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EDITORIAL

A Call for Greater Participation of Academia in Public Health

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Academia is the pursuit of scholarly disciplines at institutes of higher education. Traditionally much respected, its detractors accuse the academicians of living in silos, arrogantly sitting on their high horses, and being aloof and detached from the harsh realities of the real world. Moreover, its insistence on paying respects at the altar of evidence-based medicine has led to satires about subjecting even common-sense interventions, like the use of parachutes, to a randomized controlled trial [1]. Recent inquiries into sub-optimal tackling of the ongoing COVID pandemic have found massive global failure at multiple levels [2–4]. Not surprisingly, such introspection has put the performance of academia under a lens and called for reforms [5].

Many pressing issues facing health care today like noncommunicable diseases, various barriers to health equity, and infectious disease outbreaks such as COVID-19 are relative gaps in the individualized patient-centric approach of medical-surgical academia [5]. To counter such allegations in academia, one area hitherto less visited by academic surgeons and physicians is clinical epidemiology and public health. Our own foray into this has been a most satisfying journey.

Changing times demand a healthy dose of public health to incorporate the much-needed "balancing" ingredients for the academia. Such a reform is not as unreasonable as it sounds ab intio. Various examples of rotation of postgraduates in the periphery for community medicine and surgery already exist, as in the army they are posted in field surgery to learn "triage."

Day-to-day practice in clinical departments will automatically mold the residents into thinking about the public health aspect of each patient they see and treat. Additionally, various important lessons learned from outbreaks of HIV, SARS, and COVID will avoid the knee-jerk reactions seen in the recent past and allow training and production of "epidemiologically aware" surgeons who can rise to the occasion as and when faced with public health challenges. And finally, any additional knowledge of epidemiological study designs and statistical methods can only enhance the methodological rigors of clinical studies. Training in epidemiology surely makes more astute clinicians.

Advocacy plays a big role in public health. Elvis Presley (1935–1977) was an American singer and actor, dubbed as the "king of rock and roll." He is regarded as one of the most significant cultural figures of the twentieth century who revealed his tremendous social influence when he convinced Americans to accept the polio vaccine by himself taking it publicly [6]. Academic physicians and surgeons as leaders of society wield similar social influence and led changes in behavior like hand washing, mask-wearing, and vaccination during the COVID pandemic.

Public health, by definition and default, involves everyone and should ideally be the intersection of society with health [7]. *Rudolf Ludwig Carl Virchow* (1821–1902, the father of modern pathology) historically defined "medicine as a social science" [8]. There is no reason why academia should be an exception to either of these two dictums. Academia has this continuous cycle of learning, unlearning, and re-learning to move forward. It is changing for the better, vis-à-vis the inclusion of multiple diverse social categorizations [9]. Simultaneously, there is an added emphasis on learning as a route to progress and empowerment for health systems—particularly those in low- and middle-income countries—by developing the ability to generate and use the knowledge and skills they need for their constant improvement and performance [10]. Learning about and contributing towards *public health* is the logical extension of the same. Academic surgeons are natural leaders, and adding this *public health* facet can only enhance their leadership qualities; a win-win situation for all.

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Surgeons with sensitivity to public health aspects of disease will add huge value in their disposition of surgical cases. We surveyed over 1000 subjects soliciting surgical opinions for commonplace surgical procedures like hernias, cholecystectomies, breast lumps, hysterectomies, and ano-rectal problems. Over half had a co-morbid condition which though reported at some stage of the clinical conversation was largely ignored. Surgeons who often work like "surgical mazdoors" should adopt a larger role in studying and preventing the public health dimension of surgical diseases and co-morbidities. A *holistic* public health mindedness would lead the modern-day surgeon to discover and attend to all the frills of surgical disposition. Ubiquitous conditions like constipation, stress incontinence, and overactive bladder; concomitant anal fissure; snoring and sleep hygiene; articular and non-articular rheumatic conditions; and taenia infections—the list has over 50 co-morbid conditions not included in the surgical pre-operative checklist. Vitamin D and B12 deficiency in vegetarians are new found maladies. A *public health*-minded surgeon-physician would have inadvertently attended to these bringing much greater satisfaction and the much-needed patient-centric nuances rather than a *surgeon sahib* having done just the surgery. The new epidemic is the non-communicable diseases like diabetes, hypertension, metabolic syndrome, lifestyle management, depression, hypothyroidism, and rheumatism that must be understood and to some extent treated in surgical clinics itself. If one does not sing and dance, one must develop musical ears. Those initiated in *public health* have these magical musical ears that can make the surgical community take a highly desired approach. This, in our opinion, improves overall patient welfare and will bring greater respectability to the surgeon.

The medical community is sometimes charged with the adage, "the treatment you get is the door you enter" this means if you have a sick coronary artery you go to a conservative cardiologist who will give you medicines and advise on lifestyle changes, invasive cardiologist shall fix it by angioplasty and stent, and surgeon probably will plumb it with bypass surgery. This maxim will change once we all adopt and adapt to the principles of *public health and epidemiology* to dig out the best evidence for the patient's overall welfare.

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