ELSEVIER

Contents lists available at ScienceDirect

Integrative Medicine Research

journal homepage: www.elsevier.com/locate/imr



Editorial

Increasing trends and impact of integrative medicine research: From 2012 to 2021



Eunhye Song [©]^a, Lin Ang ^b, Myeong Soo Lee ^{b,*}

- ^a Global Cooperation Center, Korea Institute of Oriental Medicine, Daejeon, Republic of Korea
- ^b Division of Korean Medicine Science Research, Korea Institute of Oriental Medicine, Daejeon, Republic of Korea

ARTICLE INFO

Article history: Received 21 July 2022 Accepted 4 August 2022 Available online 5 August 2022

Keywords: Integrative medicine Research trend Publications Citations

1. What is integrative medicine?

The definition of "integrative medicine" has not been standardized and has been changing over time. In general, integrative medicine is patient-centered holistic approach that deals with the patient's whole aspects, such as the physical, mental, and spiritual needs, and it focuses on prevention and well-being by enhancing one's immunity and natural healing ability. It is also recognized as a term that stands for a type of medicine that utilizes and combines conventional Western medicine with complementary and alternative medicine. Integrative medicine places an emphasis on the importance of using evidence in such integration to better facilitate health and healing. 5

2. Trends and impact of integrative medicine research publications

There are increasing needs and demands for research in the field of integrative medicine. In its reflection, the increasing trend is supported by the growing number of publications on the topic from 2012 to 2021 in Web of Science Core Collection as shown in Fig. 1. The number doubled during the past decade. The top 5

E-mail address: drmslee@gmail.com (M.S. Lee).

countries with the most number of publications are USA (161,897), China (118,918), Germany (41,812), England (38,533), and Italy (30,436). The use of integrative medicine has especially risen in clinical care in the United States.⁶

Among the first quartile (Q1) journals in integrative and complementary medicine category indexed in Web of Science, the keywords of all the citable publications (i.e. reviews and research articles) published in 2021 were analyzed and visualized as word clouds for each journal (Fig. 2). Each of the journals had some unique keywords and their word clouds were distinctive from one another. Nevertheless, many keywords overlapped with each other, such as traditional Chinese medicine (TCM), systematic review and meta-analysis, inflammation, apoptosis, acupuncture, COVID-19, yoga, complementary and alternative medicine, herbal medicine, and antioxidant.

Q1, 1st quartile in Journal Citation Reports. Keywords of reviews and research articles obtained from Web of Science for analysis. Word clouds are in the alphabetical order of the journal title.

AJCM, American Journal of Chinese Medicine; BMCCMT, BMC Complementary Medicine Therapies; CM, Chinese Medicine; CTCP, Complementary Therapies in Clinical Practice; CTIM, Clinical Therapies in Medicine; IMR, Integrative Medicine Research; JIM; Journal of Integrative Medicine.

3. Growth of integrative medicine research (IMR)

During the past 5 years from 2017 to 2021, IMR grew steadily in the number of submissions and rejection rates, and the journal's

^{*} Corresponding author at: Division of Korean Medicine Science Research, Korea Institute of Oriental Medicine, 1672 Yuseong-daero, Yuseong-gu, Daejeon 34054, Republic of Korea.

Table 1 Number of articles submitted and accepted for publication in IMR during 2017–2021.

Year	Review articles		Original articles		Case reports/ short communications		Editorials/ commentaries/ letters		All		
	Submitted/ Accepted (n)	Rejection rate (%)	Submitted/ Accepted (n)	Rejection rate (%)	Submitted/ Accepted (n)	Rejection rate (%)	Submitted/ Accepted (n)	Rejection rate (%)	Submitted/ Accepted (n)	Rejection rate (%)	Official impact factor
2017	107/39	63.6	37/14	62.2	16/6	62.5	4/1	75.0	164/60	63.4	-
2018	156/22	85.9	46/6	87.0	20/7	65.0	5/1	80.0	227/36	84.1	_
2019	184/18	90.2	53/11	79.2	44/13	70.5	13/9	30.8	294/51	82.7	2.172
2020	543/56	89.7	62/15	75.8	112/6	94.6	53/23	56.6	770/100	87.0	2.379
2021	580/17	97.1	184/13	92.9	79/1	98.7	31/8	74.2	874/39	95.5	4.473

Table 2List of special collections published in IMR.

Year	Special issue theme	Number of articles	Total citations	Citations per article
2013	The power of physical activity	8	50	6.25
2014	Green tea	7	155	22.14
2014	Gathering, connecting, and integrating	11	217	19.73
2015	Multidisciplinary approach on Sasang typology	9	68	7.56
2016	Multidisciplinary approach on Sasang typology - II	6	183	30.50
2016	Biosimulation	6	25	4.17
2016	IMPACT (Integrative Medicine: physical activity is a core tip)	11	173	15.73
2020	Integrative Medicine for COVID-19: Researches and Evidence	28	266	9.50
2021	Complementary and alternative medicine for the COVID-19 pandemic: current evidence and emerging challenges	10	10	1.00

Citation data from Web of Science, as of July 5, 2022.

