

## Characteristics of Articles Published in the Journal of Institute of Medicine Nepal: A Cross-sectional Study

Lava Shrestha<sup>1</sup>, Yogendra P Singh<sup>2</sup>, Mohan R Sharma<sup>3</sup>

### Author(s) affiliation

<sup>1</sup>Department of Clinical Physiology, Maharajgunj Medical Campus, Tribhuvan University Teaching Hospital, Institute of Medicine, Maharajgunj, Kathmandu, Nepal

<sup>2</sup>Department of General Surgery, Maharajgunj Medical Campus, Tribhuvan University Teaching Hospital, Institute of Medicine, Maharajgunj, Kathmandu, Nepal

<sup>3</sup>Department of Neurosurgery, Maharajgunj Medical Campus, Tribhuvan University Teaching Hospital, Institute of Medicine, Maharajgunj, Kathmandu, Nepal

### Corresponding author

**Mohan R Sharma, MBBS, MS**  
mohanrajsharma@iom.edu.np

### Submitted

Oct 3, 2021

### Accepted

Mar 28, 2022

## ABSTRACT

### Introduction

Scholarly journals publish various types of manuscripts. The objective of this study was to analyze the types of articles published in the Journal of Institute of Nepal (JIOM Nepal) from 2019 April to 2021 April and describe bibliometric characteristics.

### Methods

Seven issues of JIOM Nepal published from April 2019 to April 2021 were analyzed for types of study, areas of medical science, the number of authors, gender of the primary author, contributing specialty, and author's affiliation.

### Results

Total articles published were 139, with a mean number of 19.8±4.4 articles per issue. More than half of the published articles were cross-sectional studies (93, 66.9%), followed by case reports (25, 17.9%). The majority of primary authors (94, 67.6%) were faculty from constituent campuses of the Institute of Medicine (IOM) Tribhuvan University. Thirty-eight (27.3%) contributing authors were females. Fifty-three (38.1%) articles published were diagnosis-related. Authors from surgical specialties were the most common article contributors [67 (48.2 %)], while basic science specialties contributed 13 (9.4%) publications.

### Conclusion

Cross-sectional studies were the most commonly published articles and surgical specialties published more than half of the articles. The majority of the articles were related to diagnosis. Greater efforts are needed to produce further progress of the journal. A mixture of original articles, reviews, and case reports from different medical domains will be more interesting to the readers.

### Keywords

Article, authors, characteristics, journal

**INTRODUCTION**

Scholarly journals publish manuscripts catering to the need of the readers. Though the thrust is to publish original research articles, various other types of information are also shared such as systematic reviews, meta-analyses, narrative reviews, case reports, and letters to the editor. Every type of article has a unique purpose.<sup>1</sup> The overall idea of scientific publication is to advance science further. Evidence-based medicine (EBM) is the bedrock of scientific practice intended to optimize decision-making in the diagnosis and treatment of various diseases.<sup>2,3</sup> The level of evidence generated by research and subsequent publication depends on the quality of the research published. For example, the Hierarchy of evidence puts systematic reviews at the top of the hierarchy and expert opinion at the bottom.<sup>4</sup>

Journal of Institute of Medicine Nepal (JIOM Nepal) is one of the oldest health science journals in Nepal. The first issue of the journal was published in 1979 AD and it has been the academic voice of the medical and healthcare professionals, especially from the Institute of Medicine (IOM), Nepal. Currently, the journal is published three times a year. There have been few studies looking at the types of manuscripts and other general characteristics of the journal in the international literature.<sup>5-8</sup> This helps to strengthen the quality of the journal by adjusting the metrics associated with the journals.

The aim of this paper is to analyze the type of manuscripts that were published since 2019 April when the new team took over, and to describe various characteristics of article types expected in a scholarly journal.

**METHODS**

A total of seven issues of JIOM Nepal were published during the study period which included 139 articles, were studied. The parameters analyzed in the study were the type of articles whether related to therapeutics, diagnosis, prognosis, or health promotion; contributing specialty, number of authors, gender, and affiliation of the lead author. As this was a purely descriptive study, no attempt was made to analyze factors associated with types of publications.

**RESULTS**

A total of 139 articles were published in these seven issues with an average of 19.8±4.4 articles per issue. As shown in Table 1, cross-sectional studies were the most commonly published articles which accounted for 93 (66.9%) of total publications, followed by case reports (25, 17.9%).

Out of 139 published articles, 101 (72.7%) were authored by male primary authors while 38 (27.3%)

by female ones. Ninety (67.6%) were faculty of constituent educational bodies of IOM and 45 (32.4%) were faculty of other academic institutes (Table 1).

Analyzing the domain, diagnostic types of studies were the most frequent which accounted for 53 (38.1%) published articles (Table 1). The surgical specialty was the most common contributor with 67 (48.2 %) articles followed closely by medical specialties with 47 (33.8%). Basic science subjects had 13 (9.4%) publications as shown in Table 1.

**DISCUSSION**

The purpose of this study was an analysis of the types and characteristics of manuscripts published in JIOM Nepal in recent years. Research and publication are very important for the professional growth of academicians.

