

Analysis of Papers Published on Journal of Korean Neurosurgical Society in 2005

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One of the biggest change in the history of the Journal of Korean Neurosurgical Society(JKNS) had been introduced in 2005. From January 2005, all manuscripts submitted to JKNS should be written in English. This new regulation was followed by many changes in characteristics of the papers published on JKNS in 2005. The authors present an analysis of papers published on JKNS and compared with those of 2004 and 2003. In total, 184 articles were published in 2005. Since a review article was requested by the editorial office to the authors, 183 articles were peer reviewed. Eighty five clinical articles, 75 case reports, 19 laboratory investigations, two special articles and two technical reports were printed. This distribution was not statistically different from 2004's distribution ($p=0.67$), even though the ratio of clinical articles was decreased to 46.4% from 54.4%. Due to the change in language specification, English articles were increased with statistical significance ($p<0.001$). There were several events related with copyright of the contents of the papers published on JKNS. We think these are some good points came with change in official language to English. General trends of the papers seemed to be in the right way.

KEY WORDS : Published papers · Journal of Korean Neurosurgical Society · 2005.

Introduction

From January 2005, all manuscripts submitted to the Journal of Korean Neurosurgical Society(JKNS) were required to be written in English. In spite that some people insisted that Korean manuscripts should be also accepted because of several reasons, this regulation had been introduced in order to drag JKNS into an internationally appreciated journal. The clearest way to be admitted as a high level journal is to be referred by many researchers and it is also clear that it should be read first in order to be referred. Even after the introduction of the regulation, several Korean articles were published since they were already submitted before the regulation. From the 38th volume (July issue), all articles on JKNS were in English and it is sustained yet. Many people worried that there would be big decrement in number of manuscript submission if we had changed the official language to English. But, the most members of the Korean Neurosurgical Society

agreed that this is one of the right way to follow to improve JKNS and number of submission was not decreased drastically.

There was also an event it might hinder the members from submitting the article to JKNS. From 2005, the regulation that the applicant of the neurosurgical board examination should have at least one original article published on JKNS or Science Citation Index(SCI) journals as the first author had been alleviated. Now, an original article on JKNS or SCI journals can be replaced by two original articles on any other journals in application for the board examination. People expected that the number of manuscript submission to JKNS would be reduced very much by this alleviation. As it is mentioned earlier, however, manuscripts came to JKNS steadily quieting down all worries.

The above two events were expected to affect the level and distribution of the papers published on JKNS in 2005. The authors present an analysis of papers published on JKNS and compared with those of 2004 and 2003.

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Analysis of Published Papers

In 2005, a total of 184 articles was published on JKNS. This number was decreased by 16.0% from 219 of 2004 and 23.3% from 240 of 2003, 16.0% of 219 of 2002, respectively¹⁻³. This reduction was, however, rather a result of the policy of the editorial committee to reduce the articles printed on JKNS to raise the quality of published papers than a result of decrease in number of manuscripts applied to JKNS. Since a review article was requested by the editorial office to the authors, 183 articles were peer reviewed⁴. Eighty five clinical articles(46.4%), 75 case reports(41.0%), 19 laboratory investigations(10.4%), two special articles(1.1%) and two technical reports(1.1%) were printed. This distribution was not statistically different from 2004's distribution (Pearson Chi-square $p=0.67$), even though the ratio of clinical articles were decreased to 46.4% from 54.4%. The ratio of the original articles including clinical articles and laboratory investigations was not significantly different from 2004 (Pearson Chi-square $p=0.27$). The case reports, technical reports, and special articles were grouped as the other articles.

The number of authors per article was 4.3 in average. The average number of authors of original articles was 4.8 and that of other articles was 3.5. The average number of authors per article, per original article, and per other article were similar with those of 2004, 4.4, 4.9, and 3.6, respectively. There was no statistically significant difference between 2005 and 2004 (Student t -test $p>0.5$). In 2003, the number of authors decreased from those of 2002 with statistically significant differences³.

