Evaluation of Articles on Rhinology Published in National Otorhinolaryngology Journals between 2010-2015

Original Investigation

İlker Akyıldız¹, Yusuf Kızıl²

¹The Ministry of Health, Otorhinolaryngology Clinic, Ankara Training and Research Hospital, Ankara, Turkey ²Department of Otorhinolaryngology, Gazi University School of Medicine, Ankara, Turkey

Abstract >

Objective: This study aimed to investigate the articles regarding rhinology published in national otorhinolar-yngology journals between 2010 and 2015 according to the manuscript type, headline, citation city, and institution, as a reference for studies that will be designed in the future.

Methods: Articles published on rhinology between 2010 and 2015 in national otorhinolaryngology journals were searched through websites of journals. The names of the journals, subjects of the manuscripts, manuscript type, citation city and institution, and manuscript language were recorded.

Results: In this study, 890 articles were reviewed in 6 national otorhinolaryngology journals. Of these, 274 were

regarding rhinology and 129 (47%) and 117 (42.7%) were original articles and case reports, respectively. Of the 274 articles, 21 (7.7%) and 5 (1.9%) were review and animal studies, respectively, and 2 (0.7%) articles defined surgical technique. Most frequently studied topics were benign tumors and inflammatory diseases of the paranasal sinuses.

Conclusion: The ratio of case reports was relatively high in national rhinology publications. In future, smell and taste disorders, skull base surgery, and nasal physiology related to Rhinology may be innovative research areas.

Keywords: Medical journalism, otorhinolaryngology, rhinology, publication

Introduction

Publications that result from scientific studies are significant indicators of scientific development in countries (1-4). The contribution of national journals published in the field of health to the literature has important implications such as encouraging young researchers and ensuring that Turkish medicine has a presence in the international community. Ear, Nose, and Throat (ENT) journals have also been fulfilling these duties and responsibilities for many years.

National peer-reviewed ENT journals accept many types of articles such as original research, case reports, surgical techniques, and reviews in Turkish and English from local and foreign authors. In this way, they contribute to the formation of the national literature and the recognition of Turkish ENT studies abroad.

In this study, articles published in the field of rhinology in six national peer-reviewed ENT journals between the years 2010 and 2015 were evaluated according to journal name, subject, type of article, institution and city of origin, language of the article, and number of authors.

Methods

Six national peer-reviewed journals were selected for the study. While four of these journals are general ENT journals, the Journal of Turkish Rhinology is a journal that specifically focuses on rhinology articles. Although the Journal of Medical Updates is a general medical journal, it is accepted as a general ENT journal, considering that all the publications it contains are related to ENT. All the articles in these journals that were published in the five-year period from 2010 to 2015 on the websites of five of the jour-



This study was presented at 11th Turkish National Rhinology Congress, 16-19 April 2015, Antalya, Turkey.

Address for Correspondence: İlker Akyıldız E-mail: ilkerakyildiz@yahoo.com

E-mail: ilkerakyildiz@yahoo.com Received Date: 27.10.2015 Accepted Date: 03.01.2016

© Copyright 2015 by Official Journal of the Turkish Society of Otorhinolaryngology and Head and Neck Surgery Available online at www.turkarchotorhinolaryngol.org

DOI: 10.5152/tao.2015.1328

nals and the printed issues of the Turkish Rhinology Journal were searched. During this research, 274 articles written in the field of rhinology were recorded in terms of published journal, the title, type of the study, number of authors, language of the article, city and institution of origin, and rate of rhinology articles in each journal. Benign diseases of the paranasal sinuses, infectious and inflammatory diseases of the paranasal sinuses, septum surgery and allergic rhinitis were among the 20 subjects that were mainly determined for the articles.

Results

Related to rhinology, 274 articles were found as a result of our studies of the Journal of Medical Updates, the Journal of ENT-HNS, the Journal of ENT-Forum, the Turkish Journal of Ear Nose and Throat, the Turkish Archives of Otolaryngology, and the Journal of Turkish Rhinology. It was observed that the most articles, 99, were published in the Turkish Journal of Ear Nose and Throat (Table 1).

While 129 of the 274 articles were original research articles, 117 of the articles were case reports (Table 2).

