food supplements.

Most pharmacists practicing in Qatar are expatriates and the majority of pharmacists received their degrees in Egypt, India, or Jordan¹⁰. As a result, practice models tend to reflect the practice one would find in those countries. In Qatar, there are 305 community pharmacies, over 20 primary care health centers, 8 government funded hospitals and 11 satellites providing urgent care and dialysis (managed by Hamad Medical Corporation, a Joint Commission International Accredited Health System)¹¹. Five more health facilities are planned, including a medical and research centre that is managed by Qatar Foundation for Education, Science and Community Development (QF). Several private hospitals also provide health care services in and around Doha city, the capital of the State of Qatar¹².

Drug procurement, storage, and supply in Qatar follows organized and well-established protocols. The rules and regulations governing these inventory-related activities in Qatar generally resemble those in other neighboring Middle Eastern countries; and several Gulf countries (members of the Gulf Cooperation Council, or GCC) purchase their annual quota of medicine through a joint procurement process¹³. This process enforces the political commitment of their member states and (through adopting a centralized tendering system) ensures a cost-effective procurement process. In a recent study conducted in Qatar, practicing pharmacists appeared to be satisfied with the processes associated with dispensing of medications in the retail setting, public clinics, and public hospital outpatient pharmacies, and felt that the regulatory processes for the procurement, storage, marketing, and pricing of medications are also acceptable⁸.

Challenges and opportunities for the pharmacy

The challenges that face the profession of pharmacy in Qatar are summarized below:

Pharmacy identity at the practice level

The very rapid expansion of health services along with a trend towards decentralizing their management has created several challenges for the hospital pharmacy services¹⁴. Workload (patients accessing the service) rises steadily and at a time when service models need to be defined there is a lot of energy going in to expanding and sustaining existing service models. In the private sector there are very few financial incentives to develop pharmacy services and with most Government hospitals dispensing to their own ambulatory care patients the revenues are limited to private sector prescribing, over the counter, and non-pharmacy product sales. Salaries are not very competitive and while there are some private pharmacy chains that are endeavoring to provide a modern professional service, they are not yet an integral part of secondary health care in Qatar⁸. The introduction of health insurance and opening up secondary care to the private sector would transform this sector.

Product focused practice model

In the community pharmacy sector, the practice is still dominated by dispensing and selling pharmacological and non-pharmacological products⁸. This is a phenomenon that characterizes the private pharmacy sector not only in Qatar but in most other countries in the region. In the hospital sector there are still many more pharmacists than technicians and limited use of automation to prepare medicines so it is not unusual to have a dispensary dominated by pharmacists. In their study that looked at medication use perceptions and professional satisfaction of pharmacists practicing in Qatar, El Hajj et al reported that over half of the pharmacists surveyed identified improvements to the professional role of the pharmacist and greater opportunities for professional development as major factors that would increase their professional satisfaction⁸. Others suggested enhancements in human resource-related conditions (e.g., adequate staffing, reduced workload, and better compensation) as important requirements⁸.

Opportunities for pharmacy practice

Recently, the pharmacy practice scene in Qatar started to go through rapid and important change and developments. The most important drivers of these changes can be summed up in the developing hospital pharmacy services, pharmacy education, Qatar's strategic health plans, and pharmacy leadership.

Developing hospital pharmacy

The hospital pharmacy sector provides and sustains a young, but a rapidly growing, clinical pharmacy service that was introduced in some of the public hospitals since 2006. One hospital

Pharmacy practice in Qatar: challenges and opportunities

(specialized in cancer therapy) provides clinical pharmacy services by two experienced clinical pharmacists (covering a total of 50 beds), and the department of pharmacy of this hospital has plans for adoption of pharmaceutical care and medication therapy management in its strategic future programs¹⁵. A recently opened government hospital has been designed to take full advantage of automated and computer controlled drug distribution, liberating more pharmacists to ensure that patients get safe and effective medication. Other larger hospitals are able to deliver clinical pharmacy services to high priority inpatient groups for example intensive care units, pediatrics and other vulnerable patient groups and acute admissions. The only published research that looked at physicians' acceptance of cognitive services provided by pharmacists in public hospitals showed that physicians were comfortable with the pharmacists' role in these patient care areas despite many unmet expectations¹⁶. Existing hospital pharmacies and pharmacy services in new hospitals being furnished will have the lion's share of new pharmacy graduates (the majority holding PharmD degrees) coming out from Qatar's national College of Pharmacy. These fresh graduates from a modern pharmacy program will ensure the growth and maturation of the hospital pharmacy sector into effective clinical services.

