Trends Towards Sub-Specialization in Urology: What About Morocco?

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The tremendous expansion of medical knowledge has created challenges for learners and practitioners. Subspecialization, defined here as a limitation of practice to a confined and sophisticated niche of the whole specialty, has created experts who have delved into new fields of research and have presented new perspectives and new discoveries[1]. In the most developed countries, sub-specialization is becoming a standard of practice. Elsewhere, however, limited resources make sub-specialization unaffordable, particularly in countries that are still struggling to achieve basic medical coverage for their populations. Morocco is a developing country that has made great economic and social progress in recent decades. The health system has been revised in its social and economic aspects by the introduction and expansion of compulsory health insurance and the stimulation of private investment. Productivity and profitability are defined as the new foundation.

Sub-specialization, as indicator of quality is, to our knowledge, rare in the Moroccan context. In contrast to certain specialties that have been oriented towards sub-specialization, such as paediatrics and cardiology, the general practice remains dominant in the urology field, few urologists pursue a sub-specialized practice in Morocco, and their influence is certainly limited. The main obstacle is the limited number of urologists. According to official statistics, there were 351 urologists in Morocco in 2019 for 35.5 million inhabitants, that is 0.9 urologists per 100 000 inhabitants[2]. This figure is low compared with developed countries such as the United States, with 3.22 urologists per 100 000 inhabitants[3] or France, with 2.06 per 100 000 inhabitants[4]—and even compared with other specialties in Morocco.

The low number of urologists in Morocco makes the issue of sub-specialization secondary to the establishment of adequate health coverage in the peripheral areas. However, a rapid increase in the number of urologists, thanks to the greater number of university teaching hospitals (currently 8), is improving medical coverage in the undermedicalized zones. The objective is to increase the yearly number of medical school graduates from the current 2092 to 6530 in 2025[5].

On the educational level, the fellowship system for post-graduate sub-specialized training is predominant in English-speaking and Commonwealth countries. Morocco, however, follows the French system in which post-graduate education is based on university diplomas. While the fellowship training relies on a well-structured clinical and research path inside clinical departments, the Moroccan system is based mainly on theoretical courses supported by less structured practical and research training.

Furthermore, Moroccan universities do not offer a great choice of diplomas— in either number or area of coverage[6].

At the institutional level, although the university teaching hospital departments are currently well endowed with medical equipment, the orientation towards sub-specialized practices remains an individual decision rather than being dictated by a care policy. Urology in particular is a dynamic and rich specialty.

Key Words	Competing Interests	Article Information
Urology, Morocco, health, developing countries	None declared.	Received on March 17, 2023 Accepted on April 5, 2023
		Soc Int Urol J.2023;4(3):162–163 DOI: 10.48083/WJR07072

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The lack of sub-specialization in high-volume centres such as university teaching hospitals delays the learning curve and produces surgeons who lack the skills for some complex and time-demanding procedures. To find an equilibrium between "minor" surgical interventions, which are numerous and will consume operating room time, and "major" interventions, which bring prestige to the department, is challenging.

In some countries, the organization of the health system requires a level of quality matching with a high level of sub-specialized practice. In France, for instance, the creation of national network for authorized centres to deal with rare cancers implies a highly specialized practice in these centres[7]. In the same country, the practice of oncological surgery is framed by a threshold of a minimal number of yearly cases[8]. This measure highlights the link between quality of care and level of expertise. In the Moroccan context, however, it is widely recognized that maintaining a highly specialized practice in the private sector is not a great advantage in view of the scarcity of private urologists: 167 in

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2019[9]. Additionally, in Morocco, the pricing system of the social security bodies does not accept the excess fees imposed by sub-specialized expertise, creating an implicit disincentive[10]. For these reasons, it is difficult to abandon general urology practice in the private sector in favour of a sub-specialized practice.

Considering the accelerated development of medical knowledge in different fields, the evolution towards surgical excellence will certainly impose the expansion of sub-specialization in the near future. The creation of referral centres able to promote the level of local training and produce local guidelines, particularly in cancer and infectious diseases, is needed. Making Morocco a leader in its African environment and an exporter of medical knowledge is perhaps only feasible through a restoration of the entire health care system towards sub-specialty training in coming years.

Acknowledgments

The authors would like to thank Mme Fiqhi Zahra and Mme Smahane Doukkali for their technical support.

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