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CORR® International – Asia-Pacific: The Opportunities and Obstacles Associated with Clinical Research in Asia

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One of the benefits of working in the Asia-Pacific region is knowing that both the government and funding agencies, in an effort to create a global identity [2], are committed to promoting clinical, laboratory, and biomedical research. Historically, the West has led the way in growing and developing modern medicine, but the economic slowdown in the United States resulted in, among other things, reduced research budgets

for many large scientific institutions [7]. In the Asia-Pacific region, however, the budget allocation for biomedical research is steadily increasing [3]. In fact, China could become the world's leader in science and technology spending by 2019 [10]. Indeed, China, South Korea, Japan, and Singapore are fast becoming research powerhouses.

This is likely the best time to be a researcher in the Asia-Pacific region. In a sign of scientific progress, we are seeing more international collaboration among biomedical scientists across the globe. Professional groups such as American Academy of Orthopaedic Surgeons promote multicenter studies involving eminent surgeons from renowned institutions in various countries. Such multicenter studies break ethnic and racial barriers and minimize geographical

biases, and produce high-level evidence that point to holistic solutions.

Orthopaedic surgeons from Asia-Pacific regions must utilize such collaborative efforts in conducting clinical trials. Furthermore, there is no shortage of healthcare-related problems that are unique and relevant to Asians that require more clinical trials. For example, anthropometric studies can guide implant designs for arthroplasty and trauma surgery in ways that may improve results for Asian patients [6, 8]. Although the quality and quantity of TKA research has increased considerably in the last decade, most notably from Japan, Korea, and China, there remains a great need for basic and epidemiological research on the differences of Asian population from their Western counterparts [5]. For example, even the smallest femoral intramedullary nail is sometimes too big for insertion in Asian women. Additionally, there is an increased focus on unplanned readmissions after joint replacement in North America, and this research can guide best practices and improve health economics, but little information is available on this topic in Asian countries [9].

A Note from the Editor-in-Chief:

I am pleased to introduce the next installment of "CORR International – Asia-Pacific." In this quarterly column, Professor T. K. Kim covers the issues of moment to orthopaedic surgeons and scientists practicing in the Asia-Pacific region, where nearly a quarter of CORR's readers are located. Prof. Kim, from Seoul, South Korea, is an internationally renowned knee surgeon and one of CORR's Deputy Editors.

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Although research funding and manpower are not major obstacles, surgeons in Asia face unique challenges that may hinder their research activities. First, many Asian surgeons bear huge patient loads with lengthy clinic hours. Rather than fretting over the burden or the repetitiveness, I see this as an opportunity. A large number of patients is the best means we have to answer the important unanswered research questions that remain. With that spirit, time spent in clinics can be delightful. But everyone has his or her limits. At a certain point, the clinical burden simply takes up so much time that high-quality clinical research simply cannot be added to the workload. How many quality clinician-scientists are we losing to the outpatient clinics? Limiting the number of patients in outpatient clinic by streamlining appointments as well as hiring more junior doctors and researchers to strengthen the team might mitigate this important problem.

Second, a lack of mutual trust among patients and doctors leading to violence against doctors (especially in China and India) is an issue more common in Asian medicine than in the West. Many factors contribute to dissatisfaction among patients: Unrealistic expectations of patients from healthcare providers, growing discontent among patients because of soaring healthcare costs, and a lack of

empathy and compassion among some physicians. It is time to get to the root of these problems. Proper counselling of patients and their family members should be a priority. Surgeons should provide a succinct explanation about the disease, prognosis, and treatment rationale with a pinch of humane touch as a way to bridge the gap between clinicians and patients. Doing so will undoubtedly imbue patients with sense of confidence and trust for the treating doctor. Educating medical students on the importance of human values and communication skills can help reduce the number of incidents in the long-term. At the same time, proper grievance redressal mechanism and capping the prices of investigation and/or treatment are of critical importance.

Lastly, the indirect and implicit pressure toward publication can cause even an unwilling surgeon to pursue research activities. For example, many universities in China and elsewhere (ie, Qatar, and Saudi Arabia) pay huge financial rewards to researchers who publish in reputed journals [4], which has led to unethical publication practices like ghost authorship, fabricated peer review, plagiarism, and other academic misconducts [1]. Administrative mechanisms and/or professional bodies should be put in place to oversee research activities, and to ensure that quality research can withstand the

scrutiny of peer review and can contribute considerably to the scientific realm.

The current sociopolitical environment in Asia-Pacific region is conducive for clinical research. Clinicians in these regions must participate and strive to make the best use of it, and inspire next generation researchers to come.

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