LETTERS

Pharmacy Education and Practice in West Bank, Palestine

To the Editor: The West Bank is a landlocked territory on the west bank of the Jordan River in the Middle East. Since 1967 most of the West Bank and Gaza Strip has been under Israeli military occupation. In 1993, the Oslo accords declared both West Bank and Gaza Strip to be partially under the administration of the Palestinian National Authority (PNA). Before 1967 there were no universities in the West Bank. Since there were no universities in West Bank at that time, Palestinians could obtain degrees only by travelling abroad to places such as Jordan, Lebanon, or Europe. After 1967, several educational institutions began offering undergraduate courses, while others opened up as entirely new universities. In December 2007, an official Census conducted by the Palestinian Authority found that the Palestinian population of the West Bank (including Israeli-annexed East Jerusalem) was 2,345,000. In terms of health insurance, more than half of the Palestinian population have governmental insurance and can obtain medications from governmental medical centers.[1]

Modern pharmacy in West Bank, Palestine, began in the very early nineteenth century. Before then, pharmacy practice focused mainly on Arab traditional medicine. In 1957, the Jordanian Pharmaceutical Association (JPA) was established. Palestinian pharmacists were registered at the JPA since West Bank was under the Jordanian rule. Most of these pharmacists were graduates of the American University of Beirut and practiced pharmacy in their private community pharmacies. After the Six Day War, particularly in 1973, a branch of JPA located in east Jerusalem started functioning as the organizational body of the Palestinian pharmacists in West Bank.

Current Pharmacy Practice

There are 2,430 registered pharmacists in the West Bank of Palestine, the majority (93.1%) of whom work in the private sector. The other 6.9% work in the government sector which mainly consists of hospital pharmacies and primary health care clinics. Community pharmacies are the most popular form of pharmacy profession in the West Bank, with over 800 registered pharmacies distributed across the country. The main duties of community pharmacists in Palestine involve dispensing, while the duties of hospital pharmacists mainly consist of administrative duties. In both hospital and community settings, very limited interaction occurs between the pharmacist and the patient. Most hospital pharmacies have dispensing windows where medicines are placed for patient pick up. Because of the limited interaction between pharmacists and patients, the public considers the pharmacy profession to be a commercially and business-oriented profession. A patient can buy any medication without a prescription, with the exception of controlled narcotics and major tranquilizers (eg, benzodiazepines), which can only be dispensed after receipt of a prescription signed by a registered physician.[2] Moreover, the use of natural products, especially herbs, as a source of medicines is widespread, as is the case in other areas of the Mediterranean.[3,4] Rarely do private pharmacies in Palestine maintain patient medication records and they are not legally required to do so. In addition, private pharmacies in the West Bank seldom use technology for patient care and manually dispense most drugs. Few pharmacists have the opportunity to work in the pharmaceutical industry. There are 5 pharmaceutical companies that manufacture more than 1000 different pharmaceutical items. Most pharmacists in the pharmaceutical industry are engaged in marketing and promotion given the tight competition between local and imported medicines. Clinical pharmacy services are absent in Palestine. It is hoped that the new patient care-oriented doctor of pharmacy (PharmD) program in the country will produce graduates who are capable of providing better pharmaceutical and clinical care to patients and improving the image of the pharmacy profession.

Pharmacy Education

The establishment of pharmacy schools in West Bank, Palestine, has been relatively recent. The 2 main schools of pharmacy in West Bank are those at An-Najah University in Nablus and Al-Quds University, located at Abu-Dis.[5,6] The 2 universities are non-governmental but had a lot of governmental attention and support. The college of pharmacy at An-najah was established in 1994 while that at Al-Quds was established in 2002. Prior to 1994, there were no colleges of pharmacy at West Bank, and most pharmacists working in West Bank were trained outside the country, mainly in Jordan and Egypt. The 2 pharmacy schools in West Bank have a 5-year bachelor of science (BSc) in pharmacy degree program, which requires the completion of 164 to 175 credit hours of didactic instruction and 1440 hours of training at community pharmacies, hospitals, or industry. Most students in both colleges are females. Students enroll for a 5-year program consisting of 10 semesters. The first 4 years includes basic and core pharmacy courses. In their fifth year, students are required to take some elective courses and are required to complete a compulsory 2 semester clerkship in various pharmaceutical settings. The language of instruction in pharmacy schools in West Bank is English. The College of Pharmacy at An-Najah University consists of 3 departments: pharmaceutical technology and pharmacokinetics; pharmacology and clinical pharmacy; and pharmaceutical chemistry and natural products. The college of pharmacy at Al-Quds also consists of 3 departments: pharmaceutics; pharmaceutical chemistry and natural products; and clinical pharmacy. The college of pharmacy at An-Najah University is staffed with 20 full-time faculty members while the college of pharmacy at Al-Quds is staffed with 11 full-time faculty members.