As a result of the investigation of the articles according to their subjects, while benign diseases of the paranasal sinuses constituted the largest portion of the total articles with 25.4%, infectious and inflammatory diseases of the paranasal sinuses followed with 12.7% and septum surgery with 9.9% (Table 3).

The rate of rhinology articles in a total of 890 articles published in six national peer-reviewed journals was investigated according to the names of the journals in the years from 2010 to 2015, and the results are presented in Table 4.

The average number of authors of the 274 rhinology articles was found to be 4.23; 181 of these articles were found to originate from university hospitals, 82 from training and research hospitals, 7 from abroad, and 4 from state hospitals (Table 5).

When examining the city that the articles originated from, it was seen that the most publications originated from Ankara, İstanbul, and İzmir (Table 6).

Concerning the language of the articles, 68.6% were in Turkish and 31.4% were in English.

Discussion

In this article, where rhinology articles published in national peer-reviewed ENT journals were examined, the journal in which the article was published, title of the subject, kind of article, language of the article, institution and city of origin, and number of authors were evaluated.

Table 1. Number of articles according to journal name

| Journal name | Number of articles | % |
|--|--------------------|------|
| The Turkish Journal of Ear Nose and Throat | 99 | 36.1 |
| Journal of Turkish Rhinology | 56 | 20.5 |
| Turkish Archives of Otolaryngology | 36 | 13.1 |
| Journal of ENT and Head and Neck Surgery | 36 | 13.1 |
| Journal of Medical Updates | 28 | 10.3 |
| Journal of ENT-Forum | 19 | 6.9 |
| Total | 274 | 100 |

Table 2. Number of articles according to type

| Type of article | Number of articles | % | |
|------------------------------------|--------------------|------|--|
| Original research | 129 | 47.0 | |
| Case report | 117 | 42.7 | |
| Review | 21 | 7.7 | |
| Experimental study | 5 | 1.9 | |
| Introduction of surgical technique | 2 | 0.7 | |
| Total | 274 | 100 | |

Table 3. Number of articles according to subject

| Subject | Number of articles | % |
|---|--------------------|------|
| Benign diseases of the paranasal sinuses | 69 | 25.4 |
| Infectious and inflammatory diseases of the paranasal sinuses | 34 | 12.7 |
| Nasal septum surgery | 27 | 9.9 |
| Allergic rhinitis | 21 | 8.0 |
| Malignant diseases of the paranasal sinuses | 16 | 6.0 |
| Nasal polyposis | 16 | 6.0 |
| Paranasal sinus anatomy | 14 | 5.2 |
| Rhinoplasty | 13 | 4.8 |
| Conchal diseases | 12 | 4.4 |
| Paranasal sinus surgery | 12 | 4.4 |
| Skull base diseases | 6 | 2 |
| Epistaxis | 6 | 2 |
| Nasal physiology | 5 | 1.6 |
| Nasal reconstruction | 5 | 1.6 |
| Evaluation of ENT articles | 5 | 1.6 |
| Lacrimal system surgery | 5 | 1.6 |
| Phoniatry and rhinology | 3 | 0.8 |
| Smell disorders | 2 | 0.8 |
| CSF fistula | 2 | 0.8 |
| Rhinology and pain | 1 | 0.4 |
| Total | 274 | 100 |

Six prominent journals among the national peer-reviewed journals were selected and included in the evaluation. The Journal of Medical Updates, the Journal of ENT-HNS, the

Table 4. Rate of rhinology publications among all articles in national peer-reviewed ENT journals

| Journal name | Total number of articles | Number of rhinology articles | % |
|---|--------------------------|------------------------------|-------|
| The Turkish Journal of Ear Nose and Throat | 330 | 99 | 30.0 |
| Journal of ENT-HNS | 157 | 36 | 23.0 |
| Turkish Archives of Otolaryngology | 150 | 36 | 24.0 |
| Journal of Medical Updates | 96 | 28 | 29.1 |
| Journal of Turkish Rhinology | 64 | 56 | 92.18 |
| Journal of ENT-Forum | 93 | 19 | 20.43 |
| Total | 890 | 274 | 30.7 |

Table 5. Distribution of institutions from which the articles originated

| Institution from which the article originated | Number of articles | % |
|---|--------------------|------|
| University hospitals | 181 | 66.0 |
| Training and research hospitals | 82 | 30.0 |
| Abroad | 7 | 2.6 |
| State hospitals | 4 | 1.4 |
| Total | 274 | 100 |

Journal of ENT-Forum, the Turkish Journal of Ear Nose and Throat, the Turkish Archives of Otolaryngology, and the Journal of Turkish Rhinology were included in the evaluation. The Turkish Journal of Ear Nose and Throat is the journal in which the most articles were published, and the Journal of Turkish Rhinology is the journal that had the highest ratio of rhinology publications.

