## Unveiling the Paradox: The Price of Open Access Orthopaedic Publications and the Elusive Impact Factor

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INTRODUCTION: While open access orthopaedic journals have gained considerably in numbers and publications, authors need to consider the financial burden of paying article processing charges (APCs) and concerns about credibility and impact before considering submitting their research for publication. The objective of this study was to compare the APC charges of open access orthopaedic journals and their impact factor (IF) of current orthopaedic open access journals.

## METHODS:

We identified all the open access journals related specifically to orthopaedics and published in English. The journal's website was examined to ensure that its publication was only open access and was not a hybrid publication with a subscription-based publication, as well as to determine the APC. We used data from Clarivate Analytics to determine the journal impact factor (IF) for the journal. We determined the number of open access journals with an IF >2, the mean IF of subscription based orthopaedic journals.

## RESULTS:

There are 44 open access orthopaedic journals from 29 publishers. There were 12 journals with no APC, all being published by an orthopaedic society. The 13 journals that charged $<\$ 1,000$ US had an IF ranging from $0.3-2.38$, with only 1 having an IF>2. The APC was between $\$ 1,000-\$ 1,999$ US in 8 journals, the IF ranged from 0.351-4.166 and 4 journals had an IF>2. Ten journals had an APC between \$2,000-\$2,999 US and an IF between 0.691-4.64. Only $50 \%$ of these journals had an IF>2. There was 1 journal that charged $\$ 3,000$ and it had an IF of 0.25 . DISCUSSION AND CONCLUSION:
Open access orthopaedic journals have variable APC charges that can be up to $\$ 3,000$ US. The APC fee is not necessarily related to the journal's impact. Despite their publication fees, open access journals are only comparable to subscription based journals IF in $27 \%$ of the cases.