In addition to the BSc degree, An-Najah University awards the PharmD degree after the completion of 198 credit hours, which includes 48 weeks of clinical training. This program, which started in 2006, is aimed at introducing the new clinical component to pharmacy education and practice in Palestine. The program was designed to meet the increased need for high quality pharmacy services in Palestine. The sixth year of study of the PharmD program is the experiential year during which students spend 8 consecutive 6-week rotations in various medical specialties such as pediatrics, internal medicine, and surgery. An-Najah University also offers a postgraduate masters of science (MSc) degree in clinical pharmacy after the completion of 36 credit hours and 36 weeks of clinical rotations. The MSc clinical pharmacy program started in 2003 as a joint program with the Palestinian ministry of health (MOH) aimed at improving the clinical pharmacy services at the MOH.

In addition to the 2 colleges of pharmacy, there is a poison control and drug information center (PCDIC) located at An-Najah Unveristy. The PCDIC is provided with a toll free telephone number which offers free information both to the public and medical professionals regarding poisoning and new drug information. The PCDIC is the first and only specialized center in West Bank that offers free drug services. The center is also engaged in clinical toxicology research, pharmacovigilance, and pharmco-epidemiology activities. The PCDIC is also working on improving awareness regarding toxic and hazardous materials through its annual poison prevention week held each April.

Future & Recommendation

Efforts in West Bank must be focused on clinical pharmacy services and education. The large number of colleges of pharmacy in West Bank and neighboring countries has led to a higher number of pharmacy graduates who are currently facing serious employment problems given the limited opportunities for pharmacists. The PNA needs to reshape pharmacy practice by adopting modern patient-oriented pharmacy practices instead of the business-oriented practices. The Palestinian universities, particularly An-Najah University needs to actively pursue getting its PharmD program accredited by international bodies. The concept of chain pharmacy needs to be considered, given the financial restrains and the limited opportunities of most pharmacists to start a new independent pharmacy business. Clinical pharmacology research focusing on pharmacoepidemiology and drug utilization needs to be encouraged to have baseline data on the drug situation in the country. Continuing pharmacy education (CPE) is also of paramount importance. According to the current regulations, pharmacists are not required to obtain a specific number of CPE credits to be relicensed. Finally, the MOH need to consider establishing clinical pharmacy residency programs and a high caliber Palestinian Pharmacy Board Examination for clinical pharmacists.

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Use of Consumer Educators in Mental Health Pharmacy Education

To the editor: We commend Buhler and Karimi on their study of the role of peer-level patient presenters in mental health pharmacy education.[1] The lack of mental health education has been described as the most important barrier to the provision of community pharmacy services for people with mental illness.[2] In addition, suboptimal attitudes toward people with mental illness may be common among health professionals.[3] The innovative education described by Buhler and Karimi addresses barriers to mental healthcare that are commonly reported by pharmacists and pharmacy students.

In their report Buhler and Karimi state that the effect of the pharmacy curriculum on reducing social distance has not been studied. In addition they report finding no literature describing the use of patient presenters in mental health education. We have previously reported the use of consumer educators as partners in a continuing professional development program for pharmacists,[4] and the impact of consumer participation in mental health education for pharmacy students.[5] In the later study we evaluated the impact of the consumer participation using a survey instrument that included a 7-item social distance scale. Our results were consistent with those of Buhler and Karimi, and also those of previous research that demonstrated an association between increased contact and improved attitudes toward people with mental disorders.[6]

There are conflicting reports as to whether workplace experience reduces social distance from people with mental illness.[7-9] Contacts between pharmacy students and people with mental illness during clinical placements typically occur in the context of a provider-patient interaction. This kind of interaction may not contribute to students developing a greater understanding of a consumer's experience of their illness. However, recent research conducted in Estonia found that previous employment in a pharmacy was associated with lower social distance among pharmacy students.[10] The determinants of social distance among pharmacy students may be culturally specific and, therefore, education programs may need to be tailored accordingly.[11] Buhler and Karimi achieved "peer-level" interactions by using presenters with graduate-level education or work history as a health care professional. We attempted to achieve equal status interactions by formally recognizing consumers as university instructors.

In 2008, consumer-led education was again successfully trialed as a part of the degree program for third-year pharmacy students at The University of Sydney.[12] This education was supported by the Schizophrenia Fellowship of New South Wales, a nonprofit community-based organization. We agree with Buhler and Karimi that future research is needed to determine whether improvements in students' attitudes will translate into improved provision of pharmacy services. We are presently following-up with students who received this form of education to assess the impact on self-reported behavior. Regardless of the potential improvements in service provision, we concur with Buhler and Karimi that people with mental illness have a valuable role in improving students' attitudes, addressing common misconceptions, and highlighting the importance of the patient/pharmacist relationship.

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