Since only English manuscripts were accepted from January 2005, there was a dramatic change in number of English articles. Most of all, the journal was published fully in English since the July issue (volume 38 number 1). Before July, 2005, several articles written in Korean were published. These had been submitted before 2005 and accepted in late 2004 or early 2005. There were only 11 articles published in Korean and it means that other the 172 articles (94.0%) were in English. This figure is statistically different from 131 articles (60.4%) of 2004 (Pearson chi-square $p<0.001$). Even though most of case reports had been written in English in 2004, the change in number of English case reports and other articles were statistically different (Fisher's exact test $p=0.03$ for both). All of the other articles, including case reports, technical reports, and special articles were published in English in 2005. This change was more prominent in number of English clinical articles and original articles. Number of English clinical articles in 2005 was 75 (88.0%) and that of original articles was 93 (89.4%). These figures showed statistically different increase compared to those of 2004 (Pearson chi-square $p<0.001$ for both).

The number of institutes which published at least one article, regardless of the type, was decreased to 44 from 51 of 2004 (Table 1). Since the affiliations were counted by the affiliation of the corresponding author, there was one article published with a corresponding author of a foreign institute. Excluding this, 43 domestic institute published at least one article on JKNS in 2005. Of these, 41 were resident training hospitals. Nine resident training hospitals published none on JKNS in 2005. When we count the number of all publications, Catholic University took the first place by publishing 19 articles which is consisting of 11 original articles and eight other articles (10.4% of all articles) on JKNS in 2005. It also had taken the first place in 2004 by publishing 18 articles (8.4%). The second place was taken by Chosun University that published 14 articles (7.7%). Hanyang University published 11 articles (6.0%) as the third place. Seoul National University, Inje University, and Yonsei University published nine articles (4.9%), respectively. Number of articles published by top five institute was 62 (33.9%) and difference from that of 2004 (67, 30.9%) was statistically meaningless (Pearson chi-square $p=0.41$). Chosun University was very active in publishing articles on JKNS in 2005 and 2004. It published 13 articles (6.9%) and took the third place in 2004. Considering it had published only one article on JKNS in 2003, this change is very remarkable.

Distribution of the institutes published original articles was not so much different from 2004. Chosun University and Catholic University took the first place together by publishing 11 original articles(12.9%) on JKNS in 2005. Hanyang University and Yonsei University published six original articles (7.1%), respectively. Wooidul Hospital and Chung-Ang University published five original articles (5.9%). Seoul National University, Kyungpook National University, Chonnam National University, and Sungkyunkwan University published four original articles (4.7%). The first five institutes published 37.5% (39 articles) of all original articles and this was not statistically different from 2004 (32.6%, Pearson Chi-square $p=0.62$). Seoul National University which had taken the first place by publishing extremely much original articles in three consecutive years until 2004 made a concession of the first place to Chosun University and Catholic University. The largest number of other articles were published by Catholic University, eight articles (10.1%). Chonnam National University followed by publishing seven other articles(8.9%). Inje University was six (7.6%). Hanyang University and Seoul National University published five other articles(6.3%), respectively.

The numbers of publications per neurosurgical board member and per training resident had been calculated and given in Table 1. Like in 2004, Chosun University was at the first place in number of publications per board member by pub-

Table 1. Numbers and type of the papers published on Journal of Korean Neurosurgical Society in 2005. The original articles mean clinical articles and laboratory investigations. The other articles are case reports, technical reports, and special articles

