

1. Ulusal Çocuk Ortopedisi Kongresi'nde Sunulan Bildirilerin Yayına Dönüşme Oran ve Özellikleri: Bibliyometrik Analiz

Publication Rates and Characteristics Of Abstracts Presented in The First National Pediatric Orthopedics Congress: A Bibliometric Study

Ahmet Hamdi Akgülle, Evrim Şirin

Marmara Üniversitesi Tıp Fakültesi, Ortopedi ve Travmatoloji Anabilim Dalı, İstanbul, Türkiye

ÖZ

GİRİŞ ve AMAÇ: Bir kongrede sunulan bildirilerin yayına dönüşme oranları, aldıkları atıf sayıları ve yayımlandıkları dergilerin kaliteleri, kongrenin değerini belirleyen faktörler arasında kabul edilirler. Bu çalışmanın amacı; 1. Ulusal Çocuk Ortopedisi Kongresi'nde sunulan sözel ve poster bildirilerin yayına dönüşme oran ve özelliklerini değerlendirmektir.

YÖNTEM ve GEREÇLER: Birinci Ulusal Çocuk Ortopedisi Kongresi bildiri özellerine Çocuk Ortopedisi Derneğinin resmi internet sitesinden ulaşıldı. Yazar isimleri kullanılarak yayımlar bilimsel arama motorları üzerinden tarandı. Çalışmalar; dergi, kongre ile yayın olmaya kadar geçen süre, dergilerin etki faktörü ve Scimago puanı, kayıtlı oldukları indeks, atıf sayısı ve ilk yazarın bağlı oldukları kurum özellikleri açısından değerlendirildi.

BULGULAR: Kongre ile çalışma arası sürede bildirilerin %36,7'si yayına dönüşmüştü. Sözlü bildirileri yayınlayan dergilerin etki faktörü 1,524 (0,39-4,154) ve Scimago puanı 0,75 (0,265-1,57) iken bu değerler poster sunumlar için sırası ile 1,051 (0,39-2,383) ve 0,663 (0,355-1,129) olarak hesaplandı. Sözel bildiriler kongre sonrası ortalama 20,9 ayda yayınlanırken, poster bildiriler için bu süre 23,75 aydı. Dört yıllık sürenin sonunda sözel bildiriler 0-25, poster bildiriler 0-8 atıf almışlardı. İlk yazarların bağlı olduğu kurumlar; 32 üniversite hastanesi, 18 eğitim araştırma hastanesi, 6 devlet hastanesi ve 5 özel hastane şeklindeydi.

TARTIŞMA ve SONUÇ: Birinci Ulusal Çocuk Ortopedisi kongresinde sunulan sözel bildirilerde daha fazla olmak üzere yüksek oranda yayına dönüşmüşlerdir. Kongre ile yayına dönüşme arası süre biraz uzun olsa dahi, yüksek kalitede dergilerde yayınlanmışlardır.

Anahtar Kelimeler: Kongre, ortopedi, bildiri, yayınlama, bilimsel toplantı.

ABSTRACT

INTRODUCTION: Publication rates, number of citations, and quality of journals publishing presentations in a congress are considered among important factors which defines the value of the congress. The purpose of this study is to evaluate publication rates and characteristics of oral and poster presentations of the first National Pediatric Orthopedics Congress in Turkey.

METHODS: We reached abstracts of oral and poster presentations of first National Pediatric Orthopedics Congress through the official web site of the Pediatric Orthopedic Society. Presentations were searched via scientific databases using author names. Studies; were evaluated in the context of the journal, time between congress and publishing, impact factor, Scimago point, and index of journal, number of citations, and first authors institution.

RESULTS: Between congress and time of this study, 36,7% of presented papers were published. Journals published oral presentations had an average impact factor of 1,524 (0,39-4,154) and Scimago point of 0,75 (0,265-1,57) at the time of the study. These values were for poster presentations; 1,051 (0,39-2,383) and 0,663 (0,355-1,129) respectively. Oral and poster presentations were published an average of 20,9 and 23,75 months after congress respectively. At the end of the four years, the number of citations of oral presentations were 0-25 and poster presentations 0-8. Affiliation of first authors of papers were 32 university hospital, 18 research hospital, 6 general state hospital, 5 private hospitals.

