STATEMENT

Pharmacy Education in the Palestinian Territories

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We are delighted that the *American Journal of Pharmaceutical Education* has recently focused on pharmaceutical practice and pharmacy education in Arab countries as part of its International Pharmacy Education Supplement. In 2006, Al-Wazaify and colleagues published an article titled "Pharmacy Education in Jordan, Saudi Arabia, and Kuwait" followed by a 2009 article by Kheir and colleagues titled "Pharmacy Education and Practice in 13 Middle Eastern Countries."^{1,2} The latter article not only shed a light on pharmaceutical education in Arab countries, which are underrepresented in international literature, but it also started a constructive discussion forum in the *American Journal of Pharmaceutical Education*, including several letters.³⁻⁵ To further enrich this discussion, we present here a synopsis of pharmacy education in the Palestinian territories.

It is fair to say that colleges and schools of pharmacy and, in general, pharmacy education in the Palestinian Territories (East Jerusalem, West Bank, and Gaza Strip) represent a unique case study. For many years, higher education in the Palestinian Territories was stalled due to the ongoing Israeli-Palestinian conflict. Up till 1992, there was not a single pharmacy school in the Palestinian Territories, and public and private-owned pharmacies relied on pharmacists educated abroad and registered in neighboring country associations, such as the Jordanian Pharmaceutical Association. The establishment of the Faculty of Pharmacy at Al-Azhar University in Gaza Strip (established in 1992) and the Department of Pharmacy at An-Najah University in West Bank (established in 1994) marked a significant progress in pharmacy education in the Palestinian Territories.

Currently, there are 5 schools of pharmacy that offer bachelor and doctor of pharmacy (PharmD) degrees, and bachelor and master of pharmaceutical sciences degrees.⁶⁻¹⁰ Every year, more than 500 students are admitted

to the bachelor of pharmacy programs at Al-Azhar, An-Najah, Hebron, and Al-Quds (in East Jerusalem) universities or PharmD programs at An-Najah and Birzeit universities. Admission is based solely on scores on the General Secondary School Examination (known as the Tawjihi) and little consideration is given to nonacademic criteria. Although these programs are accredited by the Palestinian Ministry of Higher Education, their curricula are focused on biomedical and pharmaceutical sciences and short in clinical, administrative, and experiential courses. Bachelor of pharmacy programs (5 years; 160-180 credit hours) consist of 73-81% biomedical and pharmaceutical sciences, roughly 13% pharmacy practice, less than 10% social and administrative pharmacy and experiential education courses, and 720-1 440 hours of community pharmacy training.⁶⁻⁸ The PharmD programs include biomedical and pharmaceutical sciences (around 75%) and pharmacy practice and social and administrative pharmacy (around 25%) courses, more than 1 000 hours of community pharmacy training and an additional sixth year of pharmacy clerkships.^{7,9} Moreover, the faculty member to student ratio (1:40) is generally low compared with pharmacy schools in surrounding countries and the faculty body consists mainly of biomedical and pharmaceutical sciences faculty members (More than 70%).⁶⁻⁹

Thus, Palestinian Territories' schools of pharmacy provide qualified pharmacists to meet the needs of the public and private pharmacies; however, there is a lack of clinical pharmacists with specialized residency trainings. This reflects the shortage in academic and research resources and the inability to attract qualified and well trained faculty members in the areas of pharmacy administration and pharmacy practice.

This article has uncovered several areas where additional research could be valuable. While the scope of this investigation was confined to the schools of pharmacy in the Palestinian Territories, future studies can extend the present investigation to the Middle East countries and investigate the student pharmacist's perceptions on the current pharmacy curriculum in the Palestinian Territories.

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