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Publication Barriers of Oral Abstracts From the American College of Foot and Ankle Surgeons: 2010–2014

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ABSTRACT

Despite possessing the highest oral abstract publication incidence for any national foot and ankle society conference to date (76.9%), it remains unclear why almost a quarter of the oral abstracts accepted to the annual American College of Foot and Ankle Surgeons (ACFAS) conference fail to achieve journal publication. The purpose of the present study was to assess the publication barriers of oral abstracts from the ACFAS conference: 2010 to 2014. Unpublished oral abstracts from the temporal period were procured from a database. A questionnaire was then distributed to the primary authors to determine the current status of the abstract, as well as the reasons for the failure to pursue or achieve journal publication. Of the 25 oral abstracts that failed to achieve journal publication before July 1, 2017, a total of 11 questionnaires were completed. At the time of the survey, 4 oral abstracts had since been published in a journal, 1 had been published outside of a journal, and 6 had never been submitted for publication consideration. An insufficient amount of time for manuscript preparation (42%), difficulties with co-authors (30%), and a low perceived priority (17%) were the 3 primary reasons authors cited for the failure to publish. Based on the principal barriers identified, a series of recommendations have been proposed to improve the future publication incidence of oral abstracts from the ACFAS conference and research productivity amongst foot and ankle surgeons.

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The 2 largest professional societies currently representing board-certified foot and ankle surgeons (FASs) in the United States are the American College of Foot and Ankle Surgeons (ACFAS), and the American Orthopedic Foot and Ankle Society (AOFAS). Several studies have assessed the publication incidence of oral abstracts presented at each respective society's annual meeting (ACFAS 76.9%, AOFAS 73.7%), which have served as indirect proxies for the quality of the content presented to conference attendees (1–4). The ACFAS oral abstract publication incidence from 2010 to 2014 (76.9%, 83 of 108) is currently the highest reported for any national foot and ankle society conference to date (4). Factors associated with the conversion of an oral abstract to a journal publication (JP) and the time to publication (TP) have been identified; however, it remains unclear why almost a quarter of the abstracts ultimately failed to achieve JP (4–6). The purpose of the present retrospective study was to assess the publication barriers of oral abstracts from the ACFAS conference from 2010 to 2014.

Materials and Methods

From previous studies (4,5), databases containing information on oral abstracts (n = 108) accepted for presentation at the ACFAS conference from 2010 to 2014 were procured. The first database included basic information originally compiled and provided by the ACFAS office (author names, abstract titles, and year of presentation), as well as information determined subsequently thereafter (publication incidence, mean TP, JP, and publication within 3 years of conference presentation) for the purposes of the original study (4). The second database included abstract- and author-specific variables for each of the 108 abstracts (5). Using the databases, all unpublished (prior to July 1, 2017) oral abstracts (n = 25) from the ACFAS conference were identified and verified. Questionnaires for each abstract (n = 25) were then distributed in late May and early June 2018 to the primary authors (n = 23) via email (ACFAS Membership Directory or private email) to assess the current status of the projects (5). If a response was not obtained within 4 weeks of the initial query (n = 25), repeated attempts were made to contact the authors via email or telephone until communication was established or 5 failed attempts. Abstracts that had since achieved publication (after July 1, 2017) were verified using the manual search methods described in the original study (4), and the appropriate statement was recorded (statement 1 or 2, see next paragraph).

Questionnaire

The primary authors were first asked to select 1 of the following statements: 1) the oral abstract has since been published in a journal, 2) the oral abstract has been published outside of a journal, 3) the oral abstract has been accepted for journal publication (in press), 4) the oral abstract is currently under peer review by a journal, 5) the oral abstract was submitted and rejected by a journal, 6) the oral abstract was submitted but

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withdrawn prior to journal publication, and 7) the oral abstract was never submitted for journal publication. If an author responded with either statement 2 (the oral abstract has been published outside of a journal) or 7 (the oral abstract was never submitted for journal publication); they were subsequently prompted to select 1 or more reasons (limit of 3) for why journal publication had not been pursued or achieved. These reasons included 1) insufficient time, 2) insufficient institutional support (financial, material, staff), or formal research mentorship, 3) low perceived priority, 4) difficulties with co-authors, 5) responsibility tasked to another co-author, 6) poor results or outcomes, 7) low likelihood of perceived journal acceptance owing to methodologic weaknesses, and 8) the study is still currently ongoing.