It was seen that the most common types of studies published were cross-sectional studies and case reports. Original research and case reports

*Table 1. Characteristics of articles published (n=139)*

Characteristics	Number (%)
Gender of authors	
Male	101 (72.7)
Female	38 (27.3)
Author affiliation	
Inside IOM	94 (67.6)
Outside IOM	45 (32.4)
Type of article	
Editorial	3 (2.2)
Reviews	3 (2.2)
Cross-sectional studies	93 (66.9)
Case-control studies	1 (0.7)
Cohort studies	0 (0.0)
RCT	5 (3.6)
Case reports	25 (17.9)
Letter to Editor	0 (0.0)
Erratum	0 (0.0)
Meta-analysis /Systematic reviews	0 (0.0)
Abstracts	9 (6.5)
Domain	
Therapeutics	49 (35.3)
Diagnosis	53 (38.1)
Prognosis	25 (18.0)
Health promotion	12 (8.6)
Specialty	
Surgical specialties	67 (48.2)
Medical specialties	47 (33.8)
Basic sciences	13 (9.4)
Dentistry	1 (0.7)
Public health	3 (2.2)
Nursing	8 (5.8)

have been the most commonly published types of medical articles, with nearly half of the articles published being the original research.<sup>9</sup> Though randomized controlled trials (RCTs) were also published, their number was few. There was an absence of meta-analysis and systematic reviews among the published articles in the studied issues. Meta-analyses, systematic reviews, and RCTs are considered level one evidence in evidence-based medicine practice and hence lie higher in the hierarchy of scientific evidence.<sup>4,10</sup> Their publication is of utmost importance for improvements in the quality of a journal and hence should be encouraged.

Out of all articles published, only 38 (27.3%) were authored by a female first author. This finding of gender disparity in the publication is in congruence with the findings of various other studies.<sup>11–13</sup> This gender disparity with a lesser number of female authors is much greater in surgical specialties.<sup>13</sup> However, the percentage of the female authors in our study is proportionate to the number of female specialist doctors (2547, 28.7%) registered in the Nepal Medical Council register as of September 2021.<sup>14</sup> With added contributions from nursing, public health, and various other allied health sectors, the proportion of female first authors seems acceptable in our Nepalese context.

The surgical specialties were the most frequent writers in our study (67, 48.2%). Though there are dedicated specialty journals, the surgical specialties are the largest contributors to medical literature followed by medical specialties according to a 2020 study of authorship growth.<sup>9</sup>

The limitation of our study is that it analyzed only one journal and for a limited publication time of three years only. Further studies regarding authorship numbers and expansion; and journal metrics might be of curiosity for the readers, authors as well journal publishers.

## CONCLUSION

Cross-sectional studies were the most commonly published type. Nearly half of the articles were contributed by surgical specialties. The majority of the articles were the diagnostic type of articles. The quality of papers published in JIOM Nepal is showing a steady improvement. However, a more concerted effort is needed to effect further development of the journal. An engrossing blend of articles of different types like original articles, reviews, and case reports from various medical fields is necessary for the progress of the journal

and its reach to the wider reader circle.

## FINANCIAL SUPPORT

The author(s) did not receive any financial support for the research and/or publication of this article.

## CONFLICT OF INTEREST

The author(s) declare that they do not have any conflict of interest with respect to the research, authorship, and/or publication of this article.

## REFERENCES

1. Peh WC, Ng KH. Basic structure and types of scientific papers. *Singapore Med J*. 2008;49(7):522-525.
2. Djulbegovic B, Guyatt GH. Progress in evidence-based medicine: a quarter century on. *Lancet Lond Engl*. 2017;390(10092):415-423.
3. Massarrat S, Kolahdoozan S. Critical assessment of progress of medical sciences in Iran and Turkey: the way developing countries with limited resources should make effective contributions to the production of science. *Arch Iran Med*. 2011;14(6):370-377.
4. Sharma, MR. Principles of Health Science Research. First edition. Samiksha Publication; 2021.
5. Murphy RF, Cibulas AM, Sawyer JR, et al. Levels of Evidence in the Journal of Pediatric Orthopaedics: Update and Comparison to the Journal of Bone and Joint Surgery. *J Pediatr Orthop*. 2015;35(7):779-781.
6. Luksameearunothai K, Chaudhry Y, Thamyongkit S, et al. Assessing the level of evidence in the orthopaedic literature, 2013–2018: a review of 3449 articles in leading orthopaedic journals. *Patient Saf Surg*. 2020;14(1):23.
7. Kritski AL, Ruffino Netto A. Works in the field of tuberculosis study published in the Brazilian Journal of Pulmonology between 2004 and 2011: types of articles, study models, level of scientific evidence, and social impact. *J Bras Pneumol Publicacao Of Soc Bras Pneumol E Tisiologia*. 2011;37(3):285-287.
8. Shewan LG. An analysis of the types of recently published research in the field of cachexia. *Eur J Prev Cardiol*. 2017;24(16):1759-1773.
9. An JY, Marchalik RJ, Sherrer RL, et al. Authorship growth in contemporary medical literature. *SAGE Open Med*. 2020;8:2050312120915399.
10. Burns PB, Rohrich RJ, Chung KC. The Levels of Evidence and their role in Evidence-Based Medicine. *Plast Reconstr Surg*. 2011;128(1):305-310.
11. Bernardi K, Lyons NB, Huang L, et al. Gender Disparity in Authorship of Peer-Reviewed Medical Publications. *Am J Med Sci*. 2020;360(5):511-516.
12. Bernardi K, Lyons NB, Huang L, et al. Gender Disparity Among Surgical Peer-Reviewed Literature. *J Surg Res*. 2020;248:117-122.
13. Brown MA, Erdman MK, Munger AM, et al. Despite Growing Number of Women Surgeons, Authorship Gender Disparity in Orthopaedic Literature Persists Over 30 Years. *Clin Orthop*. 2020;478(7):1542-1552.
14. Nepal Medical Council. [Internet] Available at: <https://www.nmc.org.np>. [Accessed September 27, 2021].