



Distribution Patterns and Publishing Rates of Oral Presentations Presented in National Neurology Congresses According to Diseases Between 2000-2017

2000-2017 Yılları Arasında Ulusal Nöroloji Kongrelerinde Sunulan Sözel Sunumların Hastalıklara Göre Dağılım Paternleri ve Yayınlanma Oranları

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Abstract

Objective: Congresses are important for physicians to access up-to-date information. The papers presented in congresses provide access to current research topics in the field in a short time. In this study, we aimed to investigate the contribution of oral presentations (OP) that were presented at the Turkish National Neurology Congress (TNNC) organized by the Turkish Neurological Society to the literature.

Materials and Methods: OP presented in TNNCs between 2000-2017 were reviewed. The distribution of papers in terms of the main headings and their institutions were determined. Then, the names and presentation titles of the researchers were searched in PubMed and Google Scholar databases in Turkish and English and their publication rates were determined.

Results: In 17 years, a total of 1682 oral and 8065 poster presentations were accepted. Fourteen OPs were withdrawn. Of the OPs, 318 were in the field of demyelinating diseases (DMD), 305 on cerebrovascular diseases (CVD), 205 on epilepsy, 202 on neuromuscular diseases (NMD), 199 on headache, 183 on movement disorders, 112 on behavioral neurology, 20 on sleep disorders, 13 on pediatric neurology, and 119 on other diseases. Of the studies, 1253 were clinical studies, 226 were case reports, 130 were basic science studies, 84 were questionnaire studies, 70 were genetic studies, and 852 were prospective studies. One thousand two hundred eighty-six were from university hospitals and 338 from training and research hospitals. Six hundred six were published as articles. One hundred seventy-one were published in Turkish journals and 416 were published in SCI-E journals. Of the publications, 481 were presentations from university hospitals. Comparing the 2000-2009 and 2010-2017 presentations, presentations of NMD and sleep disorders increased, and the highest number of presentations were in the CVD and DMD groups in both periods. Presentations of headache and epilepsy were mostly published in journals.

Conclusion: To our knowledge, our study is the first to analyze neurology congress presentations in Turkey. It is noted that such analyses are performed in the literature mostly for 1-5 years, and our results are similar to those of other disciplinary studies conducted in our country and lower than those of international meetings. Incentive methods should be developed to increase the number of publications.

Keywords: National neurology congress, congress analysis, verbal presentation, publication rate

Öz

Amaç: Kongreler hekimlerin güncel bilgilere erişmesi açısından önemini korumaktadır. Burada sunulan bildirimler kısa sürede alanının güncel araştırma konularına ulaşmayı sağlar. Çalışmamızda Türk Nöroloji Derneği'nin düzenlediği Ulusal Nöroloji Kongreleri'nde (UNK) sunulan sözel sunumların (SS) literatüre katkısını araştırmayı amaçladık.

Gereç ve Yöntem: 2000-2017 arasında yapılan UNK'lerinde sunulan SS'ler gözden geçirildi. Bildirilerin ana başlıklarda dağılımı ve kurumları belirlendi. Ardından araştırmacıların isimleri ve sunum başlıkları Türkçe ve İngilizce olarak PubMed ve Google Scholar veritabanlarında arandı ve yayınlanma oranları belirlendi.

Bulgular: On yedi yılda toplam 1682 sözel (43-128), 8065 (211-750) poster sunumu kabul edilmişti. On dört bildiri (%0,8) geri çekilmişti. Sözel sunumlardan 318'i demyelinizan hastalıklar (DMH), 305'i beyin damar hastalıkları (BDH), 205'i epilepsi, 202'si nöromusküler hastalıklar (NMH), 199'u baş ağrısı, 183'ü hareket bozuklukları, 112'si davranış nörolojisi, 20'si uyku, 13'ü çocuk nörolojisi, 119'u diğer hastalıklar grubundaydı. Çalışmaların 1253'ü klinik, 226'ı olgu sunumu, 130'u temel bilim, 84'ü anket, 70'i genetik, 852'si prospektif çalışmalardı. Çalışmaların 1286'sı üniversite, 338'i eğitim araştırma, 25'si devlet hastanesi, 19'u özel hastanedendi. Altı yüz altısı (%36) makale olarak yayınlanmıştı. 171'i Türkçe dergilerde ve 416'sı SCI-E dergilerde yayınlanmıştı. Yayınların 481'i (%79,4) üniversiteden hazırlanan sunumlardandı. 2000-2009 ile 2010-2017 sunumları karşılaştırıldığında NMH ve uyku sunumları artarken her dönem en fazla sunum BDH ve DMH grubunda olmuştu. En çok baş ağrısı ve epilepsi ilgili sunumlar dergilerde yayınlanmıştı.

