

Brief Communication
Medicine General &
Social Medicine



Bibliographical Characteristics of North Korean Medical Journals and Articles

Shin Ha ,^{1,2} Seok-Jun Yoon ,³ Byung Chul Chun ,^{1,3} Kyeong Jin Kim,⁴
Seung-Young Roh ,⁵ Eun Joo Lee ,⁶ Won Ho Kim ,⁷ Sin Gon Kim ,^{4,8} and
Yo Han Lee ⁹

¹Department of Public Health, Graduate School, Korea University, Seoul, Korea

²Services Department, Medical Library, Korea University, Seoul, Korea

³Department of Preventive Medicine, Korea University College of Medicine, Seoul, Korea

⁴Division of Endocrinology and Metabolism, Department of Internal Medicine, Korea University College of Medicine, Seoul, Korea

⁵Division of Cardiology, Department of Internal Medicine, Dongguk University College of Medicine, Ilsan Hospital, Dongguk University Medical Center, Ilsan, Korea

⁶Division of Respiratory Allergy and Critical Care Medicine, Department of Internal Medicine, Korea University Anam Hospital, Korea University College of Medicine, Seoul, Korea

⁷Department of Internal Medicine, Yonsei University College of Medicine, Seoul, Korea

⁸Department of Healthcare and Medicine for Unified Korea, Korea University College of Medicine, Seoul, Korea

⁹Department of Preventive Medicine, Konyang University College of Medicine, Daejeon, Korea

OPEN ACCESS

Received: Nov 9, 2017

Accepted: Apr 30, 2018

Address for Correspondence:

Yo Han Lee, MD, PhD

Department of Preventive Medicine,
Konyang University College of Medicine, 158
Gwanjeodong-ro, Seo-gu, Daejeon 35365,
Republic of Korea.
E-mail: vionic@hanmail.net

Sin Gon Kim, MD, PhD

Division of Endocrinology and Metabolism,
Department of Internal Medicine, Korea
University College of Medicine, Department
of Healthcare and Medicine for Unified
Korea, Korea University College of Medicine,
73 Incheon-ro, Seongbuk-gu, Seoul 02841,
Republic of Korea.
E-mail: k50367@korea.ac.kr

© 2018 The Korean Academy of Medical
Sciences.

This is an Open Access article distributed
under the terms of the Creative Commons
Attribution Non-Commercial License (<https://creativecommons.org/licenses/by-nc/4.0/>)
which permits unrestricted non-commercial
use, distribution, and reproduction in any
medium, provided the original work is properly
cited.

ORCID iDs

Shin Ha

<https://orcid.org/0000-0002-1454-731X>

Seok-Jun Yoon

<https://orcid.org/0000-0003-3297-0071>

Byung Chul Chun

<https://orcid.org/0000-0001-6576-8916>






ABSTRACT

The aim of our work was to analyze the bibliographical characteristics of 9 North Korean medical journals and articles. All journals show only ten pieces of information, such as publication dates and table of contents, and do not provide submission guidelines and journal policy. Most of the journals were published four times a year. Editorials often share government policy. Research articles are very short and compressed. The journals often publish articles on oriental medicine and medical information useful to the public. In conclusion, the journals were published in their own unique style and format, which are far from the global standard.

Keywords: North Korea; Medical Research; Medical Journals

At the end of World War II, Korea was divided into South and North as a result of political conflicts in the age of the Cold War. The separation of ideologies, language, politics, economy, and healthcare has brought about disparity between the two Koreas. The ideological differences of South and North Korea have had such an impact on the medical field that North Korea founded Juche-Medicine; Juche-Medicine is founded upon “Juche,” usually translated as “self-reliance,” involving an independent health policy and medicine that reflects the philosophical views and ideas unique to North Korea.^{1,2}