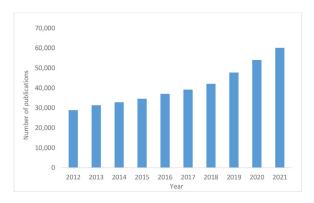


Fig. 1. Number of publications from 2012 to 2021. Data from Web of Science Core Collection (www.webofscience.com). Searched integrative medicine by topic on July 5, 2022.

impact factor has been increasing over the years since its SCIE indexing in 2019 (Table 1).

Official impact factor is from Clarivate Analytics' Journal Citation Reports which is announced the year after for the previous year.

IMR has also published a numerous special issues on diverse topics (Table 2). The topics included exercise, green tea, Sasang typology, biosimulation, and COVID-19 relating to integrative medicine..

4. Future prospects of integrative medicine

There has been a growing interest and demand for the use of integrative medicine, particularly for pain or cancer,^{7,8} and more recently, for the COVID-19.⁹ Among all the advantages of integrative medicine, the economic benefit attracts the research of integrative medicine to grow bigger with rising funding.⁸ In response to the continued interest in integrative medicine with the expansion of evidence collected for decades, the knowledge should now

be translated into policy and clinical practice for a whole person health approach. 10

5. Contribution of IMR to the integrative medicine field

IMR has been contributing to the field of integrative medicine by providing researchers with the platform to share and discuss methodologies and results, by expanding the research field and competence of integrative medicine, and by enabling researchers to connect and network for collaboration. As a Q1 journal in the integrative and complementary medicine field, IMR's international impact has been recognized, and in its response, the journal should further contribute to the field. IMR would continue to support integrative medicine researchers worldwide to facilitate the advancement of the field.

Declaration of Competing Interest

ES, LA, and MSL are editors of the journal and this article was prepared for the journal's 10th anniversary.

CRediT authorship contribution statement

Eunhye Song: Conceptualization, Writing – original draft, Formal analysis, Writing – review & editing. **Lin Ang:** Conceptualization, Formal analysis, Writing – review & editing. **Myeong Soo Lee:** Conceptualization, Writing – review & editing.

Funding

None.

Ethical statement

Not applicable.



Fig. 2. Word clouds of keywords published in 2021 among high impact (Q1) journals in integrative and complementary medicine category.

Data availability

The data used in this editorial are included within the article and its supplementary file.

Acknowledgments

Integrative Medicine Research is celebrating its 10th anniversary of publication in December 2022. In order to recognize this milestone for the journal, and to look back at its growth and impact, the journal's publications and citations were analyzed in this article along with the trend of integrative medicine. Editorial and production data were provided by Elsevier. The IMR editorial team would like to thank all the authors, reviewers, and editorial board members for their contributions and support, and we would also like to thank our readers for their interests in IMR.

References

 Hu XY, Lorenc A, Kemper K, Liu JP, Adams J, Robinson N. Defining integrative medicine in narrative and systematic reviews: a suggested checklist for reporting. Eur J Integr Med. 2015;7(1):76–84 2015/02/01/. doi:10.1016/j.eujim.2014.11. 006.

- Wolever RQ, Caldwell KL, McKernan LC, Hillinger MG. Integrative medicine strategies for changing health behaviors: support for primary care. *Prim Care Clin Off Pract*. 2017;44(2):229–245 2017/06/01/. doi:10.1016/j.pop.2017.02.007.
- Coulter ID, Khorsan R, Crawford C, Hsiao AF. Integrative health care under review: an emerging field. J Manip Physiol Ther. 2010;33(9):690–710 2010/11/01/. doi:10.1016/j.jmpt.2010.08.007.
- Locke AB, Gordon A, Guerrera MP, Gardiner P, Lebensohn P. Recommended integrative medicine competencies for family medicine residents. *Explore*. 2013;9(5):308–313 2013/09/01/. doi:10.1016/j.explore.2013.06.005.
- Rakel D, Weil A, Rakel D. Chapter 1 philosophy of integrative medicine. Integrative Medicine Elsevier; 2018:2-11.e1.
- National Center for Complementary and Integrative Health (NCCIH). Complementary, Alternative, Or Integrative Health: What's In a Name?. National Institutes of Health (NIH); 2021 Updated AprilAccessed May 31, 2022 https://www.nccih.nih.gov/health/complementary-alternative-or-integrative-health-whats-in-a-name.
- 7. Mao JJ, Pillai GG, Andrade CJ, et al. Integrative oncology: addressing the global challenges of cancer prevention and treatment. *CA Cancer J Clin*. 2022;72(2):144–164. doi:10.3322/caac.21706.
- Walach H. Good morning future: complementary medicine's next 25 years. Complement Med Res. 2018;25(1):4–6. doi:10.1159/000486887.
- Ang L, Song E, Lee MS. Randomized controlled trials of traditional, complementary, and integrative medicine-based interventions for coronavirus disease 2019 (COVID-19): a bibliometric analysis and review of study designs. *Integr Med Res*. 2021;10:100777 2021/01/01/. doi:10.1016/j.imr.2021.100777.
- National Center for Complementary and Integrative Health. Strategic Plan Fiscal Years 2021–2025: Mapping a Pathway to Research On Whole Person Health. National Center for Complementary and Integrative Health; 2021 Accessed July 6, 2022 https://www.nccih.nih.gov/about/nccih-strategic-plan-2021-2025.