

Current State of Orthopaedic Literature: Concerning Trends in Volume and Impact

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INTRODUCTION: Academic research within orthopaedic surgery is often seen as a necessary component of professional advancement. However, it remains unclear how this impacts both the volume of literature produced, and the subjective quality it provides.

METHODS: Publication volume trends in orthopaedic surgery were investigated from 1950-2020. Similarly, citation data and impact factor was examined from 1997-2019, and volume of indexed orthopaedic related journals was examined from 1980-2019. Additionally, a survey was developed and distributed electronically to an institutional alumni network and two specialty society memberships in order to gauge subjective opinion on the current state of orthopaedic literature.

RESULTS: Number of orthopaedic related publications rose from 9,336 in 2000 to 49,950 in 2020. Number of indexed orthopaedic related journals also increased from 28 in 1980 to 84 in 2019. Average impact factor of all orthopaedic related journals rose from 0.75 ± 0.54 in 1997 to 2.14 ± 1.21 in 2019 ($p < 0.01$). Only roughly 10% of indexed journals accounted for nearly 50% of total citations during this time. 127 participants responded at least in part to our survey. Most (76%, $n=91$) felt that external pressures were a detriment to orthopaedic literature, and that too much weight is placed on the number of publications someone has as opposed to the quality of studies they produce (79%, $n=95$).

DISCUSSION AND CONCLUSION: Current trends in orthopaedic literature raise concerns for the sustainability of producing high quality research. It is possible there exists a conflicting agenda between volume and clinical impact, and examination of the publication culture within our field is needed if we hope to maintain value as the ultimate goal.