DISCUSSION AND CONCLUSION: A high percentage of orally presented papers and also posters progressed to original articles. Although the time from the presentation to publication was somewhat long, they appeared in high-quality journals.

Keywords: Congress, orthopedics, presentation, publication, scientific meeting.

İletişim / Correspondence:

Ahmet Hamdi Akgülle

Marmara Üniversitesi Tıp Fakültesi, Ortopedi ve Travmatoloji Anabilim Dalı, İstanbul, Türkiye

E-mail: ahmethamdiakgulle@yahoo.com

Başvuru Tarihi: 08.06.2020

Kabul Tarihi: 09.11.2020

INTRODUCTION

Publication rates, number of citations, and quality of journals publishing, presentations in a congress are considered among important factors that define the value of the congress. These rates are around 29% for Turkey (1).

The purpose of this study is to evaluate publication rates of oral and poster presentations of 1. National Pediatric Orthopedics Congress (2016). As a secondary purpose, we try to determine basic characteristics of journals and publications like the number of citations, time to publication.

MATERIAL AND METHODS

First National Pediatric Orthopedic Congress in Turkey was held March 10-12, 2016, in Istanbul. We reached abstracts of oral and poster presentations through the official web site of the Pediatric Orthopedic Society (www.cucukortopedisi.org.tr). Presentations were searched via Pubmed, Google scholar, Ulakbim, and Turk-medline using author names. In case of the inconsistency of author names and titles, the content was investigated. If the patient group and statistics results are same, the study considered based on the paper presented.

Studies; were evaluated in the context of the journal, time between congress and publishing, impact factor, Scimago point, and index of journal, number of citations, and first authors institution.

Journals were classified considering their indexing. Impact factors and Scimago points were noted in February 2020.

RESULTS

Between congress and time of this study (four years), 36,7% of presented papers were published.

13 of 30 (43,3%) oral presentations were published during this period. Three of these were published in ScienceCitation Index (SCI) journals, while nine studies were published in Science Citation Index- Expanded (SCI-E) journals. One study was published in a peer-reviewed journal, which is indexed in Medline.

9 of 30 (30%) poster presentations were published, including 7 (23,3%) SCE-E indexed, two other peer-reviewed journals. (Table.1)

Journals published oral presentations had an average impact factor of 1,524 (0,39-4,154) and

Scimago point of 0,75 (0,265-1,57) at the time of the study (February 2020). These values were for poster presentations; 1,051 (0,39-2,383) and 0,663 (0,355-1,129) respectively. Journals published studies are listed in Table 2. (Table 2)

Table 1: Abstracts published according indexes.

	Presented	Published SCI	Published SCI-E	Published Other
Oral	30	3	9	1
Poster	30	-	7	2
Overall	60	3	16	3

Table 2: Journals publishing studies, number of studies, indexes, impact factors and citation per study published.

Journal	Number of studies published	Indexed	Impact Factor	Citation per study
Clinical Orthopedics and Related Research	2	SCI	4,154	15,5
Spine	1	SCI	2.903	4
International Orthopedics	1	SCI-E	2.383	0
Journal of Pediatric Orthopaedics	1	SCI-E	2.045	5
Journal Of Children's Orthopaedic	1	SCI-E	1.296	2
Medical Principles and Practice	1	SCI-E	1.103	0
Eklem Hastalıkları ve Cerrahisi	2	SCI-E	1.058	0,5
Acta Orthop Traumatol Turc.	1	SCI-E	0.896	1
Journal of Pediatric Orthopaedics-B	3	SCI-E	0.74	3
Ulusal Travma ve Acil Cerrahi Dergisi	1	SCI-E	0.643	0
Turk J Phys Med Rehab	1	SCI-E	0,223	1
Acta Orthopédica Brasiliera	1	SCI-E	0,569	0
Acta Orthop Belgica	3	SCI-E	0.39	2
Spine Deform	2	Medline	-	8
Cureus	1	Open access	-	1

Oral presentations were published an average of 20,9 months after congress. This time was 23,75 months for poster presentations. One poster presentation which was published in a journal before the congress was not taken into account. Two oral presentations published one and two months after congress included to the study.

