J Turk Spinal Surg 2021;32(3):127-30
DOI: 10.4274/jtss.galenos.2021.83997

THE FATE OF ABSTRACTS PRESENTED AT TURKISH SPINE CONGRESSES IN 2015 AND 2017

Ömer Erşen, Anıl Özgür, Ali Murat Başak, Fahri Emre, Tolga Ege

University of Health Sciences Turkey, Gülhane Training and Research Hospital, Clinic of Orthopedics, Ankara, Turkey

ABSTRACT

Objective: Publication rates of the abstracts presented in the congress demonstrate the scientific quality of the meeting. This study aims to evaluate the fate of the abstracts presented at the Turkish Spine Congress in 2015 and 2017.

Materials and Methods: Abstracts of the meeting were searched using Pubmed and Google Scholar databases. The title of the abstract and corresponding author's names were searched in these databases. If the title of the abstract was in Turkish, only the author's names were used. The presentations were classified according to presentation type, publication date, indexing information of the journals, the main subject of the study, and consistency of the publication and the abstract.

Results: Thirty-seven of 78 oral papers and 24 of the 73 poster presentations in the 2015 congress were published. The average time to publication was 31.2 months. The main topic of the publications was deformity. The study title change ratio was 43%, the author name change ratio was 57%, and the sample size change ratio was 32% in 2015. The journal indexes were Science Citation Index/Science Citation Index Expanded (SCI/SCIE) in 48 studies, other international indexes in 10 studies, and ULAKBIM in 4 studies. Forty-four of 136 oral presentations and 10 of 72 poster presentations in the 2017 congress were published. The average time to publication was 15.5 months. The main topic of these publications was general spine knowledge/basic module. The study title change ratio was 13%, the author name change ratio was 35%, and the sample size change ratio was 22% in 2017. The journal indexes were SCI/SCIE in 33 studies, other international indexes in 9 studies, and ULAKBIM in 12 studies.

Conclusion: Although there were inconsistencies between the presentations and full-text articles, a respectable number of presentations of Turkish Spine Congresses were published.

Keywords: Abstract, congress, scientific meeting, publication rate, spine

INTRODUCTION

Scientific meetings provide an opportunity to share research ideas among the scientific community. Also, feed-backs acquired from these meetings can increase the quality of subsequent publication of the study. The publication rate of the abstracts in a congress can demonstrate the scientific quality of the meeting[1,2]. Many abstracts of different scientific meetings remain unpublished. The publication rates of the abstracts vary in a wide range depending on the field and accessibility of the meeting to the scientists[3-5]. The average rate of publication found 44.5%, and the average time to publication was 18.4 months in a Cochrane review[4]. The publication rates of orthopedic or neurosurgery congress were around 30-35%[6,7]. This study aims to evaluate the fate of the abstracts presented at the Turkish Spine Congress in 2015 and 2017. Also, the publication time and inconsistencies between the abstract and the article were assessed.

MARERIALS AND METHODS

The list and abstracts of the oral and poster presentations of The International Turkish Spine Congress in 2015 and 2017 were obtained from the website of The Turkish Spine Society. Abstracts of the meeting were searched using PubMed and Google Scholar databases in May 2021 at the fourth year of the congress of 2017. The title of the abstracts and corresponding author's names were searched in these databases. If the title of the abstract is in Turkish only the author's names were used. The names of other authors were searched if previous searches did not yield any results. The presentations were classified according to presentation type, publication date, indexing information of the journals, the main subject of the study (Eurospine module), and consistency between the publication and the abstract. To evaluate the consistency between the abstract and the publication the titles, the number of authors, the names of authors, sample sizes, the hypothesis of the studies were compared.