When the type of article was examined, it was seen that 47% of all rhinology publications consisted of original research and 42.7% consisted of case reports. The articles of studies introducing surgical techniques (0.7%) and experimental studies (1.9%) were found to appear at a relatively lower rate.

When the number of authors was examined, the average number of authors of the 274 articles was found to be 4.23. In the study in which Erdağ et al. (5) performed qualitative and quantitative analyses of four national ENT journals between the years 2002 and 2010, this rate was found to be 4.49, which appears to be consistent with the rate found in our study.

When the subject of the articles was examined, benign diseases of the paranasal sinuses (25.4%), infectious and inflammatory diseases of the paranasal sinuses (12.7%), septum surgery (9.9%), and allergic rhinitis (8.0%) were the most common fields of study. Although frequent in ENT practice, studies related to smell disorders (0.8%), lacrimal system surgery (1.6%), nasal physiology (1.6%), epistaxis (2.0%), and skull base surgery (2.0%) were identified as the least studied subjects.

Table 6. Distribution of national articles according to cities from which they originated

| 1 | | | 2 | | 3 | |
|------------|--------------------|---------|--------------------|---------------|--------------------|-------|
| City | Number of articles | City | Number of articles | City | Number of articles | Total |
| Ankara | 69 | Adana | 4 | Bursa | 2 | - |
| İstanbul | 53 | Tokat | 3 | Kütahya | 2 | - |
| İzmir | 38 | Kayseri | 3 | Trabzon | 2 | - |
| Konya | 8 | Denizli | 3 | Zonguldak | 1 | - |
| Aydın | 8 | Mersin | 3 | Edirne | 1 | - |
| Diyarbakır | 8 | Sivas | 3 | Düzce | 1 | - |
| Elazığ | 8 | Manisa | 2 | Kahramanmaraş | 1 | - |
| Sakarya | 7 | Van | 2 | Isparta | 1 | - |
| Hatay | 7 | Bolu | 2 | Kırıkkale | 1 | - |
| Eskişehir | 6 | Samsun | 2 | Mardin | 1 | - |
| Kocaeli | 6 | Yozgat | 2 | Erzurum | 1 | - |
| Malatya | 4 | Karabük | 2 | - | - | - |
| Toplam | 222 | Toplam | 31 | Toplam | 14 | 267 |

In terms of the institutions where the articles originated, 181 (66%) of the 274 articles were found to originate from university hospitals and 82 (30%) from training and research hospitals. Meanwhile, seven articles (2.6%) originated from abroad, and four articles (1.4%) originated from state hospitals. While the rate of rhinology publications was detected, in our study, to be 30.7% of all the articles, this rate in foreign publications was found to be 19.83% in a study (6). At this point, it can be seen that Turkish ENT journals contain a greater percentage of rhinology articles than equivalent journals elsewhere in the world.

In terms of the city where the articles originated from, Ankara, İstanbul, and İzmir are the leading cities.

Although the reviewed journals were national, a considerable number of articles were found to be published in English (31.4%). We believe that this is important, particularly for young researchers who have just started their academic careers to be able to send articles to international journals, as well as for publications issued in our country to be visible in the international academic world and to be cited.

Rhinology articles had an important place in national ENT journals between 2010 and 2015 (30.7%). In a study conducted by Bhattacharyya (7) in 1999, in a 6-month period, 508 articles in the Annals of Otology, Rhinology and Laryngology, the Archives of Otolaryngology - Head and Neck Surgery, The Laryngoscope, and Otolaryngology - Head and Neck Surgery, which were the 4 major ENT journals published in English that time, were examined. According to this study, 15% of the articles were case reports, and the ratio of basic research papers was 27.4% (62.1% of them were prospective) (7). Although it is not appropriate to compare the rates of general ENT articles and rhinology articles alone, the rate of case reports among national rhinology articles was found to be quite high (42.7%) in the research we performed.

