

Urology in Syria: A View From Inside

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Damascus is the capital of Syria and one of the oldest continuously inhabited cities in the world. The city had an estimated population of 2 079 000 in 2019[1]. It is the birthplace of Ibn al-Nafis (1213 to 1288), who has been described as "the father of circulatory physiology." In his book, *Al-Mugiza*, Ibn al-Nafis distinguishes between kidney stones and bladder stones[2]. Moreover, he was the first to describe the vesicoureteral anti-reflux mechanism, which our contemporary understanding corroborates[3].

The school of medicine at Damascus University was founded in 1903 and is one of the top 10 international providers of licensed physicians in the United States[4]. In the last decade, the Syrian crisis has led to an exodus of Syrian physicians from different subspecialties, including urology[5]. It is mainly the young doctors who leave, because of concerns about safety and limited opportunities for comprehensive postgraduate training, as well as to avoid mandatory military service[6]. Consequently, there is a shortage of specialized physicians outside major cities.

The Syrian crisis is not a traditional war. The whole society is a battlefield, with civilian facilities, including health care facilities, treated as targets[7].

Moreover, the devaluation of the local currency (in 2009, 1 USD was worth 46 Syrian pounds; in 2022, 1 USD is worth 4000 Syrian pounds) and the militarization of the health care system have impacted health care spending. For example, more funds and resources are allocated to treat war victims who suffer from life-threatening injuries, and less is invested in chronic disease care and screening programs[5].

All these things have directly and indirectly changed the urology disease spectrum in Syria, with increases in the number of complex urethral injuries, late presentations of prostate and kidney cancer, and the number of young patients with bladder cancer. At the same time, hospitals are less able to acquire or maintain equipment and disposables required for endourology surgery and laparoscopic surgery. The scarcity of resources has challenged practicing urologists in our country to tailor their practice accordingly.

While the international urology community is embracing mini-PCNL for staghorn stones, urologists in Syria are running backward in time to perform open pyelolithotomy and open nephrolithotomy. At the same time as international colleagues have the luxury of offering a cornucopia of procedures to treat BPH, traditional TURP in our part of the world might be canceled due to a shortage of irrigation fluid.

As the data from the PEACE-1 trial showed that a triplet combination improves overall survival of de novo metastatic castration-sensitive prostate cancer, surgical castration might be the only option the urologist can offer in Syria[8]. Sharing the news with patients that they have metastatic renal cell and bladder cancer is like sharing a death sentence with them.

Even affluent citizens who can afford to travel to other countries for treatment and are lucky enough to get an entry visa are vulnerable to medical scams, to being overcharged, and to having unnecessary procedures recommended. Some of these patients come back to Syria without proper documentation of their treatment or a follow-up plan[9].

Key Words

Urology, Syria, conflict zone

Competing Interests

None declared.

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The training of future urologists locally is another challenge. Intelligent, dedicated residents have limited exposure to new technologies such as laser treatment of kidney stones, PCNL, staplers, and sealing devices. Added to this, opportunities to close the gaps in residency training through hands-on courses at international urology society meetings are now non-existent—as are opportunities for advanced postgraduate training abroad.

Several humanitarian agencies have worked tirelessly with different parties to facilitate access to primary care medications such as antibiotics, painkillers, and vaccines for children. In addition, in specific scenarios, these agencies were able to establish primary care centers and equip them with essential tools such as

X-ray, CT, and hemodialysis machines^[10]. We believe that international urology societies should coordinate with humanitarian agencies to play a role in ensuring that urologists in conflict zones have access to modern essential surgery tools and life-prolonging medications.

Another avenue of support for the urologist community in Syria and other conflict zones around the world is to invest in training a new generation of urologists. This can be achieved by granting these urologists unlimited access to e-courses, podcasts, recorded webinars, and surgical educational material. As more platforms are available to facilitate tele-proctoring, international urology societies might collaborate to offer tele-proctoring programs to the global urology community.

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