Address for Correspondence: Ömer Erşen, University of Health Sciences Turkey, Gülhane Training and Research Hospital, Clinic of Orthopedics, Ankara, Turkey
Phone: +90 533 527 51 81 **E-mail:** merschenn@yahoo.com **Received:** 10.06.2021 **Accepted:** 13.07.2021
ORCID ID: orcid.org/0000-0001-7351-6305

Statistical Analysis

All statistical analyses were conducted via SPSS for Windows (version 20.0, IBM Corp.). Descriptive statistics were reported, and the chi-square test was used to compare these proportions. The statistical significance level was set at $p<0.05$.

RESULTS

A total of 151 abstracts (78 oral, 73 poster presentations) were included in the booklet of the International Turkish Spine Congress in 2015. There were 21 case reports and all were belong to the poster presentations. Thirty-seven of 78 oral papers (47%) and 24 of the 73 poster presentations (33%) were published full-text in the journals. The overall publication rate of the congress was 40.3%. Six studies were published before the congress, 39 published within the first two years, and 16 studies were published after 2 years. The average time to publication was 31.2 months when studies that were published before congress were excluded. The journal indexes were Science Citation Index/Science Citation Index Expanded (SCI/SCIE) in 48 studies, other international indexes in 10 studies, and ULAKBIM in 4 studies. The most preferred journal was the European Spine Journal (6 oral, 2 poster presentations).

Two hundred and eight abstracts (136 oral, 72 poster presentations) were published in the booklet of congress of 2017. Four abstracts were duplicates (2 oral, 2 poster presentations) and excluded from evaluation. Forty-four of 136 oral presentations (33%) and 10 of 72 poster presentations (14%) of the congress of 2017 were published in full-text. Three of the oral presentations, 38 of the poster presentations were case reports. Four presentations were published before the congress, while 40 presentations were published within the first two years and 10 presentations were published after 2 years. The average time to publication was 15.5 months. The journal indexes were SCI/SCIE in 33 studies, other international indexes in 9 studies, and ULAKBIM in 12 studies. The most preferred journal indexed international indexes were Turkish neurosurgery (6 oral presentations) and the most preferred journal indexed in ULAKBIM was The Journal of Turkish Spinal Surgery (3 oral, 4 poster presentations). When the main topic of the abstracts of the congresses was classified according to the Eurospine education modules the hottest topic was "Spinal Deformities" in 2015 (20 oral, 7 poster presentations) and it is "Basic-Comprehensive" in 2017 (15 oral, 3 poster presentations) (Table 1). The publication rate of oral presentations was higher than poster presentations ($p<0.001$)

There were changes in the study title for 26 presentations in 2015 (42.6%), and for 7 presentations in 2017 (12.9%). The changes in the author names include changes in the number of authors, the first author's name, and the names of other authors. Thirty-five studies had changes in the author names in 2015 (57.3%) and 19 studies had changes in the author names in 2017 (35.1%). Sample sizes were different from the abstract in 20 studies (32.7%) of the 2015 congress while the sample size was changed in 14 studies (25.9%) in 2017. There were changes of study hypothesis in two studies from the 2015 congress (Table 2).

DISCUSSION

The publication rate of the abstracts presented in the 11th International Turkish Spine Congress in 2015 was 40.3% while it was 25.9% in the 12th meeting in 2017. The rate of the meeting in 2015 was close to the Cochrane review that included 79 reports and 29,729 abstracts and found an overall publication rate of 44.5%. The authors concluded that randomized or controlled clinical trials were most likely to be published in full text[4]. The studies that evaluated the publication rates in spine meetings demonstrated the publication rates 37-55 %[8-11]. The publication rate of the 11th meeting was similar to the previous studies that report publication rates of the abstract in the congress subjected spine surgery. The publication rate of the abstracts of the meeting in 2017 was relatively low. In our opinion, the higher number of abstracts accepted in the

Table 1. Distribution of the abstract according to the Eurospine Modules

	Presentation	Basic	Trauma	Deformity	Degenerative	Destructive
2015	Oral	4	5	20	6	2
	Poster	4	2	7	6	5
2017	Oral	15	5	11	12	1
	Poster	3	1	1	3	2

Table 2. Consistency between the abstracts and the publications

	Inconsistency	Study title	Author names	Sample size	Study hypothesis
2015	Yes	26	35	20	2
	No	35	26	41	59
2017	Yes	7	19	12	0
	No	47	35	42	54
p		0.003	0.027	0.123	0.234

meeting, and the higher number of case report abstract in 2017 caused lower publication rates.

