



Life as a student in Iraq: what impact has the war had on pharmacy?

Muna, a third-year student, and Ayad Ali, an academic pharmacist, both from the school of pharmacy in Tikrit, tell Pamela Mason about pharmacy studies in Iraq and the impact of the war on pharmacy

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The daily pictures from Iraq brought to our televisions and newspapers during the past two years may have made you wonder how your fellow students are coping in this war-torn country. During the week you were attending freshers' balls or packing up to begin another year at university, many of your fellow students in Iraq were having several extra weeks of enforced time off from their studies. Terrorist explosions, mortar attacks and the associated disruption to daily life meant that 25 September — the appointed day for the beginning of the new academic year — came and went, with students in Tikrit being told to stay at home. The day I talked to Ayad Ali, an academic staff member at the University of Tikrit, he said term should start by the middle of October, but he was not really sure. "Everyone and everything is affected by this terrible situation," he says. The day before Dr Ali's cousin had died in a car explosion.

Tikrit is situated about 100 miles north west of Baghdad on the River Tigris, with an estimated population in 2002 of about 28,900. It is home to one of seven schools of pharmacy in Iraq. The others are in Baghdad, Basrah, Qufa and Mosul.

Established in 2002, Tikrit is the newest school of pharmacy, and the BSc degree programme in pharmacy in Iraq is five years long. Dr Ali was expecting 200 first-year students to join the college for this academic year and there are currently 170 students in the second and third years combined.

A student's perspective

To find out more about being a pharmacy student in Iraq, I also spoke to Muna, who at the time of writing, was just about to start her third year. She is 21 years old and chose to study pharmacy since "it is a humanitarian, respectable and supreme profession". Having successfully completed two years at Tikrit, she is increasingly seeing pharmacists as crucial health care providers, acting as a bridge between the prescriber and the patient. Providing pharmaceutical care to patients is what really drives her. Running a business is less interesting, she adds.

Muna chose to study in Tikrit since it is the nearest school of pharmacy to her home which is in Kirkuk, about 70 miles to the north. She lives in one of the university halls of residence and walks into college, which takes her about 15 minutes.

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Entrance requirements for Iraqi schools of pharmacy are similar to those in the UK. Prospective students must pass the baccalaureate (final high school examinations) in chemistry, biology and physics with a mark of at least 75 per cent, a standard which is the same as that for students of medicine and dentistry.

Arabic is Muna's mother tongue, but she has studied English since the fifth class at primary school, a fact that is now standing her in good stead since English is the language of instruction at the school of pharmacy. The degree programme is strongly science-based with an emphasis on biology, inorganic and analytical chemistry, computing, statistics and pharmaceutical calculations in the first year. There are modules in bacteriology, parasitology, organic chemistry, physiology and pharmacognosy in the second year. Pharmaceutical chemistry, pharmaceuticals and pharmacology are taught in the third year along with more pharmacognosy. During the fourth and fifth years, the focus changes to more clinical and therapeutic areas, toxicology, industrial pharmacy and community pharmacy.

So far, Muna has particularly enjoyed the modules in pharmaceutical calculations, computing, organic chemistry and parasitology. Though she has no huge dislike for any subject, she found pharmacognosy and histology the most difficult. The reason for this, she says, is that "the tutor who teaches pharmacognosy is not a pharmacist and it is difficult for us to make the connections between this subject and pharmacy". In response to this, Dr Ali says that he is the only pharmacist in the college, but he works as a laboratory demonstrator, not a lecturer. Since he qualified in 2002, he has worked in a variety of practice settings, including a community pharmacy in Kirkuk, as a hospital pharmacist at the Saddam General Hospital and as an industrial pharmacist at the Nineveh Drug Industries in Mosul, but he is considered to be too young and to have too little experience to be a lecturer in Iraq.

The academic year consists of two semesters, each of which includes two

examinations — a mid-semester examination, which counts for 40 per cent of the semester mark and the end of semester examination, which accounts for the remaining 60 per cent. Laboratory and practical work account for 20 per cent of the total semester assessment with written work making up the rest. The minimum pass mark is 50 per cent and the student can have two attempts. Although standards of education are prescribed by the university, because Tikrit is a new school of pharmacy, there is room for flexibility, and Muna tells me that students made a special plea for practical placements in community and hospital pharmacy during their summer vacations. Third-year students spend eight weeks in community pharmacies, and students have asked to spend a similar period in a hospital pharmacy at the end of their fourth year.

Once she has graduated at the end of the fifth year, Muna will apply for registration with the Syndicate of Iraqi Pharmacists (SIP), which is necessary to practise. She is not required to complete a preregistration year to qualify as a pharmacist. She wants to work as a clinical pharmacist in a hospital. To do this she needs to apply to the Ministry of Health and complete a 12-month internship. She must also pass two further examinations — one when she applies to the Ministry of Health, the other when she finishes her internship. If she wanted to own a community pharmacy, she would have to work for 12 months in a community pharmacy before she could get a licence.

"My hope is that I shall be of real service to patients," she says. She plans to work in a hospital in the morning and in a community pharmacy in the afternoon, where she can advise the public on health promotion, rational drug use and prevention of disease.

In the meantime, she is planning to open an internet centre at the college. This is one of her biggest goals, she says. "I don't really have any hobbies," she adds. "Studying takes up nearly all of my time and it isn't safe to be out and about on outdoor hobbies and sporting activities. The curfews are frequent and explosions are everywhere."

Impact of the war

Not surprisingly, the war has had a huge effect on pharmacy in Iraq. "Opening of the borders has led to widespread availability of counterfeit medicines and substandard pharmaceutical products. Unlicensed drug street vendors have mushroomed as a result of the breakdown in law and order," says Dr Ali. "Irrational drug use has increased enormously, hospitals have been destroyed and many pharmacists and doctors have been kidnapped or assassinated."

The schools of pharmacy are in a lamentable state, he adds. Each of the seven schools faces a huge shortage of pharmacy lecturers with huge implications for the quality of the teaching. The long-lasting state of chaos in the aftermath of the war has affected all the country's infrastructures, including that of higher education centres. There is a scarcity of reagents and other chemicals and equipment.

"Many pharmacy academics have faced terrorist threats, increasing the brain drain from schools of pharmacy. This has contributed to the reduction in quality of teaching. Students, too, have faced terrorism and capture and some have lost one or two academic years as a result. Others have been killed by mortar attacks or mine explosions on their way to or from college. It is my sincere hope that this situation improves in the near future and that our future young pharmacists become 'five-star practitioners' for the benefit of the communities they serve."

If you want to learn more about Dr Ali, he is one of 12 pharmacists keeping an online diary on the FIP website at www.fip.org/weblogs. You can also contact him via that site. ✂