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Received/Geliş Tarihi: 03.12.2019 **Accepted/Kabul Tarihi:** 26.08.2020

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Turkish Journal of Neurology published by Galenos Publishing House.

Öz

Sonuç: Bildiğimiz kadarıyla çalışmamız Türkiye’de nöroloji kongre sunumları ile ilgili ilk çalışmadır. Bu tür analizlerin literatürde çoğunlukla 1-5 yıllık yapıldığı, sonuçlarımızın diğer disiplinlerin düzenlediği ülkemizden yapılan çalışma analizlerine benzer, uluslararası toplantıların analizlerine göre düşük olduğu dikkati çekmiştir. Yayın sayısının artırılması için teşvik yöntemleri geliştirilmesi gerektiği düşünüldü.

Anahtar Kelimeler: Ulusal nöroloji kongresi, kongre analizi, sözel sunum, yayınlanma oranı

Introduction

For many years, many congresses have been held in almost every country in the world in different fields of medicine, and experts of the subject add new developments to their experiences and share them with their colleagues. In addition, they present the results of their research and case reports worth sharing that they diagnosed.

Knowledge in the field of medicine has been increasing rapidly in recent years, especially due to the ease of access to the internet and search databases. Although medical literature and all kinds of new developments are easily accessible, congresses maintain their importance for physicians to access up-to-date information. Research or case reports in congresses are shared as posters or oral presentations. The publication of these works as well as the planning, production, and presentation phases requires great effort and patience. The publication of these researches in indexed, peer-reviewed journals that are shared in easily accessible search databases is especially important in terms of reaching more physicians with the results. The publication of abstracts after the congress in national/international refereed journals is one of the indicators of the scientific value of the congress (1).

It is important to evaluate the publication rate of the results of the presentations presented at congresses in peer-reviewed journals. However, articles evaluating the conversion rate of abstracts presented in national and international congresses to publications are quite limited. In these studies, the rate of conversion of presentations to publications was reported to vary between 5.7% and 62.3% (2,3,4). In a Cochrane analysis of 79 studies in which 29,729 abstracts were evaluated, the publication rate was found as 44.5% (5).

The maximum number of physicians at every stage interested in neurology participates in the Turkish National Neurology Congress, which is a comprehensive congress, organized by the Turkish Neurological Society and held regularly every year in Turkey. The 55th congress was held in 2019. In our study, we aimed to investigate the distribution of oral presentations presented at the National Neurology Congresses between 2000-2017 and their contribution to the literature.

Materials and Methods

The oral presentations presented at the National Neurology Congresses held between 2000-2017 were reviewed. The distribution of the publications under the main headings and institutions where they were made was determined. Study type was noted as prospective, retrospective, clinical, basic sciences, genetics, questionnaire studies or case reports. Then, the names of the researchers and the titles of the presentations were searched in Turkish and English in PubMed and Google Scholar databases. The distribution of the studies found to be published was determined

according to their subject titles. The number and distribution of clinical studies, basic science studies, genetic studies, and case reports were determined. The publication rates were determined in Turkish and foreign journals and Science Citation Index-Expanded (SCI-E) journals. The distribution of the publications by university hospital, training and research hospital, state hospital, and private hospital was determined. In addition, all these features were investigated as to whether there were any differences between 2000-2009 and 2010-2017.

Statistical Analysis

After entering the database on a computer, the Statistical Package for the Social Sciences (SPSS) 20.0 (IBM Corp.; Armonk, NY, USA) was used for statistical analysis. Numerical variables were presented as mean, standard deviation, minimum-maximum value and percentage and evaluated as descriptive.

Numerical data were evaluated using the independent sample t-test, and categorical data were evaluated using Pearson’s chi-square test and Fishers exact test. Results were evaluated at 95% confidence intervals and results with a p value of <0.05 were considered significant.

Results

In 17 years, a total of 1682 oral presentations (43-128±23.8) and 8467 (211-750) poster presentations were accepted. Fourteen papers (0.8%) were withdrawn. Of the verbal presentations, 321 (19.3%) were in the demyelinating diseases (DMD) group, 305 (18.3%) in the cerebrovascular diseases (CVD) group, 208 (12.5%) in the epilepsy group, 203 (12.2%) in the neuromuscular disease (NMD) group, 184 (11%) in the movement disorders group, 180 (10.8%) in the headache group, 113 (6.8%) in the behavioral neurology group, 20 (1.2%) in the sleep group, 13 (0.8%) in the pediatric neurology group, and 118 (7.1%) in the other diseases group.