In a study investigating the rate of conversion of papers to articles in National Rhinology congresses, Doğan et al. (8) found that 61 of 218 reports presented at the National Rhinology Congresses between 2007 and 2010 were converted to publication; the ratio was 28%. The majority of the papers presented in the congresses were case reports; thus, the conclusion was reached in the same study that this may create difficulties in converting these papers to publications (8).

While the ratio of original research papers in all rhinology articles was detected as 47% in our study, the rate of case reports was found to be 42.7%.

While these types of studies are frequently encountered in international areas, several similar studies that examine scientific articles in the field of ENT exist in our country (9-11). The summarization of the studies conducted in previous years is expected to help assess the situation in national ENT and its subspecialties and determine the areas or subjects in which scientific studies can be performed in the following years.

Conclusion

Case reports related to rhinology are relatively numerous in the national ENT literature; therefore, original research, review, and experimental study articles should be given priority in the coming years. Encouraging studies in uninvestigated areas such as smell and taste disorders, nasal physiology, and skull base surgery is important to ensure a prosperity of rhinology subjects in the literature.

Ethics Committee Approval: Ethics committee approval was not obtained as the study was not a human research.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept - Y.K.; Design - İ.A.; Supervision - Y.K.; Resources - İ.A.; Materials - İ.A.; Data Collection and/or Processing - İ.A.; Analysis and/or Interpretation - İ.A., Y.K.; Literature Search - İ.A.; Writing Manuscript - İ.A.; Critical Review - Y.K.

Conflict of Interest: No conflict of interest was declared by the au-

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

References

- Azim Majumder MA, Shaban SF, Rahman S, Rahman N, Ahmed M, Bin Abdulrahman KA, et al. PubMed-based quantitative analysis of biomedical publications in the SAARC countries 1985-2009. J Coll Physicians Surg Pak 2012; 22: 560-4.
- Bliziotis IA, Paraschakis K, Vergidis PI, Karavasiou AI, Falagas ME. Worldwide trends in quantity and quality of published articles in the field of infectious diseases. BMC Infect Dis 2005; 21; 16. [CrossRef]
- Glanville J, Kendrick T, McNally R, Campbell J, Hobbs FD. Research output on primary care in Australia, Canada, Germany, the Netherlands, the United Kingdom and the United States: bibliometric analysis. BMJ 2011; 342: d1028. [CrossRef]
- Ardıç FN, Kara CO, Topuz B, Bayramoğlu İ, Özüer MZ. Kulak burun boğaz dergilerinde yayınlanan makalelerin son 5 yıllık analizi. KBB ve BBC dergisi 1995; 3: 276-80.
- Erdağ TK, Doğan E, Ecevit MC, Durmuşoğlu M, Güneri EA, İkiz AÖ. Dört ulusal KBB dergisinin 2002-2010 yılları arasındaki niceliksel ve niteliksel analizi. Kulak Burun Bogaz İhtis Derg 2013; 23: 260-7. [CrossRef]
- Erdağ TK, Doğan E, İkiz AÖ. Rinoloji yayınlarımızın science citation index kapsamında dünyadaki yeri. KBB Forum 2013; 12: 62-9.
- Bhattacharayya N. Peer review: studying the major otolaryngology journals. Laryngoscope 1999; 109: 640-4. [CrossRef]

- 8. Doğan E, Durmuşoğlu M, Erdağ TK. Publication rates of presentations which were presented at Turkish National Rhinology congress. Kulak Burun Bogaz İhtis Derg 2013; 23: 282-7. [CrossRef]
- 9. Erdağ TK, Durmuşoğlu M, Demir AO, Doğan E, İkiz AÖ. Türk Ulusal Kulak Burun Boğaz ve Baş Boyun Cerrahisi kongre bildirilerinin analizi ve yayımlanma oranları. Kulak Burun Bogaz İhtis Derg 2014; 24: 89-96. [CrossRef]
- 10. Sandhu GS, Wright A. Publishing trends in otorhinolaryngology from January 1997 to December 1999 in the UK. Clin Otolaryngol Allied Sci 2001; 26: 249-52. [CrossRef]
- Cimmino MA, Maio T, Ugolini D, Borasi F, Mela GS. Trends in otorhinolaryngology research during the period 1995-2000:a bibliometric approach. Otolaryngol Head Neck Surg 2005; 132: 295-302. [CrossRef]