Statistical Analyses

Data were collected from the survey and entered into a statistical database. Duplicate assessments of reliability and logic checks were then performed to limit inconsistencies and ensure accuracy. All data were analyzed using STATA software version 12 (StataCorp, College Station, TX).

Results

A total of 25 oral abstracts (of 108, 23.1%) from 23 primary authors failed to achieve JP prior to the previously established cut-off date of July 1, 2017 (4). Of the 23 primary authors surveyed, statements were recorded for 11 questionnaires, representing a response rate of 44% (11 of 25). Descriptive statistics are summarized in Table 1. At the time of the survey, 4 (16%) of the oral abstracts had since achieved JP (4%) had been published outside of a peer-reviewed journal, and 6 (24%) had never been submitted to a journal for publication consideration (Table 2). Thus, the overall journal publication incidence for oral abstracts from the ACFAS, 2010 to 2014, increased from 76.9% (83 of

Table 1
Descriptive statistics for sample

Factor	Total Sample (n = 25)
Institution type	
Academic	13 (52)
Nonacademic	12 (48)
Authors	3.9 (2 to 8)
Centers	2 (1 to 4)
Type of research	
Patient oriented	22 (88)
Basic or laboratory	3 (12)
Study design	
Case series	9 (36)
Retrospective cohort	8 (32)
Prospective cohort	2 (08)
Meta-analysis	2 (08)
Laboratory study	2 (08)
Cross sectional	1 (04)
Case-control	1 (04)
Funded	
No	25 (100)
ACFAS regional division	
Midwest	4 (16)
Great Lakes	4 (16)
Gulf States	4 (16)
Southeast	3 (12)
Northeast	3 (12)
Big West	2 (08)
Pacific	2 (08)
Tri-State	1 (04)
Mid-Atlantic	1 (04)
Level of training (primary author)	
Faculty	20 (80)
Fellow	2 (08)
Resident	3 (12)
Prior journal publications of primary author	5.24 (0 to 16)
Research degree	
None	19 (76)
Master's	6 (24)

Abbreviations: ACFAS, American College of Foot and Ankle Surgeons.
Data are n (%) or n (range).

Table 2
Current oral abstract status

Status	Abstracts (n = 25)
Never submitted for journal publication	24 (6)
Published in a journal	16 (4)
Published outside of a journal	4 (1)
Response not obtained	56 (14)

Data are % (n).

108) to 80.6% (87 of 108). Regarding the reasons for failing to pursue or achieve JP the authors cited an insufficient amount time for manuscript preparation (42%), difficulties with co-authors (30%), a low perceived priority (17%), and that the responsibility to mature the abstract had been tasked to another co-author (8%) (Table 3).

Discussion

To the best of our knowledge, no previous study has assessed the publication barriers of oral abstracts from the ACFAS conference. For this purpose, we surveyed the primary authors of the 25 unpublished oral abstracts from the ACFAS conference, 2010 to 2014 (4,5). Of the 25 distributed questionnaires, 11 were completed (9 authors), representing a response rate of 44% (11 of 25). At the time of the survey, 4 oral abstracts had since achieved JP; resulting in an increase in the publication incidence for oral abstracts from the ACFAS to 80.6% (87 of 108). Of the remaining abstracts, 1 had achieved publication outside of a peer-reviewed journal, whereas 6 had never been submitted for publication consideration. The authors of the abstracts cited an insufficient amount time for appropriate manuscript preparation (42%), difficulties with co-authors (30%), and a low perceived priority (17%) as the 3 primary reasons for the failure to publish (Table 3).

Sprague et al (7) first identified the principal barriers to the full-text publication of abstracts presented at annual orthopedic meetings. An inadequate amount of time to prepare abstracts for JP (46.5%), the presentation of preliminary findings of larger ongoing studies (31%), and the delegated responsibility of writing the manuscript to a co-author who had failed to produce a draft (19.7%) accounted for the 3 most commonly cited reasons for the failure to publish. These barriers led to a series of recommendations by the authors and the conclusion that "limiting acceptance to only completed research studies may improve the rates of subsequent publication" (5). However, of the 3 most commonly cited reasons, only an insufficient amount of time for manuscript preparation was identified in the present study as a principal barrier to the JP of oral abstracts from the ACFAS. Furthermore, in contrast to the previous study's findings, difficulties with co-authors and a low perceived priority were the next most commonly cited reasons for the failure to publish.