Of the studies, 1253 (75.2%) were clinical studies, 226 (13.5%) were case reports, 130 (7.8%) were basic science studies, 84 (5%) were questionnaires, and 70 (4.2%) were genetic studies. Of the studies, 852 (51.1%) were performed prospectively (Table 1).

When the presentations in 2000-2009 and 2010-2017 periods were compared, the presentations about DMD, NMD, and sleep disorders increased significantly; the highest numbers of presentations were in the CVD and DMD groups in both periods (Graphic 1).

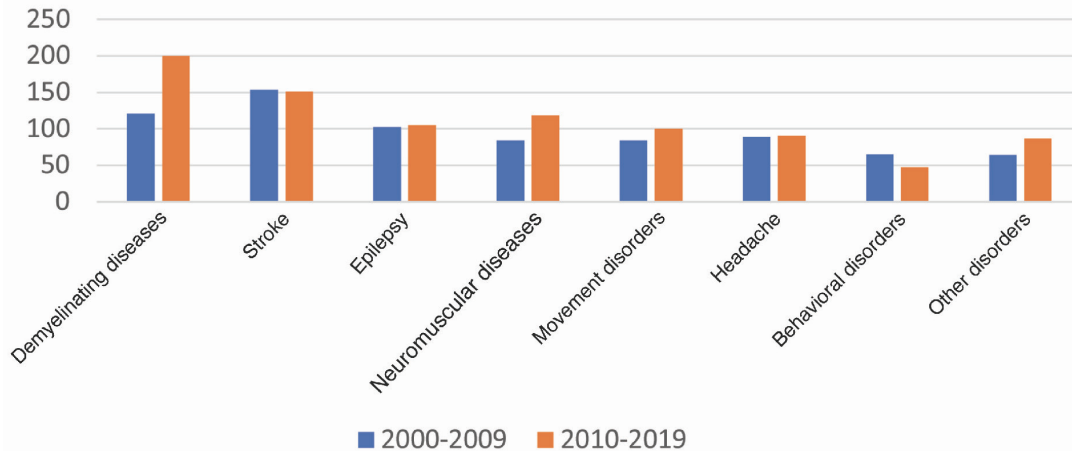
Of the studies, 1286 (77.1%) were from university hospitals, 338 (20.3%) from training and research hospitals, 25 (1.5%) from state hospitals, and 19 (1.1%) from private hospitals (Table 1). Six hundred six (36.3%) were published as articles. Every year, an average of 33.7±7 (18-49) studies were published. Eighteen (37.5%) of 48 studies were published in 2000 and 49 (38.9%) of 126 studies were published in 2013. The highest publication

rate was in 2008 (43/72, 59.7%). Of the publications, 171 (10.2%) were published in Turkish journals and 416 (25%) in SCI-E journals. Of the publications, 481 (79.4%) were from the presentations prepared in the university hospitals. One hundred fifteen of the headache studies (63.9%), 98 (32.1%) of the CVD studies, 83 (40%) of the epilepsy studies, 44 (39%) of the cognitive disorders studies, and 122 of the DMD studies (38%), 44 (27.1%) of the NMD studies, and 6 (30%) of the sleep diseases studies were published (Graphic 2).

