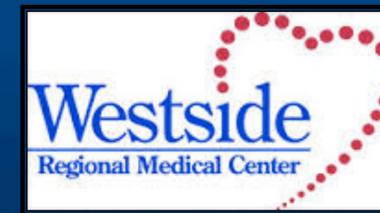




Publication Rates for Oral Manuscript and Poster Presentations From The American College of Foot and Ankle Surgeons: 2010-2014



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Statement of Purpose

The purpose of this retrospective study was to access the journal publication rates for abstracts (oral manuscript, poster) accepted for presentation at the annual American College of Foot and Ankle Surgeons (ACFAS) conference between 2010 to 2014. The number of accepted abstracts, publication rate, mean time to publication, publication rate within 3-years, and most common journal of publication were calculated. The ACFAS abstract publication rate between 2010 to 2014 was then compared to the ACFAS rate between 1999 to 2008, and the American Orthopedic Foot and Ankle Society conference rate between 2008 to 2012.

Introduction

The American College of Foot and Ankle Surgeons (ACFAS) recently celebrated their 75th annual conference, which boasted record-breaking attendance (>1900 attendees) (1-2). Since the society's inception in 1942, the annual ACFAS conference has served as a premiere platform for disseminating the latest innovations, and research in the field of foot and ankle surgery. The number and variety of abstracts submitted by Foot and Ankle Surgeons (FAS) for presentation at the conference continues to increase annually. Prior to acceptance, all submitted abstracts are screened by a selection committee in order to curtail research unlikely to affect clinical practice, and maximize the educational quality for attendees. The quality of abstract presentations at national conferences is often accessed indirectly by the abstract to journal publication rate, which typically plateaus within 3 years of presentation (3-17). Orthopedic conference abstract publication rates have ranged from 34% to 73.7% (5-7). Similarly, prior abstract publication rates for the ACFAS from 1999 to 2008 were: 67.5% (139/206) for oral manuscripts, and 24% (198/825) for poster abstracts respectively (16-17). Although the field of foot and ankle surgery continues to experience exponential growth, no study has re-evaluated the ACFAS journal publication rate for abstracts presented since 2008.

Patients/Materials and Methods

All abstracts (oral manuscript, poster) accepted for presentation at the ACFAS conference from 2010 to 2014 were compiled by the Manager of Education Curriculum and Alliances, and the Assistant Director of Education Curriculum and Alliances at the ACFAS office. The titles of the abstracts, and author names were entered into a database. Oral manuscript and poster abstracts were grouped separately, and according to the year of presentation. Five foot and ankle surgery residents from various postgraduate years then conducted a comprehensive literature search using PubMed, Google Scholar, and Scopus of all accepted abstracts identified from 2010 to 2014, using July 1, 2017 as the cut off date. This allowed for a 3-year follow up from the most recent conference analyzed, and was desired as the abstract publication rate typically plateaus at this time (3-7). Assigned podium tract lectures, student abstracts, and abstracts from organizations outside of the ACFAS at the conference were excluded.

The titles, and authors were searched individually beginning with the authors name in PubMed. Consistency between the authors and title in the original abstract and final publication were required for a match. When the search identified multiple publications by the same author, a standard Boolean operator (AND) was used to combine the author names with title from the original abstract, similar to prior investigations (16-17). This was repeated as necessary with other author names using all possible combinations. If no corresponding publication was identified via PubMed, the process was repeated using Google Scholar, and then Scopus if necessary. If two of the five foot and ankle surgery residents failed to identify a match during their independent literature search, the abstract was deemed unpublished. If a consensus could not be reached, the corresponding author of the abstract was contacted directly for final verification (3 oral manuscripts).

The number of accepted abstracts (oral manuscript, poster) at the ACFAS conference between 2010-2014 were recorded by year. Abstract's published outside of journals were excluded. For each publication, the date of publication was recorded by month and year. The time to publication was recorded as the number of months from the initial presentation at the ACFAS annual conference, and the month of publication (online ahead of print or in-print) rounded to the nearest whole month. For abstracts published prior to presentation at the conference, the time to publication in months was assigned a value of 0. The number of accepted abstracts, publication rate, mean time to publication, and publication rate within 3-years of conference presentation were calculated for each annual conference, and collectively. The three most common journals of abstract (oral manuscript, poster) publication were calculated separately (oral manuscript, poster) and compared. This data is summarized in Tables 1-3. The number of accepted abstracts, publication rate, meantime to publication, and the most common journals of abstract (oral manuscript, poster) publication were then compared between the ACFAS from 2010 to 2014, and the ACFAS from 1999 to 2008 (Tables 4-5). Lastly, the number of accepted oral manuscript/podium abstracts, publication rate, meantime to publication, and the most common journals of abstract publication were compared between the ACFAS from 2010 to 2014, and the AOFAS from 2008 to 2012 (Table 6).

