Factors Associated with the Journal Publication of Oral Abstracts From the American College of Foot and Ankle Surgeons: 2010-2014

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Statement of Purpose

Despite acceptance by conference selection committees, not all abstracts presented at national foot and ankle conference presentations are published in peer-reviewed journals, and achieve journal publication; despite its obvious merits. The purpose of the present retrospective study was to identify factors associated with the journal publication, and time to publication for oral abstracts from the ACFAS conference from 2010 to 2014.

Introduction

National foot and ankle society conferences are used to disseminate the latest research, and innovations through oral, and poster abstract presentations annually (1-3). However, not all abstracts accepted for oral presentation by conference selection committees ultimately achieve a journal publication; despite its obvious merits. Although the American College of Foot and Ankle Surgeons (ACFAS) oral abstract publication database was initiated in 2010 to 2014; (4,5), it is currently the highest reported for any national foot and ankle society conference to date; factors associated with the successful conversion of an oral abstract publication to a final journal publication remain undetermined (1-3). The purpose of the present retrospective study was to identify factors associated with the journal publication, and time to publication for oral abstracts from the ACFAS conference from 2010 to 2014.

Patients/Materials and Methods

From a previous study (1), a database containing information on all the oral abstracts accepted for presentation at the ACFAS conference from 2010 to 2014 was procured. The database included basic information originally compiled, and procured by the ACFAS office (author, abstract title, year of presentation) as well as information subsequently gathered (publication incidence, manuscript submitted, journal publication, and journal publication time) for a period of 4 years (2010-2013) for the purposes of the original study (1). Using the database, two investigators (CR, DCR) performed manual searches (www.google.com) to identify, and record predictor variables previously associated with the successful conversion of an oral abstract to a final journal publication. These variables were classified as either author or abstract specific (1). Abstract specific variables included the abstract title type (academic versus non-academic), number of authors, number of centers, type of research (patient oriented, basic/laboratory), study design (meta-analysis, retrospective, cross-sectional, randomized clinical, prospective cohort, non-protographic cohort, case-control, case-series, laboratory study), funding (yes, or no), and the ACFAS regional division (Big Southeast, Great Lakes, Gulf South, Midwest, Great Pacific, Southeast, and Tri-State) (Figure 1). Author specific variables included the primary author’s level of training (fellow, resident, student, faculty), number of prior journal publications, manuscript type (abstract publication to a final journal publication), and the presence of a formal research degree (doctoral, master’s, bachelor’s).

Statistical Analysis

Data were collected, and entered into a statistical database. Duplicate searches, assessments of reliability, and logic checks (accuracy of data entered) were performed. Univariate descriptive statistics were calculated for all study variables. Bivariate analyses were conducted using the Mann-Whitney U-Test; Fisher’s exact test, chi-square test of independence, or Spearman’s rank correlation as appropriate. Multivariable logistic regression or a generalized linear model regression were employed to analyze variables as potential predictors of successful abstract conversion (yes, no) in a logistic regression model to predict time to publication (academic degree, number of authors, and number of publications), and on an independent and generalized linear model regression employed to predict time to publication (academic degree, number of authors, and number of publications). Funding was excluded from the logistic regression model since all studies were funded by the ACFAS regional division to determine if an association existed between the mean number of prior publications, and number of institutions, and the time to publication. For conditional prediction for the primary authors, and number of institutions, authors without a formal research degree were 12/72 time (95% CI: 2.25, 7.67) more likely to achieve journal publication.

Results

A total of 108 abstracts were accepted for oral presentation at the annual ACFAS conferences from 2010 to 2014. Of these abstracts, 76.9% (83/108) achieved journal publication prior to the previously established cut-off date (1); a mean of 6 (range 0 to 44) months following the conference. Overall, the majority of accepted projects were unfunded (50%), by a fellow attending junior (12%), or by a resident attending junior (12%); and the difference was statically significant (p<0.03). The mean number of authors (X ± SD) was 3.9 ± 1.4 (2.4), and the mean number of poster presentations was 10.5 ± 5.0 (6). Descriptive statistics for the abstract/presenter-specific variables, and bivariate associations with respect to the journal publication, and time to publication (TP) are summarized in Table 1. A logistic regression model was employed to predict successful project conversion (academic degree, number of publications, and number of institutions), and a generalized linear regression model employed to predict time to publication (academic degree, number of institutions, and funding). Funding was excluded from the logistic regression model since all studies were funded by the ACFAS regional division to determine if an association existed between the mean number of prior publications, and number of institutions, and the time to publication. For conditional prediction for the primary authors, and number of institutions, authors without a formal research degree were 12/72 time (95% CI: 2.25, 7.67) more likely to achieve journal publication.

Table 1: Predictor Total Sample (n=108) P-Value (t)<p>Table 2: Predictor Total Sample (n=108) P-Value (t)<p>

Discussion

One hundred and eight abstracts were accepted for one presentation at the ACFAS conference from 2010-2014. Of these abstracts, 76.9% (83/108) achieved journal publication prior to the previously established cut-off date (1); a mean of 6 (range 0 to 44) months following the conference. Overall, the majority of accepted projects were unfunded (50%), by a fellow attending junior (12%), or by a resident attending junior (12%); and the difference was statically significant (p<0.03). The mean number of authors (X ± SD) was 3.9 ± 1.4 (2.4), and the mean number of poster presentations was 10.5 ± 5.0 (6). Descriptive statistics for the abstract/presenter-specific variables, and bivariate associations with respect to the journal publication, and time to publication (TP) are summarized in Table 1. A logistic regression model was employed to predict successful project conversion (academic degree, number of publications, and number of institutions), and a generalized linear regression model employed to predict time to publication (academic degree, number of institutions, and funding). Funding was excluded from the logistic regression model since all studies were funded by the ACFAS regional division to determine if an association existed between the mean number of prior publications, and number of institutions, and the time to publication. For conditional prediction for the primary authors, and number of institutions, authors without a formal research degree were 12/72 time (95% CI: 2.25, 7.67) more likely to achieve journal publication.

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References