Pharmacy education

In 2007, Qatar University opened the first and only College of Pharmacy in the country. This is the newest public College of Pharmacy in the Gulf region at the time this article was written. Admission to the program requires completion of United States-based pharmacy college admission test (PCAT) as a component of the application process¹⁰. Admission also requires attending a structured interview, in addition to providing a personal statement and references. The College had secured provisional international accreditation from the Canadian Council on Accreditation of Pharmacy Programs (CCAPP) in 2008, making it the first and only accredited pharmacy program by the CCAPP outside Canada. The College had its plans for PharmD degree approved in early 2007, and its first candidate will start their degree in September 2011¹⁷. The PharmD degree program was designed to meet western accreditation standards and to provide advanced professional training opportunities for students wishing to pursue specialized clinical careers. The first baccalaureate and PharmD graduates from Qatar's College of Pharmacy will enter the workforce in 2011 and 2012, respectively. It is anticipated that these graduates will mark the beginning of qualitative improvement in how pharmacy is practiced in this country and may lead to fast-tracking of the introduction of patient-centered practices in several pharmacy outlets in Qatar.

The College of Pharmacy delivers a contemporary pharmacy curriculum. A course integration teaching strategy introduces a disease-based teaching and management strategy that uses pharmaceutical care approaches. Medication therapy

management is introduced as the clinical application of pharmaceutical care at different semesters, and integrated case-based learning demonstrates a problem-based learning strategy in teaching. Professional skills (like communication skills, writing skills, patient assessment skills, and care planning) feature prominently throughout the course of study¹⁷.

The College of Pharmacy adopts a strategy of involvement with health care policy and practice in the country through linking with multiple practice site and multiple local Stakeholders Group meetings involving hospital, community and other pharmacy practitioners, as well as supporting organizations¹⁸. In 2008, Qatar University's College of Pharmacy students joined the International Pharmacy Student Federation (IPSF) which has 350,000 students from over 70 countries and recently this young program successfully hosted the second annual Eastern Mediterranean Regional Symposium (EMPS) in Qatar (July 15-21, 2011), where over 150 pharmacy students from 14 countries in Europe, Africa and the Middle East attended the 7-day educational conference¹⁷.

A new pharmacy technician program has also recently opened in Qatar. This program is operated by the Qatar branch of the College of North Atlantic (Canada), and its graduates are trained to support local pharmacists in the delivery of competent health care¹⁰. This program has also been accredited by CCAPP making it the only Canadian accredited Pharmacy Technician program outside of Canada. Many of the students on this program are sponsored by local employers (including government health services) and many of its graduates have already entered the job market and are much sought after due to both their quality and scarcity in the labour market. As per the strategic planning of the pharmacy services at the main government provider (Hamad Medical Corporation), pharmacy technicians will start to provide most of the preparative and dispensing services and most pharmacists will be deployed to provide clinical pharmacy services using the pharmaceutical care approach outside of the pharmacy units¹⁹.

The visibility of pharmacy academics, their deliberate engaging strategies with stakeholders, coupled with an active College's Continuing Professional Pharmacy Development (CPPD) program and an organized Structured Practical Experience Program (SPEP) that allows students to spend supervised training time in community and hospital pharmacies during their undergraduate course are all important factors that maximize the chances of advancing pharmacy practice in Qatar.

Pharmacy practice in Qatar's strategic plans

At a National level, the identity and leadership of pharmacy practice in Qatar received a boost from the National Health Strategy 2011-2016⁷. The strategy describes its goal of developing a comprehensive world-class healthcare system, such as the introduction of disease management, health insurance

and greater integration between government and the private sector⁷. The document advocated 'a community pharmacy network supported by appropriate policy and process, decreasing the reliance on hospitals for filling drug prescriptions, leading to increased efficiency and enhanced access²⁰. These policies and plans exemplify the national leadership that will be necessary to provide the impetus for a transformation of pharmacy practice to being an effective patient-centered service provided by pharmacists and supported by technicians and automation.

Pharmacy leadership

At the practice level, leadership has come from Hamad Medical Corporation (HMC). HMC is a Joint Commission International Accredited health system that currently includes seven hospitals. In 2009, the managing director revised and re-launched a pharmacy leadership group known as the Pharmacy Practice Committee (PCC), which is comprised of both pharmacy leaders from within HMC and educational leaders from the College of Pharmacy and CNA-Q. Key objectives of the Pharmacy Practice Committee include (a) To provide governance and leadership on professional pharmacy issues; (b) To identify and develop good pharmacy practice models for HMC; (c) To support and encourage these models to be applied across all HMC facilities; (d) To ensure that the pharmacy profession is structured and maintained to meet the needs of the citizens of Qatar; and (e) To provide timely scientific, technical and administrative advice and recommendations regarding pharmacy practice to the HMC Executive.

In June 2011, the bar was raised even further when HMC leadership announced that it was committed to creating an Academic Health System. It is clear that the pharmacy practice Committee must seek to develop pharmacy services that meet the needs of the patient and the expectations and demands of a world class Academic Health System. This together with the Corporate Executive announcing that Medication Safety was one of the key priorities has helped to ensure that pharmacy is highly valued as a clinical service at the highest levels in the organization, not simply as a drug distribution service.