At the end of the four years, the number of citations of oral and poster presentations were 0-25 and 0-8, respectively.

Affiliation of first authors of papers was 32 (20 oral-12 poster) university hospital, 18 (6 oral-12 poster) research hospital, 6 (2 oral-4 poster) general state hospital, 5 (2 oral-3 poster) private hospitals.

DISCUSSION

The ultimate goal of making scientific presentations is future publication and contribution to the medical literature. Bibliographic analysis determines the content, characteristics, and quantitative features of a specific scientific field. It provides significant information about the scientific productivity of a country by using specific parameters. These indicators are essential to evaluate the scientific activity of researchers, institutions, and also journals (2). At the ultimate point, this knowledge in this scientific field becomes comparable between academic disciplines. This analysis also gives essential information about publication trends, patterns, authors, and their affiliated institutions. The impact of published products to the current literature is also highlighted.

In the field of contribution to the literature in orthopedic surgery and traumatology, the United States of America (USA) ranked first place, where as Turkey was in 14th place among 122 countries (3). In particular, in the first decade of the 2000s, the number of publications has dramatically increased in Turkey, which can be attributed to an increased number of universities and research and training centers. Another critical factor is easier access to worldwide publications through widespread internet use (3). However, this persistent increase did not last after the year 2010. Nevertheless, it should also be considered that qualitative features rather than the quantity of publications is the main factor determining the scientific quality of a publication. Today, there are about 50 journals categorized under the topic heading of orthopaedics in Web of Science, covering all possible subspecialty areas of orthopaedic surgery (4). These journals range from general clinical journals, to subspecialty specific and basic science journals. Certainly not all of these publications are directly related to the practice of orthopaedic surgery nevertheless they are mostly indexed in widely accepted databases. Considering this fact, the probability of a properly designed presentation for progressing to an original article in future is extremely high.

National Pediatric Orthopedic Congress organized by Pediatric Orthopaedic Association (ÇOD) in Turkey is taking place since 2016. A total of 60 presentations (30 oral and 30 poster) were held in the first meeting, and the mean rate of full-text publication of these presentations was 36.7%. In a study performed by Yalçinkaya et al., publication rate of abstracts was analyzed at the 20th National Turkish Orthopaedics and Traumatology Congress in 2013, and the overall publication rate was found 29,5%. The mean impact factor of the journals where they were published was 1.15 as of September 2012. Because subspecialty meetings have a higher rate of publication, this result was not surprising. But the remarkable finding was that the progression of poster presentations to original articles were more definitive for ÇOD congress. It is not clear whether this can be attributed to poor quality poster presentations at National Turkish Orthopaedics and Traumatology Congress or higher quality posters presented in ÇOD congress. Gulcek et al. reported in another study, the publication rates of abstracts presented in the Turkish Society for Sports Traumatology, Arthroscopy and Knee Surgery (TUSYAD) congress between the years 2008 and 2014(5). The publication rates were 37,4%, 32,7%, 36,9% and 19,6 % respectively. The sudden drop in this subspecialty meeting in 2014 was probably due to the high acceptance rate of the abstracts in this year. Overall publication rates were almost similar to ÇOD congress publication rates except the year 2014. Liu et al. Selected total 400 randomized abstracts from 4 different National meetings in USA and found that 35% of them developed into journal articles (6).

