Why did four urologists from America, Europe, China, and South Asia get together to edit yet another book on stone disease?

The story winds back to 1997, when one of the current editors, Jamsheer Talati, published jointly, with Roger A. L. Sutton, Farhat Moazzam, and Mushtaq Ahmed, a volume on urolithiasis. This was intended to capture and examine the new developments (of ESWL, laser lithotripsy, minimally invasive operative surgery to name a few) of the preceding two decades, and portray the management of vesical and upper urinary tract calculi. Methodologies were examined for their efficacy and cost effectiveness.

In the foreword to that book, Professor J. E. A. Wickham hoped for a world where technological advancements would be available to all… He wrote:

> Endoscopic stone removal and ESWL have more than justified their place in the surgical armamentarium on the grounds of outstanding efficiency and cost effectiveness as compared with previous methods of open surgery. Such effective new technology, saving as it does much expense, must surely be the way forward for any society, particularly where resources are radically cost contained and difficult to access for the poorer members of the community. Hopefully in the next twenty years economies will have improved so that a full range of interventional therapy for urolithiasis will become available to all populations in all parts of the world.

Fifteen years have passed and that vision has not materialized. Why?

One would expect that as treatment methods have become “easy” on the patient, and the technology has facilitated the surgeon, our hopes would have been achieved. On the contrary: Urinary stones are still found untreated in all corners of the globe; and the numbers are growing, for various reasons. There is a greater consciousness in the lay public, easier access to services…. But there are also possibly preventable recurrences; and the populations to be served are growing so rapidly. What we see as a result is that though larger segments of population can access sophisticated care, the proportion accessing anything other than open operation in poorer countries yet remains small. Silent stones destroy the kidney. Ignorance of the true prevalence and incidence thwarts planning efforts.

As the disease is seen across the world, we crafted this book with a host of exceptional specialists in each topic, in order to create a consilience of known facts in all fields—epidemiology, basic science, technology, management, prevention, education, ethics, fund raising. The book additionally whispers the need to study geological formations and soils, and to look beyond the urological, deep into society. The book combines all of that with a stimulation of new thinking on the management of this problem, and the need for innovation, stemming from the difficulties of addressing the stone problem effectively in so many parts of the world.

We hope that this book, in addition to assisting urologists in management of stone patients, will stimulate search for answers to critical questions: Are there any simple measures that will eliminate or reduce stone: Will diet and increased water intake vanquish the concreting enemy? What really is the cause of stone? And what is the meaning of the differences in distribution and composition of stones across the world?
To hit hard and eliminate stone disease from all parts of the world is going to be difficult. It will require that the treating physician not only manage the disease effectively but that she or he (i) be cognizant of all the information available and be able to connect all of that in a way that becomes knowledge useful for asking and answering questions on prevention and treatment; and (ii) be creative, and willing to explore the available epidemiological base and the basic science of stone formation to see if there is a new approach to management or a different opportunity for research.

To spread treatment across all parts of the globe, to more than two billion people in India and China alone, is a daunting task. How will we tackle seven billion? But with the entire world looking anew at its financial models of resourcing and spending, it is apt that this book help the readers to try and attempt to find a rational solution for each patient given the resources available; and to find the required resources when they are not easily visible.

How does one teach innovation? And how can one turn a tool into a piece of equipment that can be patented and sold? How does one get expensive equipment when one does not have money? Money is available; there are enough philanthropists to go all around. To engage their attention, trust and confidence have to be built, through exhibition of excellence in management and superlative results. That takes us back to training: It is vital that we train the next generations in concepts and techniques, and then tickle their ability to think through problems. To do so, one needs, once again, information and knowledge.

For governments too it is important that the individual executing stone management be competent and practice accepted, guideline-approved strategies, introduction ever-rising standards that cannot be challenged. Hence the need for consilience and the need to learn from all corners of the world.

What is needed at the end is Equity. This can be achieved through Excellence, Effectiveness, Efficiency, Innovation, Subspecialization, Evidence-based practice, and training that is certified through high-stakes assessment of superlative standards.

*Today, the competent lithotomist needs to be more than a cutting edge endoscopist.*

Every one—patient, government, administrator, and society—demands competence. Competence is based on professionalism, knowledge and skill. But a physician’s responsibility goes beyond that—to see that she or he eliminates the very disease that provides their bread.

Above all therefore it is hoped that this book will stimulate and instigate many urologists to take on the challenge of searching society and their environments for a path leading to the demise of stone disease.

The book attempts to address a major sector of a wide-open plateau of action that the urological trainee and the practicing urologist will need to continue to survey throughout their life. Above all, the book intends to assist the development of a complete Urologist who has many skills in addition to the technical.

Karachi, Pakistan  Jamsheer Talati
Stockholm, Sweden  Hans-Göran Tiselius
Syracuse, NY, USA  David Albala
Wuhan, Hubei, China  Zhangqun Ye