

Orthopaedic Trauma Association Annual Meetings Consistently Optimize Academic Value for Attendees

Neil Jain, Nareena Imam, Zachary Zook, Emily Irlbeck, Douglas W Lundy, Dustin Adam Greenhill

INTRODUCTION:

The annual meeting program committees for orthopaedic subspecialty societies now receive more abstract submissions while conference durations remain similar. This study estimated the quality of the Orthopaedic Trauma Association (OTA) annual meeting by analyzing abstract acceptance and publication characteristics.

METHODS:

Abstracts featured in recent OTA annual meetings (2017-2021), whereby presentations had three subsequent years to reach publication, were reviewed to determine annual acceptance rates, publication status, country of origin, study type, level of evidence, journal impact factor (JIF), and time to publication. The 2020 annual meeting was excluded due to a limited attendance format. Abstracts published with dissimilar results, altered methodology, or lacking the original first author were excluded.

RESULTS:

The abstract acceptance rate during the study period averaged 23±4% despite the number of submitted abstracts varying per year. Among 1001 included abstracts, 691 (69.0%) were published in peer-reviewed journals. The vast majority (92%) were published after the annual meeting. The JIF of publications averaged 3.2±5.0 without significant variation between years. Featured abstracts were most commonly retrospective (n=436; 63.1%). Podium presentations were published at a significantly higher rate than posters (77.4% versus 64.9%, respectively; p<0.001), and had a higher average JIF (4.1±7.9 versus 2.7±1.3, respectively, p=0.001). A total of 122 unique journals published abstracts, with the *Journal of Orthopaedic Trauma* publishing the highest proportion of articles (n=232).

DISCUSSION AND CONCLUSION:

Abstracts featured in recent OTA annual meetings boast high rates of subsequent publication in relevant journals. This implies that the OTA annual meeting offers strong educational value. When compared to posters, podium presentations were more often published and appeared in higher impact journals. However, the increasing prevalence of publication among both podium and poster presentations is encouraging for authors looking to substantiate the educational value of their research.

Table 1. Characteristics of Accepted Abstracts at Recent Orthopaedic Trauma Association (OTA) Annual Meetings.

Year	Podium	Poster	Total	Abstracts Submitted	Abstract Acceptance Rate	Average Level of Evidence
2017	99	171	270	976	27.7%	2.94±1.57
2018	81	140	221	1008	22.0%	2.77±1.57
2019	78	150	228	1155	19.7%	2.84±1.82
2021	51	181	232	1114	21.8%	2.92±1.78

Table 2. Study Type of Published Abstracts per Year.

Study Type	2017	2018	2019	2021	Average Time to Publication (months)
Basic Science	3	1	0	2	16.0±2.00
Biomechanical Cadaveric	2	4	8	2	23.0±2.16
Diagnostic	0	0	0	0	0.0±0.00
Biomechanical	10	15	20	15	19.0±3.17
Retrospective	10	10	12	8	19.0±2.52
Prospective	124	80	100	170	18.0±2.10
Review	4	2	2	2	19.0±2.71
Other	1	1	2	2	12.0±1.11

Table 3. Published works are represented by level of evidence.

	I	II	III	IV	V	p value
Podium presentations published in peer-reviewed journals	23	18	11	10	10	0.142
Abstracts published in peer-reviewed journals	10	10	10	10	10	0.001
Abstracts published in non-peer-reviewed journals	10	10	10	10	10	0.001
Abstracts published in non-peer-reviewed journals	10	10	10	10	10	0.001
Abstracts published in non-peer-reviewed journals	10	10	10	10	10	0.001
Abstracts published in non-peer-reviewed journals	10	10	10	10	10	0.001
Abstracts published in non-peer-reviewed journals	10	10	10	10	10	0.001
Abstracts published in non-peer-reviewed journals	10	10	10	10	10	0.001
Abstracts published in non-peer-reviewed journals	10	10	10	10	10	0.001
Abstracts published in non-peer-reviewed journals	10	10	10	10	10	0.001

Table 4. Number of Published Abstracts Submitted to the Top 10 Accepting Journals.

Journal	2017	2018	2019	2021	Total	Average Time to Publication (months)
Journal of Orthopaedic Trauma	10	10	10	10	40	19.0±2.10
Journal of Bone and Joint Surgery American Volume	10	10	10	10	40	19.0±2.10
Orthopaedic Trauma	10	10	10	10	40	19.0±2.10
Journal of Orthopaedic Research	10	10	10	10	40	19.0±2.10
Journal of Orthopaedic Surgery and Sports Medicine	10	10	10	10	40	19.0±2.10
Journal of Orthopaedic Surgery	10	10	10	10	40	19.0±2.10
Journal of Orthopaedic Surgery and Sports Medicine	10	10	10	10	40	19.0±2.10
Journal of Orthopaedic Surgery	10	10	10	10	40	19.0±2.10
Journal of Orthopaedic Surgery	10	10	10	10	40	19.0±2.10
Journal of Orthopaedic Surgery	10	10	10	10	40	19.0±2.10