

Indian Journal of Orthopaedics: An Audit of 12 Years

The research and publications are the keys for evolution of medical science and propagation of new knowledge far and wide to help treating clinicians and patients in pain at large. Good scientific journals are peer-reviewed, publish the best credible research in shortest possible time after submission, and are available globally.^{1,2} The published research can be used by clinicians for evidence-based patient care decisions and researchers for future research on the subject.

The Indian Orthopaedic Association (IOA) started Indian Journal of Orthopaedics (IJO) in 1967. For the next 40 years, the journal was published regularly, two issues per year till 1993 and then four issues every year from 1994 onward. The journal was published in local press and was dispatched to its members. The articles published were not available universally to Indians and overseas orthopedic surgeons. The IJO was not included in index Medline and hence was not available in medical libraries. The articles published were not cited/referred in the future research. This can be reflected by only two citations received by the articles published in IJO before 2006.

During 2004, the IOA took a serious focus on the quarterly publication of IJO and one full year was given to plan IJO as a global journal as prevalent globally. The editor (AKJ) to be taking charge from 2006 onward was appointed 1 year before to organize the workflow in 2005 when the editor for 2003–2005 was already working to bring out all issues. The serious discussions took place in IOA, and the following steps were taken:

Global Reach

Unless the work published in IJO is available worldwide, the research published will not be utilized in clinical practice and research. With the aim to increase visibility and research impact, a website www.ijoonline.com for IJO was launched during IOACON 2006 at New Delhi. The website had all features of article submissions, peer review, search of all articles, archives, record citation, and sending citation alert to authors, download, search, etc. The website allowed unrestricted free access to all contents of the journal. Later on, in subsequent years, the other user-friendly features were developed such as mobile site, e-pub, article PDF to authors, PDF e-mailed on publication for promotion, monthly statistics on article pages, keywords tagging, recommend and subscribe from PDF download page, etc.

E-mail notifications were sent electronically to members on dispatch of journal copies, notification on return of copies, facility to update addresses online to increase reach of physical copies of journal and reduce waste of returned, undelivered journal.

All back issues published since its inception (1967–2006) were placed on the website. This increased the citation received by articles of even all those articles also. The PDF was free to download in India and HTML version globally. This step made IJO visible globally. This increased visibility of IJO and gave it a quantum leap in overseas submission/citations [Figure 1]. The country-wise visitors are constantly on the rise. This also attracts international scientific community to contribute to Indian Journal of Orthopaedics.

The editorial board was revamped with the inclusion of editors/authors from international journals. Since the IJO was not known outside India before 2006, the e-mails were written to “Who is Who in Orthopaedics” globally to attract quality articles (original and review) with assurance that IJO team is very serious getting it indexed. The global orthopedic community responded and supported and submitted the articles in huge number knowing fully well that journal is not available in PubMed and Science Citation Index Expanded for impact factor. This allowed us to publish the symposium on specific subjects having a global mix of authors.

To educate the members about the need for locally conducted research, symposium on “Research Methodology and Art of Writing” (January 2007) and on “Evidence-based Orthopaedics” (April 2008) was published.¹⁻³ A series of 3-min appraisal of each type of research papers (randomized control trial, systematic review, cohort study, case-control study, and retrospective case series) was published. We planned to bring out one subject symposium in every issue, and as a start, the first scientific subject was published on Giant Cell Tumor (April 2007) and Spinal Trauma (October 2007). We maintained this till 2017 and published 20 symposiums [Table 1].

All these subject symposiums planned to include 2–3 review articles from the subject experts and 6–7 original articles on the subject with an editorial by an invited expert. This process is continued until the last issue.

Online Submission System and Peer Review

The online submission and peer review system was also launched.⁴ This made peer review faster, easier, and authenticated. We used this system well to conduct a robust peer review. Whenever a manuscript was rejected, the authors were given detailed comments about the quality of the manuscript and methodology of conducting research and writing style. The objective was to sensitize the orthopedic community about the research methodology and art and science of manuscript writing and to create environment conducive for research and publication.^{5,6}

Print Parameters

To have a consistency of prints, every parameter of the journal was standardized including cover page, font, article sequencing, page type, figure making, legends, plagiarism check, standard Vancouver format of referencing, and logo.