Microsoft Excel Sheets were used to collect and store all data. Categorical continuous data were summarized using counts, percentages, means, and standard deviation. Two-tailed t-test(s) were performed to determine significance between continuous variables, and Fisher exact test was used to assess trends in abstract publications over time. An odds ratio was calculated to determine any difference between manuscript and poster publication rates, meantime to publication, publication within 3 years of conference presentation, and the ACFAS 2010-2014 vs. ACFAS 1999-2008, and AOFAS 2008-2012. A P value of $\leq .05$ was statistically significant.

Results

Table 1
Manuscript Presentations ACFAS 2010-2014

	2010	2011	2012	2013	2014	Overall
Accepted	19	19	18	22	30	108
Published	16	16	14	17	20	83
Publication Rate (%)	84.2%	84.2%	77.8%	77.3%	66.7%	76.9%
Mean time to Publication (Range)	16.1 months (0-35)	14.5 months (0-44)	8.9 months (0-32)	4.7 months (0-16)	5.0 months (0-14)	9.8 months (0-44)
Published w/in 3 years (%)	100%	93.8%	100%	100%	100%	98.8%

Table 3
Overall Manuscript and Poster Presentations from ACFAS 2010-2014

	Manuscript	Poster
Accepted	108	1113
Published	83	258
Publication Rate (%)	76.9%	23.2%
Mean time to Publication (Range)	9.8 months (0-44)	20.9 months (0 to 66)
Most Common Journal of Publication (%)	JFAS: 51 (61.4%) Foot & Ankle Spec: 12 (14.5%) Foot & Ankle Int: 4 (4.8%)	JFAS: 160 (62.0%) Foot & Ankle Spec: 37 (14.3%) JAPMA: 11 (4.3%)

Table 5
Overall Poster Presentations ACFAS 2010-2014 vs. ACFAS 1999-2008

	2010-2014	1999-2008
Accepted	1113	825
Published	258	198
Publication Rate (%)	23.2%	24%
Mean time to Publication (Range)	20.9 months (0-66)	17.6 months (-46 to 75)
Most Common Journal of Publication (%)	JFAS: 160 (62.0%) Foot & Ankle Spec: 37 (14.3%) JAPMA: 11 (4.3%)	JFAS: 101 (51%) JAPMA: 29 (14.6%) Clinic's Pod Med & Surg: 10 (5.1%)

Table 2
Poster Presentations ACFAS 2010-2014

	2010	2011	2012	2013	2014	Overall
Accepted	174	193	197	315	234	1113
Published	36	45	48	77	52	258
Publication Rate (%)	20.7%	23.3%	24.4%	24.4%	22.2%	23.2%
Mean time to Publication (Range)	34.8 months (0-53)	20.2 months (0-60)	17.3 months (0-66)	17.8 months (0-49)	14.5 months (0-41)	20.9 months (0-66)
Published w/in 3 years (%)	88.9%	77.8%	85.4%	89.6%	92.3%	86.8%

Table 4
Overall Manuscript Presentations ACFAS 2010-2014 vs. ACFAS 1999-2008

	2010-2014	1999-2008
Accepted	108	206
Published	83	134
Publication Rate (%)	76.9%	67.5%
Mean time to Publication (Range)	9.8 months (0-44)	14.5 months (-34 to 60)
Most Common Journal of Publication (%)	JFAS: 51 (61.4%) Foot & Ankle Spec: 12 (14.5%) Foot & Ankle Int: 4 (4.8%)	JFAS: 105 (75.5%) JAPMA: 13 (9.4%) Diabetes Care: 6 (4.3%)

Table 6
Overall Manuscript/Podium Presentations ACFAS 2010-2014 vs. AOFAS 2008-2012

	2010-2014	2008-2012
Accepted	108	376
Published	83	277
Publication Rate (%)	76.9%	73.7%
Mean time to Publication (Range)	9.8 months (0-44)	18.4 months (-14.4 to 70)
Most Common Journal of Publication (%)	JFAS: 51 (61.4%) Foot & Ankle Spec: 12 (14.5%) Foot & Ankle Int: 4 (4.8%)	Foot & Ankle Int: 140 (50.4%) JBJS Am: 36 (13.0%) Foot & Ankle Spec: 9 (3.2%)