Another aspect of a bibliographic study is the affiliation of presenting authors. The publications generated from ÇOD congress abstracts are mostly from university hospitals which is also the fact reported in the articles published by Yalçinkaya, Gürbüz et al. A remarkable finding of our study was almost 15% of the reported abstracts in ÇOD congress were from general state hospitals and private hospitals. In a study analyzing contribution of Turkey to the literature in arthroplasty, overall contribution of state and private hospitals reported as 8% (7). Results in our study can be accepted as an optimal, even a satisfactory percentage, particularly

when the workload of these institutions is taken into consideration.

However, considering the fact that, the mean impact factor of journals at the time of publication was over 1.5 for oral abstracts presented in ÇOD congress, we can simply manifest that this value is a top value compared to other general and subspecialty meetings in the field of Orthopaedics and Traumatology in Turkey. On the other hand, a high impact factor does not always show the scientific quality of a journal. Nevertheless, it is an objective criterium and reflects the scientific activity of a country in a specific field (3, 8).

Another parameter that is worth evaluating is the mean time from presentation at the congress to publication in the journal. For the ÇOD meeting, it is 20.9 months for oral presentations, which is somehow longer when compared to TUSYAD presentations (15.4 months). For national meeting from all orthopedic fields in 2013, the time lag to publication in a journal was calculated 12.7 months. However, we believe that from an objective point of view, parameters in a subspecialty field should be compared with each other in order to make the right implications.

Finally, one other important measure for impact of publications is, the use of citations in the literature. The scientific citation indicates the validity and scientific value of an article that provides an objective measurement of how often scientists use a specific published work (8, 9). While the number of citations of oral and poster presentations can be considered in a sub-optimal level for the articles generated from the first ÇOD congress, one should always pay attention to recent publication dates of these abstracts in the journals, which can turn into promising values when the impact factors of these quality journals is taken into consideration.

In conclusion, considering the first meeting of the Paediatric Orthopaedic Association in Turkey (ÇOD), a high percentage of orally presented papers and also posters progressed to original articles. Although the time from the presentation to publication was somewhat long, they appeared in high-quality journals. In general, orally presented abstracts supported with proper statistical analysis

are more likely to get published in every subspecialty of orthopaedic surgery and as it's a valid condition for every field of medicine.

REFERENCES

1. Yalcinkaya 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(4):223-30.
2. De Simone B, Ansaloni L, Kelly MD, Coccolini F, Sartelli M, Di Saverio S, et al. The Congress Impact Factor: A proposal from board members of the World Society of Emergency Surgeons. it (WSES) and Academy of Emergency Medicine and Care (AcEMC). *F1000Research.* 2018;7.
3. Gürbüz Y, Süğün TS, Özaksar K. A bibliometric analysis of orthopedic publications originating from Turkey. *Acta Orthop Traumatol Turc.* 2015;49(1):57-66.
4. Lefavre KA, Shadgan B, O'Brien PJ. 100 most cited articles in orthopaedic surgery. *Clinical Orthopaedics and Related Research®.* 2011;469(5):1487-97.
5. Gulcek M, Inci F, Ceyhan E, Gurhan U, Kahve Y, Ucaner A. Rate of conversion of reports presented at the Turkish Society of Sports Traumatology, Arthroscopy and Knee Surgery Congress into publication. *Acta orthopaedica et traumatologica turcica.* 2018;52(6):447-51.
6. Liu L, Danziger RS. Fate of conference abstracts. *Nature.* 1996;383(6595):20-.
7. Çatal B, Akman YE, Şükür E, Azboy I. Worldwide arthroplasty research productivity and contribution of Turkey. *Acta orthopaedica et traumatologica turcica.* 2018;52(5):376-81.
8. Patsopoulos NA, Analatos AA, Ioannidis JP. Relative citation impact of various study designs in the health sciences. *Jama.* 2005;293(19):2362-6.
9. Movassagi K, Kunze KN, Beck EC, Fu MC, Nho SJ. Predictors of 5-year citation rate in the orthopaedic sports medicine literature. *The American journal of sports medicine.* 2019;47(1):206-11.