Outcome of Total Care

The results started paying off. Our visibility has increased exponentially. The overseas submissions have increased [Figure 1]. It is interesting to see that overseas submission increased significantly (2007–2009) even when the IJO was not included in PubMed. In 2007, we received 276 submissions which continued to increase in subsequent years. In October 2009, the IJO was included in Science Citation Index Expanded from 2008 and we were likely to get the first impact factor in 2011 for articles published in

2009 and 2010. In October 2009, we were also included in PubMed open access journal through PubMed Central.³ All articles published in 2007, 2008, and 2009 were placed in PubMed by March 2010.³ This information gave us serious jump. We are receiving more overseas submissions (In 2018 - Overseas:Indian: 55%:45%). In view of large number of accepted case reports, we withheld submission of case reports from the mid of 2015 to the end of 2016. This decreased overall submissions, as visible in bar diagram [Figure 1].

After maintaining the sustained quality of the journal, we increased the frequency of publication from 4 to 6 per year from 2011. The sustained quality, timeline, demonstrable peer review following these steps lifted the IJO to the state that it was included in Science Citation Index Expanded from January 2008 first in October 2009. The advantage of this was that the IJO received first impact factor (0.285) in 2011.⁷ This was not a small achievement for a journal which was restricted to its members before 2007. Since then, the impact factor is continuously increasing [Figure 2].

Table 1: List of symposiums published

Title	Year	Issue
Research methodology	2007	January-March
Giant cell tumor	2007	April-June
Spinal trauma	2007	October-December
Femoral neck fracture	2008	January-March
Evidence-based orthopaedics	2008	April-June
Open fracture	2008	October-December
Fracture healing	2009	April-June
Idiopathic and adolescent scoliosis	2010	January-March
Spinal deformity	2010	April-June
Ewing’s sarcoma	2010	October-December
Spinal deformity	2012	March-April
Osteosarcoma	2014	May-June
ICL-2014 (2 ICL every issue)	2015	January-February
Anterior cruciate ligament	2015	March-April
Knee	2016	March-April
Total hip arthroplasty	2017	July-August
Sports injury	2017	September-October
Musculoskeletal oncology	2018	January-February
Hindfoot and ankle trauma	2018	May-June
Pediatric trauma	2018	September-October

ICL=Instructional Course Lectures

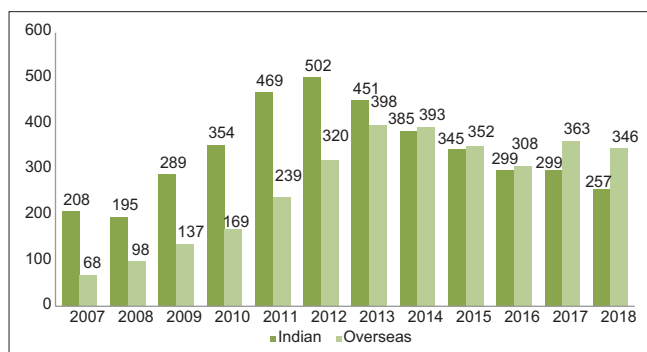


Figure 1: A bar diagram showing comparison of manuscript submission (Indian/Overseas) (2007–2018)

Financial State

The IJO was posted to all members (over nine thousand) every issue in 2007 with heavy printing and postage cost. We were given Rs. 800,000/- for 2007. Once two issues were out, we could generate adequate revenue from advertisement by year end to pay the balance. In subsequent years, the IOA continued to increase the contribution for new members enrolled, but still, we collected significant revenue from subscripsts and advertisement. In 2018, we posted approximately 11,000 journals (six issues/year), thus incurring cost of about Rs. 48 lakh.

The impact factor is increasing since then, and in 2017, it is 0.98.

We consistently maintained the acceptance rate between 10% and 16% which is acceptable rate by international standards.

Publication Policy

The publication policy planned was such to have a mix of articles published on current and burning subjects relevant to India and other limited resource countries. The locally

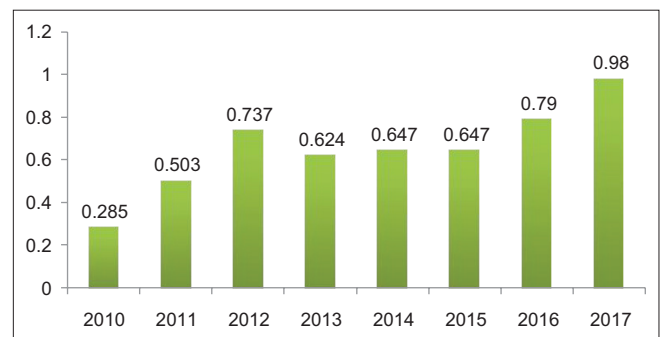


Figure 2: A bar diagram showing impact factor from 2010 to 2017

conducted research on India specific subject was given space. The education and patient care issues are given equal importance. It was focused on:

