## **COMMENTARY**

## The paucity of urology undergraduate education in medical schools - global challenges and opportunities

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This study from the University of the West Indies (UWI) Medical School in Trinidad¹ offers a contemporary end user (medical school graduates) assessment of undergraduate urology education in the English-speaking Caribbean. It has clear implications for medical school training worldwide especially those in Lower and Middle Income Countries (LMICs).²

Urology medical school exposure has shrunk dramatically over the last few decades. In the mid-2000's, only 17%-20% medical schools in the USA had a mandatory urology clinical clerkship but this dropped dramatically to only 5% by 2014.<sup>34</sup> The findings in the present study are of concern especially in areas of the world with few practicing urologists and where urology is not a well-developed specialty. The students in the UWI study expressed a lack of confidence in managing common urological conditions, performing a basic urological physical examination and recognition of urologic emergencies.

Urology education has been dramatically curtailed in the modern medical school undergraduate curriculum. Urology is a true "hybrid" of office based and surgical (endoscopic, robotic, open) practices. Primary care doctors treat conditions such as erectile dysfunction, urinary tract infections, lower urinary tract symptoms and are the "gate-keepers" for urology referrals (e.g. PSA screening for prostate cancer, hematuria etc.). Undergraduate exposure to a core curriculum in urology has obvious benefits to not only students interested in becoming urologists but also to all students irrespective of their future practice settings (primary care, other medical and surgical specialties).

Address correspondence to Dr. Grannum R. Sant, 82 Dennison Street, Gloucester, MA 01930 USA Although formal undergraduate medical school has decreased dramatically in US medical schools, urology remains a popular and highly competitive postgraduate career choice for medical students. Digital e-learning and multimedia e-platforms are emerging to fill the gap in medical student urology education.<sup>5</sup> The American Urological Association (AUA) medical student Core Curriculum represents one example of an educational innovation to fill this gap. Another approach pioneered by the Karolinska Institute is via a Massive Open Online Course (MOOC).<sup>6</sup>

The undergraduate curriculum in medical schools is clearly in need of change and innovation to address the significant "gap" in undergraduate urology training and education. Modern communication techniques - self-learning, remote-learning, multi-media, synchronous/asynchronous, spaced learning, massive open online courses etc. – have the potential to contribute to the solution to the problem of a diminished urology undergraduate education.

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