Frameworks such as the "High Performance Pharmacy" framework developed in the USA represent excellent tools for planning and prioritizing efforts²¹. These are exciting times and another initiative that will help to transform medicines management in HMC will be the introduction of a Clinical Information System that will provide an integrated electronic medical record across the majority of government providers, including Computerized Physician Order entry.

One major initiative that is hoped to help in the transformation of pharmaceutical services and practices in Qatar is the fact that a revised and progressive pharmacy and medicines law is under review and should be published in the near future. This law, and its associated regulations, will enforce professional standards and encourage the development of patient (not product) focused services. It is therefore anticipated that the new pharmacy law and regulations will provide the basis for a contemporary

pharmacy practice in Qatar, where pharmacists will be expected to demonstrate a professional attitude, be capable to show an understanding of the cultural and professional requirements in a Qatari pharmacy environment, and can be held accountable for their performance.

In conclusion, the State of Qatar is in the middle of a revolutionary expansion of health services and, thanks to pioneering educational initiatives and strong leadership at the national and practice level, there is a very good chance that pharmacy will emerge transformed into a highly respected, and progressive clinical service.

Authors' contribution

Nadir Kheir conceived the idea and both authors contributed in writing the commentary. This commentary reflects the opinions of the authors and not necessarily that of any organization in the State of Qatar.

Acknowledgement

None

Conflict of interest

No conflict of interest to declare

Funding source

None received

References

1. Kheir N, Zaidan M, Younes H, El HM, Wilbur K, Jewesson PJ. Pharmacy education and practice in 13 Middle Eastern countries. *Am J Pharm Educ* 2008;72(6):133.
2. Hallstrom L. Review of David Held and Anthony McGrew 'Globalization Theory: Approaches and Controversies'. *Canadian Journal of Political Science/Revue canadienne de science politique* 2008;41:796-797.
3. The Middle East in revolt. *TIME Specials*. <http://www.time.com/time/specials/packages/0,28757,2045328,00.html> (Accessed 13th August 2011).
4. Assaad R, Roudi Fahimi F. Youth in the Middle east and North Africa: Demographic Opportunity or Challenge? 2007 <http://www.prb.org/pdf07/youthinMENA.pdf> (Accessed 25 July 2011)
5. Albsoul Younes A, Wazaify M, Alkofahi A. Pharmaceutical care education and practice in Jordan in the new millenium. *Jordan Journal of Pharmaceutical Sciences* 2008;1(1):83-90.
6. Qatar Information Exchange. Population. http://www.qix.gov.qa/portal/page/portal/qix/subject_area?subject_area=176 (Accessed 25th August 2011)
7. General Secretarial for Development and Planning. Qatar National Development Strategy 2011-2016: Towards Qatar's National Vision. 2011. 5-10-2011 http://www2.gsdp.gov.qa/www1_docs/NDS_EN.pdf (Accessed 10th September 2011).
8. El Hajj MS, Kheir N, Jewesson PJ, Zaidan. Pharmacist characteristics, medication use perceptions, and professional satisfaction: a first national survey in the state of Qatar. *Journal of Health Care Leadership* 2011;2011(3):9-28.

9. Wilbur K. Continuing professional pharmacy development needs assessment of Qatar pharmacists. *Int J Pharm Pract* 2010;18(4):236-241.
10. Kheir N, Zaidan M, Younes H, El Hajj M, Wilbur K, Jewesson P. Pharmacy education and practice in 13 Middle Eastern countries. *Am J Pharm Edu* 2009;72(6):1-13.
11. Hamad Medical Corporation. <http://www.hamad.qa/hmcnewsite/> (Accessed 14th August 2011).
12. Qatar's Supreme Council of Health, accessed 5 October 2011 <http://www.sch.gov.qa/sch/En/>.
13. World Health Organization. Multi-country Regional Pooled Procurement of Medicines. 1-39. 2007 <http://www.who.int/medicines/publications/PooledProcurement.pdf> (Accessed 8th August 2011)
14. Bener A, Al MA. Health services management in Qatar. *Croat Med J* 2010;51(1):85-88.
15. Zaidan M. Pharmaceutical Care and Medication Therapy Management in Al Amal and the Cardiology Hopsitals in Qatar. 2011. Personal Communication
16. Zaidan M, Singh R, Wazaify M, Tahaineh L. Physicians' perceptions, expectations, and experience with pharmacists at Hamad Medical Corporation in Qatar. *J Multidiscip Healthc* 2011;4:85-90.
17. College of Pharmacy Qatar University. <http://www.qu.edu.qa/pharmacy/> (Accessed 15th August 2011).
18. Jewesson.P. Qatar University Pharmacy Program Targets for the Academic Year 2007-2008. 2008
19. Fahey M. Medication Therapy Management in Qatar. 2011. 6-6-2011. Personal Communication
20. Executive Committee SHC. Qatar National Health Strategy 2011-2016. 2011
21. McKesson Corporation. How U.S. Hospital Pharmacies Measure Up: The First Annual Hospital Pharmacy Performance Index. 2009