- a. Education of members on publication policy: We conducted research method workshop every year in UCMS, publication session of 2 h in IOACONS, lectures in various state chapter conferences, and preconference workshops. The members were educated on research methods and editorial written on various issues such as scientific communication,¹ peer review: heart and soul of scientific publication,² research in orthopedics: a necessity,⁸ ethical issues in scientific publication,⁹ impact factor: measure of quality of research publication,¹⁰ what is plagiarism and how to avoid it,¹¹ and what is indexing¹²
- b. The manuscripts were only rejected after giving adequate, valid reasons so that authors can improve on their future submissions
- c. We had a balance of review articles/original articles/case reports although case reports contribute poorly for impact factor. However, our objective was to increase awareness among authors for publication and simulating new generation about publication. The best stimulation can only come after seeing one's name printed in index IJO, and younger orthopedic surgeons are more likely to submit case reports
- d. In later years, MeSH terms were introduced along with keywords to meet the international publishing standards¹³
- e. Publication awards were introduced:
 - i. SN Baksi best published paper award of the year (already existing)
 - ii. IOA best published paper award in basic research category
 - iii. Dr. SM Tuli best published case report award.

Where Do We Stand Today?

We now have a double-blinded peer-reviewed journal where 90%–95% articles are unsolicited with rejection rate around 86%–88%. We have a mix of regional, national, and international contents.¹⁴ We do not keep submission fee, open access journal where PDF download is free in India and HTML version globally. We have global visibility. We have proven track record of plagiarism check and follow WAME and Cope guidelines for publication. Our website is mobile optimized. The impact factor has increased from 0.285 to 0.98 in 2017 and constantly increasing.

We applied to be included in index Medicus in 2016. We have scored 3.1 points out of 5. The minimum points required for getting the journal indexed are 3.75. We just missed inclusion in the index of Medline by 0.65 points. The deficiency pointed is rectified, and we are sure we shall apply again for inclusion in index Medline at the end of the year 2019.

We have to increase the impact factor, and that is possible by improving scientific contents.

Future Directions

Lots of water has now passed under Yamuna Bridge, so also IJO now moved from University College of Medical Sciences, Delhi, to new destination. Three editors contributed here for 12 years, i.e., Dr. Anil K Jain (2007–2012), Dr. Sudhir Kumar (2013–2015), and Dr. Ish Kumar Dhammi (2016–2018). Medknow publication now changed to Wolters Kluwer India Pvt. Ltd. has contributed immensely, particularly in the initial stage for going online.

Now, we have to maintain consistency in our decisions, issue planning, COPE guidelines, and print quality. We have good number of accepted manuscripts waiting for publication in 2019.

We have to open new education frontier where the IJO contributes to postgraduate education a responding by editorials/review articles on burning issue faced by orthopedic surgeons globally and particularly to Southeast Asia, Africa, and Latin America where patient care is far different and test the ingenuity of orthopedic surgeon in view of late presentation by patients and infrastructural limitations. We believe that the IJO has everything to become the most popular journals globally to fulfill the academic space for most updated and India specific research.

We wish the very best for the new team.

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References

1. Jain AK. Scientific communication. *Indian J Orthop* 2007;41:1-2.
2. Jain AK. Peer review: Heart and soul of scientific publication. *Indian J Orthop* 2009;43:3-5.
3. Jain AK, Sahu D. *Indian Journal of Orthopaedics: The journey so far.* *Indian J Orthop* 2010;44:1-4.
4. Jain AK, Kumar S. *Indian Journal of Orthopaedics: Journey continues.* *Indian J Orthop* 2013;47:1-5.
5. Dhammi IK, Kumar S. Process of peer review continues. *Indian J Orthop* 2013;47:537-9.
6. Dhammi IK. Road map of journal for coming years. *Indian J Orthop* 2016;50:1-2.
7. Jain AK. *Indian Journal of Orthopaedics: Exploring a new horizon.* *Indian J Orthop* 2011;45:1-2.
8. Jain AK. Research in orthopedics: A necessity. *Indian J Orthop* 2009;43:315-7.
9. Jain AK. Ethical issues in scientific publication. *Indian J Orthop* 2010;44:235-7.
10. Jain AK. Impact factor: Measure of quality of research publication. *Indian J Orthop* 2011;45:289-90.
11. Dhammi IK, Ul Haq R. What is plagiarism and how to avoid it? *Indian J Orthop* 2016;50:581-3.

12. Dhammi IK, Haq RU. What is indexing. Indian J Orthop 2016;50:115-6.
13. Dhammi IK, Kumar S. Medical subject headings (MeSH) terms. Indian J Orthop 2014;48:443-4.
14. Jain AK. Indian Journal of Orthopaedics dedicated to education, care and research. Indian J Orthop 2012;46:1-3.

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