Institute	Original articles	Other articles	Publications	Publications /board	Publications /resident
Ajou	1	0	1	0.17	0.13
Bong Saeng	1	0	1	0.20	0.25
Catholic	11	8	19	0.43	0.61
CHA, Pochon	2	0	2	0.50	0.50
Cheongju Saint Mary's	2	2	4	1.00	2.00
Chonbuk	1	1	2	0.40	0.25
Chonnam	1	7	8	0.80	0.67
Chosun	11	3	14	2.33	2.33
Chung-Ang	5	2	7	0.88	1.17
Chungbuk	0	1	1	0.25	0.25
Chungnam	4	2	6	1.00	0.75
Daegu Catholic	0	3	3	0.60	0.75
Daejin Medical Center	1	1	2	0.50	1.00
Dankook	1	0	1	0.17	0.50
Dong-A	2	0	2	0.33	0.25
Dongguk	1	0	1	0.25	1.00
Ewha	2	0	2	0.20	0.33
Gachon	1	1	2	0.25	0.29
Gosin	0	2	2	0.33	0.29
Hallym	3	3	6	0.29	0.33
Hanyang	6	5	11	0.92	1.10
Inha	1	1	2	0.29	0.22
Inje	3	6	9	0.45	0.50
Keimyung	3	0	3	0.50	0.60
Korea	2	3	5	0.31	0.42
Korea Cancer Center	1	0	1	0.25	1.00
Kwangju Christian	1	1	2	0.50	0.67
Kyung Hee	1	0	1	0.14	0.11
Kyungpook	4	3	7	1.00	0.70
Maryknoll	1	0	1	0.20	0.50
Myeongji Saint Mary's	1	1	2	2.00	-
Presbyterian	1	0	1	0.20	0.25
Pusan	1	1	2	0.33	0.25
Seoul	4	5	9	0.31	0.56
Seoul Medical Center	0	1	1	0.25	0.33
Soonchunhyang	2	3	5	0.31	0.71
Stanford	1	0	1	N/A	N/A
Sungkyunkwan	4	1	5	0.22	0.25
Ulsan	2	1	3	0.17	0.25
Veterans	1	0	1	0.20	0.33
Wonkwang	2	0	2	0.40	0.29
Wooridul	5	3	8	0.19	-
Yeungnam	3	3	6	1.00	0.86
Yonsei	6	3	9	0.30	0.56

- : no residents; N/A : data not available

lishing 2.33 articles per board member. Myeongji Saint Mary's hospital which appears in the list for the first time took the second place in number of publications per board members by publishing 2.00 articles per board member. Kyungpook

National University, Yeungnam University, Cheongju Saint Mary's hospital, and Chungnam National University followed the above two by publishing 1.00 articles per board member. Chosun University was also at the first place in the number of publications per training resident as in 2004. Considering the number of publications, each resident at Chosun University published 2.33 articles on JKNS in 2005. Next was Cheongju Saint Mary's hospital with 2.00 articles per resident and Chung-Ang University and Hanyang University came with 1.17 articles and 1.10 articles per resident, respectively.

Discussion

The most prominent change in characteristics of the papers published on JKNS in 2005 is that the number of English articles increased markedly. From the July, 2005 issue (volume 38, number 1), all articles on JKNS have been published in English. This is a result of the change in the regulation of the journal so that all manuscripts to JKNS should be written in English. Although there were many complaints and opposite opinions for this policy when this regulation was introduced, now it seems that the new rule is accepted and settled down among the members of the Korean Neurosurgical Society. In a point of view that it is an obligation for us to be internationalized in this globalized world, writing papers in English is one of the requisite as a citizen of the globe. By publishing our articles in English we expect more people over the

world to read and to refer them.

Even though it is not pleasant to mention this, the proof of the fact that more people over the world are reading JKNS had been given to the editorial office several times. There was

a paper which plagiarized results of another paper and published on JKNS in 2004. It was the first foreign original article published on JKNS. The reviewers and editorial office had failed to reveal this plagiarism. But, an American doctor found this and sent a letter to the editorial office to ask revocation of the paper. The editorial office examined this case and concluded that this paper is a plagiarized one and decided to withdraw it officially and the authors agreed to it. This rectification was possible only because the article was written in English and read by foreign researchers. It is so obvious and natural that the author should not plagiarize other papers. But, some people thought the original authors could not detect the plagiarism if the paper is written in Korean since they can not understand Korean. By using English for all papers, this kind of plagiarism can not be repeated again because someone will recognize it. Because all papers of JKNS are serviced on the web site (<http://www.jkns.or.kr>) anyone in the world can search and read the articles on JKNS.