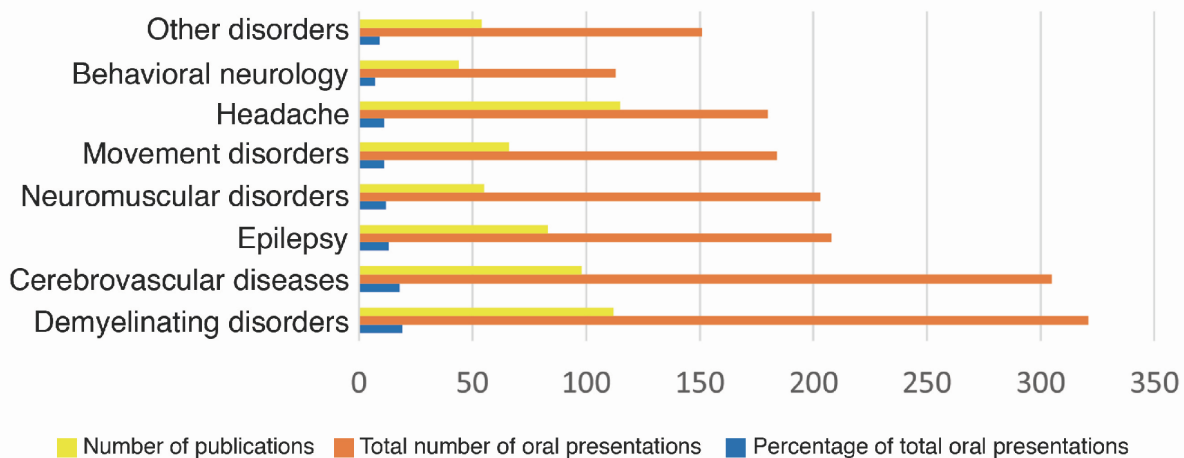
Discussion

The results of our study, which evaluated the distribution and publication rates of 17-year oral presentations presented at the Turkish National Neurology Congresses (TNNC) since 2000, showed that approximately one-third (36%) of the presented studies were published in peer-reviewed journals.

Although there are similar analyses in the literature for many branches of science from basic sciences to surgical branches such as radiology, nephrology, anatomy, urology, general surgery, neurosurgery, plastic surgery, orthopedics, cardiovascular surgery,



Graphic 1. Distribution of studies in 2000-2009 and 2010-2017 periods



Graphic 2. Distribution of studies and their publication rates

	Clinical study	Case report	BS study	Questionnaire study	Genetic study	Prospective study	UH	TRH	SH	PH
2000-2009	557 (72.8%)	129 (16.9%)	58 (7.6%)	25 (3.3%)	39 (5.1%)	445 (58.2%)	620 (81%)	129 (16.9%)	5 (0.7%)	13 (1.7%)
2010-2017	696 (77.2%)	97 (10.8%)	72 (8%)	59 (6.5%)	31 (3.5%)	407 (45.2%)	666 (73.9%)	209 (23.2%)	20 (2.2%)	6 (0.7%)
2000-2017	1253 (71.1%)	226 (13.5%)	130 (7.8%)	84 (5%)	70 (4.2%)	852 (51.1%)	1286 (76.5%)	338 (20.3%)	25 (1.5%)	19 (1.1%)

BS: Basic sciences studies, UH: University hospital, TRH: Training and research hospital, SH: State hospital, PH: Private hospital

emergency service, pediatric surgery, no congress analysis has been conducted for neurology as far as we know (6,7,8,9,10,11,12). However, such analyses determine the publication rates of studies that should be reached by a larger number of physicians, not only physicians with congressional participation. Due to the importance of similar analyses, most of the research articles in which these analyses are made are published in SCI-E journals published through medical societies (13).

In a Cochrane analysis conducted on this subject, it was found that an average of 44.5% of studies presented at congresses were published in full text (5). Few studies analyzed congress presentations from our country, and the rate of publication in full text was found between 5.7% and 28.7% (1,2,8,14,15,16,17). In our study, we determined this rate as 36% for the studies presented in TNNCs and it was higher than the rates of analyses in the literature. No comparison could be made because we could not find a similar study about presentations in TNNCs in the literature. However, this rate in those performed in many medical fields from abroad was higher than ours (3,5,13,18,19,20).

In our study, DMD and CVD studies constituted more than one-third of all studies in the 17-year analysis. It was noticed that although DMD and NMD presentations increased over the years, the number of presentations on CVD, epilepsy, and headache did not change, and presentations about behavioral neurology diseases decreased by approximately 25%. The majority of the studies were clinical (75.2%) and prospective (51.1%) studies from university hospitals (77.1%).

An average of 33.6 ± 7.34 (18-49) studies were published each year. The least number of publications was in 2009 (25.2%) and the most was in 2008 (59.7%). The vast majority (72%) of those published were published in foreign journals, only 28.2% were published in Turkish journals. Again, most of the published studies were from university hospitals (79.4%) and published in SCI-E journals (68.6%). Although most of the studies on DMD and CVD were presented, the higher publication rate was in the field of headache (63.9%), epilepsy (40%), and behavioral neurology diseases (39%). Only one-fifth of the case reports were published.

Conclusion

As a result, about one-third of the oral presentations presented at TNNCs in 17 years were published. Although there were no similar studies on neurology congresses, our rate was higher than the rates of other disciplines in Turkey, but lower than in studies performed abroad. The most widely published studies were headache and epilepsy studies. Such analyses made after congresses suggest that incentive methods should be developed to increase the publication of congress presentations.