Discussion

Overall, the journal publication rate for oral manuscript presentations from the ACFAS conference from 2010 to 2014 was 76.9% (83/108). This rate exceeded the prior reported ACFAS oral manuscript publication rate from 1999 to 2008 (67.5%), and the recently reported AOFAS podium publication rate from 2008 to 2012 (73.7%). Interpreted with the increase in the number of accepted oral abstracts per year from 2010 to 2014 (mean 21.6 per year) compared to 1999 to 2008 (mean 20.6 per year); the publication rate suggests an increase in the quality of the oral presentations at the ACFAS-conference. Of the 83 oral presentations achieving journal publication, 61.4% (51/83) were published in the Journal of Foot and Ankle Surgery (JFAS), 14.5% (12/83) in the Foot and Ankle Specialist, and 4.8% (4/83) in Foot and Ankle International. Oral abstracts from both the ACFAS from 2010 to 2014, and the AOFAS from 2008 to 2012 were commonly published in both Foot and Ankle Specialist, and Foot and Ankle International. To date, the ACFAS oral abstract publication rate from 2010 to 2014 is the highest reported oral abstract publication rate for any national foot and ankle society conference.

Conversely, the journal publication rate for poster presentations at the ACFAS from 2010 to 2014 was 23.2% (258/1113). This rate was lower than both the prior reported ACFAS poster publication rate from 1999 to 2008 (24%), and the AOFAS poster publication rate from 2008 to 2012 (55.8%). Compared to oral presentations, posters were three times less likely to navigate the peer review process and achieve journal publication. While many plausible explanations may account for the continued disparity in the journal publication rate between oral/poster abstracts, the overall quality of the research presented may remain a factor (17). Increased resident participation at the annual conference may also account in part for the disparity; as residents may be less inclined or able to pursue journal publication following conference presentation compared to attending FAS's. The poster abstract publication rate would be more effected by this participation compared to oral abstracts, as the poster selection criteria, and competition are directed toward resident FAS's; who account for the majority of submissions to articulate ideas (Mary V. Meyers; personal communication, 07/27/2017). The number of poster abstracts accepted for presentation over the current 5-year study period (1113) exceeded both the number accepted in the prior reported 10-year period (825), and the AOFAS 5-year poster abstract acceptance rate (635). Interpreted with the increase in oral abstract acceptance rates, this finding further suggests an increase in research among FAS's since prior reports (16-17). The lower poster abstract publication rate may therefore partly reflect not only an increase in research among resident and attending FAS's; but also the increased quality of the oral presentations; as abstracts denied presentation orally are routinely offered presentation as a poster.

Overall, the mean time to journal publication was 9.8 (range, 0 to 44) months for oral manuscripts, and 20.9 (range, 0 to 66) months for poster abstracts. The mean time to publication for oral manuscripts was noted to decrease in 2013 (4.7 months, range 0-16 months) and 2014 (5.0 months, range 0 to 14 months). Of the 19 oral manuscripts accepted for journal publication prior to conference presentation, 12 (12/19, 63.2%) were represented within one of these two conference years. Therefore, the decreased mean time to publication during these years is likely more reflective of journal acceptance prior to the conference, rather than an increased efficiency in journals peer review/publication process. Although abstracts from 2010 to 2014 will likely continue to be published outside the review period of this study, the overall three year publication rate was 98.8% (82/83) and 86.8% (224/258) for oral, and poster abstracts respectively. These findings are in agreement with prior reports (3-7), which have demonstrated that the majority of abstracts presented at national conferences that go on to journal publication do so within 3 years. We are confident our data would not be significantly affected by abstracts published outside our study period. While there are many plausible explanations for why presented abstracts may not achieve journal publication, these were not directly addressed in this investigation. Future research on the journal publication rates from ACFAS conferences should investigate the reasons behind failure to pursue, or achieve journal publication among resident and attending FAS's.

In conclusion, the ACFAS oral manuscript publication rate from 2010 to 2014 (76.9%) exceeded its prior reported rate from 1999 to 2008 (67.5%), and the recently reported AOFAS podium publication rate from 2008 to 2012 (73.7%). To the best of our knowledge, the ACFAS oral manuscript publication rate is the highest reported rate of any national foot and ankle society conference to date. Attendees of the oral presentations, and readers of the Journal of Foot and Ankle Surgery may therefore be confident in the quality, and clinical significance of the research presented. Future investigations on the journal publication rates of abstracts from ACFAS conference should aim to identify the reasons behind failure to pursue, or achieve journal publication.

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