The time lag to publication was varying 14-21 months in congress subjected spine surgery and 18.4 months in the all medical congress[4,8,10]. In this study, the time lag between the congress time and the publication date was high for the congress of 2017 while it was similar to the previous studies for the congress of 2015. Many factors are affecting the time between the congress and the publication time including the author-related factors (writing the manuscript, increasing the sample size, etc) and journal-related factors[10,12]. Thirty-nine (63.9%) abstracts of the 2015 meeting were published within the first two years while 40 (74%) abstracts of the 2017 meeting were published within the first two years. Previous studies demonstrated that the publication rate of the oral presentations was higher than the poster presentations in the congress of neurosurgery, orthopedics, or spine surgery[4,7,8,13,14]. In this study publication rates of oral abstracts were higher in both meetings.

Indexing information of a journal demonstrates the journal's scientific universality and the effectiveness of the articles on the scientific society. Most of the articles from both congresses were published in the journals indexed in SCI/SCIE. The journal indexes were SCI/SCIE in 48 studies (78.6%), other international indexes in 10 studies (16.3%), and ULAKBIM in 4 studies (6.1%) in the 11th meeting in 2015. The journal indexes were SCI/SCIE in 33 (61.1%) studies, other international indexes in 9 studies (16.7%), and ULAKBIM in 12 studies (22.2%) in the 12th meeting in 2017.

To evaluate the hot topics in the congresses we assessed the main topic of the abstracts published in full-text according to the Eurospine education modules. The hottest topic in 2015 was spinal deformities and the majority of these studies were about adolescent idiopathic scoliosis followed by early-onset scoliosis [12 (44%), and 7 (26%) respectively]. The hottest topic was the subject of Eurospine "Basic Comprehensive Course" such as anatomy of the spine, radiology of the spine, etc.

The discrepancy between the abstract and the full-text article is common. Reviewer suggestions in the peer-review process or academic expectations of authors can cause inconsistency [7,15,16]. Major inconsistencies may lead to differences in the conclusions and should be avoided[7]. In this study, minor consistencies like the change in the title, the change in the author names or order were common. The sample size was changed in 34 studies (29.5%) but there were no changes in the results and conclusions in full-text articles. There were only 2 changes in the study hypothesis from the 2015 congress. The changes were adding another group to compare the results.

Study Limitations

One of the limitations of this study was the time of the study. Although this study was conducted after 4 years from the 12th International Turkish Spine Congress, more abstracts can be published later. But the publication rates after 4 years were insignificant[5,10]. Also, we may have overlooked some publications especially due to the Turkish abstract in 2017. To find all publications we searched the most common databases Pubmed and Google Scholar but again there may be some shortcomings to detect all abstracts.

CONCLUSION

The abstracts of International Turkish Spine Congresses in 2015 and 2017 have a 32% publication rate. Although the overall publication rate was lower than other spine meetings, the publication rate of the meeting in 2015 was consistent with these meetings. The abstract selection preferences of the meeting in 2017 decreased the publication rate. Oral presentations had higher publication rates and most of the studies were published in full-text within the first two years. All abstracts are the core of a study and with some effort, they can be published. Authors should try to find a suitable journal for their studies.

Ethics

Ethics Committee Approval: Ethical committee approval is not applicable for this study.

Informed Consent: Informed consent is not applicable for this study.

Authorship Contributions

Concept: Ö.E., F.E., T.E., Design: Ö.E., T.E., Data Collection or Processing: A.M.B., A.Ö., F.E., Analysis or Interpretation: F.E., A.M.B., Literature Search: A.Ö., Ö.E., A.M.B, Writing: Ö.E, T.E.

