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LETTER TO THE EDITOR

Knee Surgery, Sports Traumatology, Arthroscopy WILEY

Letter to the Editor concerning 'Evidence-based research in orthopaedics, sports medicine and rehabilitation—Why new studies should rely on earlier work'

Dear Editor,

We have read the paper entitled 'Evidence-based research in orthopaedics, sports medicine and rehabilitation—Why new studies should rely on earlier work' by Prill et al., published in *Knee Surgery, Sports Traumatology, Arthroscopy* (2024), with great interest [7]. The authors highlight an apparent underutilisation of synthesised evidence from systematic reviews in contemporary orthopaedic research. As systematic reviews provide the most comprehensive overview of existing literature, the authors implore their use as integral to the success of taking an evidence-based research (EBR) approach in the field of orthopaedic research and clinical practice.

We felt compelled to respond to this editorial to expand on the author's message and raise awareness of evidence-based anatomy (EBA) [3, 11], which also plays a key role for orthosurgeons.

The importance and applications of clinical anatomy are self-evident; however, most anatomical data are reported by single, observational studies that typically lack both standardisation and the statistical power to produce generalisable conclusions. EBA not only (1) provides standardised reporting guidelines for original anatomical also those in orthopaedics studies through the implementation of the Anatomical QUality Assurance (AQUA) Checklist [10] but also (2) provides accurate, evidence-based syntheses of anatomical data, through systematic reviews and meta-analyses, to improve clinical practice.

Through evidence-based principles, EBA allows for the syntheses of data obtained from thousands of subjects across all existing literature to obtain the true prevalence of anatomical variations [2, 5, 12], improve classifications important for surgical practice [2, 9, 12] and obtain true mean values of the biomechanical and morphological parameters of key anatomical structures [4, 6].

While EBR involves taking an evidence-based approach towards the design of new studies—driving the potential for further research in novel areas—EBA have direct clinical applications through their findings, including decreasing the risk of iatrogenic injuries and potentiating the development of new minimally invasive approaches [8]. EBA has the potential to uncover anatomical factors that influence clinical outcomes. Its quantitative results translate directly into clinical practice, helping to determine risk factors and improve diagnostic accuracy in the field of orthopaedics [1, 13]. Its principles may even be extended beyond conventional clinical anatomy to study the histopathological features associated with certain orthopaedic conditions [14].

It is our belief that EBA is natural complement classical evidence-based medicine. Frequently, the researchers do not realise that anatomy develops, evolves and novel methodological tools are utilised to provide new significant data and guide clinicians in their practice.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

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[Correction added on 6 January 2025, after first online publication: The title has been modified in this version.]

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