There was another paper in which experimental data of other persons were presented as the author's. The original owner of the experiment protested on this and the authors of the paper withdrew their paper and apologized officially. The owner was an American and read JKNS at her office. Even though the paper itself was written in Korean, figure captions were in English and the original owner of the experiment could figure out this illegal use. Without any notification of the editorial office, this surreptitious use of data was disclosed. It was possible because the article was distributed over the world and figure captions were in English. By publishing papers in English, the editorial office is expecting not only these negative events but also positive facts such as marked increase of citation of JKNS by foreign researchers. Considering that an article had been submitted voluntarily by Indian authors, JKNS seems to be better known to foreign authors and this trend should be kept well by all members of the society.

Distribution of the institutes which published articles on JKNS seems to be a little bit biased. About one third of papers on JKNS was written by top five institutes out of 43 domestic institutes. If we take into account nine resident training hospitals which did not publish any paper on JKNS in 2005, it can be assessed that only some institutes are publishing papers on JKNS. This trend was more severe in original articles. The first five institutes published 37.5% of the original articles consisting of clinical articles and laboratory investigations. This phenomenon of concentration should be resolved to expand participation of all members in publishing papers to report their clinical and research works to other people.

When we look into citation of articles, Korean Medical Citation Index(KoMCI) can be a guide to the present situation of JKNS. The impact factor(IF) of JKNS was 0.197 in 2004⁵⁾.

This is similar with 0.176 of KoMCI 2003 but markedly increased compared to 0.079 of KoMCI 2000^{6,7)}. IF of 0.197 means that about one of five papers on JKNS had been cited by other papers within two years after publication. The more important factor that counts only citations from other journals is, however, the impact factor excluding self citation (ZIF). The ZIF of JKNS was 0.024 in 2004^{4,5)}. ZIF was 0.010 in 2003 and 0.006 in 2000, respectively. Even though the value of ZIF is still very low, in other words, only one of 42 papers on JKNS had been cited by papers on the other journals, it has been increased significantly. On the contrary that only three articles out of 493 published articles on JKNS had been cited by other journals in 2000, 11 articles were cited in KoMCI 2004. The gradual increment of IF and ZIF shows us that JKNS have been read by more and more people and have given more credibility to be cited.

Conclusion

In 2005, the big conversion of JKNS into an English journal was realized. All papers have been published in English since July, 2005. This changeover seems to display the endeavor and endurance of the members of the society to promote JKNS to an internationally appreciated journal. This conversion also revealed some negative facts which were undiscovered previously and we are sure that these events will be helpful in development of JKNS. The IF and ZIF are still at low levels although the absolute values have been gradually increased since 2000. The authors hope many people visit the journal web site (<http://www.jkns.or.kr>) and search papers to find previous research works when he/she wants to write his/her own articles. Keeping in mind that the only way of a journal to survive and to develop is to be cited by other articles will guide the journal to the way to an excellent academic journal.

References

1. Chung CK, Chung HT, Choi JS, Kim DG : Analysis of publications on Journal of Korean Neurosurgical Society in 2002. *J Korean Neurosurg Soc* 32 : 616-618, 2002
2. Chung HT, Yang JH, Choi JS, Kim DG : Analysis of publications on Journal of Korean Neurosurgical Society in 2004. *J Korean Neurosurg Soc* 36 : 510-513, 2004
3. Chung HT, Yang JH, Choi JS, Kim DG : Analysis of publications on Journal of Korean Neurosurgical Society in 2003. *J Korean Neurosurg Soc* 34 : 597-599, 2003
4. Clusmann H, Kral T, Schramm J : Present practice and perspective of evaluation and surgery for temporal lobe epilepsy. *J Korean Neurosurg Soc* 38 : 165-183, 2005
5. Korean Academy of Medical Science : *KoMCI 2004*, Seoul : Academia, 2005
6. Yang HJ, Chung HT, Yi MA, Kim DG : Citation of Journal of Korean Neurosurgical Society Assessed by KoMCI - Trends in recent five years. *J Korean Neurosurg Soc* 38 : 403-405, 2005
7. Yang HJ, Chung HT, Choi JS, Kim DG : Citations of Journal of Korean Neurosurgical Society 2003 : Analysis by KoMCI. *J Korean Neurosurg Soc* 36 : 264-266, 2004