

Research in medicine was born from inherent human curiosity to answer the unknown. Since the first peer-reviewed journal publication in 1665, the system of publishing, communicating and archiving scientific research has evolved to include commercial publishers of journals in the 1960s and e-publishing by 1990s. The impetus for this rapid growth stemmed from our insatiable desire to progress medical science. Consequently, this has resulted in ever-increasing expenditure on research initiatives which in turn, has led to growing numbers in researchers and research publications. Despite having improved patient care and outcomes, this well-meaning progress has witnessed a change in the metrics by which a clinician's success and contribution to medicine is recorded. These days, it is not just about the quality of care provided to patients. The "glamour guotient" of medicine has shifted somewhat from being great thinkers and teachers with astute clinical skills who shape a generation of future physicians, to how many grants one holds and one's "value" to the institution – in terms of the number of publications and citations.

The pressure is on the institutions to stand out among competitors, as well as to attract increased student and faculty enrolment and monetary grants. While most institutions provide highlevel healthcare, which is standardised thanks to various society guidelines, the number of publications and citations that are produced by each institution is a benchmark metric that registers its reputation. This pressure is invariably transmitted to the students, trainees and clinicians. Research activity and publication is now inevitably plugged to one's career path and development. Undeniably, the presence of publication bodes well for the chances of a graduate being accepted into a training programme and for a clinician to progress in his career.

As a result of the increased focus on research and publication, the volume of manuscripts submitted to journals has increased manifold. The pressure on the journals to deal with this increased mass without a proportional increase in subscriptions or sales is a unique challenge. To maintain their impact, there is a need to identify and process quality manuscripts faster with limited resources for suitable peer-review processes, resulting in high rejection rates from established journals. The pressure to get published and the limited avenues have unfortunately been exploited by an exponentially growing number of "predatory publishers" and open-access journals. They entice and promise authors fast and confirmed publication, but at a cost to be borne by authors which very often may be exorbitant. Moreover, with increasing diversity and sources of manuscripts, the possibility of scientific fraud is real and may taint the scientific information on which we base our judgements pertaining to patient care. The above factors may have a negative impact on the reputation of researchers and institutions.

The onus is then back on the institutions and individuals. There is an urgent need to recognise, establish and maintain a balance between the metrics that define a successful clinician. While good and ethical research should be promoted, the role of clinicians as service providers and educators should be lauded and held in equal esteem. Research and publication should be a fruit of an individual's passion and not an imposed endeavour. The research mentors must inculcate the right spirit of research in their juniors and make them aware of the perils of publications that exist in current times. In the longer run, quality may triumph quantity. ◆



DR MANISH KAUSHIK

Dr Manish Kaushik is a consultant in renal medicine at Singapore General Hospital (SGH). Following his training in medicine and nephrology at SGH, he pursued critical care nephrology in Italy. He is a core faculty and chair of the Program Evaluation Committee in the nephrology residency programme at Singapore Health Services.