Editorial

An Assessment of Researches by Pathology Groups of the Universities of Medical Sciences of Iran

Mohammadreza Jalali-Nadoushan ^{1,2}, Alireza Abdollahi ^{3,4}

Dept of Pathology, Shahed University, Tehran, Iran
Editor – in – Chief, Iranian Journal of Pathology, Tehran, Iran
Dept of Pathology, Tehran University of Medical Science, Tehran, Iran
Associate Editor, Iranian Journal of Pathology, Tehran, Iran

During recent years, publication of scientific articles, particularly in valid foreign journals has been improved greatly in universities of Iran, and there has been prepared proper encouraging facilities and rewards for bringing out more articles. A great increase in the amount of Iranian researchers and referring to them is an evidence of the importance of macro policies in changing scientific and cultural changes.

Publishing an article with the subject "Scientific impact of the countries" in July 2004, *The Nature Journal* discussed the scientific progress of Iran in detail. In this article, Iran was one of the 31 selected countries. In addition, in an article in 2005 in the journal of *Scientometrics*, the places of China and Korea in the global scientific system were talked over and it was reported that the highest amount of boosting in the share of referring to the articles during 1997 to 2001 with 100% has belonged to Iran and Korea (1).

The highest amount of increase in the share of the global publication, or the highest rate of increase in publication of the articles, went to Iran as well, with the approximately percentage of 120%.

In 1998, Iran overtook Pakistan towards the number of articles. Then in 2003 passed Saudi Arabia and in 2004 eclipsed Egypt, and now

after Turkey, has the second place in the area and between Islamic countries (1).

The rate of improvements in Iran, especially in basic sciences tells the essential changes in science and technology. Keeping this improvement can lead to great scientific achievements in the future. One key point is that various studies prove that there is a close and linear relationship between gross domestic production (GDP) and the number of ISI articles in each country. Therefore, by an overall assessment it is understood that there are three items, which stability of scientific and technological improvement of Iran can be guaranteed by.

Here are the results of measuring the knowledge of medical group and other scientific sections during 1999 to 2009, according to the rankings in international institutes (2):

- According to the number of articles in the ISI website of *Web of Science*, between 1999 and 2009, Iran has the place of 35th of the world. America, Japan, and Germany have respectively the first, the second, and the third places.
- Within the last ten years, in this website, there have been 49'663 articles featured by Iran, which 184'543 times

have been referred to, and the place of Iran according to impact-factor (IF) is 3.27.

- In the global rankings of the countries, depending on the rate of the existing articles, in the ISI website of Web of Science, during 2009 to 2009, Iran has had the place of 41st of the world, whereas America, Germany, and England are in the first to the third places, respectively.
- According to the number of articles in the website of *Scopus*, from 1999 up to 2009. Iran has been in the 22nd position. America, China, and England occupy the first, the second, and the third rank.
- In the last ten years, in this website, there have been 16'745 articles featured by Iran, which 10'112 times have been referred to, and the place of Iran

according to impact-factor (IF) has been 0.6. The h-index, which has been mentioned in this website, shows the score of 80 for Iran.

Overall, in these years (2000 – 2009), 2847 articles on Pathobiology have been released (Table). As stated by ISI documents during this study (2000 - 2009), the total number of referring to the articles on Pathobiology of Iran was 8'101 times. The citation per each paper was 82.2. The average yearly referring was 45.736 times. Additionally the h-index of Pathobiology papers was 34, which is quite satisfactory, shows the high quality of these articles. Having considered the value of selfcitation, we can notice that the highest yearly percentage of referring to the articles on Pathobiology by Iran goes to 2009, 2008 and 2007 with respectively 34.18%, 23.58%, and 14.82% (2).

The numbers of yearly referrals to Iranian articles on Pathobiology within the last ten years (2000 -2009)

Publication Year	Record Count	Percent of all
2009	2477	34.18
2008	1709	23.58
2007	1074	14.82
2006	668	9.21
2005	393	5.42
2004	297	4.09
2003	162	2.23
2002	98	1.35
2001	48	0.66
2000	5	0.06

By taking a look at journals that have published articles on Pathobiology of Iran, we can see that most of the articles are published in Iranian Journal of Veterinary Research Archives of Iranian (68.2%),Medicine (60.2%), and Iranian Journal of Public Health (4.2%), and all of them were Iranian journals. Between foreign journals, most of the articles were published in Cytologica Acta. This proves that due to low quality of most of the articles, they cannot make way to be published in higher-level journals than Iranian ones. This also might be because of limited, small-scaled, and local researches. On the other hand, these results prove that by publishing international journals in Iran can take a bigger part in global generating of science.

According to the information in the website of ISI, articles published on Pathobiology in Iran were evaluated in terms of dependence on organizations and centers that cooperate in composing and publishing. Having known this, the highest numbers of published articles on Pathobiology were from Tehran University of Medical Science, The University of Tehran, and The University of Medical Science of Shiraz. These results introduce the active organizations in researches on Pathobiology. Of course, participation of these centers seems not to be necessarily because of being active, but because of having related staff.

Carrying out a search in the website of ISI for different types of articles published on Pathobiology in Iran, we can see that most of the published articles were original ones (67.89%), then the articles from seminars and conferences. By leaving these two types of articles aside (seminar and conference), review articles, and letters had the highest values. These results show that the original articles take priority and the other types are not that much in the centre of attention. This might be because the ministry of health emphasizes the original articles in order for the staff to upgrade, albeit composing review articles, which are more worthy compared to original articles, are more complicated and sophisticated (2).

References

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