However, North Korea's unique medicine was not well known to the outside world in terms of form and content. It is only a glimpse of the reality through the research on North Korean refugees.^{3,4} Fortunately, there is a keyhole to look into North Korean medicine and medical research. By the middle of 2016, nine North Korean medical journals were available in South Korea. In 2018, ten journals are available, and one added is ‘Koryo ūihak.’ However, it is not clear whether there are other North Korean medical journals in addition to the ten journals available in South Korea. Although a few researchers recently studied some North Korean

Seung-Young Roh 
<https://orcid.org/0000-0002-0854-9079>
 Eun Joo Lee 
<https://orcid.org/0000-0001-7884-9045>
 Won Ho Kim 
<https://orcid.org/0000-0002-5682-9972>
 Sin Gon Kim 
<https://orcid.org/0000-0002-7430-3675>
 Yo Han Lee 
<https://orcid.org/0000-0002-9631-9969>

Disclosure

The authors have no potential conflicts of interest to disclose.

Author Contributions

Conceptualization: Ha S, Lee YH, Kim SG.
 Data curation: Ha S, Lee YH. Formal analysis: Ha S, Lee YH, Kim SG, Yoon SJ, Chun BC, Kim KJ, Roh SY, Lee EJ, Kim WH. Writing - original draft: Ha S. Writing - review & editing: Ha S, Lee YH, Kim SG.

medical journals to analyze specific medical topics, there have been few studies that analyzed the characteristics of all available North Korean medical journals.⁵⁻⁷

The aim of our work was to analyze the bibliographical characteristics of the North Korean medical journals and articles. We collected nine North Korean medical journals published between 2006 and 2015 through the Ministry of Unification of South Korea's Information Center on North Korea by the end of February 2016 (**Table 1**). After reviewing the articles, the authors found the characteristics of the medical journals of North Korea and generalized the structure and characteristics of the articles.

There were ten types of information that can be obtained through the cover of the journal: title, table of contents, publisher, printing factory, office address, country of publication, publication date, print date, volume, and International Standard Serial Number. Inside all journals, information such as submission guidelines, types of articles, editorial and peer review process, manuscript format, journal policy and subscription could not be found. All journals were published through the Korea Science and Encyclopedia Publishing House except for '*Ŭihak*' (*Medical science*); the publication frequency were identical at four per year. In terms of content, four of the nine journals deal with general medicine, and five deal with specific areas of medicine such as '*Naekwa*' and '*Oekwa*.' Most of the journals often publish articles on oriental medicine and medical information useful to the public.

There are generally five types of articles that the journals publish; editorials, research articles, reviews, case studies, and short notes. It is common for the article to have a very short, compressed form, such as a long abstract. The editorials did not function as analyzing current issues, heading opinions nor giving editorial notes; rather, they seem to function as tools of propaganda used to further the political stance and rule that the publication press had. The content of the editorials reflects government policies and the volitions of the Supreme Leader, suggesting the direction that North Korean researchers should take. Some journals' research articles provided English summaries.

Most of articles had identical organizational structures as follows (**Fig. 1**). First, on average, the bulk of the publications did not exceed two pages, and the use of abstracts was not common. Second, descriptive language was in Korean; use of English was very limited and was mainly used for units of measurement and modifiers. Third, the number of authors in

Table 1. Medical journals of North Korea available in South Korea

Title (English title)	Publisher	Publication start year	Frequency	ISSN	NLM unique ID	Language	Subjects
<i>Naekwa</i> (Internal medicine)	KSEPH	1964	Quarterly	0547-1060	101278406	Korean	Internal medicine
<i>Oekwa</i> (Surgery)		1965		0473-8020	101278407		General surgery
<i>Kich' o ŭihak</i> (Basic medicine)		1969		1728-0338	101215007		Medical science
<i>Chosŏn ŭihak</i> (Korean medicine)		1954		1680-8029	16210070R		Medical science
<i>Yebang ŭihak</i> (Preventive medicine)		1966		1683-9943	101207212		Medical science
<i>Soa, sanbuinkwa</i> (Pediatrics, obstetrics and gynecology)		1978		0583-6697	101281666		Pediatrics, obstetrics, and gynecology
<i>Kugang, ankwa, ibiinhukwa</i> ^a (Dentistry, ophthalmology, otorhinolaryngology)	CSTIA	2004 ^a	6 times a year	2219-0694 ^a	-		Oral, ophthalmology, and otorhinolaryngology
<i>Chosŏn yakhak</i> (Korean pharmacy)		1957		1683-9951	101215002		Pharmacy
<i>Ŭihak</i> (Medical science)		1960 ^a		-	101212469		Medical science