Ethics

Ethics Committee Approval: Ethics Committee approval is not required, as the study investigates oral presentations at neurology congresses.

Informed Consent: Patient consent information is not required for this type of study.

Peer-review: Externally peer-reviewed

Authorship Contributions

Concept: F.İ.U., G.B.Y., Design: F.İ.U., G.B.Y., Data Collection or Processing: F.İ.U., A.B., S.M., Analysis or Interpretation: F.İ.U., G.B.Y., Literature Search: F.İ.U., A.B., S.M., Writing: F.İ.U.

Conflict of Interest: No conflict of interest was declared by the authors.

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

References

1. Meral UM, Urkan M, Alakuş Ü, et al. Publication rates of abstracts presented at the annual congress of the Turkish Society of Colorectal Surgery (years 2003-2011). *Turk J Surg* 2017;33:87-90.
2. Kabay B, Teke Z, Erbiş H, et al. Ulusal cerrahi kongrelerinde sunulan bildirilerin uluslararası yayına dönüşme oranları *Ulus Cerrahi Derg* 2005;21:130-134.
3. Elliott CA, Mehta V, Poon C, Oliver M, Gourishankar S. The fate of abstracts presented at the annual meeting of the congress of neurologic surgeons. *Open Journal of Modern Neurosurgery* 2016;6:1-8.
4. Sanossian N, Ohanian AG, Saver JL, Kim LI, Ovbiagele B. Frequency and determinants of nonpublication of research in the stroke literature. *Stroke* 2006;37:2588-2592.
5. Scherer RW, Langenberg P, von Elm E. Full publication of results initially presented in abstracts. *Cochrane Database of Syst Rev* 2007;18:MR000005.
6. Gorman RL, Oderda GM. Publication of presented abstracts at annual scientific meetings: a measure of quality? *Vet Hum Toxicol* 1990;32:470-472.
7. Ng L, Hersey K, Flesher N. Publication rate of abstracts presented at the annual meeting of the American Urological Association. *BJU Int* 2004;94:79-81.
8. Riordan FA. Do presenters to paediatric meetings get their work published. *Arch Dis Child* 2000;524-526.
9. Bhasin N, Scott D. Publication outcome for research presented at the Vascular Society of Great Britain and Ireland annual meetings. *Ann R Coll Surg Engl* 2007;89:292-297.
10. Secil M, Ucar G, Dicle O. Scientific papers presented at the 2000-2001 European Society of Gastrointestinal and Abdominal Radiology (ESGAR) meetings: publication rates during the period 2000-2004. *Eur Radiol* 2007;17:2183-2188.
11. Patel AJ, Cherian J, Fox BD, 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;115:1258-1261.
12. Harel Z, Wald R, Juda A, Bell CM. Frequency and factors influencing publication of abstracts presented at three major nephrology meetings. *Int Arch Med* 2011;4:40.
13. ul Haq MI, Gill I. Observational analysis of BOA free papers (2001): from presentation to publication and comparison with the American Academy of Orthopaedic Surgeons (AAOS). *Injury* 2011;42:418-420.
14. Gregory TM, Liu T, Machuk A, Arneja JS. What is the ultimate fate of presented abstracts? The conversion rates of presentations to publications over a five-year period from three North American plastic surgery meetings. *Can J Plast Surg* 2012;20:33-36.
15. 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;29:164-168.
16. Kalyoncu U, Çınar M, Demirağ MD, et al. The assessment of abstracts presented in National Rheumatology Congresses: where do we stand? *RAED Dergisi* 2011;3:6-10.
17. Özyurt S, Kaptanoğlu AF. Publication rates of abstracts presented at the biannual Turkish national dermatology meetings between 2004 and 2008. *Dermatoz* 2012;3:7-11.
18. Kaya Mutlu E, Çelik D, Mutlu C, Razak Özdingler A. Publication rates of oral presentations accepted at Advances in Physiotherapy Symposiums. *Turk J Physiother Rehabil* 2013;24:145-149.
19. Ersoy GŞ, Eken M, Öztekin D, Çoğendez E, Eroğlu M. The International publication rates of abstracts presented in The National Gynecology and Obstetrics Meetings in the field of reproductive endocrinology and infertility. *Zeynep Kamil Tıp Bülteni* 2015;46:63-68.
20. Bonfield CM, Pellegrino R, Berkman J, et al. Oral presentation to publication: publication rates of abstract presentations across two pediatric neurosurgical meetings. *J Neurosurg Pediatr* 2018;21:650-654.