In the present study, we identified the 3 principal barriers to the journal publication of oral abstracts from the ACFAS conference. Based on the barriers identified, and considering the factors known to be associated with JP and TP of the oral abstracts (5) we propose a series of recommendations aimed at improving the future publication incidence for oral abstracts from the ACFAS conference, and research productivity

Table 3
Reasons for the failure to publish

Reason	Abstracts (n = 12)
Insufficient time	42 (5)
Difficulty with co-authors	30 (4)
Low perceived priority	17 (2)
Responsibility tasked to other co-authors	8 (1)

Data are % (n).

Table 4
Recommendations

Individual (4)

1. Allocate a realistic and consistent amount of dedicated research time (weekly, monthly) to complete a project within a predetermined timeline, before its initiation.
2. Clearly outline the specific roles and responsibilities required for each co-investigator to attain eventual authorship.
3. Avoid including co-investigators who are not equally as committed to the project to minimize intergroup conflict.
4. When developing close liaisons with outside institutions, preferentially select research focused FASs, or those with considerable publication experience.

Organizational (3)

5. Increase the availability of, and funding for, investigator initiated research grants.
6. Establish a consortium to collect and record the patient-reported outcome measures for various foot and ankle conditions.
7. Recruit young, research-oriented FASs to committees and task forces for the college.

amongst board certified FASs (Table 4). The most important recommendation is that authors allocate a realistic and consistent amount of dedicated research time (weekly, monthly) to complete a project within a predetermined time frame, before its initiation. It is important for co-investigators to do the same; and providing clear outlines regarding the roles and responsibilities required for each co-investigator to attain eventual authorship (abstract, manuscript) is also recommended. It is important that only co-investigators equally as committed to the project as the primary author be included; as intergroup conflict creates confusion, and threatens the shared constructive influences and servant attitudes of the projects team. Although a collective benefit may be gained from involving multiple co-investigators and institutions, minimizing difficulties that may potentially threaten the abstract's subsequent conversion to a full-text JP may become more problematic as the team's size increases. Therefore, when developing close liaisons with investigators at outside institutions, we recommend the preferential involvement of research-focused FASs, or those with considerable publication experience. These individuals can provide key insights, indispensable mentorship, and a bulwark of support, especially for nascent researchers. Finally, organizational (institution, professional society) recommendations include: increasing the availability of and funding for investigator initiated research grants, the establishment of a consortium to collect and record various patient reported outcome measures for various foot and ankle conditions, and the recruitment of young, research oriented FASs to committees, and task forces within the college. It is difficult to foresee how fostering opportunities and collaborations between inquisitive, enthusiastic young minds could result in anything but an increase in the research productivity amongst FASs.

This study has several limitations inherent to its design, namely selection and responder biases. However to minimize these biases, all abstracts deemed unpublished prior (4,5) were first verified by repeat manual searches (PubMed, Google Scholar, Scopus) before the distribution of the questionnaires. The authors of the abstracts subsequently identified as published after July 1, 2017, were first contacted to attempt confirmation of the publication before the questionnaire's completion (statement 1). Although it is plausible that the reported "current status" of an unpublished abstract may not represent the abstract's actual status, falsely reporting this information on the questionnaire for the purposes of the present study offers no foreseeable advantages to the authors, whose identities remained confidential. Of the 23 primary authors whose oral abstracts (25) were originally deemed unpublished (4,5) questionnaires were not completed for 14. However, overall, the response rate (44%) approximated the mean response rate identified previously for organized research (8).

In conclusion, the issue of how best to increase research productivity amongst FASs remains a question of continued debate. In the present study, we identified the 3 principal barriers to the JP of oral abstracts from the ACFAS and proposed a series of recommendations to improve the future publication incidence of oral abstracts after the annual conference. Future research is warranted to identify the factors associated with, and the barriers to the JP and TP for poster abstracts presented at the annual ACFAS conference.

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