ISSN = international standard serial number, NLM = U.S. National Library of Medicine, KSEPH = Korea Science & Encyclopedia Publishing House, CSTIA = Central Information Agency for Science and Technology.

^aUse of the Information Center on North Korea' data when North Korean journals' bibliographical matters cannot be found on U.S. National Library of Medicine.

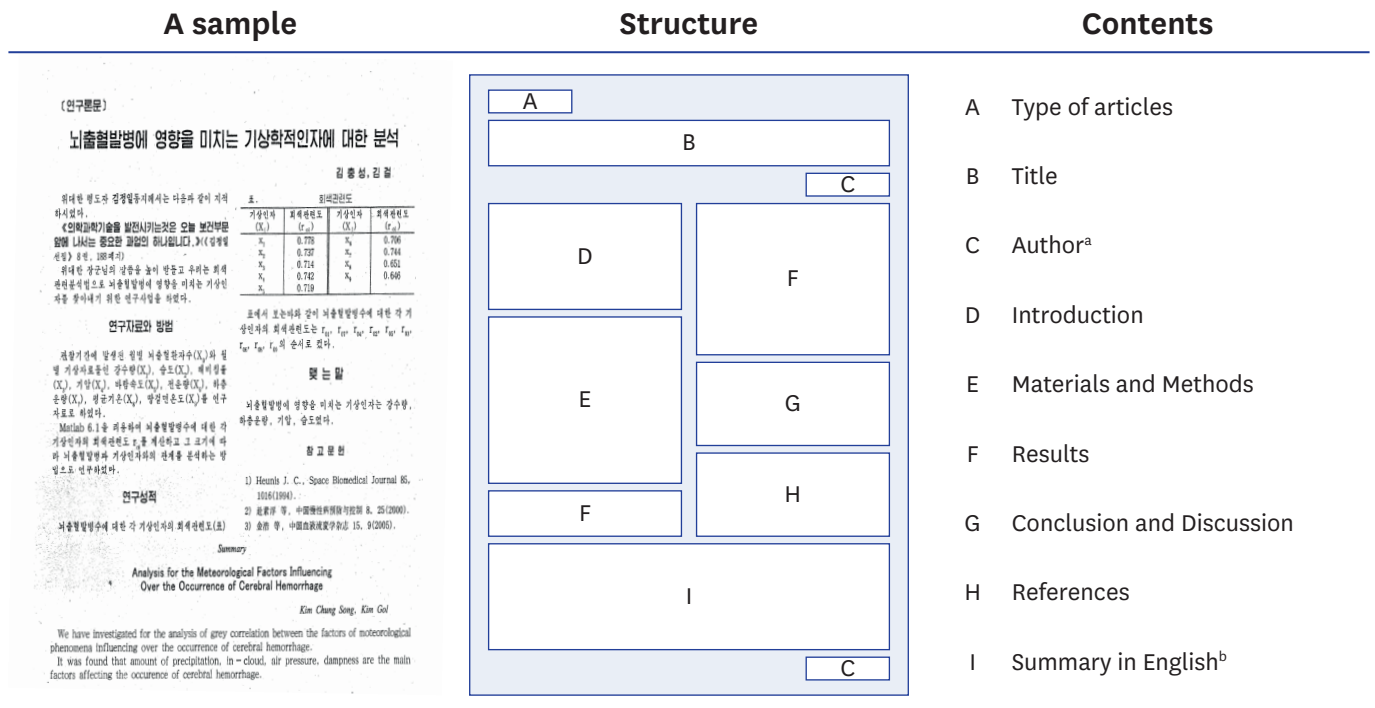


Fig. 1. The typical structure of a North Korean medical article.
^aIt is common that the name of author is located after the title. In 'Üihak,' if the author is a professor, an associate professor, or a PhD, the name of author is located after the title. However, other author names are listed after the reference. ^bEnglish abstract is rare.

