

## Research Trends Analysis through Journals on Traditional Korean Medicine

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### 1. Introduction

Since traditional medicine (TM) was proclaimed by the Declaration of Alma-Ata as one of the tools designed to promote primary healthcare, its value and importance have steadily increased in international society.[1] Likewise, Prince Charles's speech at the UN symbolically showed the profile of TM.[2] Korea has established its traditional medicine (traditional Korean medicine or TKM), having inherited and developed it for several thousands of years. It is helping promote national health alongside western medicine.[3] In recent years, TKM – as a science based on scientific research and diverse clinical trial results – has been accumulating knowledge and expanding its scope. The research results of TKM are increasingly used in biology, medicine, and alternative medicine, and foreign researchers increasingly demand theses on TKM. Moreover, as seen in modern sciences wherein many research results are accumulated by many researchers and published into theses, the analysis of tendencies in the publication of journals in a specific field can provide clues to the identification of research trends.

### 2. Methods

Information on journals was obtained from journals published by the Society of Korean Medicine and its societies of departments, colleges of traditional Korean medicine and their annexed research centers, journals subscribed to by colleges of traditional Korean medicine' libraries and national libraries, and journals provided by domestic journals databases – such as Oriental Medicine Advanced Searching Integrated System (OASIS), Korean Traditional Knowledge Portal (KTKP), and National Discovery for Science Leaders (NDSL) – as well as lists of journals provided by the National Research Foundation of Korea (NRF). As targets of research, journals were selected based on their scope belonging to detailed TKM subjects (fundamental theory, clinical science, departments, special subject, pharmacy, and acupuncture & moxibustion)[4], existence of ISSN number, regular issuance over the past two years and publishing in Korea. A total of 44 TKM journals met the journal selection conditions of this study and we analyzed research trends using the journals.

### 3. Results

#### 3.1. General trend

According to NRF's journals statistics, the largest number of journals (38.8%) was launched in the 1990s, followed by 30.8% in the 2000s. The publication of TKM journals was in keeping with the development and history of Korea's journals; in this regard, nothing particular was discovered about TKM. Likewise, based on NRF's journals statistics, medical journals numbered 398, 11.1% of which were TKM journals (44/398). This figure is smaller than the ratio (27%) of TKM clinics and hospitals to ordinary and general hospitals and dentistry and the ratio (15%) of TKM doctors to doctors and dentists; thus suggesting that the publication of TKM journals was inactive.

#### 3.2. Publication Institute

The selected 44 TKM journals were published by academic societies (79.5%) and educational institutes (20.5%), and the study revealed that research institutes and TKM hospitals had a number of journals but discontinued them. Of Korea's 11 TKM universities, 9 (81.8%) published TKM journals; all 11 had previously published TKM journals.

#### 3.3. Publication period

The direct index for measuring research activity levels is the number of papers published, whereas the journal publication cycle is an indirect index.[5] In terms of Korea's medical journals publication cycle, the largest number (32.9%) was published quarterly, followed by yearly (22.5%); even journals published monthly accounted for 4.4% of the total number of medical journals. With regard to TKM journals' publication cycle, the largest number (36.4%) was published yearly, followed by quarterly (29.5%); nothing was published monthly, indicating a need for quantitative growth in TKM journals.

### 3.4. Journal index

As the most representative journal evaluation system, NRF's KCI reviews all journals published in Korea and selects core journals and "expand" journals. Currently, KCI includes 2,145 outstanding journals in 8 sciences including humanities, natural sciences, and medicine. KISTI and KSCI are huge databases of journals in science and technology, providing information on 661 core science and technology journals published in Korea. 14 TKM journals were registered in the KCI core, 5 in the KCI "expand," and 21 in KSCI. On the other hand, 18 were registered in both KCI and KSCI. CrossRef as the official registration agency of the Digital Object Identifier (DOI) was established to gain continued access to papers via the Internet, with eight TKM journals registered. Journals whose excellence was proven internationally are registered in international index databases such as PubMed, Scopus, and Web of Science following strict review. Among the TKM journals published in Korea, only the Journal of Acupuncture & Meridian Studies was registered in PubMed and SCOPUS. This challenges Korea to endeavor to register TKM journals in international index databases.

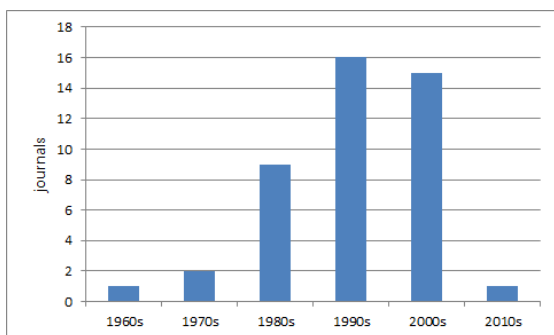


Figure 1. The starting year of traditional Korean medicine journals' publish.

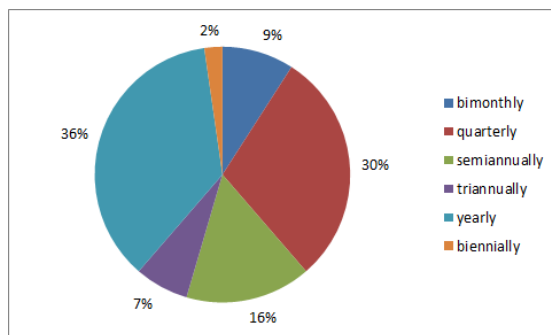


Figure 2. The ratio of traditional Korean medicine journals' publication period.

### 4. Conclusion

Most of the TKM journals published in Korea were sponsored by academic societies, and most of societies' journals in diverse fields were launched in the 1990s. A number of TKM journals were evaluated as excellent by Korea's journal rating system, but only one journal entered the international index databases. TKM journals covered diverse subjects, and most of their full text was provided in Korea's journal databases. Through the analysis of journal publication cycle which is an indirect index for measuring research activity levels, we found that TKM researches are not very highly active.

### 5. References

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