Conflict of Interest: The authors declare that they have no conflict of interest.

Financial Disclosure: The authors declared that this study received no financial support.

REFERENCES

1. Light A, Dadabhoy M, Burrows A, Nandakumar M, Gupta T, Karthikeyan S, et al. Publication fate of abstracts presented at four british surgical meetings: an 11-year follow-up. J Surg Res. 2019;234:139-48.
2. Gorman RL, Oderda GM. Publication of presented abstracts at annual scientific meetings: a measure of quality? Vet Hum Toxicol. 1990;32:470-2.
3. Allart E, Beaucamp F, Tiffreau V, Thevenon A. Fate of abstracts presented at the 2008 European Congress of Physical and Rehabilitation Medicine. Eur J Phys Rehabil Med. 2015;51:469-75.
4. Scherer RW, Langenberg P, von Elm E. Full publication of results initially presented in abstracts. Cochrane Database Syst Rev. 2007 Apr 18;(2): MR000005.
5. Scherer RW, Meerpohl JJ, Pfeifer N, Schmucker C, Schwarzer G, von Elm E. Full publication of results initially presented in abstracts. Cochrane Database Syst Rev. 2018;11:MR000005.
6. Jamjoom AA, Hughes MA, Chuen CK, Hammersley RL, Fouyas IP. Publication fate of abstracts presented at Society of British Neurological Surgeons meetings. Br J Neurosurg. 2015;29:164-8.
7. Yalçınkaya M, Bagatur E. Fate of abstracts presented at a National Turkish Orthopedics and Traumatology Congress: publication rates and consistency of abstracts compared with their subsequent full-text publications. Acta Orthop Traumatol Turc. 2013;47:223-30.

8. Schulte TL, Huck K, Osada N, Trost M, Lange T, Schmidt C, et al. Publication rate of abstracts presented at the Annual Congress of the Spine Society of Europe (years 2000-2003). Eur Spine J. 2012;21:2105-12.
9. Wang JC, Yoo S, Delamarter RB. The publication rates of presentations at major Spine Specialty Society meetings (NASS, SRS, ISSLS). Spine (Phila Pa 1976). 1999;24:425-7.
10. Ramos MB, Falavigna A, Abduljabbar F, Rabau O, Ferland CE, Weber MH, et al. Assessing publication rate of abstracts presented in spine conferences as a quality benchmark: the example of the Canadian Spine Society Annual Meetings. World Neurosurg. 2019:e339-45. doi: 10.1016/j.wneu.2019.07.146. Epub ahead of print.
11. Bovonratwet P, Webb ML, Ondeck NT, Shultz BN, McLynn RP, Cui JJ, et al. High publication rate of abstracts presented at lumbar spine research society meetings. Int J Spine Surg. 2018;12:713-7.
12. Toroser D, Carlson J, Robinson M, Gegner J, Girard V, Smette L, et al. Factors impacting time to acceptance and publication for peer-reviewed publications. Curr Med Res Opin. 2017;33:1183-9.
13. Donegan DJ, Kim TW, Lee GC. Publication rates of presentations at an annual meeting of the American academy of orthopedic surgeons. Clin Orthop Relat Res. 2010;468:1428-35.
14. Patel AJ, Cherian J, Fox BD, Whitehead WE, Curry DJ, Luerssen TG, et al. Publication patterns of oral and poster presentations at the annual meetings of the Congress of Neurological Surgeons and the American Association of Neurological Surgeons. J Neurosurg. 2011;115:1258-61.
15. Kleweno CP, Bryant WK, Jacir AM, Levine WN, Ahmad CS. Discrepancies and rates of publication in orthopaedic sports medicine abstracts. Am J Sports Med. 2008;36:1875-9.
16. Zelle BA, Zlowodzki M, Bhandari M. Discrepancies between proceedings abstracts and posters at a scientific meeting. Clin Orthop Relat Res. 2005;245-9.