the article was generally from one to three. Fourth, some of the articles had a brief summary in English at the end. Fifth, tables, graphs, and images were partially illustrated by hand, but even those were rarely seen. Sixth, most articles presented references at the end of the article, but the number of references rarely exceeded six. Furthermore, there was no in-text citation. References included publications mainly from North Korea, Japan, Russia, China, and the United States, but the bibliographical information was written in the language of the publication press. Although some articles of *The New England Journal of Medicine (NEJM)* or *JAMA* were quoted when referring to English articles, none of the cited articles were up-to-date. Lastly, apart from 'Üihak,' there were no keywords provided.

Miscellaneous features are as follows. Articles usually began by citing the Supreme Leaders' instructions, reflecting their ideological views and ideas unique to North Korea. Some statistics such as percent and *P* values were observed but no specific statistical methods were presented. There were no epidemiological indexes such as mortality and the prevalence of disease. Furthermore, publication bias could be widely observed, as there were no negative cases or results. In addition, the authors could not find any other ethical code including publication ethics regulations.

Since these findings mentioned above are from partial observation of North Korean medicine, they should be interpreted with caution and require further study.

In conclusion, all of the North Korean medical journals were published in their own unique style and format, which are far from the international standard. The purpose of their publications looks for domestic distribution. It is necessary to help their publications keep international standards of editing and publishing.

ACKNOWLEDGMENTS

Special thanks to Prof. Woo Taek Jeon, MD, PhD (Department of Psychiatry and Institute of Behavioral Science in Medicine, Yonsei University College of Medicine), Prof. Hee Young Shin, MD, PhD (Department of Pediatrics, Seoul National University College of Medicine) and Prof. Young Hoon Kim (Department of Healthcare and Medicine for Unified Korea, Korea University College of Medicine) for the inspiration in this research. This work was jointly supported by the Association of Healthcare for Korean Unification and the Department of Healthcare and Medicine for Unified Korea, Korea University College of Medicine.

REFERENCES

1. Jung M. Bibliometric investigation on preventive medicine in North Korea: a coauthor and keyword network analysis. *Health Care Manag (Frederick)* 2013;32(3):253-9.
[PUBMED](#)
2. Yi SG, Moon OR, Lee SJ, Kim JC, Yong W, Lin PS. The state of the art of preventive medicine in North Korea with reference to the content analysis of a medical textbook. *Korean J Prev Med* 2000;33(3):373-82.
3. Kim SJ, Park YS, Lee H, Park SM. Current situation of psychiatry in North Korean: from the viewpoint of North Korean medical doctors. *Korean J Psychosomatic Med* 2012;20(1):32-9.
[CROSSREF](#)
4. Lee YH, Lee WJ, Kim YJ, Cho MJ, Kim JH, Lee YJ, et al. North Korean refugee health in South Korea (NORNS) study: study design and methods. *BMC Public Health* 2012;12(1):172.
[PUBMED](#) | [CROSSREF](#)
5. Kim OJ. An analysis of a North Korean Medical Journal: In-Min-Bo-Gun (People's Health) in 1950s. *Uisahak* 2002;11(2):165-85.
[PUBMED](#)
6. Kim SG, Kim KJ, Ha S, Kim YH. A peek into the Galapagos of the medical research field. *Lancet* 2016;388(10063):2989-90.
[PUBMED](#) | [CROSSREF](#)
7. Park DH, Choi MH, Lim AY, Shin HY. An analysis of infectious disease research trends in medical journals from North Korea. *J Prev Med Public Health* 2018;51(2):109-20.
[PUBMED](#) | [CROSSREF](#)