

DOCUMENTING WHILE OPERATING; A CALL TO THE SURGEON AUTHOR IN AFRICA

That research is an integral component of orthopaedic practice is an undeniable fact. Research in orthopaedics and in particular region specific research must be integrated into patient management (1). It is clear that books and articles written and edited in western countries may not serve our needs in the developing world. The data represented in these publication is reflective of the needs of those countries and ignores some of the most common conditions we see in our setting (2). Because of this, it is necessary that we develop our own data which will find its way in our books so we may teach the next generation of orthopaedic surgeons relevant material that they will use every day in their practice. This will call for a concerted effort to document the clinical conditions we see and the outcomes of our interventions. This will only happen if orthopaedic surgeons in the region make a concerted effort to document their clinical experiences.

Basic research should be considered inseparable to clinical research and collaboration between the scientist and the clinician is highly encouraged (1, 3). We should also encourage collaboration between African researchers and their colleagues from the global north as this will resort in improving the quality of research (4). The study by Kigera *et al* (5) highlights the population differences in the scaphoid and the required stock of implants to manage its fractures. This kind of population specific basic research needs to be supported and resources dedicated to these efforts (1). Population specific research is also important to document unique challenges in a region and the adaptations surgeons may be required to make to effectively manage their patients. The case reports by Ong'ang'o *et al* (6) and Maina *et al* (7) document challenging cases where the management was adapted to the local situation. Without documenting these cases, a surgeon in the region in the same circumstances may be unable to adequately manage similar patients as they may only be aware of cases documented in western literature. Other unique situations such as the unavailability of diagnostic facilities may be a source of frustration for the orthopaedic surgeon in a resource limited setting. However, as highlighted by the paper by Muthuri (8), a thorough clinical examination can aid the surgeon in arriving at the correct diagnosis in a majority of cases. Thus in documenting their results, the authors have reassured surgeons that they can still provide similar quality of care to the one provided with sophisticated diagnostic modalities.

While it is clear that research especially that geared to solving local population specific problems has enormous benefits to our patients, few surgeons are engaging in research. Among those conducting research most are mainly in academic positions. The average

clinician rarely dedicates adequate time for research in his practice. Some of the challenges cited include lack of time, pressures of the clinical practice and lack of the skills to conduct research. The young orthopaedic surgeon in particular may not engage in research due to several barriers most of which are financial. The lack of resources to conduct research, pressure to earn more and the lack of a mentor are some of the reasons identified (9). Many centers of excellence in the western world have dedicated research academics whose role is to drive the research agenda. This is rare in the African setting. The orthopaedic surgeon in Africa is a clinician, researcher and administrator all rolled into one. There is hence need for the African orthopaedic surgeon to be supported in his quest to conduct research. This may involve having dedicated time for research, provision of adequate personnel and equipment and the provision of funding for the conduct of surgery. In addition to helping us manage patients better publishing has been determined as one of the markers of highly successful orthopaedic surgeons (10). This may be an additional incentive for orthopaedic surgeons to participate in research and publish their findings.

The outcome of research is usually data that needs to be shared with the scientific community. This is usually presented first in scientific meetings. While surgeons may be satisfied with presenting their data at a conference, it is likely that the threshold for presentation in a conference may be lower than that of peer reviewed publication and less than half of presented papers are published at 5 years (11). The surgeon should hence strive to improve the quality of their work and publish the data in a peer reviewed journal. While available data indicates that orthopaedic surgeons are publishing more, there has been a concern about the declining numbers of younger surgeons publishing research articles (12). While the reasons for this may be related to the barriers to research conduct indicated above, it is also likely that young surgeons have not been supported to acquire the skills necessary to convert their research work into scientific articles. While we encourage surgeons to participate in research, we should be wary not to increase inappropriate authorship which has shown a dramatic increase in the last 50 years (13). Authors should only be listed if they meet certain criteria which ensures that they have participated enough to warrant listing as an author (14).

Population specific research and publication of these findings by clinicians will provide relevant information that will aid in mitigation of the conditions in specific areas. It will also lead to the development of training of surgeons well acquainted in management of conditions they are more likely to encounter in their future careers.

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